

Final Program

May 13-18 | San Francisco, CA



BE A **GAME CHANGER.**



You can preserve antibiotic efficacy

with the right diagnostic tests that guide appropriate and responsible use of antibiotics to ensure they remain life-saving for future generations.

Learn more about our innovative respiratory infectious disease diagnostics and antimicrobial (AMS) solutions.

Visit booth #2127

Attend our Industry Theater:

Mini Theater 1
Sunday, May 15, 2022
1:30 p.m. - 2:00 p.m.

Lunch provided

PREREGISTER FOR INDUSTRY THEATER

Or visit https://go.biomerieux.com/industry_theatre_2022 to preregister.

An Industry Program presentation at the ATS 2022 International Conference. This presentation is sponsored by bioMérieux and is open to all ATS 2022 International Conference attendees.



BioFire is now bioMérieux.



For the 2022 ATS International Conference, this disclosure information for all individuals in control of content was requested and received by ATS in advance of the Conference, reviewed by appropriate ATS reviewers, and session chairs and others in positions of authority were instructed to manage and mitigate identified faculty conflicts according to procedures overseen by the ATS Ethics and Conflict of Interest Committee. Please click the link below to review the ATS 2022 International Conference Planners Disclosures.

<https://conference.thoracic.org/speakers/resources/2022/disclosure.pdf>

Alphas are always our focus



Respiratory



CSL Behring is committed to improving the lives of those affected by Antitrypsin Deficiency by providing innovative and sustainable solutions.

CSL Behring has added a new manufacturing site to supplement current facilities to meet continued demand by the Alpha 1 community.

Welcome to ATS 2022

Welcome to San Francisco and the 2022 American Thoracic Society International Conference. The conference attracts investigators, educators, clinicians and related health care professionals and is truly the destination for adult and pediatric pulmonary, critical care, and sleep medicine professionals at every level of their careers. And this year will be special ... our first in-person meeting in three years. Welcome back!

The conference is all about learning, networking and connections. Because it engages attendees across many disciplines and continents, the ATS International Conference draws a large, diverse group of participants, a dedicated and collegial community that inspires each of us to make a difference in patients' lives, now and in the future. By virtue of its size — ATS 2022 features more than 4,600 original research projects and case reports, over 400 sessions, and over 1000 speakers — participants can attend sessions and special events from early morning to the evening.

At ATS 2022 there will be something for everyone.

Don't miss the following important events:

- **[Opening Ceremony](#)** featuring a keynote presentation by Dr. Catherine Grace “Cady” Coleman. She is a former NASA astronaut and retired U.S. Air Force colonel who has logged more than 180 days in space, including two space shuttle missions and a six-month expedition to the International Space Station.
- **[ATS Research Program Benefit](#)** on Saturday evening where you can reconnect with old friends and make new ones.
- **[Keynote Series](#)** highlight state of the art lectures on selected topics in an unopposed format to showcase timely and diverse topics which relate to pulmonary, critical care and sleep medicine.
- **[Respiratory Health Awards](#)**, which includes the Trudeau Medal, Distinguished Achievement Awards, and the Amberson Lecture
- **[ATS Plenary Session](#)** featuring J. Randall Curtis, MD, MPH, former ATS president and expert on palliative care.
- **[Assembly Membership Meetings](#)**, which are open to all attendees.

These events create a sense of community among the International Conference attendees, which is precisely what our founders had hoped when they established the world's first respiratory society.

Finally, we wish to acknowledge the hard work and outstanding efforts of the members of the International Conference Committee, Education Committee, Assembly Program Committees, and ATS staff. The success of our conference depends on the dedication, creativity, and support of these individuals.

We welcome you to the International Conference and hope you take advantage of all San Francisco has to offer.

ATS 2022



Lynn Schnapp, MD, ATSF
President



Andrew Halayko, PhD,
ATSF
Chair, International
Conference Committee



A big team for small lungs.

As the largest pediatric pulmonary program in California, the Pulmonary, Asthma and Sleep Medicine Center at Stanford Children's Health has experience helping patients with any lung or breathing condition. Ranked the best program on the West Coast by *U.S. News & World Report* and #6 in the nation, we provide innovative, high-quality care and conduct research to discover new treatments.



Learn more at pulmonary.stanfordchildrens.org.

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ATS 2022





Learn more at
booth 2419

A liquid biopsy for infectious diseases

1 blood sample | 1-day processing | 1000+ pathogens

The Karius Test[®] can rapidly and non-invasively detect deep-seated and bloodstream infections, including challenging respiratory infections

KARIUS
clarity at speed[®]

kariusdx.com

Program at a Glance

Friday, May 13

8 a.m. - 4 p.m.

- [Postgraduate Courses](#)

8 a.m. - 5 p.m.

- [Fellows Track Symposium \(FTS\)](#)
- [Resident Boot Camp \(RBC\)](#)
- [New Faculty Boot Camp \(NFBC\)](#)

Saturday, May 14

8 a.m. - 4 p.m.

- [Postgraduate Courses](#)

8 a.m. - 5 p.m.

- [Fellows Track Symposium \(FTS\)](#)
- [Resident Boot Camp \(RBC\)](#)
- [New Faculty Boot Camp \(NFBC\)](#)

4:30 - 5:30 p.m.

- [Opening Ceremony](#)

5:30 - 6:30 p.m.

- [Networking Exchange for Early Career Professionals](#)

6 - 7:30 p.m.

- [Annual ATS Research Program Benefit](#)

Sunday, May 15

7 - 8 a.m.

- [Meet the Expert Seminars](#)

8:15 - 9 a.m.

- [Keynote Series](#)

9:30 - 11 a.m.

- [Basic Science Core](#)
- [Clinical Topics in Pulmonary Medicine](#)
- [Clinical Year in Review](#)
- [Critical Care Track](#)
- [Mini Symposia](#)
- [Poster Discussion Sessions](#)
- [RAPiD: Rapid Abstract Poster Discussion Sessions](#)
- [Scientific Symposia](#)

9:30 a.m. - 3:45 p.m.

- [Thematic Poster Sessions](#)

10:30 a.m. - 3:30 p.m.

- [Exhibit Hall](#)

10:45 - 11:45 a.m.

- [Meet the Expert Seminars](#)

11:30 a.m. - 1 p.m.

- [Adult Clinical Core Curriculum: Critical Care](#)

11:45 - 1:15 p.m.

- [Diversity Forum](#)

12 - 1 p.m.

- [Medical Education Seminars](#)
- [Outside Organization Sessions](#)
- [Pediatric Clinical Core Curriculum](#)

12:15 - 1:15 p.m.

- [Meet the Expert Seminars](#)

1:15 - 2:15 p.m.

- [Unopposed Exhibit Hall Time](#)

2:15 - 3:45 p.m.

- [Basic Science Core](#)
- [Clinical Topics in Pulmonary Medicine](#)
- [Critical Care Track](#)
- [Mini Symposia](#)
- [Poster Discussion Sessions](#)
- [RAPiD: Rapid Abstract Poster Discussion Sessions](#)
- [Nursing Year in Review](#)

4 - 5 p.m.

- [Awards Ceremony](#)

5 - 7 p.m.

- [Assembly Membership Meetings](#)

Monday, May 16

7 - 8 a.m.

- [Meet the Expert Seminars](#)

8:15 - 9 a.m.

- [Keynote Series](#)

9:30 - 11 a.m.

- [Basic Science Core](#)
- [Clinical Topics in Pulmonary Medicine](#)
- [Clinical Year in Review](#)
- [Critical Care Track](#)
- [Mini Symposia](#)
- [Poster Discussion Sessions](#)
- [RAPiD: Rapid Abstract Poster Discussion Sessions](#)
- [Scientific Symposia](#)

9:30 a.m. - 3:45 p.m.

- [Thematic Poster Sessions](#)

10:30 a.m. - 3:30 p.m.

- [Exhibit Hall](#)

10:45 - 11:45 a.m.

- [Meet the Expert Seminars](#)

11:30 - 1 p.m.

- [Adult Clinical Core Curriculum: Pulmonary](#)

11:45 - 1:15 p.m.

- [Women's Forum](#)

12 - 1 p.m.

- [Medical Education Seminars](#)
- [Outside Organization Sessions](#)
- [Pediatric Clinical Core Curriculum](#)

12:15 - 1:15 p.m.

- [Meet the Expert Seminars](#)

1:15 - 2:15 p.m.

- [Unopposed Exhibit Hall Time](#)

2:15 - 3:45 p.m.

- [Adult Clinical Core Curriculum: Critical Care](#)
- [Basic Science Core](#)
- [Clinical Topics in Pulmonary Medicine](#)
- [Critical Care Track](#)
- [Mini Symposia](#)
- [Poster Discussion Sessions](#)
- [RAPiD: Rapid Abstract Poster Discussion Sessions](#)
- [Pediatric Year in Review](#)
- [Recognition Awards for Scientific Accomplishments](#)

5 - 7 p.m.

- [Assembly Membership Meetings](#)

Tuesday, May 17

7 - 8 a.m.

- [Meet the Expert Seminars](#)

8:15 - 9 a.m.

- [Keynote Series](#)

9:30 - 11 a.m.

- [Clinical Topics in Pulmonary Medicine](#)
- [Clinical Year in Review](#)
- [Critical Care Track](#)
- [Mini Symposia](#)
- [Poster Discussion Sessions](#)
- [RAPiD: Rapid Abstract Poster Discussion Sessions](#)
- [Scientific Symposia](#)

9:30 - 3:45 p.m.

- [Thematic Poster Sessions](#)

10:30 a.m. - 3:30 p.m.

- [Exhibit Hall](#)

10:45 - 11:45 a.m.

- [Meet the Expert Seminars](#)

11:30 - 1 p.m.

- [Plenary Session](#)

12 - 1 p.m.

- [Medical Education Seminars](#)

- [Pediatric Clinical Core Curriculum](#)

12:15 - 1:15 p.m.

- [Meet the Expert Seminars](#)

1:15 - 2:15 p.m.

- [Unopposed Exhibit Hall Time](#)

2:15 - 3:45 p.m.

- [Adult Clinical Core Curriculum: Pulmonary](#)
- [Basic Science Core](#)
- [Clinical Topics in Pulmonary Medicine](#)
- [Critical Care Track](#)
- [Mini Symposia](#)
- [Poster Discussion Sessions](#)
- [RAPiD: Rapid Abstract Poster Discussion Sessions](#)

Wednesday, May 18

7 - 8 a.m.

- [Meet the Expert Seminars](#)

8:15 - 9:45 a.m.

- [Clinical Topics in Pulmonary Medicine](#)

- [Clinical Year in Review](#)

- [Critical Care Track](#)

- [Mini Symposia](#)

- [Poster Discussion Sessions](#)

- [RAPiD: Rapid Abstract Poster Discussion Sessions](#)

- [Scientific Symposia](#)

10 - 11 a.m.

- [Meet the Expert Seminars](#)

10:45 a.m. - 12:15 p.m.

- [Adult Clinical Core Curriculum: Sleep](#)

11:30 a.m. - 12:30 p.m.

- [Meet the Expert Seminars](#)

12 - 1 p.m.

- [Outside Organization Sessions](#)

12:45 - 2:15 p.m.

- [Adult Clinical Core Curriculum: Sleep](#)

- [Clinical Topics in Pulmonary Medicine](#)

- [Clinical Year in Review](#)

- [Critical Care Track](#)

- [Mini Symposia](#)

- [Poster Discussion Sessions](#)

- [RAPiD: Rapid Abstract Poster Discussion Sessions](#)

- [Scientific Symposia](#)

BROWSE CLINICAL & SCIENTIFIC SESSIONS
CREATE YOUR ITINERARY NOW



Download the conference app to access the most current sessions, networking events, exhibitors, and industry programs

General Information

REGISTRATION

Registration will be in the Lobby of the Moscone Center, North Building and will include Express Registration and Assisted Registration Desks, as well as Membership Desks, Information Desks, and ADA Accessible counters. Express Registration is designed for attendees who are ready to pick up their badges. Assisted Registration provides on-site support for attendees who want to make changes to their registration. Registration opens on Thursday, May 12.

ATTENDEE REGISTRATION HOURS

Registration Hours

Thursday, May 12	5 - 7 p.m.
Friday, May 13	6:30 a.m. - 5 p.m.
Saturday, May 14	6:30 a.m. - 6 p.m.
Sunday, May 15	6:30 a.m. - 5:30 p.m.
Monday, May 16	6:30 a.m. - 5:30 p.m.
Tuesday, May 17	6:30 a.m. - 3:30 p.m.
Wednesday, May 18	6:30 a.m. - 1 p.m.

BADGES

Name badges must be worn for admittance to all ATS 2022 events. Please return to registration if you have lost your name badge. There will be a \$50 fee for replacement badges.

Conference badge holders are color-coded as follows:

Blue	Attendee
Purple	International Attendee
Yellow	Exhibitors
Brown	Spouses/Partners/Guest
Green	Postgraduate/Early Career Professional Courses (Friday and Saturday Only)
Clear	Press

SESSION LOCATIONS

ATS 2022 sessions, special events, assembly meetings, and committee meetings will be held at the Moscone Center and the San Francisco Marriott Marquis.

Industry Sponsored Evening Symposia will be held at the San Francisco Marriott Marquis, InterContinental San Francisco, and Hyatt Regency San Francisco Downtown SOMA.

EXHIBITS

Exhibits are located in the Moscone Center, Halls A-C (South Building, Lower Level). Badges must be worn for admittance to the Exhibit Hall and at all times in the hall.

Children under the age of 12 are not permitted in the Exhibit Hall.

ATS INTERNATIONAL OFFICE

The ATS International Conference Office is in Room 152 (South Building, Upper Mezzanine).

SPEAKER READY ROOM

There are two Speaker Ready Rooms, one located in Room 151 (South Building, Upper Mezzanine) and the other located in Room 2000 (West Building, Level 2).

All speakers need to check in at the Speaker Ready Room at least four hours before their talk. Speakers can bring their presentation to this room to view, edit and upload. This area is restricted to speakers only, and badges must be worn for admittance to the room.

Speaker Ready Room Hours:

	Room 151 (South Building, Upper Mezzanine)	Room 2000 (West Building, Level 2)
Thursday, May 12	1 - 6 p.m.	1 - 6 p.m.
Friday, May 13	6 a.m. - 6 p.m.	6 a.m. - 6 p.m.
Saturday, May 14	6 a.m. - 6 p.m.	6 a.m. - 6 p.m.
Sunday, May 15	6 a.m. - 5 p.m.	7:30 a.m. - 5 p.m.
Monday, May 16	6 a.m. - 5 p.m.	7:30 a.m. - 5 p.m.
Tuesday, May 17	6 a.m. - 5 p.m.	7:30 a.m. - 5 p.m.
Wednesday, May 18	6 a.m. - 2 p.m.	6 a.m. - 2 p.m.

PRESS OFFICE

The press office is located in the Moscone Center, Room 157 (South Building, Upper Mezzanine) and is only open to members of the press.

Press Room Hours:

Sunday, May 15	6:30 a.m. - 6 p.m.
Monday, May 16	7a.m. - 6 p.m.
Tuesday, May 17	7 a.m. - 6 p.m.
Wednesday, May 18	7 a.m. - 2 p.m.

TRANSPORTATION

Muni

Muni is San Francisco's bus and metro system that runs throughout the city, operating buses, trains, cable cars and the F-line heritage streetcar. Muni buses remain above ground and on streets while Muni Metro runs on rails and sometimes go underground. Bus stops come in many forms: small bus shelters, yellow paint on street poles, and white paint on streets. Metro stops can be found on an island in the middle of the street and in underground stations. Using the Metro Map, find the nearest Metro to your location. Find more information on how to use Muni and Muni Metro.

General Information

For all Muni routes and times, you can call 511. There are also many smartphone apps, including the 511 SF Bay Transit Trip Planner app, that provides maps, routes and times.

Cable Cars and Street Cars

Cable cars and street cars are San Francisco's historic public transit cars. Cable cars are located downtown and run on three lines: Powell-Hyde, Powell-Mason, and California Street. The F-Line streetcar runs up and down Market Street all the way to Fisherman's Wharf. Pay the conductor onboard or purchase tickets in advance at multiple locations or via smartphone using the MuniMobile app. Exact change is your only option when you are onboard the vehicles.

PresidiGo Shuttle

The PresidiGo Shuttle system provides free and accessible transportation to and around the Presidio from three routes in the city, seven days a week. Many stops are within a short walking distance from Muni or Golden Gate Transit bus lines.

RIDE SHARING

There are a few on-demand car services to choose from, most of them started by San Francisco locals. To use them, you must first download the app, register, and set up a credit card payment system. Uber and Lyft both offer options to request a private car service as well as shared car options for a discounted rate, such as Lyft Line and uberPOOL. To use these services, set a pick-up location and destination in the app. Within minutes, you will be matched with a driver. Make sure to communicate with your driver; call, text, or wave down their car and always confirm that you are getting in the correct vehicle.

TAXI

As is customary in most U.S. cities, visitors may hail a taxi directly or use a smartphone app.

CLIPPER CARD

The Clipper Card is an easy way to use the various modes of public transportation throughout San Francisco. Purchasing this pre-loaded card gives you access to BART, Muni buses, Muni Metro, and cable cars. When you board, hold the card over a scanner and listen for the beep to make sure that you have an adequate balance on your card for your fare. Be warned: fines are steep and Muni personnel check frequently for fare evasion. Cards can be bought at multiple locations and refilled at Muni/BART stations.

FIRST AID

ATS Hotels: Contact the hotel's front desk for any emergencies.

Moscone Center: First Aid support will be available in the North, South and West Buildings of the Moscone Center.

CHILD CARE FACILITIES

Onsite childcare is available. For more information, please go to: www.accentregister.com/register/ATS22

INTERNET ACCESS

WiFi is available throughout the Moscone Center – North, South and West Buildings.

LOST AND FOUND

Please be aware of your personal items at all times. The ATS is not liable for personal items lost during the Conference. There will be a lost and found maintained in the ATS International Conference Office in Moscone Center in Room 152 (South Building, Upper Mezzanine). Unclaimed items will be turned over to the Convention Center at the conclusion of the Conference. Items lost or found at any of the Conference hotels should be reported to the specific hotel.

BAGGAGE CHECK

Baggage Check will be available in the North and West Buildings.

North Lobby (Street Level)

Sunday, May 15 8:30 a.m. – 4:30 p.m.

Monday, May 16 8:30 a.m. – 4:30 p.m.

Tuesday, May 17 8:30 a.m. – 4:30 p.m.

Wednesday, May 18 8 a.m. – 3:00 p.m.

West Hall (West/Street Level)

Sunday, May 15 8:30 a.m. – 4:30 p.m.

Monday, May 16 8:30 a.m. – 4:30 p.m.

Tuesday, May 17 8:30 a.m. – 4:30 p.m.

Wednesday, May 18 8 a.m. – 3:00 p.m.

NETWORKING AND COFFEE BREAK AREA

Coffee & Connections booths are located inside the Exhibit Hall. Here you can network with colleagues in a comfortable lounge-style setting.

POSTAL AND SHIPPING NEEDS

The Moscone Center does not have an onsite business center, nor do they offer shipping services. There are several shipping services within walking distance of the Moscone Center, including the UPS Store and FedEx.

INTERNATIONAL MONEY EXCHANGE

Most major banks offer currency exchange services. San Francisco International Airport has currency exchange by Traveler's. Their services include currency exchange, travel insurance, travelers' checks, Western Union money transfer, copy and fax, and prepaid phone cards.

International Terminal:

- by Gate 91
- Arrivals
- Ticket Aisle 1
- Boarding Area A
- Boarding Area G
- Terminal 3, Post-Security

Hours: According to flights schedule

Tel: 650-821-0900

The Exhibit Hall

Explore new product, devices, innovative technology and additional learning opportunities.

Learning opportunities abound in the [ATS 2022 Exhibit Hall](#). Gain practical knowledge to advance care and research by attending booth demonstrations, Industry Theater Presentations, Guru Bars, and visiting the over 160 exhibiting companies.

Why visit the ATS 2022 Exhibit Hall?

- Find the latest innovations or learn about the newest advances
- Compare all relevant products and services in one place
- Take part in interactive hands-on demonstrations
- Speak with medical affairs officers and medical science liaisons
- Obtain patient information from the Public Advisory Roundtable exhibitors

EXCITING OFFERINGS in the ATS 2022 EXHIBIT HALL

Fun Zone

Booth 213

Head over to the Fun Zone where you can challenge your friends or colleagues to a game of “Pop a Shot”, Fuseball or Air Hockey. The Fun Zone is the perfect spot to be a kid again!

Play, Learn, Win in the Exhibit Hall

Discovery Quest – Play the virtual Exhibit Hall trivia game. Visit the participating exhibitors then answer the questions in the mobile app game for a chance to win prizes!

Power up with Health Snacks and Coffee

Sunday, Monday, and Tuesday at 11:00 a.m.

Professional Headshot Photo

Booth 2527

Complimentary for everyone. Headshots are emailed the same day.

A professional photo is a good marketing tool for the hospital, medical group, university websites, brochures and other communication channels.

Join us for a

Toast to Innovation

Networking Event

Tuesday, May 17, 1:15 – 2:15 p.m.

Celebrate where the industry gathers.

Coffee & Connections

Booths 407, 539, 1039, 2309

Your Solution Center

Moscone Center

Halls A-C, South Building, Lower Level

Exhibit Hall Hours

Sunday, May 15,
10:30 a.m. – 3:30 p.m.

Monday, May 16,
10:30 a.m. – 3:30 p.m.

Tuesday, May 17,
10:30 a.m. – 3:30 p.m.

Unopposed Exhibit Hall Time

1:15 – 2:15 p.m. daily

Industry Programs

Industry Theaters

11:30 a.m. – 2 p.m.

Moscone Center, Halls A-C (South Building, Lower Level)

Booths 200, 1537, 2135, and Rooms 5 & 6

Enjoy lunch while enhancing your educational experience during ATS 2022. Listen to industry experts discuss the latest information on products/services or disease awareness related to pulmonary, critical care, and sleep medicine in one of five theaters in the Exhibit Hall. Complimentary box lunch is provided by ATS (while quantities last).

Guru Bars

Every 30 minutes from 11:30 a.m. – 1:30 p.m.

Moscone Center, Halls A-C (South Building, Lower Level)

Booths 2501, 2505, 2513, and 2517

Guru Bars provide an intimate learning environment fostering dynamic interaction between attendees and subject matter experts. These learning experiences consist of burst sessions of 15–20 minutes fostering a rich educational experience. Every session includes a 10–15 minute problem statement, mitigating factors, the host's perspective/solution, and a challenge or question posted to attendees.

Industry Supported Evening Symposia

Sunday and Monday evenings in ATS 2022 conference hotels

6:30 – 9:30 p.m.

Industry Supported Evening Symposia complement the content offered by the ATS and provide an opportunity for attendees to further enrich their learning experiences during ATS 2022. All full-conference participants are encouraged to attend these evening programs.

Complete details on these presentations may be found at:

- [ATS Conference News](#)
- [Industry Program Listing](#)
- [Mobile App](#)

The use of cameras and audio recording equipment (including, but not limited to, cellular phones, film: digital and video, and tablets) is strictly prohibited in Industry Theaters and Guru Bars at all times. Credentialed members of the press who have received a special badge from the ATS are permitted on the floor but are restricted by the photography policy.

ATS 2022

The American Thoracic Society Would Like to Acknowledge our 2022 Corporate Members:

CHAMPION	   	CHAMPION
BENEFACTOR	   	BENEFACTOR
PATRON	  	PATRON
SUPPORTER	  	SUPPORTER
FRIEND	   	FRIEND

Resource Centers

[ATS Center](#)

**Moscone Center
Lobby (South Building, Upper Mezzanine)**

The ATS Center provides a place for you to network, recharge, and ask any questions you have about that ATS. Join us for live programming throughout the conference, and learn about how you can stay connected with the Society all year. We'll have Ask Me Anything opportunities with key ATS staff, lively discussions with prominent ATS members, and more!

Into social media? The ATS Center acts as the social media hub, with selfie stations and information about social media surprises throughout the conference.

[Center for Career Development](#)

**Moscone Center
Room 153 (South Building, Upper Mezzanine)**

The Center for Career Development (CCD) is a networking and career development forum for trainees and early-career ATS attendees. This includes medical and graduate students, residents, fellows, postdocs, and other allied health and research professionals in Pulmonary, Critical Care or Sleep Medicine and related scientific fields. The CCD offers a variety of daily workshops, didactic small group sessions, and several opportunities for informal discussion and networking focused on topics relevant to early career success.

[International Participants Center](#)

**Moscone Center
Room 154 (South Building, Upper Mezzanine)**

The International Participants Center is designed to enhance the conference experience for international participants by providing a space for participants to network and learn how the ATS and other peer societies are working to improve global health.

[Science & Innovation Center](#)

**Moscone Center
Room 155 (South Building, Upper, Mezzanine)**

The Science and Innovations Center (SIC) is a forum for all scientists, without regard to research topic or training, and researchers to meet, network, learn, and relax and recharge. The SIC offers innovative and basic science presentations that highlight exciting new topics and techniques. The Center will also host the Rising Star and SIC Abstract awards on Sunday, May 15, 12 - 3 p.m., followed by the annual PhD Reception, which takes place Sunday, May 15, 3 - 5 p.m., and the annual BEAR Cage Competition, which takes place on Monday, May 16, 12 - 2 p.m.

[Clinicians Center](#)

**Moscone Center
Room 156 (South Building, Upper Mezzanine)**

The Clinicians Center is a comfortable and congenial environment designed to enhance the International Conference experience for pulmonary, critical care and sleep practitioners. The ATS Clinicians Advisory Committee cordially invites you to attend live and informal educational and informational panel discussions and sessions presented daily by leading experts in the fields of Pulmonary, Critical Care and Sleep medicine. On Sunday, May 15 12 - 1:30 pm, the Clinicians Center will host Dr. Ganesh Raghu and a panel of expert discussants on "The new, 2022 Official ATS/ERS/JRS/ALAT Clinical Practice Guideline: Idiopathic Pulmonary Fibrosis (an Update) and Progressive Pulmonary Fibrosis in Adults".

[ATS Donor Suite](#)

**Moscone Center
Room 159 (South Building, Upper Mezzanine)**

Our donors who've made gifts of \$250 or more since June 1, 2021, are invited to use the Donor Suite during ATS 2022. It will include lounge seating, powered tables for device charging and refreshments throughout the day. Haven't made your gift yet? There will be computers for use onsite to make your gift online.

International Poster Sessions

The goal of these events is to provide an opportunity for clinicians and scientists from various parts of the world to network, to promote research in their respective regions, and to showcase the abstracts particularly of young investigators in those regions. The presentations include research abstracts that have been reviewed and approved by the ATS International Conference Committee.

INTERNATIONAL POSTER COLLOQUIUM

Organized by the International Health Committee and the Methods in Epidemiologic, Clinical and Operations Research (MECOR) Faculty.

Saturday, May 17, 8:00 a.m. - 12:30 p.m.

Moscone Center

Room 154 (South Building, Mezzanine Level)

BUENOS DÍAS, ATS

Organized by Asociación Latinoamericana de Tórax (ALAT) and the Sociedad Española de Neumología y Cirugía Torácica (SEPAR) The presentations will be made in Spanish only.

Saturday, May 14, 12:30 - 4:30 p.m.

Moscone Center

Room 9-10 (South Building, Exhibition Level)

#ATS2022

is your ticket to everything social media for the ATS International Conference!



#MOTTIRL

Join our #tweetup in San Francisco!

Come to the ATS Center at 5 p.m. on Sunday, May 15 to meet your ATS Twitter friends IRL!

Claim your ticket to the red carpet!

Collect a ticket from ATS 2022 hot spots and then visit the ATS Center for a prize! Learn more!

Maybe you'll see Al & Viola there!



General Sessions

OPENING CEREMONY

Saturday, May 14
4:30 - 5:30 p.m.
Moscone Center
Hall E (North Building,
Exhibition Level)



ATS 2022 kicks off with the Opening Ceremony, featuring a keynote address by Catherine Grace “Cady” Coleman, PhD. Dr. Coleman is a former NASA astronaut and retired U.S. Air Force colonel who has logged more than 180 days in space, including two space shuttle missions and a six-month expedition to the International Space Station, where she acted as the Lead Robotics and Lead Science officer. Cady is currently a research affiliate of the MIT Media Lab and ASU’s Global Explorer in Residence.

The Opening Ceremony also features:

- Lynn Schnapp, MD, president of the ATS, provides an update of the Society’s major accomplishments for the past year and priorities for the coming one
- Presentation of several ATS Respiratory Health Awards: Public Service Award, World Lung Health Award, and Jo Rae Wright Award for Outstanding Science

The Opening Ceremony is generously sponsored by Boehringer Ingelheim Pharmaceuticals, Inc.

ATS RECOGNITION AWARDS FOR SCIENTIFIC ACCOMPLISHMENTS

Monday, May 16
2:15 - 3:45 p.m.
Moscone Center, Room 3001/3003 (West Building,
Level 3)

As part of the ATS Respiratory Health Awards, The Recognition Awards for Scientific Accomplishments are given to individuals for outstanding scientific contributions in basic or clinical arenas to enhance the understanding, prevention and treatment of respiratory disease, critical illness, or sleep disorders and recognizes exemplary professionalism, collegiality and citizenship through mentorship and scientific involvement in the ATS community.

SUNDAY AWARDS SESSION

Sunday, May 15
4 - 5 p.m.
Moscone Center, Hall E (North Building,, Exhibition Level)

The ATS Respiratory Health Awards honor achievements in clinical and basic science research, fighting respiratory disease globally through research, education, patient care, and advocacy, education and mentorship and contributions in the public health arena. During this session, the following awards are presented:

- Edward Livingston Trudeau Medal
- Distinguished Achievement Awards
- Amberson Lecture

PLENARY SESSION

Tuesday, May 17
11:30 a.m. - 1:00 p.m.
Moscone Center
Room 3000/3002/3004 (West Building,
Level 3)



The Plenary Session features a keynote address by J. Randall Curtis, MD, MPH; a past ATS president (2009-2010).

Dr. Curtis is the director of the Cambia Palliative Care Center of Excellence at UW Medicine at the University of Washington. He is also the A. Bruce Montgomery-American Lung Association endowed chair in pulmonary and critical care medicine and UW professor of medicine. He is an expert in critical care, palliative care, and pulmonary medicine.

The Plenary Session also features:

- Introduction of the ATS slate of officers for 2022-2023
- Messages from the ATS President and President-Elect
- Presentation of several ATS Respiratory Health Awards: Outstanding Educator Award, Research Innovation and Translation Achievement Award, and Outstanding Clinician Award

The Plenary Session is generously sponsored by GSK.

ATS 2022 Sessions

ATS 2022 SAN FRANCISCO

ATS 2022 in San Francisco offers the latest in pulmonary, critical care and sleep medicine for ATS members and other physicians, scientists and health care professionals.

SESSION ADMISSION

Badges are required to attend all conference sessions and events.

Admission to Sessions

Sessions are held at The Moscone Center. Your badge allows you admittance to ninety percent of the sessions and events without additional fees or tickets. It also entitles you to entry to the Exhibit Hall.

Admission by Tickets Only

The following require pre-registration. Additional fees may apply.

- Medical Education Seminars
- Meet the Expert Seminars
- Postgraduate Courses

ATS 2022 MOBILE APP

The full Conference program is available to iPhone, iPad, and Android users through the ATS 2022 Conference app. View and bookmark sessions and speakers, and create your own personal conference itinerary. [Search for ATS 2022 in the App Store or Google Play.](#)

ePOSTERS OF ORIGINAL RESEARCH

Speakers presenting original research based on submitted abstracts have been invited to prepare and make available an ePoster of their research. The ePosters provide an opportunity to view those posts you may miss during the conference. The ePosters that have been prepared may be viewed by conference registrants online at <https://cattendee.abstractsonline.com/meeting/10476>

PUBLICATION OF ABSTRACTS

The research and case report abstracts presented at the Conference are available electronically on the website of the American Journal of Respiratory and Critical Care Medicine hosted by Atypon. The abstracts in the Final Program contain the publication number for each abstract to facilitate online access. Abstracts may be accessed at www.atsjournals.org/series/ajrccm-conference where ATS members may log in using their username and password used to access regular journal issues. Non-members may access the site on a pay-per-view basis.

FACULTY DISCLOSURES

In accordance with policies of the Accreditation Council for Continuing Medical Education and ATS, everyone in a position to control educational content (planners and presenters) of all International Conference sessions designated as CME has been instructed to complete an online faculty disclosure form. Please contact ethicsoffice@thoracic.org for more information.



DISCLOSURE DECLARATION

It is the policy of the ATS to ensure independence, balance, objectivity, scientific rigor, and integrity in all of its continuing education activities. As an accredited CME provider, the ATS requires that its planners, reviewers and presenters comply with the **ACCME Standards Integrity and Independence in Accredited Continuing Education**. The ATS also requires specific disclosure of relationships with companies and organizations associated with tobacco or cannabis and prohibits or limits participation of faculty in official ATS activities, including CME, if any tobacco industry relationship or some types of cannabis industry relationships is present. The most recent policies regarding potential conflicts of interest as well as the mechanisms to mitigate or resolve such conflicts can be found here:

[COI Policy for Official ATS Activities \(thoracic.org\)](http://thoracic.org/COI-Policy-for-Official-ATS-Activities)

CRITERIA FOR SUCCESS FOR FOR CME AND MOC DESIGNATED ACTIVITIES

CME Certificates of credit/attendance will be awarded based on the participant attending the activity, completing and submitting an evaluation and attesting to the credits earned. A CME certificate will be available upon successful completion of all three components. For MOC points, participants attend the session(s), complete the corresponding evaluation and pass the post-test for the activity with a passing score.

RECORDING OF PRESENTATIONS

The use of cameras and audio recording equipment (including, but not limited to, cellular photos, film, digital, and video) is prohibited in the Exhibit Hall. Photographs may be taken during sessions or poster presentations, provided that the photographs are strictly for personal, noncommercial use and are not to be published in any form. Attendees are prohibited from using flash photography or otherwise distracting the presenters or members of the audience. With regard to posting presentation images on social media, if a presenter requests images not be posted, conference attendees must respect those wishes.


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ATS 2022 INTERNATIONAL CONFERENCE MAY 13-18, SAN FRANCISCO

This session portion of the ATS International Conference Final Program is published by the ATS as a service to attendees. This publication contains the programs and speakers for the postgraduate courses, scientific and educational sessions presented at the conference.

While every effort is made to ensure accuracy, ATS makes no warranties, expressed or implied, related to the information. Information contained herein is subject to change without notice.

The information contained in this program is up to date as of April 15, 2022. For the most current session information, please visit the [online program itinerary](#). Look for  to view more information about ATS events, assemblies and sections.

18	Friday Postgraduate Courses
25	Saturday Postgraduate Courses
37	Sunday Conference Sessions
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 **ATS 2022**
INTERNATIONAL CONFERENCE
 San Francisco, CA


Friday, May 13

[Click Here to Access the Program Itinerary and Add Friday Sessions and Presentations to Your Calendar](#)

CLINICAL

POSTGRADUATE COURSE

PG1A CRITICAL CARE ULTRASOUND AND ECHOCARDIOGRAPHY I

 This is part 1 of a two-part course which includes PG1B on Saturday, May 18. Those registering for PG1A will be registered for PG1A and PG1B. Pre-registration and additional fees required. Attendance is limited.

Member: \$1170	In-Training Member: \$890
LMIC Member: \$825	LMIC In-Training Member: \$625
Non-Member: \$1560	In-Training Non-Member: \$1010

Assembly on Critical Care

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 2002 (West Building, Level 2)

Target Audience

Providers of critical care or emergency medicine

Objectives

At the conclusion of this session, the participant will be able to:

- apply ultrasound at bedside to assess critically ill patients;
- apply ultrasound to guide common ICU procedures;
- diagnose alternate etiologies of shock in the critically ill patient.

This is a 2-day postgraduate course that consists of didactic lectures and hands-on stations. The focus is primarily bedside transthoracic echocardiography, with some diagnostic ultrasound. The topics include basic and intermediate critical care echocardiography (including hemodynamic measures), assessment of fluid status, procedural guidance for vascular access and thoracentesis, venography. The

hands-on stations will include both healthy models and laptops that can demonstrate abnormal pathology.

Chairing: M.J. Lanspa, MD, MSCR, ATSF, Salt Lake City, UT

8:00 Welcome and Introduction to Critical Care Ultrasound: Training and Competency

M.J. Lanspa, MD, MSCR, ATSF, Salt Lake City, UT

8:20 Basic Physics, Artifacts, and Knobology

Z. Shaman, MD, Cleveland, OH

8:45 Transthoracic Windows and Views, FATE Exam

K. Anderson, MD, Stanford, CA

9:15 Basic Evaluation of LV Systolic Function, Measurement of Cardiac Output

J.C. Klick, MD, Burlington, VT

9:45 Basic Evaluation of RV Size and Function, Pulmonary Embolus

D. Pradhan, MD, New York, NY

10:15 Break

10:30 Practical Skills Session: Hands-On Station I

Apical Window

P.K. Mohabir, MD, Stanford, CA

D.A. Sweeney, MD, Poway, CA

V.A. Dinh, MD, Loma Linda, CA

L. Rapoport, MD, MS, Santa Clara, CA

Parasternal Window

Z. Shaman, MD, Cleveland, OH

J.C. Klick, MD, Burlington, VT

L. Greco, MD, Durham, NC

R.E. Burk, MD, Reno, NV

Subcostal Window

G.B. Allen, MD, Burlington, VT

J. Kasal, MD, St. Louis, MO

D. Pradhan, MD, New York, NY

A. Leibowitz, MD, Boston, MA

E. Ablordeppey, MD, St. Louis, MO

12:00 Lunch

12:30 Lunch and Clinical Cases

L. Greco, MD, Durham, NC

12:45 Chest Ultrasound

P.K. Mohabir, MD, Stanford, CA

1:15 Valvulopathy and Endocarditis

R.E. Burk, MD, Reno, NV

1:45 Basic Assessment of Diastolic Function

A. Leibowitz, MD, Boston, MA

2:15 Break

2:30 Practical Skills Session: Hands-On Station II

Lung Ultrasound (Model and Mannequin)

Z. Shaman, MD, Cleveland, OH
 D. Pradhan, MD, New York, NY
 P.K. Mohabir, MD, Stanford, CA
 R.E. Burk, MD, Reno, NV
 L. Rapoport, MD, MS, Santa Clara, CA

Cardiac Output

L. Grecu, MD, Durham, NC
 V.A. Dinh, Loma Linda, CA
 G.B. Allen, MD, Burlington, VT
 D.A. Sweeney, MD, Poway, CA
 E. Ablordeppey, MD, St. Louis, MO

Diastolic Measurements

J. Kasal, MD, St. Louis, MO
 A. Leibowitz, MD, Boston, MA
 J.C. Klick, MD, Burlington, VT

This session and the International Conference are supported by in-kind grants from Mindray, Teleflex.

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CLINICAL**POSTGRADUATE COURSE**

PG2 BRONCH DAY 2022: A COMPREHENSIVE, HANDS-ON GUIDE TO BASIC BRONCHOSCOPY, EBUS, AND NAVIGATIONAL BRONCHOSCOPY

Pre-registration and additional fees required. Attendance is limited.

Member: \$570	In-Training Member: \$360
LMIC Member: \$400	LMIC In-Training Member: \$255
Non-Member: \$660	In-Training Non-Member: \$480

Assemblies on Clinical Problems; Critical Care; Pediatrics; Thoracic Oncology

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 2004 (West Building, Level 2)

Target Audience

Adult and pediatric pulmonologists and intensivists, thoracic surgeons, physicians in training, allied health professionals, anesthesiologists interested in improving their skills in diagnostic and therapeutic flexible bronchoscopy and EBUS

Objectives

At the conclusion of this session, the participant will be able to:

- diagnose and manage adults and children with benign and malignant respiratory diseases;
- improve knowledge of basic flexible bronchoscopy and strengthen procedural skills;
- understand the indications for linear and radial endobronchial ultrasound and the skills necessary to perform these procedures.

This course is designed to provide a comprehensive introduction to diagnostic and therapeutic flexible bronchoscopy. Participants will acquire the knowledge and skills to improve their proficiency in basic bronchoscopic techniques and be introduced advanced diagnostic bronchoscopy, including linear and radial endobronchial ultrasound and navigational bronchoscopy. A series of didactic lectures will be followed by intensive, hands-on training, through the use of physical and virtual reality simulators which will help participants strengthen their procedural skills. This course will be of particular interest to a provider seeking to refine their flexible bronchoscopy skills and wish to review the data behind the various bronchoscopic techniques. Audience Response System will be used during lectures.

Chairing: C.L. Channick, MD, Los Angeles, CA
 N. Maouelainin, DO, MBA, Lansdale, PA
 S.S. Oh, DO, Santa Monica, CA

8:00 Introduction

C.L. Channick, MD, Los Angeles, CA

8:10 Optimizing Basic Bronchoscopy Skills: Bronchoalveolar Lavage, Brushings, and Biopsies

S.S. Oh, DO, Santa Monica, CA

8:35 Performing Flexible Bronchoscopy in COVID-19 and Other High-Risk Patients: How to Maximize Outcomes and Safety

A.C. Argento, Baltimore, MD

9:00 The Role of Flexible Bronchoscopy in the Management of Hemoptysis

C.R. Lamb, MD, Burlington, MA

9:25 Break**9:40 Pediatric Flexible Bronchoscopy for the Adult and Pediatric Bronchoscopists**

C. Spencer, MD, New York, NY

10:05 The Fundamentals of Linear EBUS: Overview of the Basic Technique and the Data

C.L. Channick, MD, Los Angeles, CA

10:30 Navigational Bronchoscopy: From Fluoroscopy to Robotics

E.E. Folch, MD, MS, Boston, MA

10:55 Bronchoscopic Lung Volume Reduction

A. Majid, MD, Boston, MA

11:20 Lunch**12:09 Practical Skills Session****Bronchoscopy with Biopsy and Needle Aspiration of Endobronchial Lesion**

M.S. Parikh, MD, Boston, MA
 N. Maouelainin, DO, MBA, Lansdale, PA

Management of the Difficult Airway and Tracheostomy Tubes

I. Susanto, MD, Santa Monica, CA
 M. Shafiq, MD, MPH, Boston, MA

Bronchoscopic Management of Hemoptysis

C.R. Lamb, MD, Burlington, MA
G.Z. Cheng, MD, PhD, San Diego, CA

Techniques for Foreign Body Removal Using Flexible Bronchoscopy

E. Volker, MD, MSPH, Denver, CO
Y.B. Gesthalter, MD, San Francisco, CA

1:45 **Break**2:00 **Practical Skills Session****Navigational Bronchoscopy- Radial Endobronchial Ultrasound**

P. Lee, MD, Singapore, Singapore
O. Kalchiem-Dekel, New York, NY

Navigational Bronchoscopy-Robotic Bronchoscopy

S. Garwood, MD, Nashville, TN
C. Manley, MD, Philadelphia, PA

Endobronchial Ultrasound Anatomy

A.C. Argento, MD, Baltimore, MD

Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration

C. Oberg, MD, Torrance, CA
J. De Cardenas, MD, Ann Arbor, MI

Endobronchial Valve Placement

A. Majid, MD, Boston, MA
A.J. Schwalk, MD, Lubbock, TX

This session and the International Conference are supported by an independent medical educational grant from Olympus Corporation of the Americas.

This session and the International Conference are supported by in-kind grants from Cook Medical, Intuitive Surgical, Olympus Corporation of the Americas, Teleflex, Zephyr. All CME sessions have been planned and implemented in accordance with the Accreditation Criteria of the Accreditation Council for Continuing Medical Education (ACCME®) and are free of the control of ineligible companies (formerly commercial interests).

CLINICAL**POSTGRADUATE COURSE****PG3 EXTRACORPOREAL LIFE SUPPORT: HOW TO DO IT AND WHEN**

R Pre-registration and additional fees required. Attendance is limited.

Member: \$570	In-Training Member: \$360
LMIC Member: \$400	LMIC In-Training Member: \$255
Non-Member: \$660	In-Training Non-Member: \$480

Assemblies on Critical Care; Clinical Problems; Nursing; Pediatrics; Pulmonary Circulation; Respiratory Structure and Function

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER**Room 2006 (West Building, Level 2)****Target Audience**

Pulmonary and critical care physicians, nurses and respiratory therapists who would like to enhance their competence in ECMO patient management

Objectives

At the conclusion of this session, the participant will be able to:

- describe appropriate patient selection considerations for venoarterial and venovenous ECMO;
- understand common complications and how to assess and manage;
- identify methods of cannulation for ECMO and provide technical assistance in cannulation by attendees.

This session will consist of multiple rotating small group stations facilitated by interprofessional and experienced ECMO faculty. There will be a mix of interactive didactic sessions, hands-on workshops, and simulation sessions. Content will include ECMO management including patient selection, circuit components, circuit initiation, daily management of ECMOV patient circuit emergencies, weaning, and cannulation. In order to maximize time and experience, we will utilize a flipped classroom model, whereby some attendees will receive lectures while others are doing simulations. Online education developed by faculty will also be available prior to the course to augment foundation of ECMO understanding.

Chairing: H.J. Dalton, MD, Falls Church, VA
B. Patel, MD, Phoenix, AZ

8:00 **Welcome and Introduction**

H.J. Dalton, MD, Falls Church, VA

8:10 **VV ECMO Physiology**

S. Conrad, MD, Shreveport, LA

8:35 **ECMO Indications and Patient Selection Including CARDS**

A. Combes, MD, Paris, France

8:55 **Rotate & Move**9:00 **How to Approach and Treat Hypoxemia (VV)**

B. Zakhary, MD, Portland, OR

9:20 **Mechanical Ventilation Pre and On VV ECMO**

C. Rackley, MD, Durham, NC

9:45 **Bleeding/Thrombosis and Anticoagulation**

H.J. Dalton, MD, Falls Church, VA

10:05 **Overview of Neurologic Assessment and Outcomes of VV ECMO**

H. Kanji, MD, Vancouver, Canada

10:25 **Rotate & Move**10:30 **Practical Skills Session**

Simulation Station 1: Circuit Management

C. Agerstrand, MD, New York, NY
A.M. Zaaqoq, MD, MPH, Washington, DC
C. Alwardt, CCP, Scottsdale, AZ

Simulation Station 2: Circuit Components, Knobology, & Monitoring

T. Preston, CCP, Columbus, OH

Simulation Station 3: Ultrasound Assessment in ECMO

H. Sekiguchi, MD, Rochester, MN

B. Patel, MD, Phoenix, AZ

11:55 **Lunch**

12:25 **VA ECMO Physiology**

S.A. Conrad, MD, PhD, MBA, Shreveport, LA

12:45 **Rotate & Move**

12:50 **VA Goals and LV Unloading**

R. Lorusso, MD, Maastricht, Netherlands

1:15 **Weaning (Failure) and Post Decannulation Care (Including Lung TX Eval Timing)**

M. Desai, MD, Falls Church, VA

1:35 **Procedures on ECMO**

P.E. Mason, MD, San Antonio, TX

1:55 **Challenging ECMO Patients**

H.J. Dalton, MD, Falls Church, VA

2:05 **Challenging ECMO Patients**

R. Lorusso, MD, PhD, Maastricht, Netherlands

2:15 **Rotate & Move**

2:20 **Practical Skills Session**

Simulation Station 4: Cannulation Pearls and How To Do It Demo

S.A. Conrad, MD, PhD, MBA, Shreveport, LA

Simulation Station 5: Hypoxia on VA ECMO

C. Agerstrand, MD, New York, NY

H. Kanji, Vancouver, Canada

C. Alwardt, CCP, Scottsdale, AZ

Simulation Station 6: Circuit Emergencies

M. Robinson, RN, Columbus, OH

J.H. Badulak, MD, Seattle, WA

3:50 **Summary and Closing Remarks**

This session and the International Conference are supported by in-kind grants from FUJIFILM/SonoSite, Getinge ECMO, Getinge Ventilators, LivaNova.

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CLINICAL

POSTGRADUATE COURSE

PG4 PEDIATRIC DIAGNOSTIC, ADVANCED DIAGNOSTIC, AND INTERVENTIONAL BRONCHOSCOPY

R Pre-registration and additional fees required. Attendance is limited.

Member: \$570

In-Training Member: \$360

LMIC Member: \$400

LMIC In-Training Member: \$255

Non-Member: \$660

In-Training Non-Member: \$480

Assembly on Pediatrics

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 2008 (West Building, Level 2)

Target Audience

Clinicians, Pediatric Pulmonologists Performing Bronchoscopy

Objectives

At the conclusion of this session, the participant will be able to:

- describe new findings about diagnostic, advanced diagnostic and interventional bronchoscopy in children;
- better diagnose airway dynamic disorders in children;
- more appropriately refer and provide care to children who could benefit from advanced diagnostic and therapeutic bronchoscopy procedures.

This course will introduce attendees to a broad spectrum of diagnostic, advanced diagnostic and interventional pediatric flexible bronchoscopy techniques from endobronchial and transbronchial biopsies to EBUS and CT-guided navigational procedures. Indications, risks and potential benefits will be discussed, followed by opportunity for hands-on practice under the guidance of leaders in the field of advanced pediatric bronchoscopy. The course will offer insights relevant to both trainees and experienced bronchoscopists.

Chairing: J.C. Piccione, MS, DO, ATSF, Philadelphia, PA

A. Vicencio, MD, New York, NY

E. Hysinger, MD, MSCE, Cincinnati, OH

8:00 **The Future of Pediatric Flexible Bronchoscopy: Advice for the Next Generation**

R.E. Wood, PhD, MD, Cincinnati, OH

8:25 **Sleep State Endoscopy for Evaluation of Upper Airway Obstruction**

R.E. Wood, PhD, MD, Cincinnati, OH

8:50 **Assessment and Impact of Abnormal Lower Airway Dynamics**

E. Hysinger, MD, MSCE, Cincinnati, OH

9:15 **Questions and Answers**

A. Vicencio, MD, New York, NY

9:40 **Lunch**

- 9:55 Endobronchial Brushings in Cystic Fibrosis and Primary Ciliary Dyskinesia**
J. Brewington, MD, Cincinnati, OH
- 10:20 Endobronchial Forceps and Cryobiopsy**
C. Spencer, MD, New York, NY
- 10:45 Transbronchial Lung Biopsy in Children**
S.B. Goldfarb, MD, ATSF, Minneapolis, MN
- 11:10 Endobronchial Ultrasound (EBUS) Techniques in Children**
J.C. Piccione, MS, DO, ATSF, Philadelphia, PA
- 11:35 Endobronchial Valves for Persistent Air Leak in Children**
J. Puchalski, MD, MEd, New Haven, CT
- 12:00 Lunch**
- 12:30 Practical Skills Session**
- Station 1 - Endobronchial Biopsy**
E.M. Deboer, MD, MSCR, Aurora, CO
- Station 2 - Foreign Body Retrieval**
J.C. Piccione, MS, DO, ATSF, Philadelphia, PA
- Station 3 - Cryoprobe**
C. Spencer, MD, New York, NY
- Station 4 - Radial EBUS & CT Navigational Bronchoscopy**
J.C. Piccione, MS, DO, ATSF, Philadelphia, PA
- Station 5 - Linear EBUS**
J. Puchalski, MD, New Haven, CT
- Station 6 - Fiberoptic Intubation**
E. Hysinger, MD, MSCE, Cincinnati, OH

This session and the International Conference are supported by an independent medical educational grant from

Olympus Corporation of the Americas.

This session and the International Conference are supported by in-kind grants from

Avanos, Broncus, ERBE USA, INC., Olympus Corporation of the Americas.

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CLINICAL

POSTGRADUATE COURSE

PG5 ADVANCES IN THE HOME MANAGEMENT OF CHRONIC RESPIRATORY FAILURE

Pre-registration and additional fees required. Attendance is limited.

Member: \$570	In-Training Member: \$360
LMIC Member: \$400	LMIC In-Training Member: \$255
Non-Member: \$660	In-Training Non-Member: \$480

Assemblies on Sleep and Respiratory Neurobiology; Clinical Problems; Pediatrics

8:00 a.m. - 4:00 p.m. MOSCONE CENTER

Room 2010 (West Building, Level 2)

Target Audience

All health care providers who care for patients with chronic respiratory failure syndromes on home mechanical ventilation; including physicians, advanced practice providers, nurses, respiratory therapists, and junior faculty including fellows

Objectives

At the conclusion of this session, the participant will be able to:

- develop skills for the management of chronic respiratory failure syndromes in the ambulatory or home setting;
- develop knowledge on algorithms and features of respiratory assist devices, home mechanical ventilators, and understand how to interpret downloaded report from devices in order to optimize ventilatory support for specific diseases;
- develop knowledge on indications and applications of mechanical airway clearance devices in the ambulatory setting.

Patients with chronic hypercapnic respiratory failure are unable to breathe independently without noninvasive/invasive ventilatory support. In order to properly care for this complex patient population, a solid understanding of home mechanical ventilators, respiratory assist devices, and mechanical airway clearance is critical. The course aims to highlight advances in home mechanical ventilation for specific to disease states including hypercapnic COPD, obesity hypoventilation syndrome, and neuromuscular disorders. There will be a skills-based (hands-on) component providing learners the chance to dive into specific algorithms and functionalities of each device.

Chairing: M. Cao, DO, Palo Alto, CA
J.O. Benditt, MD, Seattle, WA
K.A. Provost, DO, PhD, Buffalo, NY
J.H. Hansen-Flaschen, MD, ATSF, Philadelphia, PA

- 8:00 Introduction and Course Overview/Goals**
M. Cao, DO, Stanford, CA
- 8:05 Understanding NIV: Respiratory Assist Device (RAD) Versus Home Mechanical Ventilator**
L.F. Wolfe, MD, Chicago, IL
- 8:35 Telemonitoring for Home Assisted Ventilation**
J. Ackrivo, MD, MSCE, Philadelphia, PA
- 9:05 Optimizing Mechanical Airway Clearance Strategies**
K.A. Provost, DO, PhD, Buffalo, NY
- 9:35 Break**
- 9:50 Obesity Hypoventilation Syndrome: When Is NIV Superior To CPAP**
A.J. Piper, EdM, PhD, Camperdown, Australia
- 10:20 Home Noninvasive Ventilation for COPD**
J.E. Orr, MD, La Jolla, CA
- 10:50 NIV for the Neuromuscular Patient**
M. Cao, DO, Palo Alto, CA
- 11:20 Lunch**

12:20 Introduction to Afternoon Practical Skills

M. Cao, DO, Stanford, CA

12:30 Practical Skills Session**Station 1 - Bilevel S and ST**

D. Zielinski, MD, Montreal, Canada

J.P. Brown, MD, PhD, Salt Lake City, UT

Station 2 - Volume Assured Pressure Support (VAPS)

R. Amin, MD, Toronto, Canada

J.E. Orr, MD, La Jolla, CA

Station 3 - Astral and Vivo 45LS Ventilators + Sip Ventilation

L.F. Wolfe, MD, Chicago, IL

H. Sawnani, MD, Cincinnati, OH

2:00 Break**Station 4 - Trilogy 202, Trilogy Evo + Sip Ventilation**

B. Lussier, MD, Dallas, TX

B. Selim, MD, Rochester, MN

Station 5 - Mechanical Airway Clearance, Volara, Metaneb, Vest System

J. Ackrivo, MD, MSCE, Philadelphia, PA

S.L. Katz, MD, Ottawa, Canada

Station 6 - VOCSN Multifunction Ventilator

J.O. Benditt, MD, Seattle, WA

K.A. Provost, DO, PhD, Buffalo, NY

3:50 Questions and Answers with Panel

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CLINICAL • TRANSLATIONAL**POSTGRADUATE COURSE****PG6 JUMP START: A BEGINNER'S GUIDE TO DRUG/TECHNOLOGY AND COMPANY DEVELOPMENT IN AN ACADEMIC SETTING**

R Pre-registration and additional fees required. Attendance is limited.

Member: \$480

In-Training Member: \$300

LMIC Member: \$340

LMIC In-Training Member: \$210

Non-Member: \$570

In-Training Non-Member: \$420

Assemblies on Respiratory Cell and Molecular Biology; Drug Device Discovery and Development Committee

8:00 a.m. - 4:00 p.m.**MOSCONE CENTER****Room 3008 (West Building, Level 3)****Target Audience**

Investigators pursuing basic, translational, or clinical who are interested in early-stage technology development (e.g. drugs, devices, biomarkers), entrepreneurship and/or forming academic start-ups

Objectives

At the conclusion of this session, the participant will be able to:

- better understand early-stage drug discovery and technology development processes and how to identify the commercialization potential of academic-based inventions;
- learn about essentials and challenges various aspects of commercialization: intellectual property (patents), IND-enabling studies, pre-clinical study design, business development, company spin-out, pitching to investors, securing funding, and more;
- learn how to develop a business pitch for investors. Attendees will develop a 5 minute pitch based on their technologies/products of interest and will practice by pitching to the group.

This course will review the best practices for developing new drugs/technologies and commercialization for discoveries initially made in academic settings. Although innovative thinking and cutting-edge has the potential to translate into novel products, many scientists/clinicians in academia are not familiar with the best practices that lead to successful commercialization. Here, attendees will discover real-life stories from experts on what works and doesn't work when the goal is to translate research findings into successful products/technologies. Topics will include start-up formation, intellectual property, drug development, IND-enabling studies, funding resources, business development, and more.

Chairing: M. Vukmirovic, PhD, Toronto, Canada
L. Hecker, PhD, Atlanta, GA
K. Hajipouran Benam, PhD, Pittsburgh, PA

8:00 Introduction and General Welcome

M. Vukmirovic, PhD, Toronto, Canada

8:10 An Introduction to Drug Development in Lung Diseases - Academic Perspective

R.H. Gomer, PhD, College Station, TX

8:35 What's Mine Is Mine: Promoting and Protecting Your IP During Publication

N.J. Kenyon, MD, MSCR, Sacramento, CA

9:00 The Importance of Target Engagement Studies in Preclinical Research

S. Turner, PhD, South San Francisco, CA

9:25 Questions and Answers**9:40 Break****9:55 Expert Fireside Chats: The Future of Pulmonary Medicine**

N. Kaminski, MD, ATSF, New Haven, CT

M. Koenigshoff, MD, PhD, Pittsburgh, PA

-
- 10:25 Panel Discussion: Taking the Next Steps After Discovery**
R. Tarran, PhD, Chapel Hill, NC
A.H. Cohen, MD, Menlo Park, CA
T.R. Watkins, MD, MSc, Seattle WA
M. Vukmirovic, PhD, Toronto, Canada
- 11:05 Introduction to Pre-IND Enabling Studies and Clinical Trials**
T.M. Maher, MD, MSc, PhD, Los Angeles, CA
- 11:30 Lunch**
- 11:45 Power Lunch: Navigating and Growing an Academic Startup**
J.J. Rose, MD, MBA, Pittsburgh, PA
R.K. Mallampalli, MD, Columbus, OH
- 12:30 Experts Chats: Funding Made Easy**
R.H. Gomer, PhD, College Station, TX
L. Hecker, PhD, Atlanta, GA
- 12:55 Lessons From Venture Capitalists - Do's and Don'ts When Developing a New Drug**
D.G. Morris, MD, Basel, Switzerland
K. Hajipouran Benam, PhD, Pittsburgh, PA
- 1:25 Early Stage Drug Development Presentation- Fibrinox**
L. Hecker, PhD, Atlanta, GA
- 1:31 Early Stage Drug Development Presentation- Mediar Therapeutics**
D. Lagares, PhD, MSc, Boston, MA
- 1:37 Early Stage Drug Development Presentation- Pilant Therapeutics**
S. Turner, PhD, South San Francisco, CA
- 1:43 Early Stage Technology Development Presentation- Pneumax**
K. Hajipouran Benam, PhD, Pittsburgh, PA
- 1:50 Break**
- 2:00 Workshop: Work in Groups to Prepare 5 Min Pitch Slide Deck**
M. Vukmirovic, PhD, Toronto, Canada
- 3:00 Presentations from PG Course Participants and Feedback**
L. Hecker, PhD, Atlanta, GA
- 3:55 Closing Remarks - Chairpersons**
K. Hajipouran Benam, PhD, Pittsburgh, PA



ATS 2022
INTERNATIONAL CONFERENCE
San Francisco, CA


Saturday, May 14

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CLINICAL

POSTGRADUATE COURSE

PG1B CRITICAL CARE ULTRASOUND AND ECHOCARDIOGRAPHY II

 This is part 2 of a two-part course which includes PG1A on Friday, May 13. Pre-registration and additional fees required. Attendance is limited. See PG1A for course fees.

Assembly on Critical Care

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 2002 (West Building, Level 2)

Target Audience

Providers of critical care or emergency medicine

Objectives

At the conclusion of this session, the participant will be able to:

- apply ultrasound at bedside to assess critically ill patients;
- apply ultrasound to guide common ICU procedures;
- diagnose alternate etiologies of shock in the critically ill patient.

This is a 2-day postgraduate course that consists of didactic lectures and hands-on stations. The focus is primarily bedside transthoracic echocardiography, with some diagnostic ultrasound. The topics include basic and intermediate critical care echocardiography (including hemodynamic measures), assessment of fluid status, procedural guidance for vascular access and thoracentesis, venography. The hands on stations will include both healthy models and laptops that can demonstrate abnormal pathology.

Chairing: M.J. Lanspa, MD, ATSF, Salt Lake City, UT

8:00 Vascular Ultrasound: DVT Evaluation
L. Rapoport, MD, MS, Santa Clara, CA

8:25 Vascular Access
S. Bain, MD, Seattle, WA

8:45 Tamponade
G.B. Allen, MD, Burlington, VT

9:15 Using Ultrasound to Assess Intravascular Volume and Fluid Responsiveness
M.J. Lanspa, MD, MSCR, ATSF, Salt Lake City, UT

9:45 Ultrasound for Diuresis and Dialysis
D.A. Sweeney, MD, Poway, CA

10:15 Break

10:30 Practical Skills Session: Hands-On Station III

Vascular Ultrasound

S. Bain, MD, Seattle, WA
Z. Shaman, MD, Cleveland, OH
L. Grecu, MD, Durham, NC
L. Rapoport, MD, MS, Santa Clara, CA
D. Pradhan, MD, New York, NY

Tamponade Evaluation

V.A. Dinh, MD, Loma Linda, CA
G.B. Allen, MD, Burlington, VT
P.K. Mohabir, MD, Stanford, CA
J.C. Klick, MD, Burlington, VT

Volume Status

R.E. Burk, MD, Reno, NV
J. Kasal, MD, St. Louis, MO
D.A. Sweeney, MD, Poway, CA
A. Leibowitz, MD, Boston, MA
E. Ablordeppey, MD, St. Louis, MO

12:00 Lunch

12:30 Lunch and Clinical Cases II
Y. Duanmu, MD, Stanford, CA

12:45 Abdominal Ultrasound
V.A. Dinh, MD, Loma Linda, CA

1:15 Goal Directed Management of Shock Using Echocardiography
J. Kasal, MD, St. Louis, MO

1:45 Incorporating Echocardiography into Shock and CPR
E. Ablordeppey, MD, St. Louis, MO

2:15 Break

2:30 Practical Skills Session: Hands-On Station IV

Abdominal Ultrasound

E. Ablordeppey, MD, St. Louis, MO
Z. Shaman, MD, Cleveland, OH
V.A. Dinh, MD, Loma Linda, CA
D. Pradhan, MD, New York, NY
R.E. Burk, Reno, NV

Echo in Shock and CPR

L. Rapoport, MD, MS, Santa Clara, CA
 G.B. Allen, MD, Burlington, VT
 J.C. Klick, MD, Burlington, VT
 L. Grecu, MD, Durham, NC

Ask the Expert

A. Leibowitz, MD, Boston, MA
 J. Kasal, MD, St. Louis, MO
 S. Bain, MD, Seattle, WA
 D.A. Sweeney, MD, Poway, CA
 P.K. Mohabir, MD, Stanford, CA

This session and the International Conference are supported by an in-kind grant from Mindray, Teleflex.

All CME sessions have been planned and implemented in accordance with the Accreditation Criteria of the Accreditation Council for Continuing Medical Education (ACCME®) and are free of the control of ineligible companies (formerly commercial interests).

BASIC • CLINICAL • TRANSLATIONAL

POSTGRADUATE COURSE

PG7 ASTHMA: LATEST TECHNIQUES AND TOOLS FOR THE INVESTIGATOR

R Pre-registration and additional fees required. Attendance is limited.

Member: \$420	In-Training Member: \$240
LMIC Member: \$295	LMIC In-Training Member: \$170
Non-Member: \$510	In-Training Non-Member: \$360

Assemblies on Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology

8:00 a.m. - 4:00 p.m. MOSCONE CENTER

Room 3016/3018 (West Building, Level 3)

Target Audience

Investigators or potential investigators who are interested in basic, translational, and clinical research in asthma

Objectives

At the conclusion of this session, the participant will be able to:

- gain a broad understanding of methodology in asthma research, from translational immunology to clinical trial design;
- learn how to apply immunophenotyping and omics techniques to the study of asthma;
- understand new concepts in clinical trials in asthma, including adaptive designs, master protocols, and recruitment of underrepresented groups.

This course is focused on providing a comprehensive overview of major techniques and tools in asthma investigation, ranging from clinical trials to translational tools to basic models. The course will allow investigators of different backgrounds to get a broad view of the current state of asthma research and provide cross-training that may allow them to expand their research in new directions. The course is also well suited for junior investigators who are pursuing careers in asthma research.

Chairing: P. Akuthota, MD, ATSF, La Jolla, CA
 M. Kraft, MD, ATSF, Tucson, AZ
 B.D. Medoff, MD, Boston, MA

8:00 Introduction

P. Akuthota, MD, ATSF, La Jolla, CA

8:05 Advances in Clinical Trial Design in Asthma

L.C. Denlinger, MD, PhD, Madison, WI

8:35 Translational Research Tools: Bronchoscopy with Segmental Allergen Challenge

B.D. Medoff, MD, Boston, MA

9:05 Addressing Disparities in Asthma Research

J.C. Celedon, MD, DrPH, ATSF, Pittsburgh, PA

9:35 Studying Innate Immunity in Asthma

M. Kraft, MD, ATSF, Tucson, AZ

10:05 Break**10:20 New Concepts in Mouse Models of Asthma**

D. Vercelli, MD, Tucson, AZ

10:50 Studying Human Eosinophils in Asthma and Beyond

P. Akuthota, MD, ATSF, La Jolla, CA

11:10 Adaptive Immunity in Asthma I: T Cells

R.A. Rahimi, MD, PhD, Boston, MA

11:40 Lunch**12:20 Adaptive Immunity in Asthma II: Dendritic Cells**

J.L. Cho, MD, Iowa City, IA

12:45 Advanced Imaging Techniques in the Study of Asthma

E.A. Hoffman, PhD, ATSF, Iowa City, IA

1:10 Asthma Genetics and Genomics

S. Sharma, MD, MPH, Aurora, CO

1:40 Microscaled and Single Cell Sequencing Approaches in Asthma Research

G.L. Chupp, MD, New Haven, CT

2:05 Break**2:20 Structural Cells in Asthma**

J.L. Ingram, PhD, ATSF, Durham, NC

2:40 Rare Cell Types in Asthma

X. Sun, PhD, La Jolla, CA

3:00 Immune Cell Phenotyping in Asthma

R.M. Tighe, MD, ATSF, Durham, NC

3:30 Studying Physiology in Asthma

R.A. Panettieri, MD, New Brunswick, NJ


This session and the International Conference are supported by an independent medical educational grant from Genentech, Inc.

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POSTGRADUATE COURSE

PG8 FUNDAMENTALS OF WRITING SUCCESSFUL RESEARCH PROJECT GRANTS: RISING TO THE NEXT LEVEL - FUND-R

 Pre-registration and additional fees required. Attendance is limited.

Member: \$480	In-Training Member: \$300
LMIC Member: \$340	LMIC In-Training Member: \$210
Non-Member: \$570	In-Training Non-Member: \$420

Assemblies on Behavioral and Health Services Research; Clinical Problems; Critical Care; Nursing; Pediatrics; Pulmonary Infections and Tuberculosis; Sleep and Respiratory Neurobiology; Thoracic Oncology

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 3003 (West Building, Level 3)

Target Audience

Early to mid stage investigators (fellows, clinical faculty, advanced practice nurses, PhDs) interested in submitting R-level research project grants focused on basic, clinical, translational, health services, or implementation research

Objectives

At the conclusion of this session, the participant will be able to:

- compose a competitive research project grant application as an independent investigator with an emphasis on innovative research;
- formulate and articulate integrated research plans that outline an innovative and feasible project that should be funded;
- gain a better understanding of the grant review process, including resubmission, through participation in a mock study section.

Writing your first R01 can be a daunting endeavor but does not need to be. This session will combine didactics with hands-on practice in order for participants to learn fundamental skills to develop a competitive R01 grant proposal. Key topics will include: writing a compelling research plan, developing a team of investigators, and creating a budget. Participants will gain an appreciation of the review process through participation in a mock study section and interact throughout the day with a diverse faculty composed of previous awardees, experienced mentors, and grant reviewers from various funding bodies.

Chairing: A. Volerman, MD, Chicago, IL
S.M. Nyenhuis, MD, Chicago, IL
T.S. Valley, MD, MSc, Ann Arbor, MI

8:00 **Welcome and Introductions**

8:15 **The Alphabet and Number Soup: An Overview of Different R Mechanisms**
A. Volerman, MD, Chicago, IL

- 8:35 **How to Know When You Are Ready to Apply for an R**
S.M. Nyenhuis, MD, Chicago, IL
- 8:55 **Aiming for Success: Preparing Your Specific Aims Page**
R.S. Wiener, MD, MPH, ATSF, Boston, MA
- 9:15 **Small Group Breakout: Writing Specific Aims**
R. Kohn, MD, MSCE, Philadelphia, PA
- 9:45 **Break**
- 9:55 **What's the Big Deal? Crafting Strong Significance and Innovation Sections**
T.S. Valley, MD, MSc, Ann Arbor, MI
- 10:15 **Laying the Foundation: Outlining Preliminary Data**
C.T. Hough, MD, MSc, Portland, OR
- 10:35 **Looking Under the Hood: Laying Out a Successful Research Approach**
G.A. Silvestri, MD, Charleston, SC
- 10:55 **Creating Your Investigative Team**
L.C. Feemster, MSc, MD, Seattle, WA
- 11:15 **Lunch**
- 12:15 **Give Me the Money: Developing a Budget**
K.A. Riekert, PhD, Baltimore, MD
- 12:35 **The "Other" Sections: What Else Do I Need to Know About the Process of Grant Preparation**
L.P. Hariri, BS, MD, PhD, ATSF, Boston, MA
- 12:55 **Small Group Breakout: Review Grant Prior to Mock Study Section**
A.J. Admon, MD, MPH, MSc, Ann Arbor, MI
- 1:25 **Break**
- 1:35 **Mock Study Section for R01 Grant Review**
K.A. Riekert, PhD, Baltimore, MD
A. Morris, MD, MS, Pittsburgh, PA
C.H. Weiss, MD, MS, Evanston, IL
M.L. Salisbury, MD, MS, Nashville, TN
S.E. Evans, MD, ATSF, Houston, TX
D.H. Au, MD, MS, ATSF, Seattle, WA
J.P. Reilly, MD, MSCE, Philadelphia, PA
- 2:05 **Moderated Discussion About Grant Review**
J.A. Wambach, MD, MS, St. Louis, MO
- 2:30 **Now What? After the Grant Review**
E. Forno, MD, MPH, ATSF, Pittsburgh, PA
- 2:50 **Break**
- 3:00 **Panel of Recent Awardees and Senior Investigators**
E.K. Kross, MD, Seattle, WA
M.P. Kerlin, MD, MS, Philadelphia, PA
C.R. Cooke, MD, Ann Arbor, MI
V.G. Press, MD, MPH, ATSF, Chicago, IL
D.K. Costa, PhD, RN, Ann Arbor, MI
- 3:45 **Conclusion**

CLINICAL

POSTGRADUATE COURSE

PG9 THORACIC IMAGING FOR THE PULMONOLOGIST AND CRITICAL CARE PHYSICIAN

R Pre-registration and additional fees required. Attendance is limited.

Member: \$420	In-Training Member: \$240
LMIC Member: \$295	LMIC In-Training Member: \$170
Non-Member: \$510	In-Training Non-Member: \$360

Assemblies on Clinical Problems; Allergy, Immunology and Inflammation; Critical Care; Pulmonary Circulation; Pulmonary Infections and Tuberculosis; Thoracic Oncology

8:00 a.m. - 4:00 p.m. MOSCONE CENTER

Room 3002 (West Building, Level 3)

Target Audience

Pulmonologists, critical care physicians, thoracic surgeons, advanced practice providers, residents, fellows, respiratory therapists, and students

Objectives

At the conclusion of this session, the participant will be able to:

- formulate a differential diagnosis of respiratory diseases based on diagnostic imaging findings;
- state the value of a multidisciplinary approach to diagnosis and management of patients with diffuse lung diseases and recommendations on diagnosis of idiopathic pulmonary fibrosis;
- improve strategies for the evaluation of solitary pulmonary nodules and for approaching challenging cases encountered on lung cancer screening.

This postgraduate course will review major thoracic imaging topics. Presentations are targeted towards practitioners in pulmonary and critical care medicine. Thoracic radiologists will offer case-based reviews focusing on the key aspects of chest imaging. Presentations will be image rich and focus on key imaging findings, differential diagnosis, and common pitfalls. Topics will cover a broad range of chest disease and will be relevant to trainees, generalists, and alike. At the conclusion of the course, learners will have increased knowledge about thoracic imaging and be able to bring that knowledge to their respective practices.

Chairing: M.D. Martin, MD, Madison, WI
J. Kanne, MD, Madison, WI

8:00 Large Airways Diseases
J. Kanne, MD, Madison, WI

8:30 Small Airways Diseases
T. Henry, MD, San Francisco, CA

9:00 Diseases of the Pleura
C.C. Wu, MD, Houston, TX

9:30 Break

9:45 Solitary Pulmonary Nodule
J. Mammarrappallil, MD, PhD, Chapel Hill, NC

10:15 Lung Cancer Screening
M.D. Martin, MD, Madison, WI

10:45 Lunch

11:45 Pulmonary Infections
L. Ketaj, MD, Albuquerque, NM

12:15 Nuclear Medicine 101 for the Pulmonologist
J. Kanne, MD, Madison, WI

12:45 Pulmonary Hypertension
E.M. Johnson, MD, Jacksonville, FL

1:15 Break

1:30 Multidisciplinary Approach to Diffuse Lung Diseases
S.J. Halliday, MD, MSci, Madison, WI
S. Hobbs, MD, Lexington, KY
K.D. Jones, MD, San Francisco, CA

CLINICAL

POSTGRADUATE COURSE

PG10 INTERSTITIAL LUNG DISEASE: DELIVERING OPTIMAL, PATIENT CENTERED CARE

R Pre-registration and additional fees required. Attendance is limited.

Member: \$420	In-Training Member: \$240
LMIC Member: \$295	LMIC In-Training Member: \$170
Non-Member: \$510	In-Training Non-Member: \$360

Assemblies on Clinical Problems; Behavioral and Health Services Research; Environmental, Occupational and Population Health; Nursing; Pulmonary Circulation; Pulmonary Rehabilitation

8:00 a.m. - 4:00 p.m. MOSCONE CENTER

Room 3004 (West Building, Level 3)

Target Audience

Pulmonary fellows, general pulmonologists, ILD specialists, and advanced care nurses who provide clinical care for patients with ILD

Objectives

At the conclusion of this session, the participant will be able to:

- be able to apply a consistent, effective strategy to ILD/IPF diagnosis;
- understand the range of therapeutics available for ILD and how and when to prescribe them;
- be able to integrate a holistic and interdisciplinary approach to ILD patient care.

This course will provide a practical approach to the diagnosis and management of patients with ILD. It will bring the most recent

recommendations and guidelines into a usable strategy that will facilitate the care of patients with ILD. This will be accomplished through didactics, simulated MDD and panel discussion of difficult cases which will provide a range of learning methods to reach the largest number of learners.

Chairing: S.K. Danoff, MD, PhD, ATSF, Baltimore, MD
M. Kreider, MD, MSCE, ATSF, Philadelphia, PA

- 8:00 Introduction**
S.K. Danoff, MD, PhD, ATSF, Baltimore, MD
- 8:10 Clinical Evaluation of the New ILD Patient**
S. Sood, MD, MS, Philadelphia, PA
- 8:35 New Guidelines for Diagnosis of ILD**
E. Renzoni, PhD, London, United Kingdom
- 9:00 Recognizing CT Patterns**
S. Hobbs, MD, Lexington, KY
- 9:25 Natural History of Disease and Monitoring**
C. Newton, MD, Dallas, TX
- 9:50 Break**
- 10:20 ILD Speed MDD**
E. Renzoni, PhD, London, United Kingdom
S. Sood, MD, MS, Philadelphia, PA
L.P. Hariri, BS, MD, PhD, ATSF, Boston, MA
S. Hobbs, MD, Lexington, KY
C. Newton, MD, Dallas, TX
M. Kreider, MD, MSCE, ATSF, Philadelphia, PA
E.J. Bernstein, MD, MSc, New York, NY
- 11:30 Lunch**
- 12:30 Therapies for IPF**
Y.N. Mageto, MD, MPH, ATSF, Dallas, TX
- 12:55 Therapies for CTD-ILD**
V. Cottin, PhD, MD, Lyon, France
- 1:20 Non-Pharmacologic Care in ILD**
M. Wijsenbeek, MD, PhD, Rotterdam, Netherlands
- 1:45 Pulmonary Hypertension and Lung Transplant in ILD Patients**
E.D. Farrand, MD, San Francisco, CA
- 2:10 Break**
- 2:40 Tough Cases**
Y.N. Mageto, MD, MPH, ATSF, Dallas, TX
V. Cottin, PhD, MD, Lyon, France
M. Wijsenbeek, MD, PhD, Rotterdam, Netherlands
E.D. Farrand, MD, San Francisco, CA
S.K. Danoff, MD, PhD, ATSF, Baltimore, MD
E.J. Bernstein, MD, MSc, New York, NY
M. Kreider, MD, MSCE, ATSF, Philadelphia, PA

3:50 Wrap Up

M. Kreider, MD, MSCE, ATSF, Philadelphia, PA

This session and the International Conference are supported by independent medical educational grants from

Boehringer Ingelheim Pharmaceuticals, Inc., Genentech, Inc.

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BEHAVIORAL • CLINICAL

POSTGRADUATE COURSE

PG11 LONG TERM OXYGEN THERAPY IN 2022: WHAT WE NEED TO KNOW AND WHAT IS NEXT

R Pre-registration and additional fees required. Attendance is limited.

Member: \$420

In-Training Member: \$240

LMIC Member: \$295

LMIC In-Training Member: \$170

Non-Member: \$510

In-Training Non-Member: \$360

Assemblies on Nursing; Clinical Problems; Pulmonary Rehabilitation

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 3005 (West Building, Level 3)

Target Audience

Health care professionals who care for patients using supplemental oxygen, including physicians, nurses, respiratory therapists, PAs and NPs and also individuals working in advocacy and policy around oxygen services

Objectives

At the conclusion of this session, the participant will be able to:

- incorporate the new ATS oxygen CPG into current practice, including the importance of ongoing monitoring, managing patients needing high flow oxygen, and meeting the educational needs of patients and caregivers;
- improve clinician knowledge to better counsel mobile patients with resting and exertional hypoxemia on the rationale for oxygen therapy and how to match their expectations and lifestyle needs to the capabilities of available technologies;
- improve the quality of life and health status of patients using long-term oxygen therapy by demonstrating understanding of the different portable oxygen device technologies, oxygen reimbursement requirements, and oxygen advocacy efforts.

This full day session will review critical content related to the provision of supplemental long-term oxygen therapy (LTOT) to adults outside of the acute care setting. The educational needs are broad and complex for health care professionals who care for patients with a variety of pulmonary problems who receive LTOT. Course attendees will increase clinical practice knowledge around the rationale and process for prescribing oxygen, the evidence from the recent ATS Oxygen CPG,

the oxygen equipment prescription based on patients' needs, equipment technology, oxygen device innovation, and gaps in research. Additionally, subject matter experts will discuss reimbursement barriers and share advocacy and policy efforts in device innovation.

- Chairing:** S.S. Jacobs, RN, MS, Stanford, CA
C. Garvey, MSN, MPA, FNP, San Francisco, CA
J.A. De Andrade, MD, Nashville, TN
- 8:00 The Patient Perspective: What Clinicians Need to Know**
B. Jackson, MS, Little Rock, AR
- 8:30 Oxygen 101: Qualification, Orders, Equipment Options**
C. Garvey, MSN, MPA, FNP, San Francisco, CA
- 9:00 The Finer Points of Portable Oxygen Concentrators (POCs)**
R.D. Branson, MS, RRT, Cincinnati, OH
- 9:30 ATS Oxygen CPG: Evidence for Prescribing Oxygen for Patients With Resting Hypoxemia**
J. Krishnan, MD, PhD, ATSF, Chicago, IL
- 10:00 PRO/CON Debate- PRO: Patients With Exertion-Only Hypoxemia Should Be Prescribed Supplemental Ambulatory Oxygen**
J. Krishnan, MD, PhD, ATSF, Chicago, IL
- 10:15 PRO/CON Debate-CON: Patients With Exertion-Only Hypoxemia Should Not Be Prescribed Supplemental Ambulatory Oxygen**
A.E. Holland, PT, PhD, Melbourne, Australia
- 10:30 Break**
- 11:00 The Evolution of Reimbursement Since Competitive Bidding: Where Do We Stand?**
A.M. Hummel, Alexandria, VA
- 11:30 Interfacing With Durable Oxygen Supply Companies: Ordering vs Reality, the Appeal Process and More**
S.S. Jacobs, RN, MS, Stanford, CA
- 12:00 Lunch**
- 1:00 What Is the Priority for Oxygen Policy Today? Perspectives From Professional and Advocacy Organizations**
G. Ewart, MHS, Washington, DC
Schmidt, JD, Evanston, IL
A.M. Hummel, Alexandria, VA
R. Tal-Singer, PhD, Washington, DC
N. Freedman, MD, Chicago, IL
- 1:30 Evidence and Practice for Oxygen in Palliative and End-of-Life Care**
A.M. Schneidman, MS, CNS, RN, ATSF, Phoenix, AZ
- 2:00 Break**
- 2:30 Is It Possible to Give Too Much of a Good Thing? Oxygen Therapy Pitfalls and Possible Toxicity in Patients With COPD and ILD**
J.D. Andrade, MD, Nashville, TN

- 3:00 Oxygen Device Innovation: Remote Control, Autotitration and More**
R.D. Branson, MS, RRT, Cincinnati, OH
- 3:30 Gaps in Oxygen Research: Where to Next?**
C. Ryerson, MD, Vancouver, Canada

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POSTGRADUATE COURSE

PG12 GENDER EQUITY IN ACADEMIA: A SLIPPERY LADDER AND A LEAKY PIPELINE

- Pre-registration and additional fees required. Attendance is limited.**
- | | |
|--------------------|--------------------------------|
| Member: \$420 | In-Training Member: \$240 |
| LMIC Member: \$295 | LMIC In-Training Member: \$170 |
| Non-Member: \$510 | In-Training Non-Member: \$360 |

Assemblies on Pediatrics; Allergy, Immunology and Inflammation; Behavioral and Health Services Research; Critical Care; Environmental, Occupational and Population Health; Nursing; Pulmonary Circulation; Respiratory Cell and Molecular Biology; Respiratory Structure and Function

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 3007 (West Building, Level 3)

Target Audience

All ATS attendees would benefit from this session, including trainees, junior faculty and senior faculty, in basic, clinical, behavioral and translational

Objectives

At the conclusion of this session, the participant will be able to:

- incorporate new strategies for mentoring women, particularly URM women to allow for increased retention and promotion of women in academia;
- apply strategies for mitigating harassment of women in the academic workplace;
- define the role of institutions and academic societies in the advancement of women scientists.

This program will delve into issues of gender equity in medicine, including educational/didactic sessions, panel discussions, and concrete strategies that can be applied at home institutions to address gender inequity. This course has been co-sponsored by nearly all ATS assemblies.

Chairing: H.H. De Keyser, MD, MSCR, Aurora, CO
T.A. Laguna, MD, MSci, Chicago, IL


- 8:00 Opening Remarks**
D.M. Boyer, MD, MPHE, Columbus, OH
- 8:10 Challenges Facing URM Women in Academic Medicine**
J.L. Taylor-Cousar, MD, MSc, ATSF, Denver, CO

- 8:40 Mentoring Diverse Women**
V.G. Press, MD, MPH, ATSF, Chicago, IL
- 9:10 Break**
- 9:40 Moderated Discussion**
B.E. Himes, PhD, ATSF, Philadelphia, PA
T.A. Laguna, MD, MSci, Chicago, IL
H.H. De Keyser, MD, MSCR, Aurora, CO
S.L. Martiniano, MD, MS, Aurora, CO
C. Eckhardt, MD, New York, NY
- 10:40 Lunch**
- 11:40 Gender Equity: The Role of Men**
N. Kaminski, MD, ATSF, New Haven, CT
- 12:10 Work Life Integration/Parental Leave**
C.E. Ventetuolo, MD, MSCR, Providence, RI
- 12:40 Women in Leadership Panel**
S.D. Davis, MD, ATSF, Chapel Hill, NC
R.R. Deterding, MD, Aurora, CO
C.H. Wendt, MD, ATSF, Minneapolis, MN
D.M. Boyer, MD, Columbus, OH
- 1:20 Role of Societies in Supporting Women**
M.E. Rebuli, PhD, Chapel Hill, NC
I. Jaspers, PhD, Chapel Hill, NC
- 1:50 Break**
- 2:20 Strategies for Mitigating Harassment: Bystander/Upstander Training**
C.H. Wendt, MD, ATSF, Minneapolis, MN
- 2:40 Strategies for Mitigating Harassment: Patient Perpetrated Harassment**
E.M. Viglianti, MD, MPH, MSc, Ann Arbor, MI
- 3:00 Equity in Grant Funding**
M.A.O. Curley, PhD, Philadelphia, PA
- 3:30 Academic Negotiation/Advocating for Yourself**
N.A. Shah, MD, MPH, MSci, New York, NY

BASIC

POSTGRADUATE COURSE

PG14 LUNG IMMUNITY AND RESPIRATORY INFECTION

-  Pre-registration and additional fees required. Attendance is limited.
- | | |
|--------------------|--------------------------------|
| Member: \$420 | In-Training Member: \$240 |
| LMIC Member: \$295 | LMIC In-Training Member: \$170 |
| Non-Member: \$510 | In-Training Non-Member: \$360 |

Assemblies on Pulmonary Infections and Tuberculosis; Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 3008 (West Building, Level 3)

Target Audience

Research trainees, clinicians seeking biological perspectives, scientists desiring infection/health knowledge, those with clinical or research activities, and those needing instruction outside of specialty

Objectives

At the conclusion of this session, the participant will be able to:

- describe new findings about specialized elements of immunity within the lung;
- improve research efforts relating to pulmonary immunology and respiratory infections;
- apply knowledge of immunopathophysiology and immunoprotection to preventing and treating patients with or at risk for pneumonia.

The session will provide an overview of immunity in the lung, and how that lung immunity determines the outcome of respiratory infection, including protective and pathogenic immune activities.

Chairing: J.P. Mizgerd, ScD, ATSF, Boston, MA
H. Koziel, MD, Boston, MA

- 8:00 Resident and Recruited Macrophages in the Lung**
W.J. Janssen, MD, Denver, CO
- 8:30 Neutrophils and Acute Lower Respiratory Infection**
K. Traber, MD, PhD, ATSF, Boston, MA
- 9:00 Eosinophils and Antimicrobial Defense**
A.E. Samarasinghe, PhD, Memphis, TN
- 9:30 Visualizing Immunity in the Lungs**
M.R. Looney, MD, San Francisco, CA
- 10:00 Break**
- 10:15 Epithelial Cell Responses to Lung Infection**
S. Herold, MD, PhD, Giessen, Germany
- 10:45 Mesenchymal Contributions to Lung Immunity**
P.G. Thomas, PhD, Memphis, TN
- 11:15 The Lung Microbiome and Lung Immunity**
R.P. Dickson, MD, Ann Arbor, MI
- 11:45 Lunch**
- 12:45 TRM Cells in the Lung**
J. Sun, PhD, Charlottesville, VA
- 1:15 BRM Cells in the Lung**
T. Randall, PhD, Birmingham, AL
- 1:45 An Anatomic Approach to Study Lung Resident Immunity**
D. Farber, PhD, New York, NY
- 2:15 Break**
- 2:30 Mucosal Vaccine Approaches for Fighting Lung Infection**
J.K. Kolls, MD, New Orleans, LA

- 3:00 Stimulating Lung Innate Immunity to Prevent Respiratory Infection**
S.E. Evans, MD, ATSF, Houston, TX
- 3:30 Co-Morbidities and Susceptibility to Respiratory Infection**
C. Dela Cruz, MD, PhD, ATSF, New Haven, CT

CLINICAL

POSTGRADUATE COURSE

PG15 DIFFICULT CLINICAL QUESTIONS IN PULMONARY AND CRITICAL CARE INFECTIONS

R Pre-registration and additional fees required. Attendance is limited.

Member: \$420	In-Training Member: \$240
LMIC Member: \$295	LMIC In-Training Member: \$170
Non-Member: \$510	In-Training Non-Member: \$360

Assemblies on Pulmonary Infections and Tuberculosis

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER

Room 3024 (West Building, Level 3)

Target Audience

Clinicians who manage patients with lung infections and those who manage intensive care unit patients with infections related to critical illness

Objectives

At the conclusion of this session, the participant will be able to:

- apply contemporary diagnostic and treatment approaches to a variety of infections encountered in the local practice setting to improve the care of the pulmonary/critical care patient with infection;
- understand contemporary epidemiology of infections in the immunocompromised host, including the critically ill, and select appropriate diagnostic and therapeutic modalities;
- gain an updated understanding of the contemporary treatment options for the patient with resistant lung pathogens.

This course will provide clinicians with a broad overview of, as well as recent updates on, current challenges in pulmonary and critical care infections, including those caused by bacteria, mycobacteria, viruses, and fungal pathogens. Issues specific to infections in the immunocompromised host will likewise be discussed. Each talk will begin with a challenging case example followed by a multiple-choice question, which the attendees will answer using an audience response system (ARS).

Chairing: O. Epelbaum, MD, ATSF, Valhalla, NY
K. Pennington, MD, Rochester, MN
C.A. Hage, MD, ATSF, Indianapolis, IN

- 8:00 Introduction**
O. Epelbaum, MD, ATSF, Valhalla, NY
- 8:05 Resistant Pathogens in Severe CAP: Exaggerated or Underestimated?**
Barbara E. Jones, MD, MSc, Salt Lake City, UT

- 8:30 How Should VAP Be Defined and Treated?**
R.G. Wunderink, MD, Chicago, IL
- 8:55 Pleural Space Infection: Medical or Surgical Disease?**
N. Rahman, BMBCh, MSc, MCRP, Oxford, United Kingdom
- 9:20 Panel Discussion**
- 9:35 Break**
- 9:50 Steroids for Viral Pneumonia: Why COVID but Not Influenza?**
C. Dela Cruz, MD, PhD, ATSF, New Haven, CT
- 10:15 What Are the Options for Managing Treatment Failure in Pulmonary MAC?**
R. Thomson, MBBS, PhD, Greenslopes, Australia
- 10:40 How Have Recent Clinical Trials Impacted Treatment of Latent and Active Pulmonary TB?**
S.E. Dorman, MD, Charleston, SC
- 11:05 Panel Discussion**
- 11:20 Lunch**
- 12:20 Empirical Therapy for Invasive Candidiasis in the ICU: Who, When, How?**
S. Jacobs, MD, New York, NY
- 12:45 Aspergillus in the Critically Ill: Real Danger or Phantom Fear?**
K. Pennington, MD, Rochester, MN
- 1:10 Is There a Right and Wrong Way to Use Procalcitonin in the ICU?**
S. Kadri, MD, MS, Bethesda, MD
- 1:35 Panel Discussion**
- 1:50 Break**
- 2:05 BAL for Opportunistic Infection: What Is There Beyond Culture?**
M. Ferrer, MD, PhD, Barcelona, Spain
- 2:30 What Has Changed in the Landscape of Pneumocystis Pneumonia?**
K.A. Crothers, MD, Seattle, WA
- 2:55 Lung Infections on Biologics: What to Consider Before and During Therapy?**
K.L. Winthrop, MD, MPH, Portland, OR
- 3:20 Panel Discussion**
- 3:35 Post-Test**
K. Pennington, MD, Rochester, MN
- 3:50 Conclusion**
C.A. Hage, MD, ATSF, Indianapolis, IN


*This session and the International Conference are supported by an independent medical educational grant from
Insmid Incorporated*

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BASIC • CLINICAL • TRANSLATIONAL

POSTGRADUATE COURSE

PG17 THE SENESCENCE PIPELINE: FROM BASICS TO MODELS AND THERAPEUTIC IMPLICATIONS

 Pre-registration and additional fees required. Attendance is limited.

Member: \$420	In-Training Member: \$240
LMIC Member: \$295	LMIC In-Training Member: \$170
Non-Member: \$510	In-Training Non-Member: \$360

Assemblies on Respiratory Cell and Molecular Biology; Clinical Problems; Critical Care; Respiratory Structure and Function

8:00 a.m. - 4:00 p.m. MOSCONE CENTER

Room 3011 (West Building, Level 3)

Target Audience

Physicians, physician scientists, scientists, fellows and trainees with an interest in the area of lung aging and regeneration, in particular how cellular senescence influences the development of chronic and acute lung diseases

Objectives

At the conclusion of this session, the participant will be able to:

- to improve participants knowledge on cellular senescence biology and relevance in chronic and acute lung diseases;
- to identify opportunities for novel investigation into understudied aspects of cellular senescence biology and disease relevance;
- to gain how advances in cellular senescence biology are revealing new therapeutic approaches to deplete or modify senescent cells.

The primary objective of this course is to provide a comprehensive state of the art overview about current approaches and findings that demonstrate the relevance of cellular senescence during lung aging, injury, and repair. The lectures of this PG course will feature the basics of cellular senescence, the different upstream inducers of cellular senescence as well as its downstream mediators. It will further feature its relevance in different chronic and acute lung diseases across the age spectrum and finally how to modify cellular senescence as a therapeutic target in lung diseases.

Chairing: C.R. Kliment, MD, PhD, Pittsburgh, PA
J.R. Baker, PhD, ATSF, London, United Kingdom
O. Eickelberg, MD, ATSF, Pittsburgh, PA
Z. Borok, MBChB, ATSF, La Jolla, CA

8:00 Why Do We Need to Care About Senescence in Frailty and Chronic Lung Disease

M. Koenigshoff, MD, PhD, ATSF, Pittsburgh, PA

Senescence Basics

8:21 The Different Faces of Cellular Senescence

B. Schilling, PhD, Novato, CA

8:42 Triggers of Senescence in the Lung

A.L. Mora, MD, Columbus, OH

9:02 Inflammaging and Senescence

J.R. Baker, PhD, ATSF, London, United Kingdom

9:22 Questions and Answers

9:32 Break

Senescence Tools and Methods

10:03 Mouse and Human Models to Study Cellular Senescence

C.T. Jourdan Le Saux, PhD, San Francisco, CA

10:23 Utilizing Single Cell Sequencing to Characterize Cellular Senescence

B.R. Stripp, PhD, Los Angeles, CA

10:43 Context Dependent SASP and How to Identify It

J.K. Alder, PhD, Pittsburgh, PA

11:03 Questions and Answers

11:13 Lunch

Senescence in Lung Disease

12:14 Cellular Senescence in Airway Disease

Y.S. Prakash, MD, PhD, Rochester, MN

12:34 Cellular Senescence in COPD Mediates Alveolar Niche Reprogramming

M. Sauler, MD, New Haven, CT

12:54 Cellular Senescence of Different Cell Populations Mediates IPF

M. Lehmann, PhD, Neuherberg, Germany

1:14 Cellular Senescence Contributes to COVID-19 Pathogenesis

S. Adnot, MD, Créteil, France

1:34 Questions and Answers

1:44 Break

Senescence: Therapy and Outcomes

2:15 Pre-Clinical Development of Novel Drug Candidates for Age-Associated Lung Diseases

L. Hecker, PhD, Atlanta, GA

2:35 Considerations for Next-Stage Clinical Trials for Senolytic Therapies

A.H. Limper, MD, Rochester, MN

2:55 Senescence and Frailty Phenotypes: Impact on Patient Outcomes

J.P. Singer, MS, MD, San Francisco, CA

3:15 Questions and Answers

3:35 Summary

Z. Borok, MBChB, ATSF, La Jolla, CA

O. Eickelberg, MD, ATSF, Pittsburgh, PA

BEHAVIORAL • CLINICAL

POSTGRADUATE COURSE

PG18 BREATHING EASIER: PFT CLINICAL UPDATES AND BEST PRACTICES

R Pre-registration and additional fees required. Attendance is limited.

Member: \$420	In-Training Member: \$240
LMIC Member: \$295	LMIC In-Training Member: \$170
Non-Member: \$510	In-Training Non-Member: \$360

Assemblies on Respiratory Structure and Function; Clinical Problems

8:00 a.m. - 4:00 p.m. MOSCONE CENTER

Room 3020/3022 (West Building, Level 3)

Target Audience

Current and future directors of PFT labs, attending physicians, respiratory therapists, trainees, fellows, and other interested health care providers

Objectives

At the conclusion of this session, the participant will be able to:

- to gain further understanding of the principles and practice of pulmonary function diagnostic tests;
- to develop greater confidence interpreting pulmonary function test results in clinical practice;
- to identify strategies to approach the interpretation of pulmonary function test results in complex patients.

This course will focus on clinical lung function testing, combining guidelines from The new technical standards published in the past three years with interactive experience in small group settings focusing on the performance, interpretation, and reporting of PFT and a brief primer on cardiopulmonary exercise testing. We will combine didactic lectures with case-based instruction, small group discussion, and live demonstration of spirometry and diffusing capacity measurement. Challenging cases will be presented before a group of expert clinicians and physiologists. We will use a multidisciplinary team approach to facilitating case discussions including content experts, clinicians, respiratory therapists, and pulmonary function laboratory medical directors from around the world.

Chairing: R. Clay, MD, Clackamas, OR
T. Decato, MD, Torrance, CA
M.C. McCormack, MHS, MD, Baltimore, MD

8:00 Introduction
R. Clay, MD, Clackamas, OR

8:10 A Breath of Fresh Air: Spirometry State of the Art Measurement and Interpretation
S. Stanojevic, PhD, Halifax, Canada

8:45 Clearing the Air in Diffusing Capacity Assessment and Interpretation
T. Decato, MD, Torrance, CA

9:15 1-2-3 Breathe - Real-Time Demonstration of PFT Assessment and Troubleshooting
G.L. Ruppel, MEd, RRT, RPFT, Saint Louis, MO

9:55 Break

10:05 Small Breaths Now - Pediatric Considerations in PFT
D.J. Weiner, MD, ATSF, Pittsburgh, PA

10:35 Full Gas: Clinical Exercise Testing
H.B. Rossiter, PhD, Torrance, CA

11:05 Breathing Together: Small Group PFT Case Discussions
M.C. McCormack, MHS, MD, Baltimore, MD
R. Clay, MD, Clackamas, OR
T. Decato, MD, Torrance, CA

12:05 Lunch

12:50 Shaky Breathing - Use of Forced Oscillation Technique in Clinical Practice
D.A. Kaminsky, MD, Burlington, VT

1:20 Methacholine and Beyond: Insights Into New Guidelines for Bronchial Challenge Testing
T.S. Hallstrand, MD, MPH, ATSF, Seattle, WA

2:00 Quality Inspiran - Ensuring Lab Excellence in the Post-COVID-19 Era
C.D. Mottram, RRT, RPFT, Rochester, MN

2:30 Break

2:40 Respiration Classification - Complex Patterns in Pulmonary Function
A.S. Niven, MD, Rochester, MN

3:10 Full of Hot Air: Expert Panel Case Debate
A.S. Niven, MD, Rochester, MN
N.R. Macintyre, MD, Durham, NC
D.A. Kaminsky, MD, Burlington, VT
M.C. McCormack, MHS, MD, Baltimore, MD
D.J. Weiner, MD, ATSF, Pittsburgh, PA
R. Clay, MD, Clackamas, OR

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CLINICAL • TRANSLATIONAL

POSTGRADUATE COURSE

PG19 LUNG CANCER 2022: STATE OF THE ART

R Pre-registration and additional fees required. Attendance is limited.

Member: \$420	In-Training Member: \$240
LMIC Member: \$295	LMIC In-Training Member: \$170
Non-Member: \$510	In-Training Non-Member: \$360

Assembly on Thoracic Oncology

8:00 a.m. - 4:00 p.m.

MOSCONE CENTER**Room 3001 (West Building, Level 3)****Target Audience**

Clinicians who take care of patients with lung cancer including pulmonologists, interventional pulmonologists, thoracic surgeons, medical and radiation oncologists, fellows-in-training, and physician extenders

Objectives

At the conclusion of this session, the participant will be able to:

- integrate/incorporate new lung cancer screening recommendations. Understand the factors that impact rates of LCS and rates of annual adherence;
- improve and update knowledge of new lung cancer treatments. Apply this knowledge to enhancing diagnostic interventions that will support personalized lung cancer treatment;
- learn new findings about the pulmonary toxicities associated with targeted therapies and immunotherapy.

This comprehensive course with up to date didactic lectures coupled with interactive tumor boards, will review the advances in the development of more effective methods for detection, diagnosis and treatment of lung cancer. Tobacco treatment strategies, patient selection and implementation of new lung cancer screening recommendations, review of the biology of lung cancer and differences in incidence, biology, and outcomes between men and women with lung cancer, application of biomarkers in clinical practice, advances in precision medicine and in the role immunotherapy across all stages of NSCLC and in small cell lung cancer, recognition and management of toxicities due to lung cancer therapies, and strategies to minimize disparities in care across the continuum of lung cancer will be reviewed.

Chairing: D.J. Feller-Kopman, MD, Lebanon, NH
N.T. Tanner, MD, MSCR, Charleston, SC

- 8:00 Introduction**
D.J. Feller-Kopman, MD, Lebanon, NH
- 8:05 Tobacco Dependence Treatment: An Integral Component of Lung Cancer Care**
H. Kathuria, MD, ATSF, Boston, MA
- 8:30 Lung Cancer Screening a Decade After the NLST: Progress and Challenges**
N.T. Tanner, MD, MSCR, Charleston, SC
- 8:55 Lung Cancer in Women: A Modern Epidemic**
C. Chang, MD, Los Angeles, CA
- 9:20 The Molecular Basis of Lung Carcinogenesis**
K.M. Fong, MBBS, PhD, Brisbane, Australia
- 9:45 Break**
- 10:00 Biomarkers in the Management of Lung Nodules: Are We There Yet**
C.R. Sears, MD, ATSF, Indianapolis, IN

- 10:25 The Changing Landscape of Targeted Therapy in NSCLC**
Y.B. Gesthalter, MD, San Francisco, CA
- 10:50 The Evolving Role of Immunotherapy in Lung Cancer**
M. Das, MD, Palo Alto, CA
- 11:15 Management of Stage IIIA Lung Cancer - The Role of Surgery in the Era of Immunotherapy**
F. Detterbeck, MD, New Haven, CT
- 11:40 Lunch**
- 12:10 Multidisciplinary Tumor Board**
N.T. Tanner, MD, MSCR, Charleston, SC
- 12:55 Update on Mesothelioma**
D.J. Feller-Kopman, MD, Lebanon, NH
- 1:20 Cancer Related Fatigue Syndrome in Lung Cancer**
B. Bade, MD, New Haven, CT
- 1:45 Pulmonary Toxicity Due to Targeted Therapies and Immune Check Point Inhibitors**
K. Suresh, MD, Baltimore, MD
- 2:10 Addressing Disparities Across the Lung Cancer Continuum**
J.P. Wisnivesky, MD, DrPH, New York, NY
- 2:35 Break**
- 2:50 Lung Cancer Year in Review: Top 5 Papers in 2021**
P. Nana-Sinkam, MD, Richmond, VA
- 3:15 Multidisciplinary Tumor Board**
D.J. Feller-Kopman, MD, Lebanon, NH

4:15 p.m. - 5:30 p.m.

OPENING CEREMONY



ATS 2022 kicks off with the Opening Ceremony, featuring a keynote address by **Catherine Grace "Cady" Coleman, PhD**. Cady Coleman is a former NASA astronaut and retired U.S. Air Force colonel who has logged more than 180 days in space, including two space shuttle missions and a six-month expedition to the International Space Station, where she acted as the Lead Robotics and Lead Science officer.

Dr. Coleman is a chemist, earning a BS degree from MIT, and an engineer, having received a PhD degree in polymer science and engineering from the University of Massachusetts, Amherst. She is a passionate advocate for inclusion in STEM/STEAM fields.

Cady is currently a research affiliate of the MIT Media Lab and ASU's Global Explorer in Residence. She is also an advisor to Earthrise Alliance, which uses satellite imagery to provide context for environmental and social justice issues.

An amateur flute player, Dr. Coleman is best known for her "Space Duet" with Ian Anderson of Jethro Tull and her work from space with the acclaimed Irish band, The Chieftains.

Dr. Coleman will share how she managed isolation and maintained connection during her 6 months in space. This experience can serve as a guide to how we can all re-enter our new world once restrictions are lifted due to the Coronavirus.

Also during the Opening Ceremony will be:

- ATS President **Lynn Schnapp, MD** will provide an update of the Society's major accomplishments for the past year and priorities for the coming one.
- Presentations of the Public Service Award, World Lung Health Award, and Jo Rae Wright Award for Outstanding Science.

The Opening Ceremony is generously sponsored by Boehringer Ingelheim Pharmaceuticals, Inc

5:30 p.m. - 6:30 p.m.

THE NETWORKING EXCHANGE FOR EARLY CAREER PROFESSIONALS



The Network Exchange is a welcome event for all Early Career Professionals (residents, fellows, post docs, IP members, and other medical professionals) and takes place on Saturday following the Opening Ceremony. This one-hour event allows attendees to network and mingle with peers as well as provides information at the start of the conference. This event includes cocktails and appetizers.

What to expect at the one-hour event?

- Come mingle with colleagues, mentors and peers
- Learn about the ATS Road Map and other early career professional materials
- Learn how you can become an ATS member for FREE and much more

This event is sponsored / organized by the Membership, Training, Education and Members in Transition and Training (MITT) committees.

 **The event is free to paid conference registrants, but registration is required.**



ATS 2022
INTERNATIONAL CONFERENCE
San Francisco, CA

Sunday Morning, May 15

[Click Here to Access Sunday Sessions and Presentations to Your Calendar](#)

MEET THE EXPERTS

CME Credits Available: 1

 Pre-registration and additional fees required. Attendance is limited.

Member: \$100

LMIC Member: \$70.

7:00 a.m. - 8:00 a.m. MOSCONE CENTER

South Building, Lower Mezzanine

ME1 LUNG CANCER AND FIBROSIS: COMMON PATHWAYS AND DIVERGENCE

G. Stella, MD, PhD, Pavia, Italy

Room 52/54/56 (South Building, Lower Mezzanine)

ME2 "RELATIONSHIP ADVICE": OPTIMIZING THE MENTOR-MENTEE RELATIONSHIP

T.M. Dempsey, MD, MPH, Sacramento, CA

J.B. Richards, MD, MA, ATSF, FACP, Boston, MA

K. Pennington, MD, Toronto, Canada

E. Kelly, MD, Dublin 4, Ireland

Room 58/60 (South Building, Lower Mezzanine)

ME3 APPROACH TO LUNG NODULES IN 2021

S. Islam, MD, Augusta, GA

Room 70/72 (South Building, Lower Mezzanine)

ME4 NAVIGATING THERAPEUTIC OPTIONS FOR PF-ILD

M. Koslow, MD, Denver, CO

A. Oh, MD, Denver, CO

M. Padilla, MD, New York, NY

Room 74/76 (South Building, Lower Mezzanine)

10:45 a.m. - 11:45 a.m

MOSCONE CENTER

South Building, Lower Mezzanine

ME5 CARING FOR OLDER ADULTS WITH SERIOUS RESPIRATORY ILLNESS THROUGH GERIPULM

A.S. Iyer, MD, MSPH, Birmingham, AL

L. Witt, MD, Chicago, IL

Room 50/62 (South Building, Lower Mezzanine)

ME6 RACE AND SPIROMETRY: THE CONSEQUENCES OF RACIAL CORRECTIONS USED IN NORMALIZATION

D.J. Conrad, MD, La Jolla, CA

Room 52/54/56 (South Building, Lower Mezzanine)

ME7 NICOTINE AND TOBACCO DEPENDENCE COUNSELING AND TREATMENT IN PEDIATRIC HEALTH CARE

H.J. Farber, MD, MSPH, ATSF, Houston, TX

Room 58/60 (South Building, Lower Mezzanine)

ME8 MENTAL HEALTH IN PATIENTS WITH CHRONIC RESPIRATORY DISEASE: ASSESSMENT AND TREATMENT

A.M. Yohannes, PhD, ATSF, Azusa, CA

Room 70/72 (South Building, Lower Mezzanine)

ME9 THE "MIDAS" TOUCH: MITOCHONDRIAL DYSFUNCTION AS A DRIVER OF CELLULAR SENESCENCE IN LUNG DISEASE

S.M. Cloonan, PhD, Dublin, Ireland

C.R. Kliment, MD, PhD, Pittsburgh, PA

S. Victorelli, PhD, Rochester, MN

Room 74/76 (South Building, Lower Mezzanine)

BASIC • BEHAVIORAL • TRANSLATIONAL

KEYNOTE SERIES

CME Credits Available: .75

K1 RESTORATION IN THE AFTERMATH

8:15 AM - 9:00 AM

MOSCONE CENTER

Room 7-8 (South Building, Exhibition Level)

How do we carry on when we are living in impossible circumstances? This is the challenge of our times, and one that unites health care workers, patients, and their families.

Using an innovative story-telling framework, the presenters will illustrate how patient and provider narratives can provide a critical foundation for healing.

Through honest reflection, reappraisal of our field and a shared visioning of our strengths we will gain insight as to how we move forward collectively, united in a way that will uphold and respect all that we've lost as well as the ways in which we have changed.

Introduction: J. M. Beck, MD, ATSF, Denver, CO

Featured Speakers: R.L. Awdish, MD, MS, Detroit, MI
M.M. Hosey, PhD, Baltimore, MD

YEAR IN REVIEW

CME Credits Available: 1.5

MOC Points Available: 1.5

A1 CLINICAL YEAR IN REVIEW 1

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Hall E (North Building, Exhibition Level)

Target Audience

Pulmonary, critical care and sleep providers. The program will discuss general topics of interest to a broad group of providers, inside and outside of these subspecialties. The program is relevant to not only clinicians, but also to researchers and administrators.

Objectives

At the conclusion of this session, the participant will be able to:

- apply new clinical research knowledge to clinical practice;
- learn new findings about key conditions in pulmonary, critical care and sleep;
- gain new strategies to manage the care of common conditions in pulmonary, critical care, and sleep.

Clinical Year in Review sessions will include core topics in pulmonary, critical care, and sleep medicine. The goal of the session is to discuss critical state of the art topics and evolving concepts. The learner will be exposed to a carefully curated review of the current literature by emerging leaders in the field. After the course, participants will better understand novel concepts in each specific domain that we hope will translate to improved patient care.

Chairing: J.L. Gomez, MS, MD, ATSF, New Haven, CT
R.J. Shah, MD, MSCE, San Francisco, CA
J.C. Ferreira, MD, PhD, Sao Paulo, Brazil

9:30 Pulmonary Vascular Disease
B.N. Rivera-Lebron, MD, MS, Pittsburgh, PA

9:52 Interstitial Lung Disease
R.J. Shah, MD, MSCE, San Francisco, CA

10:15 Lung Cancer
N. Navani, MD, MSc, PhD, London, United Kingdom

10:37 Pneumonia and Pulmonary Infections
F. Amati, MD, Milan, Italy

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Boehringer Ingelheim Pharmaceuticals, Inc., Genentech, Inc, Merck & Co.

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BASIC • CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

A2 THE NEW ENGLAND JOURNAL OF MEDICINE AND JAMA DISCUSSION ON THE EDGE: REPORTS OF RECENTLY PUBLISHED PULMONARY RESEARCH

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3000/3002/3004 (West Building, Level 3)

This session will provide a forum for attendees to interact with the authors and editors about papers published in JAMA and the New England Journal of Medicine. Papers presented will be recent publications, selected by the editors, to be of significant importance to the field of pulmonary medicine. Attendees will have the opportunity to hear presentations directly from the author and address questions to both the authors and editors. The discussion is intended to provide a unique insight into these papers, the selection process, and how the research applies directly to the field of pulmonary medicine.

Chairing: D.B. Taichman, MD, PHD, Philadelphia, PA
G.T. O'Connor, MD, Boston, MA

Speakers and Talks to be Announced

CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

A3 FELLOWS CASE CONFERENCE

Training Committee

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 7-8 (South Building, Exhibition Level)

Target Audience

Clinicians, nurses, fellows, residents, and researchers looking to broaden their clinical acumen to facilitate clinical and translational research.

Objectives

At the conclusion of this session, the participant will be able to:

- recognize clinical, radiographic, and pathologic findings of rare diseases;
- gain insight into clinical decision making skills demonstrated by master clinicians, radiologists and pathologists which will improve the quality of learners' practice and potentially improve quality of care for the learner's patients;
- develop strategies to evaluate patients with common symptoms that include uncommon/rare diseases in the differential diagnosis when appropriate.

In this session, six unknown cases will be presented by fellows to a panel of experts in a traditional Clinical Pathology Conference (CPC) format. The panel of experts includes three clinician experts, an expert radiologist, and an expert pathologist. The panel of clinician experts will discuss the key clinical elements of the history and a differential diagnosis. The expert radiologist and pathologist will interpret the imaging and pathology, respectively, which the expert clinician will then use to further the discussion and ultimately make a diagnosis.

Chairing: K.M. Burkart, MD, MSc, ATSF, New York, NY
M.M. Lee, MD, ATSF, Los Angeles, CA

- 9:30 Hickam's Dictum**
E. Mlodzinski, BS, MD, San Diego, CA
- 9:39 The Good, the Bad, and the Kidney**
I. Ikwu, MD, Washington, DC
- 9:48 Rapid Respiratory Riddle**
J. Wilkinson, MD, Los Angeles, CA
- 9:57 What's in the Mediastinum???**
J.M.G. Puebla, MD, San Juan, Puerto Rico
- 10:06 A Case of Red Herrings**
A. Maqsood, MD, Toledo, OH
- 10:15 A Hard Case to Crack**
O. Mirza, MD, Dallas, TX
- 10:24 Expert Clinicians**
E.P. Schmidt, MD, ATSF, Aurora, CO
M.P. Rivera, MD, ATSF, Chapel Hill, NC
A.E. Dixon, MA, BM BCH, ATSF, Burlington, VT
- 10:45 Expert Pathologist**
J.L. Myers, MD, Ann Arbor, MI
- 10:52 Expert Radiologist**
Brett Elicker, MD, San Francisco, CA

BEHAVIORAL • CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

A4 WICKED PROBLEMS IN THE ICU: IMPROVING CRITICAL CARE THROUGH THE LENS OF SYSTEMS

Assemblies on Critical Care; Behavioral and Health Services Research; Nursing; Pediatrics

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3020/3022/3024 (West Building, Level 3)

Target Audience

Interprofessional ICU team, including advance practice providers, chaplains, nurses, pharmacists, physicians, rehabilitation professionals, social workers; Health services researchers; ICU medical directors, managers, and other leaders

Objectives

At the conclusion of this session, the participant will be able to:

- understand and describe at least one reason to use complexity and systems to improve ICU care;
- better diagnose challenges in patient care, interprofessional teamwork, or clinician wellbeing;
- incorporate tools of systems to improve teamwork, patient care, quality improvement, or research.

The ICU is a perfect example of a complex system: a large cast of rotating team members interacting with critically ill patients, families, each other, and sophisticated technology. The wicked problems of ICU systems cannot be solved by reducing this complexity into individual causes and effects. However, the cross-disciplinary approach of systems offers valuable tools to study complexity and transform ICU care from the bedside to nationwide policy. This session will introduce the principles of complexity and systems, demonstrate how a systems lens can improve delivery of critical care, and forecast the future of the ICU system.

Chairing: J.M. Kruser, MD, MS, Madison, WI
D.K. Costa, PhD, RN, Ann Arbor, MI
C.E. Cox, MD, MPH, MHA, Durham, NC

- 9:30 It's About the Get Messy: Why a Systems Lens Is Necessary to Improve Care for Common ICU Diagnoses**
B.E. Jones, MD, MSc, Salt Lake City, UT
- 9:40 Real-World Impact of System-Level Change: Lessons Learned from the Frontline of Quality Improvement**
M.C. Spiegel, MD, Charleston, SC
- 9:50 Goal-Concordant Care is More Than Good Communication: Insights From a Systems Engineering Approach**
J.M. Kruser, MD, MS, Madison, WI
- 10:00 Social Network Analysis of the ICU Team: It's Not Just for Facebook and Twitter**
D.K. Costa, PhD, RN, Ann Arbor, MI
- 10:10 Systemic Racism Perpetuated Through ICU Technology**
M.W. Sjoding, MD, Ann Arbor, MI
- 10:20 When Systems Work Against the Individual: COVID-19 and Clinician Wellness**
M. Buchbinder, PhD, Chapel Hill, NC
- 10:30 Improving Critical Care Research through Networks of Cooperation and Organization**
M. A.Q. Curley, RN, PhD, FAAN, Philadelphia, PA
- 10:40 Panel Discussion/Q&A**

BASIC CORE

CME Credits Available: 1.5

A5 CROSSTALK OF SENESCENT CELLS WITH THE MICROENVIRONMENT: IT TAKES TWO TO TELL A STORY

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Target Audience

Basic and translational scientists

Objectives

At the conclusion of this session, the participant will be able to:

- learn and understand new discoveries in the molecular field of cellular senescence;
- gain understanding of cellular senescence effects on the local microenvironment.

Cellular senescence has been appreciated as a central determinant of the lung's resilience in response to pathologic insult, including its capacity for repair, regeneration, and resolution after injury. This symposium will feature presenters with a range of perspectives on senescent cell-microenvironment crosstalk. These perspectives represent cutting-edge molecular discoveries in the field of cellular senescence, with a focus on its regulation by and effects on the local microenvironment, a topic that should draw a broad audience of basic and translational scientists.

Chairing: B.D. Singer, MD, ATSF, Chicago, IL
D. Al Alam, PhD, MS, Los Angeles, CA

9:30 The Senescence Response as a Driver of Intrinsic and Extrinsic Signals of Aging
Speaker To Be Announced

10:00 Age-Related Changes in Immune Cell Function
L. Morales-Nebreda, MD, Chicago, IL

10:20 Senescence of Alveolar Type 2 Cells Drives Progressive Lung Disease
B.R. Stripp, PhD, Los Angeles, CA

CLINICAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

A6 #THE FUTURE OF TELEMEDICINE AND DIGITAL HEALTH CARE INNOVATIONS IN PEDIATRIC SLEEP AND LUNG DISEASE

Assemblies on Pediatrics; Allergy, Immunology and Inflammation; Clinical Problems; Nursing; Sleep and Respiratory Neurobiology

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

Clinicians who care for pediatric patients with lung disease and sleep disordered breathing

Objectives

At the conclusion of this session, the participant will be able to:

- understand and describe the current state of literature on telehealth and home monitoring in pediatric sleep and pulmonary medicine;
- apply digital health care innovations to optimize delivery of high quality, equitable care to pediatric sleep and pulmonary patients;
- understand implementation and essential privacy, security, and legal aspects when partnering with eHealth companies for clinical care or research.

The COVID-19 pandemic led to a rapid rise in use of digital health technology. To consolidate those gains we must determine how to best integrate this technology into clinical care. This session will review current evidence for use of telemedicine and home monitoring to optimize care delivery in pediatric CF, sleep, and asthma, exploring the provider and patient experience. Regulatory and implementation considerations related to digital technology will also be reviewed. Finally, the session will review the digital divide created by this new technology, and best practices to utilize digital innovations to improve health equity.

Chairing: D.K. Radhakrishnan, MS, MD, Ottawa, Canada
T. Simoneau, MD, Boston, MA

9:30 A Patient's Perspective
Kathy Page, Smithton, MO

9:35 Digital Health Care Innovations: Regulatory and Implementation Considerations
R. Amin, MD, Toronto, Canada

9:50 Telehealth and Home Monitoring in Cystic Fibrosis Care
G.S. Sawicki, MD, MPH, Boston, MA

10:05 The Future of Pediatric Sleep Medicine: Telehealth and Remote Monitoring
Z. Ehsan, MD, Kansas City, MO

10:20 Enhancing Pediatric Asthma Management Through Telemedicine and Home Monitoring
T. Simoneau, MD, Boston, MA

10:35 The Digital Divide: Equity and Disparities in Digital Health Care Innovation
A. Messinger, MD, Aurora, CO

10:50 Questions

CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A7 NEXT-GENERATION TESTS FOR TUBERCULOSIS: HOLD MY SMEAR

Assemblies on Pulmonary Infections and Tuberculosis

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3-4 (South Building, Exhibition Level)

Target Audience

Individuals interested in understanding the latest methods and approaches for tuberculosis screening, diagnosis and drug resistance testing, including researchers, clinicians, trainees, diagnostic developers, funders

Objectives

At the conclusion of this session, the participant will be able to:

- gain understanding of the recommended use and limitations of novel tuberculosis tests;
- describe test performance and operational characteristics needed for effective tuberculosis screening, diagnosis and drug resistance testing;
- describe the latest scientific advances in next-generation tuberculosis diagnostics development.

The tuberculosis diagnostics pipeline is rapidly expanding, with novel molecular tests, urine antigen tests and automated CXR interpretation algorithms endorsed or under review by the World Health Organization. The session will describe the current and future tuberculosis diagnostics landscape by discussing the progress and data for the most promising next-generation methods for tuberculosis screening, diagnosis and drug-resistance testing. We will conclude with a multi-disciplinary discussion comprised of experts involved in the development of novel COVID-19 diagnostic panel. Speakers will share their insights from COVID-19 diagnostics on the future development and implementation of novel tests for tuberculosis.

Chairing: C. Yoon, MD, MPH, MSCR, San Francisco, CA
D.M. Lewinsohn, MD, PhD, Portland, OR

9:30 TB Diagnostics: State of the Art
A. Cattamanchi, MD, San Francisco, CA

9:45 Next-Generation TB Screening
C. Yoon, MD, MPH, MSCR, San Francisco, CA

10:00 Next-Generation TB Diagnosis Using Non-Sputum Based Tests
C. Denking, MD, Heidelberg, Germany

10:15 Next-Generation Tests to Rapidly Identify Drug Resistance
M.R. O'Donnell, MD, MPH, New York, NY

10:30 Insights From COVID-19 Diagnostics on Development and Implementation of Next-Generation Tests for TB
M. Ruhwald, MD, PhD, Copenhagen, Denmark

CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A8 CRITICAL DECISIONS AND STEPS BEFORE THE NEXT BIG TRIAL OF CPAP

Assemblies on Sleep and Respiratory Neurobiology

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3001/3003 (West Building, Level 3)

Target Audience

Clinicians who care for obstructive sleep apnea; clinical researchers; key stakeholders and funders of research

Objectives

At the conclusion of this session, the participant will be able to:

- describe several critical decisions in designing trials to test the effectiveness of CPAP (e.g. ethics of including symptomatic patients, primary vs. secondary prevention);
- apply best practices in trial design to the next generation of trials in OSA;
- gain new strategies in trial design and the necessary pilot studies to assess feasibility.

In a recent draft report, the Agency for Healthcare Research and Quality (AHRQ) found a lack of strong evidence that CPAP improves clinically important outcomes. These findings reinforce the need for definitive trials assessing the impact of CPAP on cardiovascular disease, cognitive impairment, and long-term patient-reported outcomes. Through state-of-the-art reviews and an in-depth panel discussion, we will speak to critical issues in designing these definitive trials. We will focus on the ethics of including symptomatic patients in control/placebo arms, primary versus secondary prevention of adverse events, patient-driven care pathways, and the optimal designs for informative pilot studies.

Chairing: L.M. Donovan, MD, MS, Seattle, WA
S.P. Patil, MD, PhD, ATSF, Cleveland, OH
C. Hoyos, BSc(Hons), MPH, PhD, Glebe, Australia

- 9:30 Ethical Considerations of Including Symptomatic Populations in Trials With a Control Arm**
J. Hart, MD, MS, Philadelphia, PA
- 9:45 Choosing Trials Targeting Primary vs. Secondary Prevention**
E. Lewis, MD, MPH, Palo Alto, CA
- 10:00 Role of Patient-Driven Care Pathways in Trials of OSA Management**
S. Pamidi, MD, MSci, Montreal, Canada
- 10:15 What Pilot Studies Do We Need Before the Next Big Trial of CPAP?**
D.J. Gottlieb, MD, MPH, Boston, MA
- 10:30 Panel Discussion: What Are the Next Steps in Designing Definitive Trials of CPAP for Patients with OSA?**
S.R. Patel, MD, MS, ATSF, Pittsburgh, PA
D.J. Gottlieb, MD, MPH, Boston, MA
C. Hoyos, BSc(Hons), MPH, PhD, Glebe, Australia

BEHAVIORAL • CLINICAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

A9 EVERYTHING ON YOUR PULMONARY HYPERTENSION REGISTRY: FROM CLASSIFICATION TO OUTCOMES**Assemblies on Pulmonary Circulation; Behavioral and Health Services Research****9:30 a.m. - 11:00 a.m.****MOSCONE CENTER**

Room 2014/2016 (West Building, Level 2)

Target Audience

Members interested in pulmonary vascular disease, epidemiology, statistical analysis, and outcome based clinical research

Objectives

At the conclusion of this session, the participant will be able to:

- apply new knowledge of study design and data analysis to the interpretation of current and future literature;
- describe emerging clinical tools involved in surveillance monitoring of pulmonary hypertension patients and risk prognostication;
- integrate new findings from pulmonary hypertension registries toward current practice.

Pulmonary hypertension (PH) registries have been instrumental in identifying clinical and demographic changes in PH and have yielded widespread changes in clinical practice over the past ten years. We will review the design of contemporary clinical registries in PH and compare how differences in design dictate the outcomes that will result. We will review the role of PH registries in prognostication (including advances in data analysis), the use of PH registries in evaluating and validating

novel outcomes such as actigraphy, and the potential of PH registries to change disease classification.

Chairing: D. Grinnan, MD, Richmond, VA
N. Al-Naamani, MD, MS, Philadelphia, PA

- 9:30 Introduction**
D. Grinnan, MD, Richmond, VA
- 9:40 Go PHAR or GoDeep: A Comparison of Two Large Contemporary Registry Designs and Goals**
C.E. Ventetuolo, MD, MSCR, Providence, RI
- 9:55 Go PHAR or GoDeep: A Comparison of Two Large Contemporary Registry Designs and Goals**
W. Seeger, MD, Giessen, Germany
- 10:10 The U.S. CTEPH Registry: Outcomes Assessment and Future Directions**
K.M. Kerr, MD, La Jolla, CA
- 10:25 ACTiPH: An Ancillary Study of the Pulmonary Hypertension Association Registry**
J. Minhas, MD, MS, MBBS, Philadelphia, PA
- 10:40 Machine Learning in Pulmonary Hypertension: Maximizing the Use of Data From Registries**
A. Sweatt, MD, Stanford, CA

This session and the International Conference are supported by an independent medical educational grant from

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BASIC**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

A10 THE AFTERMATH OF LUNG INFECTION: RECOVERED LUNGS ARE DIFFERENT LUNGS**Assemblies on Pulmonary Infections and Tuberculosis; Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology****9:30 a.m. - 11:00 a.m.****MOSCONE CENTER**

Room 205-206 (South Building, Level 2)

Target Audience

Providers of lung health; those with clinical or research activities; those needing instruction in areas of medicine outside of their specialty

Objectives

At the conclusion of this session, the participant will be able to:

- describe new findings about the immune system within the lungs;

- define pathways relevant to establishing and maintaining lung trained immunity and lung-resident immunological memory;
- apply knowledge of lung immune remodeling to improve research into pneumonia and other lung diseases.

This session will provide cutting edge information on how the lungs are changed after recovery from respiratory infection. Participants will learn the current perspectives and state of the for multiple components of innate and adaptive immunity that change within the lung tissue, and how these different immune components then influence future susceptibility to lung infections as well as chronic pulmonary diseases.

Chairing: J.L. Cho, MD, Iowa City, IA
M. Bhattacharya, MD, San Francisco, CA
C. Dela Cruz, MD, PhD, ATSF, New Haven, CT
J.P. Mizgerd, ScD, ATSF, Boston, MA

9:30 Recovery Remodels Innate and Adaptive Immunity Inside the Lungs

J.P. Mizgerd, ScD, ATSF, Boston, MA

9:48 New Macrophage Biology in the Recovered Lung

G.S. Budinger, MD, ATSF, Chicago, IL

10:06 Lung Tissue Niches for Immune Remodeling

A. Molofsky, MD, PhD, San Francisco, CA

10:24 Lymphocyte Roles Within Lung Tertiary Lymphoid Structures

C. King, PhD, Basel, Switzerland

10:42 Aged Lung-Resident Lymphocytes and Chronic Lung Disease

J. Sun, PhD, Charlottesville, VA

- understand and address the effects of their own and others' implicit biases;
- facilitate discussions about health disparities and racism with learners and colleagues.

If you worry about talking or teaching about health disparities with patients, colleagues, or trainees this session is for you! We will review health disparities, their causes, and provide attendees with tools to tackle them in all their professional roles. We will define key vocabulary, including social determinants of health, structural racism, and implicit bias. The speakers will use examples from pulmonary, critical care, and sleep medicine and provide practical suggestions on how to incorporate and facilitate discussions about health disparities, racism, and bias.

Chairing: R. Adamson, MBBS, ATSF, Seattle, WA
A.A. Diaz, MD, Boston, MA
M. Sharp, MD, MHS, Baltimore, MD
M. Johnson, MD, San Francisco, CA

9:30 Introduction

A.A. Diaz, MD, Boston, MA

9:33 What Are Health Disparities and What Causes Them?

G.C. Lockhart, MD, Denver, CO

9:48 How Do We Recognize and Overcome Implicit Bias in Ourselves and Others?

R. Adamson, MBBS, ATSF, Seattle, WA

10:03 How Do We Incorporate Justice and Equity, and Identify and Address Racism During Training In PCCSM?

J.A. Frank, MD, MA, San Francisco, CA

10:10 How Do We Incorporate Justice and Equity, and Identify and Address Racism During Training In PCCSM?

M. Johnson, MD, San Francisco, CA

10:17 Talking About Health Disparities When You Are Not an Expert

W.M. Gibson-Scipio, PhD, FNP-BC, ATSF, Detroit, MI

10:32 Q&A and Practicing New Skills

M. Sharp, MD, MHS, Baltimore, MD

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SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A11 TACKLING HEALTH DISPARITIES: HOW DO WE TALK AND TEACH ABOUT THEM?

Assemblies on Health Equality and Diversity Committee; Education Committee; Training Committee; Membership Committee

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 11-12 (South Building, Exhibition Level)

Target Audience

Healthcare professionals, administrators, and researchers, including trainees

Objectives

At the conclusion of this session, the participant will be able to:

- recognize and list three causes of health disparities;

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SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A12 THE FULL PICTURE: ASTHMA AS A CASE STUDY IN THE COMPLEXITIES OF EXPOSURE

Assemblies on Environmental, Occupational and Population Health; Allergy, Immunology and Inflammation; Behavioral and Health Services Research; Clinical Problems; Pediatrics

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 209-211 (South Building, Level 2)

Target Audience

Individuals involved in care of patients with environmentally-mediated lung disease: basic, clinical, and translational researchers focused on environmental/occupational exposures and respiratory health

Objectives

At the conclusion of this session, the participant will be able to:

- understand the complexities of exposures over a lifetime and how those exposures have an effect on the development and long-term management of asthma in the era of personalized medicine;
- identify what constitutes the definition of the exposome and how this relates to asthma and respiratory health;
- understand how a person's various environmental exposures are important to effectively managing his or her asthma effectively, and how these lessons may be considered more broadly in respiratory care.

Sensitivity to environmental exposures is a hallmark of asthma. Management of the disease is possible by understanding and avoiding triggers. Leading research focuses on the exposome which comprises a complex combination of exposures that individuals and populations encounter over a lifetime, with the model applicable more broadly to a range of respiratory diseases. We will present research relevant to an individual's environmental exposures, with asthma as a case study. The symposium includes work in clinical studies, animal models, computational modeling, advances in environmental mixture studies, and how complex exposures may be accounted for in an exposome model. We will conclude by presenting the translation of research to action in public health policy.

Chairing: N. Solanki, MD, Cleveland, OH
M. Federico, MD, Aurora, CO
S.J. London, MD, DrPH, Research Triangle Park, NC

9:30 A Patient's Perspective
L. Quinn Gooden, Clawson, MI

9:35 State of the: Role of Exposome in Asthma Development and Outcomes
C. Carlsten, MD, MPH, Vancouver, Canada

9:52 Environment and Lung Function: Asthma and Exposure Families

V. Siroux, PhD, La Tronche Cedex, France

10:09 Intersecting Pollutant and Metabolic Exposures in Pediatric Asthma and Beyond

E. Brigham, MD, MHS, Vancouver, Canada

10:26 The Role of Psychosocial, Neighborhood, and Contextual Factors as Environmental Stressors on Asthma Exacerbations

N. Thakur, MD, MPH, San Francisco, CA

10:43 Research to Action: Asthma and Public Health Environmental Policy

S.B. Khatri, MD, MS, Cleveland, OH

BEHAVIORAL • CLINICAL

MINI SYMPOSIUM

A13 IMPROVING CARE FOR PATIENTS WITH LUNG DISEASE OR CRITICAL ILLNESS THROUGH TRAINING AND EVALUATION

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3014 (West Building, Level 3)

Chairing: S.M. Nyenhuis, MD, Chicago, IL
D.P. Blagev, MD, Murray, UT

Oral Presentations:

9:30 Incremental Rates of Imaging and Diagnostic Procedures Attributed to Lung Cancer Screening in Community Practice/K. Rendle, C.A. Saia, A. Vachani, A.N. Burnett-Hartman, V.P. Doria-Rose, C. Neslund-Dudas, C. Oshiro, R.Y. Kim, J.E. Lafata, S.A. Honda, J. Wainwright, N. Mitra, R.T. Greenlee, Philadelphia, PA, p.A1001

9:40 Timely Receipt of Guideline Recommended Annual Lung Cancer Screening Across Three Rounds Among US Veterans/E.R. Nunez, T.J. Caverly, S. Zhang, M.E. Glickman, S.X. Qian, J.H. Boudreau, D.R. Miller, C.G. Slatore, R.S. Wiener, Boston, MA, p.A1002

9:50 The Epidemiology of Sarcoidosis Among U.S. Veterans, 2000-2020/M.I. Seedahmed, J. Chen, J. Potter, C. McCulloch, M. Whooley, L. Koth, M. Arjomandi, San Francisco, CA, p.A1003

10:00 Indicators of Neighborhood Health Disparities in Idiopathic Pulmonary Fibrosis/A.M. Dedent, H.R. Collard, N. Thakur, San Francisco, CA, p.A1004

10:10 Hospital-Level Care at Home for Adults with Acute Respiratory Illness: A Descriptive Analysis/C. Hernandez, H.M. Mitchell, N.A. Rosario, D.M. Levine, Boston, MA, p.A1005

- 10:20 Predicting Six-Month Mortality After Hospital Discharge with Machine Learning Using Electronic Health Record Data/J.C. Rojas, J. Fahrenbach, E. Loehmer, N. Nowalk, M. Malec, Chicago, IL, p.A1006**
- 10:30 Fragmented Care Is Associated with Greater Mortality and Increased Costs Among Patients Hospitalized for Respiratory Failure/A.J. Admon, S. Cohen-Mekelburg, J.L. Denson, H.B. Gershengorn, C.R. Cooke, Ann Arbor, MI, p.A1007**
- 10:40 Length of Rounds, Patient Census, and Patient Acuity Correlate with Increased Cognitive Load Amongst Multidisciplinary Providers in an ICU Learning Environment/N. Held, A. Neumeier, T. Amass, R. Pomponio, R. Peterson, T.J. Huie, M. Moss, Aurora, CO, p.A1008**
- 10:50 Fellows' Experience and Perceptions of Airway Management Training Within Pulmonary and Critical Care Fellowship/C. Ghiathi, A.R. Lanfranco, M. Kreider, J.K. Heath, Philadelphia, PA, p.A1009**
- 10:10 Association Between Social Vulnerability and Chronic Lower Respiratory Disease Mortality Among United States Counties/Y.-C. Lee, K.-Y. Chang, M. Mirsaedi, Buffalo, NY, p.A1013**
- 10:20 Association of State Health Factors with COPD Mortality in the United States/Y.-C. Lee, K.-Y. Chang, S. Sethi, Buffalo, NY, p.A1014**
- 10:30 Geographic Differences in Sex-Specific Trends in Chronic Obstructive Pulmonary Disease (COPD) Mortality Rates, Adults Aged = 25 Years, 1999-2019/S.A. Carlson, A.G. Wheaton, K.B. Watson, Y. Liu, J.B. Croft, K.G. Greenlund, Atlanta, GA, p.A1015**
- 10:40 Association of Rural Residence with Risk for Hospitalizations in Veterans with COPD/S. Fortis, Y. Gao, A.K. Baldomero, P.J. Kaboli, M. Vaughan Sarrazin, Iowa City, IA, p.A1016**
- 10:50 Sociodemographic and Geographic Determinants of All-Cause Mortality Among Veterans with COPD in National VA Data/C. Robichaux, A. Rau, J. Berman, C. Wendt, A. Bangerter, A.K. Baldomero, Minneapolis, MN, p.A1017**

BEHAVIORAL • CLINICAL

MINI SYMPOSIUM

A14 INVESTIGATING COPD HEALTH INEQUITIES9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 201-202 (South Building, Level 2)

Chairing: R. Kalhan, MD, MS, Chicago, IL
M.K. Han, MD, MS, ATSF, Ann Arbor, MI**Featured Speaker:****9:30 Neighborhood and Environmental Contributions to Health Disparities in COPD /N.N. Hansel, Baltimore, MD****Oral Presentations:****9:40 Racial Disparities in Emphysema Prevalence: The CARDIA Lung Study/G.Y.-H. Liu, S.S. Khan, L. Colangelo, D. Meza, G.R. Washko, P.H.S. Sporn, D. Jacobs, M.T. Dransfield, M. Carnethon, R. Kalhan, Chicago, IL, p.A1010****9:50 Race-Based Spirometry Under-Diagnoses COPD in African-American Smokers/E.A. Regan, M.E. Lowe, J.L. Curtis, C. Wilson, R. Casaburi, A.K. Baldomero, A. Balasubramanian, M.C. McCormack, K.A. Young, G.L. Kinney, G.R. Oates, K.F. Hoth, A.A. p.A1011****10:00 The Role of Neighborhood Factors in Emergency Department Utilization Among People with Chronic Obstructive Pulmonary Disease in the COPD Foundation's Patient-Powered Research Network/T.M. Parekh, Y.-I. Kim, R. Ramachandran, A. Nassel, C.B. Pasquale, J. Yates, G. McCreary, M.T. Dransfield, G.R. Oates, Birmingham, AL, p.A1012**

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MINI SYMPOSIUM

A15 A BEAUTIFUL MIND: BIG DATA APPROACHES TO PEDIATRIC LUNG DISEASE9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 2006/2008 (West Building, Level 2)

Chairing: D. Rastogi, MBBS, MS, ATSF, Washington, DC
C. Rosas-Salazar, MD, MPH, ATSF, Nashville, TN**Oral Presentations:****9:30 Integration of Clinical Exome Sequencing with In-Situ RNA Expression Profiling to Diagnosis and Guide Therapy of a New Cause of Rapidly Progressive Fibrotic Childhood Interstitial Lung Disease (chILD): A Road Map for New Gene Discovery/J.C. Kennedy, S.O. Vargas, M.P. Fishman, N. Alesi, N. Carmichael, A. Rincon Bolivar, F. Flanagan, A.M.H. Casey, D. Khabibullin, L. Henderson, A. Wehrman, B.A. Raby, Boston, MA, p.A1018****9:40 Transcriptome-Wide Analysis of Nasal Epithelium Predicts Time to First Severe Exacerbation in Childhood Asthma/M. Yue, Z. Xu, F.J. Rosser, Y.-Y. Han, W. Chen, E. Forno, J.C. Celedon, Pittsburgh, PA, p.A1019**

- 9:50 Association of the Gut Microbiome and Metabolome with Inhaled Corticosteroid Response in Childhood Asthma: A Pilot Study**/K. Lee-Sarwar, S. Dedrick, B. Momeni, R.S. Kelly, R.S. Zeiger, G.T. O'Connor, M. Sandel, L.B. Bacharier, A. Beigelman, N. Laranjo, D.R. Gold, J.A. Lasky-Su, A.A. Litonjua, Y.-Y. Liu, S.T. Weiss, Boston, MA, p.A1020
- 10:00 Genome-Wide Analysis of Gene Expression in Nasal Airway Epithelium and Children's Psychosocial Distress Symptoms**/M. Yue, Z. Xu, Y.-Y. Han, F.J. Rosser, E. Acosta-Pérez, G. Canino, E. Forno, W. Chen, J.C. Celedon, Pittsburgh, PA, p.A1021
- 10:10 Analysis of Metabolites in Exhaled Breath for the Phenotyping of Eosinophilic Asthma in Children**/Y. Van Dijk, F.W.M. Dieker, M.I. Abdel-Aziz, P. Brinkman, A.H. Stuyvenberg - Neerinx, S.J.H. Vijverberg, S. Hashimoto, M. Gorenjak, A.A. Toncheva, S. Harner, S. Brandstetter, C. Wolff, A.M. Hedman, C. Almqvist, P. Corcuera Elosegui, J. Kortá Murua, O. Sardón Prado, M. Pino-Yanes, U. Poto?nik, M. Kabesch, A.D. Kraneveld, A.H. Maitland - van der Zee, Amsterdam, Netherlands p.A1022
- 10:20 Hypoxia Induced MicroRNAs in Sickle Cell Disease Mouse Model**/A.S. Alishlash, N. Olave, T. Jilling, N. Ambalavanan, Birmingham, AL, p.A1023
- 10:30 A Sex-Dependent Transcriptome Profile in the Neonatal Lung: Potential Role of the Metalloproteinase ADAMDEC1**/T. Westmont, C.M. Royer, A. Rindy, N.A. Siegel, H. Deshmukh, L.A. Miller, Davis, CA, p.A1024
- 10:40 Congenital Central Hypoventilation Syndrome (CCHS) Facial Phenotypic Recognition by Automated Modeling**/S.M. Slattery, A. Mittal, C. Zheng, D. Demeter, J.J. Baker, C.M. Rand, T.M. Stewart, I. Khaytin, K. Reed, C.D. Brogadir, B.L. Lappin, T. Chung, D.E. Weese-Mayer, Chicago, IL, p.A1025

Featured Speaker:

- 10:50 Pediatric Airway Biology to Understand the Early Origins of Respiratory Diseases**/G.R. Nino, Washington, DC

CLINICAL • TRANSLATIONAL**MINI SYMPOSIUM****A16 PULMONARY REHABILITATION: TRANSFORMING OUR PRACTICE IN 2022**

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER**Room 3010/3012 (West Building, Level 3)**

Chairing: F. Blackstock, PhD, Penrith, Australia
F. Franssen, MD, Horn, Netherlands

Oral Presentations:

- 9:30 The Effects of High-Intensity Interval Training on Inhaled Corticosteroid Dose in Patients with Asthma - a Randomized Controlled Trial**/A. Pitzner-Fabricsius, C.H. Dall, M. Henriksen, E.S.H. Hansen, L.L. Toennesen, M. Hostrup, N.V. Backer, Copenhagen, Denmark, p.A1026
- 9:40 Effect of Home-Based Rehabilitation with Health Coaching on Chronic Obstructive Pulmonary Disease Outcomes: A Randomized Study**/R. Benzo, J.P. Hoult, C.E. Mcevoy, M. Clark, M.V. Benzo, M.M. Johnson, P. Novotny, Rochester, MN, p.A1027
- 9:50 Oscillatory Positive Expiratory Pressure (OPEP) Therapy in Chronic Obstructive Pulmonary Disease (COPD): The O-COPD Trial**/S.M. Alghamdi, A.M. Alasmari, A.S. Alsulayyim, K.E. Philip, S.C. Buttery, P. Williams, C. Orton, S.S. Biring, M.I. Polkey, N.S. Hopkinson, London, United Kingdom, p.A1028
- 10:00 Effects of Home-Based Respiratory Physiotherapy and Telephone-Based Psychological Support on Pulmonary and Mental Health Outcomes in Peru: A Feasibility Randomized Controlled Trial**/A.N. Soriano, A.H. Coico-Lama, E.C. Flores, J. Galvez-Buccollini, G. Gianella, S. Hartinger, A.G. Lescano, W. Checkley, Lima, Peru, p.A1029
- 10:10 Influence of Adherence to an App-Based Pulmonary Rehabilitation Maintenance Program on Physical Activity and Quality of Life in COPD Patients - a Subgroup Analysis of a Randomized Controlled Trial**/R. Gloeckl, M. Spielmanns, I. Jarosch, D. Leitl, T. Schneeberger, T. Boeselt, S. Huber, P. Kaur-Bollinger, B. Ulm, C. Mueller, J. Bjoerklund, S. Spielmanns, W. Windisch, A.R. Koczulla, Schoenau am Koenigssee, Germany, p.A1030
- 10:20 Impaired Spirometry and Older Age Predict Skeletal Muscle Oxidative Capacity in COPD**/A. Adami, F. Duan, R.A. Calmelat, Z. Chen, R. Casaburi, H.B. Rossiter, Kingston, RI, p.A1031
- 10:30 Description and Reliability of Internet Resources on Pulmonary Rehabilitation for Individuals with Chronic Lung Disease**/T. Da Silva, A. Lokhandwala, N. Al Kaabi, J. Semenchuk, G.C. Goobie, E. Camacho, W.D. Reid, J.H. Fisher, C.J. Ryerson, D. Rozenberg, Toronto, Canada, p.A1032
- 10:40 How Many Monitoring Days Are Necessary to Assess the Sedentary Behavior of Individuals with COPD?**/F. Pitta, M.P. Pereira, R.P. Hirata, L. Sartori, L.P. Schneider, I.L. Brito, N.A. Hernandez, K.C. Furlanetto, Londrina, Brazil, p.A1033
- 10:50 Impact of a Structured Diagnostic Approach for Breathlessness on Patient Related Outcome Measures; Six-Month Results from a Feasibility Multi-Centre Cluster Randomised Control Trial in Primary Care**/G. Doe, J. Clanchy, S. Wathall, S. Barber, S.A. Edwards, H. Evans, N. Baxter, D. Jackson, M. Steiner, R.A. Evans, Leicester, United Kingdom, p.A1034

BEHAVIORAL • CLINICAL

MINI SYMPOSIUM

A17 COPD: SINGLE CELL RNA SEQUENCING, EPIGENETICS, MODELS, AND MACROPHAGES9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 2001/2003 (West Building, Level 2)

Chairing: E.R. Neptune, MD, Baltimore, MD
V.K. Sidhaye, MD, Baltimore, MD
F. Polverino, MD, PhD, Houston, TX

Oral Presentations:

- 9:30 PRMT7 Epigenetically Regulates Monocyte Migration and COPD Pathogenesis/T.M. Conlon, A. Jeridi, G. Günes Günsel, N.J. Lang, G. Burgstaller, H.P. Van Eeckhoutte, S.E. Verleden, T. Stoeger, M. Königshoff, O. Eickelberg, K.R. Bracke, H. Watz, H.B. Schiller, R. Schneider, A.Ö. Yildirim, Neuherberg, Germany, p.A1035**
- 9:40 Identification of a Myeloid Cell Subset that Drives Progressive Lung Disease/J. Venezia, A. Scott, W. Mitzner, Baltimore, MD, p.A1036**
- 9:50 Temporal Assessment of Single-Cell RNA Sequencing in a Mouse COPD Model Identifies Aberrant Macrophage Inflammatory and Metabolic Functions Dependent on Adenine Nucleotide Translocase 1 (ant1)/J. Sui, J.C. Boatz, A. Gregory, C.R. Kliment, Pittsburgh, PA, p.A1037**
- 10:00 Macrophage Induced Ferroptotic Cell Death of Epithelial Cells Drives COPD Pathogenesis/A. Jeridi, G. Günes Günsel, M. Novikova, S. Doll, N.J. Lang, M. Ansari, S. Verleden, M. Rehberg, T. Stoeger, H.B. Schiller, M. Conrad, A.Ö. Yildirim, T.M. Conlon, München, Germany, p.A1038**
- 10:10 Dysregulation of Unfolded Protein Response (UPR) Signaling in Chronic Obstructive Pulmonary Disease (COPD) Leads to Small Airway Fibrotic Disease/S. Moore, J.P. Ferruzza, T.L. Joseph Mathuram, Y. Perry, A. Blumental-Perry, Buffalo, NY, p.A1039**
- 10:20 Reduced Alveolar Type 2 Epithelial Expression of NUPR1 Is Associated with Severe COPD and Increases Susceptibility to Oxidative Stress and Ferroptosis/J. Nouws, J.E. McDonough, T. Adams, R. Werder, J.C. Schupp, M.J. Robertson, C. Coarfa, S. Poli De Frias, A.A. Wilson, P.N. Timshel, N. Kaminski, I.O. Rosas, M. Sauler, New Haven, CT, p.A1040**
- 10:30 The Balance of mTOR and Autophagy Signaling Is Associated with the Development and Resolution of Airway Mucous Metaplasia/J.D. Dickinson, E.M. Eilers, K.M. Kudrna, P. Thomes, R. Gaurav, K.L. Bailey, Omaha, NE, p.A1041**

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

- 10:40 Human Platelet Derived Exosome Product Attenuates Cigarette Smoke Induced Murine Emphysema/S. Wang, W. Xuan, T. Peterson, P. Stalboerger, A. Behfar, R. Vassallo, Rochester, MN, p.A1042**

A18 IMPROVEMENTS IN PFTs AND NEW APPLICATIONS9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 2018/2020 (West Building, Level 2)

Chairing: D.A. Kaminsky, MD, Burlington, VT
V. Mock, MD, New York, NY

Oral Presentations:

- 9:30 Determinants and Diagnostic Performance of Lung Clearance Index in Patients with Suspected Asthma/A.-C. Maynard-Paquette, F. Tremblay, B.-P. Dubé, Montréal, Canada, p.A1043**
- 9:40 Improved Prediction of Major Pulmonary Complications in Lung Cancer Surgery Using the Nadir Rather Than the Slope of the Ventilation-Carbon Dioxide Relationship During Exercise/K. Hedman, J. Hylander, M. Boros, A. Fyrenius, K. Kristenson, Linköping, Sweden, p.A1044**
- 9:50 Diabetes Mellitus: Contribution to Pulmonary Impairment and Disability/E. Ali, E. Priel, G.L. Jones, A.P. Freitag, P. O'Byrne, K.J. Killian, I. Satia, Hamilton, Canada, p.A1045**
- 10:00 Impulse Oscillometry as Predictor of Methacholine Reactivity in the Evaluation of Dyspnea/D. Wingo, M.J. Morris, Fort Sam Houston, TX, p.A1046**
- 10:10 Respiratory Oscillometry to Assess Airway Inflammation, Dysphagia, and Treatment Responses in the Aerodigestive Clinic/K.L. Hamlington, A.N. Keck, B.J. Smith, E.M. Deboer, Aurora, CO, p.A1047**
- 10:20 Lung Function Monitoring in Patients with Pulmonary Graft vs. Host Disease Following Bone Marrow Transplantation (BMT) Using Oscillometry/C. Nohra, H. Ota, J. K. Y. Wu, Q. Huang, L. Day, Z. Hantos, J. Lipton, C.M. Ryan, C.-W.W. Chow, Toronto, Canada, p.A1048**
- 10:30 Addressing Potential Race Bias in Pulmonary Function Test Reference Equations: GLI 'Other' vs GLI Global/C. Bowerman, B. Cooper, I. Steenbruggen, L.G. Gochicoa-Rangel, R. Masekela, T.L. Le Hi, M.C. McCormack, J.K. Lloyd, J. Haynes, D. Brazzale, S. Stanojevic, Hamilton, Canada, p.A1049**

- 10:40 Normal Range of Decline in Diffusion Capacity in Healthy Adults: The Framingham Heart Study/R.** Sangani, M.-M. Lee, H. Xu, J. Dupuis, G.T. O'Connor, Boston, MA, p.A1050
- 10:50 Deep Learning Using Multi-Layer Perceptron Improves the Diagnostic Acumen of Spirometry/A.** Mac, T. Xu, J. Wu, C.M. Ryan, S. Valaee, C.-W. Chow, Toronto, Canada, p.A1051

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

A19 TO INFINITY AND BEYOND: NOVEL DISCOVERIES AND TRANSLATIONAL RESEARCH IN LUNG CANCER

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 215-216 (South Building, Level 2)

Chairing: S.J. Moghaddam, MD, Houston, TX
V.S. Nair, MSCR, Seattle, WA
C.R. Sears, MD, ATSF, Indianapolis, IN

Oral Presentations:

- 9:30 Tumor Vaccination with Cytokine-Secreting Dendritic Cells Sensitizes Murine NSCLC to Anti-PD-1 Therapy/R.** Salehi-Rad, R. Lim, Y. Du, L. Tran, E. Garon, K. Krysan, B. Iiu, S.M. Dubinett, Los Angeles, CA, p.A1052
- 9:40 Exosomes from EGFR-Mutated Adenocarcinoma Induce a Partial/Hybrid EMT and an MMP9-Dependant Tumour Invasion/A.** Jouda, C. Mccarthy, A. Fabre, A. Kelly, P. Nadarajan, M. O'Callaghan, M.P. Keane, Dublin, Ireland, p.A1053
- 9:50 Genome Maintenance in Aging and Lung Carcinogenesis/Z.** Huang, S. Sun, M. Lee, A.Y. Maslov, S. Miao, S. Waldman, A. Marsh, T. Siddiqui, X. Dong, Y. Peter, K. Ye, S.D. Spivack, J. Vijg, Bronx, NY, p.A1054
- 10:00 Extracellular Vesicle miRNA in Malignant Pleural Effusion/S.** Shojaee, G. Romano, T. Sanchez, G. Yermakhanova, M. Saviana, G. Nigita, K.A. Hess, N. Rahman, P. Nana-Sinkam, M. Acunzo, Richmond, VA, p.A1055
- 10:10 Microbial Signatures in Malignant Pleural Effusions/B.** Kwok, B.G. Wu, I.F. Kocak, R. Anwer, Y. Li, C. Goparaju, R. Schluger, V. Murthy, S. Rafeq, J.L. Bessich, J.J. Tsay, H.I. Pass, L.N. Segal, New York, NY, p.A1056
- 10:20 Measuring DNA Repair in Peripheral Mononuclear Cells (PMCs): A Step Towards Personalizing Lung Cancer Care/N.** Al Nasrallah, F.C. Duncan, A. Al Hader, H. Zhou, P. Smith, C.R. Sears, Indianapolis, IN, p.A1057

- 10:30 A Pilot Study to Investigate the Utility of Exhaled Breath Condensate as a Liquid Biopsy in the Detection of Spatial Genomic Heterogeneity in Patients with Early-Stage Non-Small Cell Lung Cancer/R.** Smyth, S. Toomey, S. Nicholson, R. Ryan, S. Furney, L. Grogan, O. Breathnach, P. Morris, R. Morgan, B. Hennessy, Boston, MA, p.A1058
- 10:40 Enhancing Diagnostic Evaluation of Patients with Symptoms of Lung Cancer Using the DELFI Circulating Cell-Free DNA Approach for Cancer Detection/A.** Leal, D. Mathios, J.S. Johansen, A. Lau, D. Jakubowski, S. Cristiano, J.E. Medina, J. Phallen, K.R. Larsen, D.C. Bruhm, J. Carey, N.C. Dracopoli, T. Maddala, S.E. Bojesen, R.B. Scharpf, V.E. Velculescu, P.B. Bach, Baltimore, MD, p.A1059
- 10:50 Immune Microenvironment in Normal Bronchial Airway Tissue: Lymphocyte Epithelial Infiltration Correlates with Smoking Behavior and Lung Cancer Diagnosis/D.** Rowe, H. Mori, M.N. Kammer, Y. Zou, S. Antic, S. Deppen, E. Grogan, A. Borowsky, F. Maldonado, Nashville, TN, p.A1060

BEHAVIORAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A21 IMPACT OF THE COVID-19 PANDEMIC ON HEALTH DISPARITIES, PATIENTS, FAMILIES, CLINICIANS, AND SYSTEMS

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 3016/3018 (West Building, Level 3)

- Viewing 9:30-10:00**
- Summaries/Discussion 10:00-11:00**
- Chairing:** M.P. Kerlin, MD, MS, Philadelphia, PA
C.H. Weiss, MD, MS, Evanston, IL
V.G. Press, MD, MPH, ATSF, Chicago, IL
- 1001 Racial Disparities in Pulmonary and Quality of Life Outcomes Among COVID-19 Survivors in the Southeast/N.** Navuluri, M.S. Mccravy, A. Meservey, S. Morrison, C. Green, S. Martindale, K. Williford, D. Shaz, B.W. Stephenson, A.M. Mathews, C.X. Giovacchini, L.G. Que, Durham, NC, p.A1061
- 1002 Understanding Disparities and Promoting Equity in Post-COVID-19 Recovery Care/A.-M.C.** Tukupah, J. Patel, J. Sullivan, B. Kissane, T. Jocelyn, B. Amundson, M. Linares, M. Sury, G.L. Weinhouse, M. Moll, N.E. Lange, D.J. Lamas, E.B. Gay, Boston, MA, p.A1062
- 1003 COVID-19 on the Navajo Nation: Experiences of Dine Families of Children with Asthma/L.B.** Gerald, B. Simmons, A.A. Lowe, A.H. Liu, P. Nez, E. Begay, B.G. Bender, Tucson, AZ, p.A1063

- 1004 Differences in the Perception of COVID-19 Healthcare Delivery Among White, Black, and Hispanic Patients: A Survey Exploring Health Inequity/T. Oppelt, B. Polsonetti, M. Caron, C. Collins-Carriveau, Foster City, CA, p.A1064**
- 1005 Impact of Covid-19 Pandemic on Goals of Care Conversations at Veterans Affairs Hospitals/N.M. Mesfin, R.S. Wiener, J. Wormwood, A. Linsky, Boston, MA, p.A1065**
- 1006 Longer Term Health System Response to the COVID-19 Pandemic on the Management of Respiratory Conditions/T. Kendzerska, J.M. Fitzgerald, D.T. Zhu, M. Pugliese, D. Manuel, M. Sadatsafavi, M. Povitz, T. Stukel, T. To, S.D. Aaron, S. Mulpuru, M. Chin, C. Kendall, R. Robillard, A.S. Gershon, Ottawa, Canada, p.A1066**
- 1007 Preventative Health Care During the COVID-19 Pandemic: Patient, Caregiver, and Clinician Perspectives/J. Hart, T. Klaiman, A. Belk, J. Kim, J. Silvestri, S. Szymanski, D. Sheu, S.D. Halpern, Philadelphia, PA, p.A1067**
- 1008 Delay and Avoidance in Care Among Asthma and COPD Patients During the COVID-19 Pandemic/J.C. Fazio, R. Buhr, Los Angeles, CA, p.A1068**
- 1009 Patients' Perspectives on Life and Recovery One Year After Severe COVID-19/C. Chow, M. Ward, R. Neergaard, R. Kohn, M.O. Harhay, C.L. Auriemma, Philadelphia, PA, p.A1069**
- 1010 Patient Perspectives on the Impact of the COVID-19 Pandemic on Tobacco Dependence and Treatment/J. Hart, T. Klaiman, A. Belk, J. Kim, J. Silvestri, S. Szymanski, D. Sheu, S.D. Halpern, Philadelphia, PA, p.A1070**
- 1011 One Year Later: Family Members of Critically Ill Patients with COVID-19 Experience Substantial Persistent Symptoms of PTSD/M.E. Ambler, S. Rhoads, D. McGuirl, P. Armstrong, M.H. Cruse, N. Csikesz, R.A. Engelberg, J. Heywood, M. Hua, Y. Jin, K. Likosky, M. Mayer, E. Nielsen, R. Peterson, O. Rea, J.H. Wykowski, S. Yu, R.D. Stapleton, J.R. Curtis, T. Amass, Stanford, CA, p.A1071**
- 1012 Post-Hospital Follow up Needs in Patients with COVID-19/M. Lannan, A. Cranford, A. Strahley, J. Palakshappa, Winston-Salem, NC, p.A1072**
- 1013 Impact of the COVID-19 Pandemic on Burn-Out in Pulmonary and Critical Care Fellowship Training/A. Matta, R. Adamson, M.M. Hayes, H. Carmona, M. Soffler, S. Benzaquen, E. Gupta, Philadelphia, PA, p.A1073**
- 1014 Respiratory Therapists Experienced Compassion Fatigue in Adult COVID-19 Intensive Care Units/Z. Bilello, M. Khan, P. Agrawal, M. Fawaz, M. Ibarra, N. Pierce, J. Cronin, S. Melinauskas, D. Hampton, Chicago, IL, p.A1074**
- 1015 The Impact of COVID-19 on Anxiety and Depression of Healthcare Workers - Results from the Recommending Essential Sleep Time (R.E.S.T.) Survey/N.H. Stewart, A. Koza, S. Dhaon, M. Martinez, V. Arora, Kansas City, KS, p.A1075**

CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

A22 IMAGING AND MOLECULAR BIOMARKERS IN COPD

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 9-10 (South Building, Exhibition Level)

- Poster Viewing 9:30-10:00**
- Discussion 10:00-11:00**
- Chairing:** C.H. Wendt, ATSF, MD, Minneapolis, MN
J.M. Wells, MD, MSPH, Birmingham, AL
A. Synn, MD, Boston, MA
- 101 Airway Mucus Plugs on CT Scan Are Associated with Worse Patient Reported Outcomes in Smokers with and Without COPD and No History of Exacerbations: A Cross Sectional Analysis of the COPD Gene Study/V. Kim, W.R. Dolliver, J.L. Orejas, S. Grumley, A.S. Wen, S.J. Kligerman, P.P. Manapragada, K. Jacobs, M. Abozeed, M.A. Aziz, M. Zahid, S. Sonavane, N. Terry, A. Ahmed, H. Nath, R. San Jose Estepar, A.A. Diaz, Philadelphia, PA, p.A1076**
- 102 Subtype-Specific CT Radiomics Signatures Predict Emphysema Progression/R. San Jose Estepar, A.H. Curiale, B. Choi, R. San Jose Estepar, G.R. Washko, S. Ash, Boston, MA, p.A1077**
- 103 Predicting Chronic Obstructive Pulmonary Disease from Chest X-Rays Using Deep Learning/K.P. Seastedt, T. Litchman, L. Moukheiber, R. Wang, L.-C. Chen, S. Moukheiber, H. Truong, P.-C. Kuo, L. Celi, Boston, MA, p.A1078**
- 104 Comparison of Feature Selection Methods and Machine Learning Classifiers with CT Radiomics-Based Features for Predicting Chronic Obstructive Pulmonary Disease/K. Makimoto, R.C. Au, A. Moslemi, J.C. Hogg, J. Bourbeau, W.C. Tan, M. Kirby, Toronto, Canada, p.A1079**
- 105 Association of Increased Chest CT Density (ICTD) with Clinical Features and Emphysema Progression in Ever Smokers/S. Fortis, J. Guo, M.F.A. Chaudhary, J.D. Newell, P. Nagpal, S.E. Gerard, M.K. Han, E.A. Kazerooni, F.J. Martinez, I. Barjaktarevic, R.G. Barr, S. Bodduluri, J.D. Schroeder, L.D. Gravens-Mueller, V.E. Ortega, W.H. Anderson, C.B. Cooper, D. Couper S. P. Bhatt, P. Woodruff, E. A. Hoffman, J. M. Reinhardt, A. P. Comellas; Iowa City, IA, p.A1080**
- 106 The Use of Diaphragm Ultrasonography to Predict Outcomes in Patients With Acute COPD Exacerbation/R. Ahmad, A. Chichra, New Haven, CT, p.A1081**

- 107 The Use of Transient Elastography for Assessing for Alpha-1 Antitrypsin-Related Liver Disease and Its Discordance with Liver Ultrasonography/D. Fraughen, H. Yousuf, M. Herron, L. Alhaddah, T. Carroll, M. Casey, G. Kelly, R. Heeney, O.F. McElvaney, O.J. McElvaney, M. Murphy, C. Gunaratnam, J.D. Ryan, N.G. McElvaney, Dublin, Ireland, p.A1082**
- 108 Regional Distribution of Ventilation via X-ray Velocimetry Is a Repeatable Phenotype of COPD/T. Siddharthan, J.P. Kirkness, T. Otvos, A. Fouras, N.M. Punjabi, R.A. Wise, Miami, FL, p.A1083**
- 109 Pulmonary Artery Enlargement Predicts Poor Survival in Patients with COPD: Pulmonary Artery Enlargement Predicts Poor Survival in Patients with COPD: A Meta-Analysis/W. Huang, H. Chen, Chongqing, China, p.A1084**
- 110 Large Scale Chest Image Phenotyping in NHLBI BioData Catalyst Using the Chest Imaging Platform/R. San Jose Estepar, M. Iturrioz Campo, K. Bradford, A. Krishnamurthy, R. San Jose Estepar, Boston, MA, p.A1085**
- 111 Utilizing a Deep Learning Radiomic Model for the Quantification of Emphysema/M.G. Lester, E. Geder, F. Maldonado, Nashville, TN, p.A1086**
- 112 COPD Stage Classification Using Deep Learning on NHLBI BioData Catalyst/M. Iturrioz Campo, P. Nardelli, S. Koc, K. Bradford, A.K. Krishnamurthy, R. San Jose Estepar, Boston, MA, p.A1087**
- 113 Local Prognostication of Emphysema Progression using Conditional AutoEncoders/A.H. Curiale, R. San Jose Estepar, Boston, MA, p.A1088**
- 114 Developing a Metabolomic Risk Score for Forced Expiratory Volume in One Second (FEV₁) in COPD/S. Godbole, W.W. Labaki, K.A. Pratte, K. Kechris, R.P. Bowler, Aurora, CO, p.A1089**
- 115 Development of a 20 Single Nucleotide Polymorphism Multiplex Assay for Genotyping Alpha-1 Antitrypsin and Cohort Study with Alpha-1 Antitrypsin Deficiency Samples from Biobank/Y. Wang, I. Machado, Z. Stewart, R. Harbeck, C. Coeshott, R. Sandhaus, Denver, CO, p.A1090**
- 116 Identification of Novel Biomarkers for COPD Phenotypes by Large-Scale Proteomics Analysis with UHR-IonStar/S. Sethi, X. Zhu, S. Shen, S. Qian, G. Broderick, M. Morris, M.J. Mammen, J. Qu, Buffalo, NY, p.A1091**
- 117 Airway Epithelial Gene Expression in Resilient Smokers/A. Oh, K. Currin, H. Liu, R. Smith, S. Nerella, P. Grant, D. Couper, C. Jones, P. Woodruff, S. Christenson, San Francisco, CA, p.A1093**
- 118 Relationship Between Nonspecific Immunoglobulin G and Endothelin-1 in Women with Exacerbations of Chronic Simple Bronchitis Initiated with Reactivation of Cytomegalovirus Infection in the Third Trimester of Pregnancy/I.N. Gorikov, V.P. Kolosov, I.A. Andrievskaya, N.A. Ishutina, L.G. Nakhmchen, I.V. Dovzhikova, Blagoveshchensk, Russian Federation, p.A1094**
- 119 Stability of Commonly Evaluated Biomarkers in Clinically Stable COPD/S.C. Park, J.E. Phillips, N. Saiphoklang, M.L. Wilgus, R.G. Buhr, C.B. Cooper, D.P. Tashkin, I. Barjaktarevic, Goyang-si, Korea, Republic of, p.A1095**
- 120 Features of Activation of Coagulative Hemostasis in Patients with COPD/O.M. Kovalenko, V. Rodionova, O.Y. Kovalenko, Dnipro, Ukraine, p.A1096**
- 121 Using Decision Tree Models to Predict FEV1 Decline in COPD Gene/J.M. Wang, W.W. Labaki, S. Murray, F.J. Martinez, J.L. Curtis, S. Ram, A. Bell, C.J. Galban, M.K. Han, C. Hatt, Ann Arbor, MI, p.A1097**

CLINICAL

POSTER DISCUSSION SESSION

A23 CASE REPORTS IN ILD AND LUNG TRANSPLANTATION

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 212-214 (South Building, Level 2)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: A.O. Adegunsoye, MD, MS, Chicago, IL
 B. Bemiss, MD, Maywood, IL
 Y.H. Khor, BMedSci, MBBS, FRACP, PhD, Heidelberg, Australia

401 Human Papillomavirus Viremia Signaling Metastatic Cervical Cancer as an Unexpected Cause for Multiorgan Failure in a Lung Transplant Patient/R.W. Starcher, Minneapolis, MN, p.A1098

402 Lung Transplantation for Hermansky-Pudlak Syndrome: A Single-Center Experience/N. Ramachandra, K.S. Lal, K. Warrior, J.P. Schwartz, Z.M. Abdelsattar, B. Bemiss, D.F. Dilling, Maywood, IL, p.A1099

403 Lung Transplantation with ABO Incompatibility in a Patient with Cystic Fibrosis in Status 0/F.A. Varon, L. Tellez, S. Crevoiser, J. Palacios, L. Cucunubo, A. Rincón, Bogota, Colombia, p.A1100

- 404 Diffuse, Microscopic Pulmonary Arteriovenous Malformations Requiring Lung Transplant/K. Kashinsky, J. Bahgat, S. Saidy, F. Ilyas, F.C. Hastrup, Stamford, CT, p.A1101**
- 405 Pre-operative Tracheostomy in High-MELD Orthotopic Liver Transplant (OLT) Recipients: A Case Series from a Large Liver Transplant Center/L. Ward, K. Hahn, N. Feduska, D. Farmer, V. Agopian, F. Kaldas, I. Barjaktarevic, Los Angeles, CA, p.A1102**
- 406 Pomalidomide Induced Pneumonitis: A Case Review/S. Misra, E. Ozen, D. Djondo, A.S. Ray, W. Sanders, Chicago, IL, p.A1103**
- 407 Recurrent Respiratory Failure Caused by Pembrolizumab-Induced Guillain-Barre Syndrome/K. Cueva, H. Pi, K. Patel, Seattle, WA, p.A1104**
- 408 Drug-Induced Lung Disease: Who Is the Culprit?/M.A. Amjad, Z. Hamid, Y. Patel, V. Raheja, P.O. Ochieng, Scranton, PA, p.A1105**
- 409 Diffuse Alveolar Hemorrhage After Exposure to Sevoflurane/P. Duncan, C.D. Kershaw, Dallas, TX, p.A1106**
- 410 Methotrexate-Induced Pneumonitis, a Rare Cause of Refractory Hypercalcemia/M.A. Dirico, L. Hall, T. Zanders, N. Yoder, Bethlehem, PA, p.A1107**
- 411 Systemic Absorption of Doxorubicin Causing Diffuse Alveolar Hemorrhage Following Transarterial Chemoembolization in Hepatopulmonary Syndrome/K. Branick, J. West, B. Boer, Omaha, NE, p.A1108**
- 412 Incidental Iron Pill Aspiration as an Unsuspected Cause of Wheezing/Y. Sarda, S.K. Avasarala, B.P. Young, J. Wasman, W. Mneimneh, T. Panchabhai, Cleveland, OH, p.A1109**
- 413 Sirolimus-Induced Pulmonary Alveolar Proteinosis in a Heart Transplant Recipient/A.N. Fuher, A. Hudler, J. Sippel, Denver, CO, p.A1110**
- 414 “Rest Uneasy”: A Case of Hypersensitivity Pneumonitis Related to Foam in Bedding/S. Tang, O. Moran Mendoza, Kingston, Canada, p.A1111**
- 415 A Case of Chronic Avian Hypersensitivity Pneumonitis with Non-Specific Interstitial Pneumonia Pattern and Alveolar Proteinosis Expression/V. Hoytfox, I.A. Martinez Avalos, Spokane, WA, p.A1112**
- 416 A Rare Case of Posterior Mediastinal Bronchogenic Cyst, Post-Menopausal Pulmonary Benign Metastasizing Leiomyoma and Follicular Bronchiolitis with Rheumatoid Pleurisy in a Rheumatoid Arthritis Patient/K. Sarvottam, A. Matta, R. Bhat, S. Benzaquen, Philadelphia, PA, p.A1113**
- 417 Pulmonary Fibrosis Following 9/11 Exposure Associated with Chronic Lupus Pneumonitis/M. Fernandes, I. Nwachukwu, O. Aroyewun, J. Fernandes, Brooklyn, NY, p.A1114**
- 418 The I’s Have it: A Rare Case of Interstitial Lung Disease in a Patient with Inclusion Body Myositis/A. Alexis, A. Koch, Miami, FL, p.A1115**
- 419 The Fibrosing, Sclerosing, Infection: A Case of Autoimmune Activation Leading to Systemic Sclerosis and Interstitial Lung Disease Following COVID-19 Infection/B. Hackett, S.M. Pandya, Kansas City, KS, p.A1116**
- 420 Pleuropericarditis as Initial Manifestation of Anti-PL7 Antibody Antisynthetase Syndrome/A. Wasim, N. Aye, A. Jose, R.K. Chakraborty, Boston, MA, p.A1117**
- 421 Primary Cavitory Sarcoidosis - A Rare Presentation of Pulmonary Sarcoidosis/B.S.K.R. Sabbula, P.K. Upadrista, R.R. Sanivarapu, J. Iqbal, J. Akella, East Meadow, NY, p.A1118**
- 422 Sweet’s Syndrome as a Presentation of Sarcoidosis/C.-Y. Kang, V. Reyes Pinzon, P. Khamooshi, H. Laswi, N. Haghani Rad, Chicago, IL, p.A1119**

CLINICAL

POSTER DISCUSSION SESSION

A24 HEART AND LUNGS: “BETTER TOGETHER”

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3009/3011 (West Building, Level 3)

Poster Viewing

9:30-10:00

Discussion

10:00-11:00

Chairing:

H.E. Faust, MD, MS, Madison, WI
 E. Wilcox, MD, MSc, PhD, FRCPC, Toronto, Canada
 A.M. Esper, MD, MS, ATSF, Atlanta, GA

901

Use of Perfluorocarbon for Pediatric Pulmonary Hemorrhage/K. Nelson Mcmillan, V. Dorsey, F. Yousof, S. Kane, A. Waas, C. Urbas, C. El Zein, N. Hlbino, J. Sherman, L.A. Vricella, Oak Lawn, IL, p.A1120

902

Conservative Management of an Iatrogenic Left Bronchial Injury Following Double-Lumen Endotracheal Tube Placement/S. Guru, M. Assaad, P. Saththasivam, F. Siddiqui, N. McElhaney, Sayre, PA, p.A1121

903

Hidden Between the Lines: Acute Eosinophilic Pneumonia Masquerading as Heart Failure/A.J.O. Davis, J.P. Kanne, H.E. Faust, Madison, WI, p.A1122

- 904 **The Unclear Significance of Refractory Ventricular Fibrillation in a Patient Undergoing Venous-Arterial Extracorporeal Membrane Oxygenation/A. Go, D. Das, E. Abo-Salem, G. Kamel, Saint Louis, MO, p.A1123**
- 905 **Takotsubo's Cardiomyopathy in a Patient with Myasthenic Crisis: A Rare Complication/J. Genova, W. Khan, Toms River, NJ, p.A1124**
- 906 **A Very "Tense" Scenario: Story of a Tension Pneumoperitoneum/F. Rida Ul Jannat, S.F.Z. Naqvi, G. Knowles, S. Deskins, Y. Hadi, M. Poling, Morgantown, WV, p.A1125**
- 907 **Cardiac Tamponade - A Rare Complication of Sjogren's Syndrome/Y. Medik, C. Schooff, W. Khan, Toms River, NJ, p.A1126**
- 908 **Acute Eosinophilic Pneumonia Caused by Cigar Smoking/S. Faryad, M. Ali, J. Meeker, Peoria, IL, p.A1127**
- 909 **An Unusual Case of Massive Hemoptysis and Diffuse Alveolar Hemorrhage Caused by Acute Mitral Regurgitation Secondary to Infective Aortic Valve Endocarditis/A. Alam, E. Estrada, G. Perkowski, M. Poling, R.G. Sangani, Morgantown, WV, p.A1128**
- 910 **Who's Responsible? Diffuse Alveolar Hemorrhage with Multiple Potential Culprits/R. Puthumana, C.J. Trujillo, Miami, FL, p.A1129**
- 911 **Pneumonitis Due to "Dabbing" Successfully Managed via Extracorporeal Membrane Oxygenation/L.E. Meece, J.P. Moran, H.M. McConville, S. Velani, Des Moines, IA, p.A1130**
- 912 **A Rare Case of Left-Sided Unilateral Pulmonary Edema in Acute Mitral Regurgitation/C.-Y. Kang, P. Khamooshi, V. Reyes Pinzon, N. Haghani Rad, Chicago, IL, p.A1131**
- 913 **A Unique Case of Aggressive Hemorrhagic Pericardial Effusion Causing Cardiac Tamponade in a Patient with Rheumatoid Arthritis/S.K. Kommineni, R. Hussain, T. Bandarupalli, C.T. Cook, Johnson City, TN, p.A1132**
- 914 **A Rare Cause of Acute Throat Pain: Acute Aortic Dissection/I.A. Martinez Avalos, V. Hoytfox, Spokane, WA, p.A1133**
- 915 **Jest of Nature- A Late Presentation of Dysphagia Lusoria/K. Burgess, E. Chang, M. Shah, J. Volcy, B. El Hammali, Atlanta, GA, p.A1134**
- 916 **Code Blue Due to CO2/D. Ahmed, D.O. Ford, N. Motayar, Shreveport, LA, p.A1135**
- 917 **Infected Bronchogenic Cyst Rupture Causing Pericardial Effusion and Cardiac Tamponade: Diagnosis Made by Bedside Point of Care Ultrasound (POCUS)/S. Desai, L.D. Stagner, Detroit, MI, p.A1136**
- 918 **A Case of Acute Interstitial Pneumonia (AIP)/S. Jarrett, A. Matta, S. Benzaquen, Philadelphia, PA, p.A1137**
- 919 **Arid Airways: Broadening the Differential/J. Mansour, N.M. Lee, R. Abdelghani, C.M. Bojanowski, New Orleans, LA, p.A1138**
- 920 **Pulmonary Cement Emboli: An Underreported Phenomenon or Rare Kyphoplasty Complication/A. Cimino, A. Alchakaki, Farmington Hills, MI, p.A1139**
- 921 **A Rare Case of Post-Partum Spontaneous Coronary Artery Dissection Involving Left Main Coronary Artery with Profound Acute Decompensated Heart Failure/H. Asif, T. Park, L. Mccook, C. Wood, W. Ghumman, C. Hawk, Boca Raton, FL, p.A1140**
- 922 **Acute Monocytic Leukemia: A Rare but Devastating Cause of ARDS/A.Y. Soleiman, G. Eman, M. Islam, Bronx, NY, p.A1141**
- 923 **A Bloody Drowning: an Uncommon EVALI Presentation Complicated by DAH/M. Forster, T. Demirci, L. Benes, P.M. Carlucci, F. Palmares, M. Hache-Marliere, A. Nolan, New York, NY, p.A1142**
- 924 **Plastic Bronchitis After Minimally Invasive Mitral Valve Replacement: An Unusual Etiology of Acute Respiratory Failure After Cardiac Surgery/J.M. Zapata -Canivilo, F. Amin, E. Belley-Cote, A. Alsagheir, A. Fox-Robichaud, V. Chu, S. Tang, Hamilton, Canada, p.A1143**
- 925 **Atrioesophageal Fistula following Catheter Ablation for Atrial Fibrillation: A Rare Cause of Hematemesis/C. Iyer, L.K.T. Boppana, B.E.-X. Tan, S. Liang, Rochester, NY, p.A1144**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

A25 TOBACCO AND THC HEALTH SCIENCE

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 303-304 (South Building, Level 3)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: I. Jaspers, PhD, Chapel Hill, NC
A. Noel, PhD, MSc, BSc, Baton Rouge, LA
H. Kathuria, MD, ATSF, Boston, MA

501 **Vaping Habits and Respiratory Health Outcomes Using a Smartphone App Platform/M.-S. Lee, J. Allen, K.-D. Eum, J.-P. Onnela, D.C. Christiani, Boston, MA, p.A1145**

- 502 A Study Assessing Interactions of E-cigarette and Other Inhalants with Sleep Quality in Subjects Recruited Between 2018 and 2020/J.G. Marganski, I.N. Advani, S. Boddu, S. Patel, D. Gunge, W.W. Merz, A.L. Fuentes Baldarrago, A. Malhotra, L. Crotty Alexander, La Jolla, CA, p.A1146**
- 503 Synthetic Cooling Agents in US-Marketed E-cigarette Refill Liquids and Disposable E-cigarettes: Chemical Analysis and Risk Assessment/S.E. Jordt, H. Erythropel, D. Garcia Torres, L.A. Delgado, P.T. Anastas, J.B. Zimmerman, S.V. Jabba, Durham, NC, p.A1147**
- 504 Novel Delta-8-Tetrahydrocannabinol Vaporizers Contain Unlabeled Adulterants, Byproducts of Chemical Synthesis, and Heavy Metals/J. Meehan-Atrash, I. Rahman, Rochester, NY, p.A1148**
- 505 Long-Term Toxicity of E-Cigarette Whole Body Aerosol Exposure Using Cardiovascular Health and Pulmonary Changes in Mice as Persistent Outcomes/N. Durmus, G. Grunig, A. Raja, V. Goriainova, H. Joung, D. Chalupa, A.C.P. Elder, J. Zelikoff, New York, NY, p.A1149**
- 506 Exposure to JUUL Menthol-Flavored Aerosol Modulates House-Dust Mite-Induced Asthma in Wild-Type Juvenile Female Mice Comparably to Mice with a MMP12 Deficiency/R.I. Pinkston, A. Penn, A. Noel, Baton Rouge, LA, p.A1150**
- 507 Effect of Vaping on Lung Inflammation and SARS-CoV-2 Infection in a Hamster Model/D. Hinds, H.J. Nick, T. Vallin, C.W. White, A. Bosco-Lauth, Aurora, CO, p.A1151**
- 508 Investigation of Smoking Effect on Male Germline Epigenome and Its Transmission Across Generations/K. Batbayar, K. Ye, A. Marsh, M. Shi, S. Park, A.J. Dabo, P. Geraghty, B. Lucas, M. Vigodner, S.D. Spivack, Bronx, NY, p.A1152**
- 509 Associations of Pipe and Cigar Smoking with DNA Methylation Levels at the Aryl Hydrocarbon Receptor Repressor Gene/C. Eckhardt, P. Balte, J. Morris, S.P. Bhatt, D. Couper, P. Lutsey, D. Jacobs, R. Kalhan, R. Kronmal, R. Kaplan, L. Loehr, S.J. London, G.T. O'Connor, J. Fetterman, J. Schwartz, W. White, S. Yende, N. Freedman, T.R. Sanchez, E. Oelsner, New York, NY, p.A1153**
- 510 The Restoration of M1/M2 Type Alveolar Macrophage After Smoking Cessation/M. Takeuchi, H. Nakata, M. Seta, K.E. Pinkerton, Kyoto, Japan, p.A1154**
- 511 A Validation Study on a Sputum Home Collection Method with Immediate Freezing and Delayed Processing: Impact on Proteomic, Mucin and RNA/DNA Endpoints/N.E. Alexis, W. Dabbs, N. Wernsman Young, A.T. Hastie, C.M. Doerschuk, P. Woodruff, R. Paine, Chapel Hill, NC, p.A1155**

- 512 Global Projections Regarding Smoking Prevalence Trends: A Model Based Analysis/E. Boers, M. Barrett, V. Vuong, J. Su, L. Kaye, D. Tellez, A. Benjafield, C.M. Nunez, A. Malhotra, Halifax, Canada, p.A1156**
- 513 Association of Cigarette-e-Cigarette Transitions with Respiratory Symptom Incidence: A Longitudinal Analysis of the Path Study, 2014-2019/J. Berlowitz, W. Xie, A. Goghari, A. Stokes, Boston, MA, p.A5523**
- 514 Biologic Response of the Airway Epithelium to Smoking in Women Compared to Men/M.R. Rostami, P.L. Leopold, J.G. Mezey, R.J. Kaner, R.G. Crystal, Y. Strulovici-Barel, New York, NY, p.A5524**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A26 CUTTING EDGE PEDIATRIC COVID-19 SCIENCE

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2005/2007 (West Building, Level 2)

Viewing

9:30-10:00

Summaries/Discussion

10:00-11:00

Chairing: S.A. Mcgrath-Morrow, MD, Philadelphia, PA
R. Wang, MD, Boston, MA
M.K. Elmallah, MD, MS, Durham, NC

- 601 Uniting Global Efforts on Pediatric Long-COVID: Results of the International Post-COVID Condition in Children Collaboration (IP4C)/C. Brackel, L. Noij, C.L. Legghe, S. Vijverberg, S. Hashimoto, A.-H. Maitland - van der Zee, D. Munblit, T. Stephenson, D. Buonsenso, M. Ryd-Rinder, D.W. Miller, A.M. Edwards, M. McVoy, S.W.J. Terheggen, Amsterdam, Netherlands, p.A1157**
- 602 Respiratory Syncytial Virus (RSV) and Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Cov-2) Can Be Vertically Transmitted from Infected Mothers to Their Fetuses Leading to Respiratory Symptoms in the Offspring/S.P. Desai, A. Agbodji, K. Craig, E. Pennie, R. Brown, I. Trinh, S. Rambaran, M. Gebara, S. Medearis, F. Carrion, C. Dugas, Y. Li, R. Satou, J. Robinson, E. Norton, S.H. Ley, G. Pridjian, S. Longo, G. Piedimonte, New Orleans, LA, p.A1158**

- 603 **Risk Factors Associated with Hospitalization for COVID-19 in a Comprehensive Pediatric Cohort in Western Pennsylvania**/K.M. Gaietto, M. Culler Freeman, L.A. DiCicco, S. Rauenswinter, J.R. Squire, Z. Aldewereld, J. Iagnemma, B. Campfield, D. Wolfson, T. Kazmerski, E. Forno, Pittsburgh, PA, p.A1159
- 604 **Outcomes Following Community-Acquired SARS-CoV-2 Infections for Patients with BPD**/M. Ingram, A. Miller, K. Krivchenia, E.G. Shepherd, L.D. Nelin, M.J. Kiehl, Columbus, OH, p.A1160
- 605 **Dose-Dependent Respiratory Viral Inhibition by a Safe Inhaled Alkaline Treatment**/J.L. Saunders, M. Carozza, C.M. Robinson, I. Daniels, L. Smith, E. Hanson, B. Gaston, M.D. Davis, Indianapolis, IN, p.A1161
- 606 **Six Month Outcomes of Children with Acute COVID-19 or Multisystem Inflammatory Syndrome in Children**/L. Yonker, M.D. Burns, Y. Bartsch, J. Davis, E. Farkas, M. Loissele, B. Boribong, A. Galit, Boston, MA, p.A1162
- 607 **Exhaled Breath Condensate and Pulmonary Sequela in Children Post COVID-19**/G. Livnat-Levanon, K. Yaacoby-Bianu, A. Zetser, I. Orlin, E. Fireman Klein, Haifa, Israel, p.A1163
- 608 **Masking Policy and Covid-19 Positivity Rate in Texas Public School Districts**/M. Shah, J.W. Hollingsworth, Fort Worth, TX, p.A1164
- 609 **From “Back-to-School” Asthma to “Back-from-Lockdown” Asthma - Pediatric Respiratory Diseases During a Full COVID-19 Pandemic Year**/M. Be’Er, I. Amirav, M. Cahal, M. Rochman, Y. Lior, M. Lavie, Tel Aviv, Israel, p.A1165
- 610 **Covid-19 and Some Polymorphisms in Genes of Signaling Molecules of the Immune System**/E. Suprun, S. Suprun, E. Nagovicina, G. Evseeva, O. Lebed’ko, R. Telepneva, O. Galyant, Khabarovsk, Russian Federation, p.A1166
- 611 **COVID-19 Pandemic and Inner City Youth E-Cigarette Use**/J. Klein, K. Cohen, A. Fales, T. Pham, H.Y.J. Choi, B.N. Collins, S. Lepore, J.L. Garfield, Philadelphia, PA, p.A1167
- 612 **Impact of the COVID-19 Pandemic on Healthcare Utilization Rates on Urban Minority Children with High Asthma Disease Burden**/Y. Sun, Z. Treyster, D. Rastogi, L.A. Conrad, Bronx, NY, p.A1168
- 613 **Pediatric COVID-19 and Respiratory Syncytial Virus 2021: A Summer/Spring Epidemiological Shift**/R. Kahanowitch, S. Gaviria, H.M. Aguilar, M.G. Gayoso Liviach, E. Chorvinsky, B.S. Bera, G.R. Nino, Washington, DC, p.A1169

- 614 **Effect of the COVID-19 Pandemic on Asthma Morbidity Among Children Hospitalized for an Exacerbation**/N. Alabdulkarim, J. Gai, J. Bost, D.K. Pillai, D. Rastogi, Washington, DC, p.A1170
- 615 **Characterization of Respiratory Compromise in Pediatric Patients with Confirmatory Test for Covid19 Hospitalized in a Fourth Level Pediatric Hospital in Bogotá**/D. Beltran-Franco, S.M. Restrepo, M. Villamil, S.L. Goyeneche, Bogota, Colombia, p.A1171
- 616 **Update in Pediatric SARS-CoV-2 Infections During 2022: Defining Clinical Respiratory Manifestations of the Omicron Variant in the Pediatric Population**/M.G. Gayoso Liviach, R. Kahanowitch, S. Gaviria, H.M. Aguilar, E. Chorvinsky, B.S. Bera, G.R. Nino, Washington, DC, p.A5525

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

A27 SOMA: SEX, METABOLISM, INFLAMMATION, AND IMMUNITY IN PULMONARY VASCULAR DISEASE

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2022/2024 (West Building, Level 2)

- Poster Viewing 9:30-10:00
- Discussion 10:00-11:00
- Chairing:** A.L. Frump, MS, PhD, Indianapolis, IN
R. Kumar, PhD, San Francisco, CA
F. Perros, PhD, Paris, France
- 801 **RNA Editing Controls Pulmonary Endothelial Apoptosis in PAH via Nocturnin Gene Signaling**/C.-S.J. Woodcock, Y. Tang, Y.Y. Tai, J. Zhao, A. Handen, R.A. Lafyatis, S.Y. Chan, Pittsburgh, PA, p.A1172
- 802 **Sex Dependent Changes in Pulmonary Hypertension and Penetrance Mediated by a High Fat Diet in Transgenic Mice with a Human BMPR2 Mutation (R899X)**/H. Labazi, G. Aitchison, K. Mair, N. Denver, M. Nilsen, S. Laforest, A. Gebriel, M.R. Maclean, Glasgow, United Kingdom, p.A1173
- 803 **STING Mediates Pulmonary Hypertension Through VEGF but Independent of Type I Interferon Signaling**/A. Pham, Y. Lu, L. Mukhsinova, C. Fu, A. Oliveira, L. Jin, A.J. Bryant, Gainesville, FL, p.A1174
- 804 **SIRT7- and JNK-Mediated Akt Supports Glycolysis-Driven Lipogenesis and Proliferation of Human Pulmonary Arterial Vascular Smooth Muscle Cells in Pulmonary Arterial Hypertension**/L. Jiang, D.A. Goncharov, Y. Shen, D. Lin, B. Chang, A. Pena, E.A. Goncharova, T.V. Kudryashova, Davis, CA, p.A1175

- 805 **Elucidating the Role of Triggering Receptor Expressed on Myeloid Cells-1 (TREM-1) in Pulmonary Hypertension**/V. Lin, D.D. Xing, Y. Wu, S. Hardy, P.R. Cochran, E.S. Helton, S.V. Pamboukian, J. Joly, J.A. Tallaj, G.A. Payne, J.W. Barnes, J.M. Wells, Birmingham, AL, p.A1176
- 806 **Effect of Sex Hormones on the Severity of Experimental Pulmonary Hypertension in a Natural Killer Cell-Deficient IL-15 Knockout Rat Model**/L.R. Hilton, M. Ratsep, K. Lavery, M. Mitchell, S. Renaud, M.J. Soares, M.L. Ormiston, Kingston, Canada, p.A1177
- 807 **Single-Cell RNA-seq Reveals Transcriptionally Convergent Pulmonary Endothelial Cells in an Inflammatory Model of Pulmonary Arterial Hypertension with BMPR2 Dysfunction**/D. Kim, L. Zhao, T. Wu, R. Vihn, E. Schneider, C.M. Cunningham, A.S. Mcquiston, P.N. Kao, X. Jiang, A. Tian, M.R. Nicolls, Stanford, CA, p.A1178
- 808 **ATAC Seq Reveals That Genes Involved in the Persistently Activated Phenotype of PH Fibroblasts Exhibit Open Enhancers and Promoters That Are Enriched in Binding Sites for Several Transcription Factors**/C.-J. Hu, A. Laux, H. Zhang, K.R. Stenmark, Aurora, CO, p.A1179
- 809 **Unique Transcriptomic and Metabolic Characteristics of Pulmonary Monocytes and Macrophages in an Inflammatory Rat Model of Pulmonary Arterial Hypertension with Bmpr2 Mutations**/L. Zhao, C. Cunningham, D. Kim, R. Vihn, E. Schneider, T.-H. Wu, A. McQuiston, P. Kao, X. Jiang, A. Tian, M. Nicolls, Palo Alto, CA, p.A1180
- 810 **Positioning, Enzymatic Processing and Binding Partners of Versican in Vascular Lesions of Pulmonary Arterial Hypertension**/C. Westöö, T. Mead, C. Norvik, C. Koch, O. van der Have, M. Bech, H. Brunnström, S. Apte, K. Tran-Lundmark, Lund, Sweden, p.A1181
- 811 **Transcriptomics Identify Lipid Metabolism and Inflammation as Early Pathways in an Animal Model of Pulmonary Hypertension Due to Heart Failure with Preserved Ejection Fraction**/V. Agrawal, N. Fortune, M. Talati, N.J. Shelburne, J.D. West, A. Hemnes, Nashville, TN, p.A1182
- 812 **Mitochondrial Dysfunction as a Primary Cause of Impaired Angiogenesis in Pulmonary Arterial Hypertension**/M. Niihori, J. James, N. McCalin, R.C. Philip, R. Rafikov, O. Rafikova, Tucson, AZ, p.A1183
- 813 **Inhibition of Anaplerosis Mitigated Mitochondrial Dysfunction and Proliferative Signaling in Pulmonary Hypertension**/M. Valuparampil Varghese, J. James, M. Niihori, O. Rafikova, R. Rafikov, Tucson, AZ, p.A1184
- 814 **Dysfunctional Mitochondria and Impaired Reticulocyte Maturation in Pulmonary Hypertension**/J. James, M. Niihori, N. McClain, M. Valuparampil Varghese, O. Rafikova, R. Rafikov, Tucson, AZ, p.A1185
- 815 **Estrogen Stimulates Angiogenesis and Regulates Metabolism in the Right Ventricle and on Cultured Cardiac Microvascular Endothelial Cells**/S. Bousseau, B. Yakubov, E. Sims, M. Repass, A.L. Frump, T. Lahm, Denver, CO, p.A1186
- 816 **The Role of Fatty Acid Oxidation in Animal Models of Pulmonary Hypertension**/M.H. Lee, L. Sanders, R. Kumar, D. Hernandez-Saavedra, X. Yun, J.A. Ford, M. Perez, C. Mickael, A. Gandjeva, D. Koyanagi, J. Herral, D. Irwin, B. Kassa, R. Eckel, L.A. Shimoda, B.B. Graham, R.M. Tuder, San Francisco, CA, p.A1187
- 817 **Circulating Amino Acid Profiles in Pulmonary Arterial Hypertension at Rest and with Peak Exercise**/J. Coursen, C. Simpson, D. Graham, S. Aja, R. Harlan, A. Roux, T.M. Kolb, S.C. Mathai, S. Hsu, R.J. Tedford, P.M. Hassoun, R.L. Damico, Baltimore, MD, p.A1188
- 818 **Lipid Metabolomics Analysis of Pulmonary Venous-Occlusive Disease**/P. Yuan, Shanghai, China, p.A1189
- 819 **Bone Morphogenetic Protein 9 (BMP)-9 Loss Alters Lung Vascular Integrity and Partially Attenuates Experimental Pulmonary Hypertension**/N. Berrebeh, R. Thuillet, M. Ottaviani, M.K. Chelgham, I. Anegon, R.T. Schermuly, M.J.C. Humbert, B. Kojonazarov, S. Bailly, L. Tu, C. Guignabert, Le Plessis Robinson, France, p.A1190
- 820 **A Semi-Quantitative Immunohistochemistry-Based Comparison of Systemic Sclerosis-Associated (SSc-PAH) vs. Idiopathic Pulmonary Arterial Hypertension (IPAH) Lungs**/S.H. Friedman, R.A. Harley, J. Williams, V. Ramakrishnan, C. Strange, R.M. Silver, C. Feghali-Bostwick, R.G. Argula, Charleston, SC, p.A1191
- 821 **Reciprocal Bi-Directional Cross-Talk Between GATA6 and YAP Regulates Vascular Smooth Muscle Cell Hyper-Proliferation in PAH**/T.V. Kudryashova, A. Ichihara, T. Toyama, Y. Shen, D. Goncharov, T. Avolio, R.A. Lafyatis, M. Trojanowska, E.A. Goncharova, Davis, CA, p.A1192
- 822 **Apelin Signaling Protects Against Pulmonary Artery Banding-Induced Right Ventricular Failure**/A.L. Frump, A. Fisher, T. Cook, T. Lahm, S. Bonnet, S. Provencher, V. Nadeau, B. Yakubov, Indianapolis, IN, p.A5526
- 823 **HIPK2 Supports Pulmonary Vascular Smooth Muscle Cell Proliferation and Pulmonary Hypertension Via YAP and CEP55**/L. Jiang, D. Goncharov, Y. Shen, L. Teos, D. Lin, E.A. Goncharova, T.V. Kudryashova, Davis, CA, p.A5527

- 824 **Treatment with the Mitochondria-Targeted Antioxidant Mitotempo Ameliorates Pulmonary Vascular Remodeling and Improves Exercise Hemodynamics in a Rat Model of Combined Pre- and Post-Capillary Pulmonary Hypertension**/G. Triantafyllou, T. Satoh, R. Liu, Q. Xu, C.F. McTiernan, S. Shiva, A.C. Straub, M.T. Gladwin, Pittsburgh, PA, p.A5528
- 825 **The Roles of Inflammasome Activation and Gasdermin D in Pulmonary Arterial Hypertension**/A. Foley, S. Sulstarova, A. Volchuk, B.E. Steinberg, N.M. Goldenberg, Toronto, Canada, p.A5529

BASIC • TRANSLATIONAL

POSTER DISCUSSION SESSION

A28 THE HOST DELIVERS

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 203-204 (South Building, Level 2)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: E.M. Carmona Porquera, MD, PhD, Rochester, MN
L.K. Sharma, PhD, New Haven, CT
S.E. Evans, MD, ATSF, Houston, TX

- 201 **IL-25 Inhibits Airway Anti-Viral Immunity and Promotes Virus Exacerbation of Allergic Airways Disease**/N.W. Bartlett, T. Williams, S.-L. Loo, J. Girkin, Newcastle, Australia, p.A1193
- 202 **Inducible Resistance Against Viral Pneumonia Requires a Lung Epithelium-Specific Transcriptional Interaction Between RelA and cJUN**/J. Pantaleon-Garcia, L.M. Pacheco Hernandez, V.V. Kulkarni, M. Longmire, Y. Wang, S.E. Evans, Monterrey, TX, p.A1194
- 203 **Bronchial Epithelial ACE-2 and SARS-CoV-2 Replication in Asthmatic and Healthy Children**/L.M. Rich, E.R. Vanderwall, K. Barrow, M. White, D.J. Jackson, M.C. Altman, J.S. Debley, Seattle, WA, p.A1195
- 204 **Pulmonary Surfactant Phospholipids as Novel Anti-Virals Against SARS-CoV-2 Infection**/M. Numata-Nakamura, R. Bowen, D.R. Voelker, Denver, CO, p.A1196
- 205 **Induced Pluripotent Stem Cell Derived Airway to Assess Cystic Fibrosis Intrinsic Epithelial Response to SARS-CoV-2**?/S. Rollins, A.J. Hume, C. Simone-Roach, Y. Tang, C.V. Chin, D.-Y.C. Chen, M. Prakash, F.J. Hawkins, T.M. Schlaeger, B.A. Raby, M. Saeed, D.N. Kotton, E. Mühlberger, R. Wang, Boston, MA, p.A1197
- 206 **Age-Elevated Prostaglandin E2 Levels Enhance Mortality to Influenza Infection**/J. Chen, J.C. Deng, M. Peters-Golden, D. Goldstein, R.L. Zemans, M. Zhang, Ann Arbor, MI, p.A1198
- 207 **Additive Neuroinflammatory and Neuroimmune Effects of SARS-CoV-2 and Respiratory Syncytial Virus (RSV) Co-infection in the Ad5-hACE2 Mouse Model**/R. Brown, A. Narayanappa, G. Piedimonte, G. Bix, New Orleans, LA, p.A1199
- 208 **Targeted Activation of the Apical Epithelial Sodium Channel Alpha Subunit Preserves Alveolar Fluid Clearance in Bacterial Pneumonia (*S. pneumoniae*) in the Ex Vivo Perfused Human Lung**/M. Maishan, H. Taenaka, S. Matsumoto, X. Fang, S. Sridhar, R. Lucas, M.A. Matthay, San Francisco, CA, p.A1200
- 209 **Pam2-ODN Induces Protection Against Acute Bacterial Pneumonia by Redox Based Activation of Lung Epithelial STAT3**/V.V. Kulkarni, Y. Wang, J. Pantaleón García, S.E. Evans, Houston, TX, p.A1201
- 210 **Mucociliary Transport Augmenting Agents Block SARS-Cov-2 Replication in Human Bronchial Epithelial Cells In Vitro**/J. Campos-Gomez, Q. Li, S.S. Hussain, J.E. Peabody Lever, C. Fernandez Petty, H. Kim, S.M. Rowe, Birmingham, AL, p.A1202
- 211 **Lung Mesenchymal Cell Responses to Pneumonia**/A.M. Soucy, J.E. Brune, A.T. Shenoy, F.T. Korkmaz, J.D. Campbell, W.N. Goltry, I.M.C. Martin, K.E. Traber, M.R. Jones, L.J. Quinton, C.W. Frevert, J.P. Mizgerd, Boston, MA, p.A1203
- 212 **Modifying Macrophage Phenotypes to Dampen Airway Inflammation in Chronic Lung Diseases**/K.B. Hisert, A. Ochoa, K. Skinner, M. Long, K. Schoenfelt, W.J. Janssen, L. Becker, A. Manicone, Denver, CO, p.A1204
- 213 **Rhinovirus-A1B Decreases Coronavirus NL63 Replication and Inflammation in Adult Mice**/J.K. Bentley, H.A. Breckenridge, J.E. Kreger, A.M. Goldsmith, C.N. Lumeng, M.B. Hershenson, Ann Arbor, MI, p.A1205
- 214 **Neutrophil-Avid Nanocarriers, a Future Potent Autosomal Dominant Hyper Ig-E Syndrome STAT3 Deficiency Therapeutic**/K. Rubey, A.J. Paris, A. Mukhitov, S. Lin, J. Myerson, J. Brenner, G.S. Worthen, V.P. Krymskaya, J. Heimall, Philadelphia, PA, p.A1206
- 215 **RIG-I Is a Novel Receptor for CpG Oligodeoxynucleotides**/Y. Wang, V. Kulkarni, J. Pantaleón García, M. Lethier, S. Cusack, S.E. Evans, Houston, TX, p.A1207
- 216 **PI4KB Inhibitor Ameliorates Exacerbation of Respiratory Diseases Caused by Rhinovirus Infection in Mice**/T. Matsui, M. Fujita, Y. Ishibashi, T.K. Nomanbhoy, J.S. Rosenblum, M. Nagasawa, Shimotsuga-gun, Tochigi, Japan, p.A1208

- 217 **TLR2/6 Agonist Treatment Enhances Antiviral Innate Immune Responses in a Novel Mouse Coronavirus Respiratory Infection Model**/J. Girkin, N.E. Bryant, S.-L. Loo, C. Demaison, F. Mercuri, N.W. Bartlett, New Lambton Heights, Australia, p.A1209
- 218 **The Effects of E-cigarette Use, Cigarette Smoke and Dual-Use of Both on Murine Susceptibility to Streptococcal Pneumonia**/K. Park, I.N. Advani, J.A. Masso Silva, J. Pham, L.E. Crotty Alexander, La Jolla, CA, p.A1210
- 219 **Genetic Regulation of the Host Immune Response to Cryptococcus Neoformans Infection**/M. El Sheikh, I. Angers, S.T. Qureshi, Montreal, Canada, p.A1211
- 220 **Type I IFN Signaling Controls Damage and Clearance During Pulmonary Aspergillus Fumigatus Infection**/K.M. Shephardson, J. Roemer, A. Rynda-Apple, Bozeman, MT, p.A1212
- 221 **The Combined Action of Tumor Necrosis Factor and Gamma Interferon Leads to Inflammation-Cell Death Axis and Senescence in Covid-19 Patients**/Y. Palacios, L.A. Ramón-Luing, A. Ruiz, A. Garcia, A. Sánchez-Monciváis, O. Barreto-Rodríguez, K. Medina-Quero, I. Buendia-Roldan, L. Chávez-Galán, Mexico, Mexico, p.A1213
- 222 **Cigarette Smoke Exposure or Nigericin/LPS Stimulation Induces MAVS Aggregation, Which Is Further Augmented in NLRX1 Deficiency**/G. Gupta, S.-H. Kim, H.J. Shin, L. Wei, I.O. Rosas, N. Kaminski, L.K. Sharma, C. Dela Cruz, M.-J. Kang, New Haven, CT, p.A1214
- 223 **AMP-Activated Protein Kinase Is Required for Treg Cell Function During Microenvironmental Stress**/M.A. Torres Acosta, S. Weinberg, K. Helmin, L. Morales-Nebreda, C.P. Reyes Flores, A.M. Joudi, B.D. Singer, Chicago, IL, p.A1215
- 224 **The Influenza-Injured Lung Microenvironment Promotes Methicillin-Resistant Staphylococcus Aureus (MRSA) Virulence, Leading to Secondary Pneumonia**/C. Langouet-Astrie, K. Oshima, S. McMurty, Y. Yang, J. Kwiecinski, J. Liu, A. Horswill, E.P. Schmidt, Aurora, CO, p.A1216
- 225 **Combined Toll-Like Receptor Agonist Treatment Leads to Activation of Interferon Regulatory Factor 3 in Lung Epithelial Cells In Vitro**/M. Longmire, J.P. Bodnar, J. Pantaleón García, Y. Wang, S.E. Evans, Houston, TX, p.A1217

BASIC • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A29 CLINICAL AND TRANSLATIONAL STUDIES OF ASTHMA

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2009/2011 (West Building, Level 2)

- Viewing 9:30-10:00
- Summaries/Discussion 10:00-11:00
- Chairing: A.A. Zeki, MD, Davis, CA
M.G. Drake, MD, Portland, OR
- 701 **Therapeutic Effect of Melatonin on Pulmonary Inflammatory Response in Experimental Models of Asthma, COPD and Asthma-COPD Overlap**/V. Scheffer, C. Ribeiro, L. Camargo, S. Fukuzaki, R.F. Righetti, S.K.M. Bezerra, B.M. Saraiva-Romanholo, F.M.D. Almeida, I.D.F.L.C. Tibério, E.A. Leick, Sao Paulo, Brazil, p.A1218
- 702 **Parasympathetic Airway Nerve Labeling with AAV9-Based Multicolor Fluorescence**/U. De La Torre, M.G. Drake, A.D. Fryer, D.B. Jacoby, A.B. Pincus, Portland, OR, p.A1219
- 703 **TNF α and IFN α Augments Pro-inflammatory and Pro-Contractile Genes in Human Airway Smooth Muscle: A Potential Role for Oxidative Stress**/M.L. Ford, B.W. Lewis, J. Walum, R.D. Britt, Columbus, OH, p.A1220
- 704 **Substrate-Selective Targeting of Extracellular Signal-Regulated Kinase (ERK1/2) Mitigates Multiple Pathophysiological Features of Allergen-Induced Asthma**/S.D. Shah, A.P. Nayak, P. Sharma, S. Addya, W. Huang, M. Kane, P. Shaprio, D.A. Deshpande, Philadelphia, PA, p.A1221
- 705 **Smooth Muscle-Specific Estrogen Receptor Signaling Regulates Airway Hyperreactivity in a Mouse Model of Allergic Asthma**/N.S. Ambhore, P. Balraj, S. Varadharajan, S. Venkatachalem, Fargo, ND, p.A1222
- 706 **The Mechanism of Novel Benzodiazepine PI320-Mediated Airway Relaxation in Mouse Lung Slice**/G.T. Yocum, J.F. Perez-Zoghbi, D.R. Sajorda, L.A. Arnold, C.W. Emala, New York, NY, p.A1223
- 707 **Does Tobacco Smoking Influence the Effectiveness of ICS/LABA Controller Therapy in Asthma Patients with Persistent Cold Airway Hyperresponsiveness?**/J.M. Perelman, A.G. Prikhodko, Blagoveschensk, Russian Federation, p.A1224

- 708 Meaningful Change in Asthma Impairment and Risk Questionnaire (AIRQ®) Score: Assessing Minimally Important Difference (MID)/B.E. Chipps, K.R. Murphy, R.A. Wise, D. Beuther, J. Reibman, W. McCann, M. George, I.A. Gilbert, H.N. Gandhi, K. Cutts, K.S. Coyne, R.S. Zeiger, Sacramento, CA, p.A1225**
- 709 Differences in Ventilation Defects (VDefs) and Inflammatory Responses to Segmental Allergen Challenge Between Allergic Adults With and Without Asthma/T. Winkler, V.J. Kelly, M. Kone, D. Hamilos, J.L. Cho, J. Griffith, J.G. Venegas, A.D. Luster, B.D. Medoff, R.S. Harris, Boston, MA, p.A1226**
- 710 Effect of Airway Smooth Muscle Tone on Airway Responsiveness in Asthmatic Patients/A. Dufour-Mailhot, C. Henry, F. Khadangi, M. Gazzola, M. Boucher, M.-E. Boulay, A. Côté, L.-P. Boulet, Y. Bossé, Québec, Canada, p.A1227**
- 711 Rhinovirus (RV) C15 Decreases Bronchodilation, Relaxation and cAMP Levels in Human Small Airways and Airway Smooth Muscle (HASM), but Has Little Effect on β_2 Adrenergic Receptor Signaling Genes/C.J. Koziol-White, E. Gebski, V. Parikh, N. Kim, Y. Bochkov, J.E. Gern, S.S. An, R.A. Panettieri, New Brunswick, NJ, p.A1228**
- 712 Kisspeptin Attenuates Airway Smooth Muscle Cell Migration by Regulating Rho GTPase Signaling Pathway/P. Balraj, N.S. Ambhore, N.A. Borkar, C.M. Pabelick, Y.S. Prakash, S. Venkatachalem, Fargo, ND, p.A1229**
- 713 IL-13 and IL-17A Activate Beta-1 Integrin to Enhance Force Transmission in Airway Smooth Muscle/U. Ngo, D. Sheppard, A.B. Sundaram, San Francisco, CA, p.A1230**
- 714 Hyperinsulinemia Increases Reflex Bronchoconstriction in Obese Mice/G.N. Calco, A.D. Fryer, D.B. Jacoby, Z. Nie, Portland, OR, p.A1231**
- P713 National Differences in Real-World Outcomes with Mepolizumab Treatment for Patients with Severe Asthma: Results from the REALITI-A Study/J.K. Lee, F. Schleich, G.W.W. Canonica, X. Muñoz, R. Chaudhuri, F.E.-H. Lee, P. Howarth, R.G.G. Price, S. Yang, R.W.W. Jakes, A. Maxwell, R. Alfonso Cristancho, Toronto, Canada, p.A1232**
- P714 Comparison of Clinical Efficacy Between Mepolizumab and Benralizumab in Severe Eosinophilic Asthma/K. Okawa, T. Akamatsu, S. Sugiyama, K. Shiratori, H. Nakayasu, T. Masuda, S. Takahashi, Y. Kitahara, Y. Kishimoto, S. Sakurai, M. Saigusa, A. Yamamoto, S. Morita, K. Asada, T. Shirai, Shizuoka, Japan, p.A1233**
- P715 Antitussive Utilization in Patients with Inadequately Controlled Severe Asthma: A Post-Hoc Analysis of the Omalizumab EXTRA Trial/C.J. Rutland, O. Iweala, K. Anders, J. Ko, P. Mital, S. Gupta, A. Mohan, Newport Beach, CA, p.A1234**
- P716 Effect of Omalizumab on Exacerbations and Glucocorticoid Use in Patients with Allergic Bronchopulmonary Aspergillosis: A Systematic Review and Meta-Analysis/W.J. Calhoun, M. Jin, J.A. Douglass, J.S. Elborn, R. Agarwal, S. Lazarewicz, M. Yan, Galveston, TX, p.A1235**
- P717 Effect of Biologics on Allergic Response and Airway Hyperresponsiveness: A Systematic Literature Review/J.D. Spahn, T.S. Hallstrand, C.E. Brightling, P.M. O'Byrne, N.A. Molfino, C.S. Ambrose, N. Martin, Wilmington, DE, p.A1236**
- P718 Real World Impact of Non Clinical Inhaler Switching on Asthma or COPD Patients - a Systematic Review/O.S. Usmani, S.Z. Bosnic-Anticevich, P.N.R. Dekhuijzen, F. Lavorini, J. Bell, N. Stjepanovic, S.L. Swift, N. Roche, London, United Kingdom, p.A1237**
- P719 Serum Iron Correlates with Serum Immunoglobulin E, Serum Total Globulin, and Exhaled Nitric Oxide in Asthmatic Children/S.-W. Hu, A.J. Ghio, Miami, FL, p.A1238**
- P720 The Use of Inflammation Parameters in the Care of Patients with Asthma Prescribed Extrafine Single-Inhaler Triple Therapy: A Real-World View from Germany/C. Gessner, B. Akyildiz, D. Nachtigall, E. Nudo, S. Boeig, H. Timmermann, Leipzig, Germany, p.A1239**
- P721 Comparable Diagnostic Accuracy Between Sputum Cell Analysis and FeNO in Diagnosing Cough Variant Asthma/T. Shirai, K. Tamura, K. Hirai, Shizuoka, Japan, p.A1240**
- P722 Development of a Prediction Score for the Diagnosis of Asthma in Adult Patients with Respiratory Symptoms: PIFA Score (Provocation Test, Induced Sputum Eosinophilia, and FeNO for Diagnosing Asthma)/N. Kang, J.-Y. Lee, B.-J. Lee, D.-C. Choi, Seoul, Korea, Republic of, p.A1241**

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A31 REAL WORLD ASTHMA TREATMENT OUTCOMES, BIOMARKER STUDIES, PHENOTYPING, AND SEVERITY ASSESSMENTS

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area I, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

**Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.**

- P723** **Development of a Prototype ORACLE Web-app to Predict Treatment Benefits of Type-2 Targeted Anti-Inflammatory Treatment in Asthma/W.** Do, R.W. Beasley, T.S.C. Hinks, I.D. Pavord, S. Couillard, Oxford, United Kingdom, p.A1242
- P724** **Identification of Phenotypes for Older Adults with Asthma using Cluster Analysis/B.J.** Polivka, L. Huntington-Moskos, D. Antimisiaris, R. Folz, Kansas City, KS, p.A1243
- P725** **30-Days Spirometry Holter: An Effective Tool for Diagnosis and the Optimization of the Respiratory Diseases - Case Series/L.** Koltowski, M. Solinski, A. Mazur, M. Kowalczyk, M. Basza, Warsaw, Poland, p.A1244
- P726** **Prediction of Allergic Skin Sensitization in Asthmatic Adolescents in a Nigerian City, Using Blood Eosinophil Values/C.I.** Ndukwu, A.C. Ayuk, J.C. Elo-Ilo, Awka, Nigeria, p.A1245
- P727** **Correlates of Positive Methacholine Challenge Tests/S.** Patrawala, C. Arevalo Rodriguez, R. Kraude, S.N. Georas, S. Khurana, Rochester, NY, p.A1246
- P728** **Eosinophil as a Determinant of Airway Hyperresponsiveness in Allergic Asthma with Elevated Blood Eosinophils/M.** Imaoka, Matsuyama, Japan, p.A1247
- P729** **Sex-Specific Differences in L-Arginine Metabolism of Asthma Patients/M.D.** Althoff, S. Sharma, H. Grasmann, A. Federman, J.P. Wisnivesky, F. Holguin, Aurora, CO, p.A1248
- P730** **Immunoproteasome Inhibits Allergic Inflammation and Airway Hyperresponsiveness During Rhinovirus Infection/N.** Schaunaman, K.G. Dimasuy, D.L. Cervantes, D.A. Ferrington, H.W. Chu, Denver, CO, p.A1249
- P731** **Smoking Exposure Is Associated with Airway Eosinophilic Activation/D.K.** Klein, A. Silberbrandt, M. Mukherjee, L. Froessing, M. Hvidtfeldt, A. von Bülow, P. Nair, C. Porsbjerg, Copenhagen, Denmark, p.A1250
- P732** **ADRB2 Arg16Gly Polymorphisms Are Associated with Nocturnal Asthma Symptoms in Asthmatic Children Using Long-Acting Beta2-Agonists/S.** Vijverberg, T.M. Nguyen, S. Hashimoto, A.H. Maitland-van der Zee, Amsterdam, Netherlands, p.A1251
- P733** **Allergic Airway Inflammation in IgG4-Related Disease/S.** Matsui, S. Okazawa, K. Tokui, T. Chihiro, S. Zenta, S. Imanishi, K. Kenta, I. Minehiko, K. Tobe, M. Komatsu, H. Yamamoto, Toyama-shi, Japan, p.A1252

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

A32 **UPDATES IN THE MOLECULAR AND CELLULAR UNDERPINNINGS OF ASTHMA**

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area I, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P735** **RSV Induces Asthma-Related Immunological Signatures in Distal Human Lung Tissue Ex Vivo/M.** Ahrends, O. Danov, C. Werlein, P. Zardo, M. Niehof, D. Jonigk, S. Wronski, C. Hesse, A. Braun, K. Sewald, Hannover, Germany, p.A1253
- P736** **Electrostatic Interactions Between Intelectin-1 and MUC5AC/M.** Liegeois, J.L. Everman, M.A. Seibold, J.V. Fahy, San Francisco, CA, p.A1254
- P737** **MYADM Epithelial Expression Correlates with Type-2 Asthma and Is Up-Regulated by Rhinovirus Infection/S.** Tanyaratsrisakul, H. Kimura, A.B.C. Dy, M. Kraft, J.G. Ledford, Tucson, AZ, p.A1255
- P738** **CD4 Tissue Resident Memory T Cell Stimulation Activates Asthma-Relevant Inflammatory Pathways/N.** Schoettler, K.M. Blaine, A.I. Sperling, Chicago, IL, p.A1256
- P739** **Long-Acting Muscarinic Antagonist Attenuated Human Basophil-Derived IL-4 Production/T.** Matsuyama, K. Machida, H. Matsuyama, Y. Dotake, K. Takagi, H. Inoue, Kagoshima City, Japan, p.A1257
- P740** **The Effect of Commonly Used Glucocorticoids in a Model of Vially-Induced Epithelial Barrier Dysfunction/P.A.** Donohue, K. Norton, B. Dexter, T. Pressley, S.N. Georas, Rochester, NY, p.A1258
- P741** **Expression Of Clock Gene PER3 Is Altered In Asthma/K.** Krakowiak, R. Maidstone, J. Blaikley, P. Downton, H. Durrington, Manchester, United Kingdom, p.A1259
- P742** **Endometrial Plasma Cell Count Associated with Impaired Fertility in Women with Asthma? A Pilot Study/C.** Tidemandsen, V. Backer, P. Egerup, N.L.C. Freiesleben, H.S. Nielsen, E.J. Gade, L.L. Thuesen, R. Serizawa, A.J.K. Stubsgaard, C.S. Ulrik, Hvidovre, Denmark, p.A1260
- P743** **Immunoglobulin E Specific Serum Dermatophagoides Pteronyssinus and Dermatophagoides Farinae and Their Correlation with Fractional Exhaled Nitric Oxide in Uncontrolled Asthma Patients/T.** Damayanti, N. Bahana, H. Wibowo, A. Rozaliyani, Jakarta Timur, Indonesia, p.A1261

- P744** **The Effectiveness of Allergoids in Conducting SIT in Patients with Seasonal Allergic Rhinitis/I.** Koretskaia, Y. Dytyatkovska, Dnipro, Ukraine, p.A1262
- P745** **Collagen 4 Alpha 3 (COL4A3) Degradation May Depend on Matrix-Metallo-Proteinase 9(MMP9) in Experimental Asthma Exacerbations/S.S.P.** Nemani, L. Lunding, M. Wegmann, M.V. Kopp, M.D. Weckmann, Luebeck, Germany, p.A1263
- P746** **HIF Alpha Subunit Expression Within Pulmonary Endothelial Cells May Regulate Cellular Inflammation in a Mouse Model of Allergic Asthma/J.M.** Olay, J. Pham, J.A. Masso Silva, L.E. Crotty Alexander, San Diego, CA, p.A1264
- P747** **Impact of HIF-1a and HIF-2a Subunits in Inflammatory Cell Recruitment During Asthmatic Response Via Alternaria Alternata Sensitization/J.** Pham, J.M. Olay, J.A. Masso Silva, L.E. Crotty Alexander, San Diego, CA, p.A1265
- P748** **Intermittent Hypoxia Influences T Cell Distribution and Allergic Response/D.-Y.** Park, D.-Y. Park, H.J. Kim, Suwon, Korea, Republic of, p.A1266
- P749** **Role of MAP3K19 in Allergic Airway Inflammation of Asthma/Y.** Sandhu, N. Harada, S. Harada, H. Sasano, S. Abe, S. Ueda, T. Nishimaki, Y. Sato, T. Watanabe, T. Takeshige, K. Matsuno, J. Ito, H. Akiba, K. Takahashi, Tokyo, Japan, p.A1267
- P750** **Noxa in Airway Epithelia Inhibits Lung Inflammation by Affecting the Innate Immune Response/Z.H.** Negasi, J.J. Rojas-Quintero, D. Tassew, Y.A. Mebratu, Y. Tesfaigzi, Boston, MA, p.A1268
- P751** **Changes in the Alveolar Macrophage Toponome of Female SP-A Knockout Mice After Rescue with Exogenous SP-A1: Comparison with Males/D.S.** Phelps, V.M. Chinchilli, L. Yang, D. Shearer, X. Zhang, J. Floros, Hershey, PA, p.A1269
- P752** **Decreased Response to Interleukin 13 in Distal vs Proximal Airways/M.** Conway, A. Molzahn, D. Francisco, H. Kimura, M. Kraft, Tucson, AZ, p.A1270
- P753** **Strain-Dependent Inflammatory Cell Response Variability Following Acute Ozone Exposure in BALB/c and C57BL/6 Mice With and Without HDM-Sensitization/W.C.** Bennett, J. Frisbee, T.K. Patron, G.A. Sarah, S.A. Schworer, S.L. Tilley, Chapel Hill, NC, p.A1271
- P754** **Sex Differences in Whole Lung B Cell Subsets in a Murine Model of Asthma/L.Y.** Drake, K. Stelzig, D. Bravo-Solarte, C.M. Pabelick, Y.S. Prakash, S.E. Chiarella, Rochester, MN, p.A1272

- P755** **Endotoxin Abundance in House Dust Mite Drives Asthma Phenotype In Vivo/N.** Fuentes, A. Keller, V. Godfrey, C. Tkaczyk, Gaithersburg, MD, p.A1273
- P756** **Helicobacter Pylori Derived Vacuolating Cytotoxin A (VacA) Modulates the Allergen Specific Interaction of Dendritic Cells with T Cells/J.** Raspe, H. Beckert, T.L. Cover, A. Müller, C. Taube, S. Reuter, Essen, Germany, p.A1274

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THEMATIC POSTER SESSION

A33 BIOMARKERS, ALLERGY AND IMMUNE RESPONSES IN COVID-19

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P771** **Eosinophil Recovery in Hospitalized COVID-19 Patients Is Associated with Lower Rates of ICU Admission and In-Hospital Mortality/P.** Yan, D. Markovic, R.Y. Hixson, C. Shover, R. Buhr, J. Fulcher, T. Bina, D.P. Tashkin, I. Barjaktarevic, Los Angeles, CA, p.A1275
- P772** **The Absolute Eosinophil Count Predicts Mortality in a Group of Latin/Mexican Severe COVID-19 Patients/A.** Cortes-Telles, V.A. Alvarez-Sanchez, E. Figueroa-Hurtado, D.L. Ortiz-Farias, A. Avila-Nava, A.L. Gutierrez-Solis, Merida, Yucatan, Mexico, p.A1276
- P773** **Asthma Severity and Risk for Covid-19/N.** Orfan, Z. Wu, T. Wilson, York, PA, p.A1277
- P774** **COVID-19 and Biologics in Severe Asthmatic Patients: A Multicenter Retrospective Analysis/S.Y.** Jiang, C. Pathak, S. Cao, W. Collins, L. Eggert, P. Akuthota, R.S. Chinthrajah, San Jose, CA, p.A1278
- P775** **B-Cell Depletion Associated Prolonged COVID-19 and Response to Treatment with Monoclonal Antibodies: A Case Series/E.** Arnold, M. Samant, S. Mehta, C. Diffie, Saint Louis, MO, p.A1279
- P776** **New-Onset Autoantibodies Are Prevalent in Non-COVID Critical Illness/A.R.** Moore, A. Feng, J. Roque, T. Asuni, E. Yang, X. Yin, P.J. Utz, A. Rogers, Stanford, CA, p.A1280
- P777** **Qualitative Serologic Antibody Response Using Lateral Flow Immunoassay (Rapid IgG/IgM Diagnostic Test) in the Different Illness Severity of COVID-19 Pneumonia/M.C.** Agase, Quezon City, Philippines, p.A1281

- P778 Plasma Mediators in E Cigarette Users Inhibit SARS-CoV-2 Pseudovirus Infection/R.** Chitteti, J.P. Zuniga-Hertz, J.A. Masso-Silva, L.E. Crotty Alexander, J. Shin, H.H. Patel, D.M. Roth, San Diego, CA, p.A1282
- P779 Preliminary Analysis of the Symptoms and Quality of Life After Discharge in Noncritically Ill Patients with COVID-19: The ACTIV-4a and ATTACC Randomized Controlled Trial/K.A.** Hubel, Y.Y. Greenstein, V. Venugopal, Y.-H. Lai, J.S. Berger, S.Y. Chang, C. Colovos, F. Shah, M. Islam, J.V. Jimenez, M. Khan, L.Z. Kornblith, P.R. Lawler, M. Gaddh, J. Moises, R. Morillo Guerrero, W. Nkemdirim, H.R. Reynolds, J. Seijas Amigo, A. Soeiro, L. Wahid, A. Zahra, E.C. Goligher, R. Zarychanski, M. Cushman, M.N. Gong, Portland, OR p.A1283
- P780 Soluble Cluster of Differentiation 36 (sCD36) as a Biomarker for Outcomes in Coronavirus Disease (COVID-19) Acute Respiratory Distress Syndrome (ARDS)/F.** Alghanim, T. Mohan, J.D. Hasday, C. Shanholtz, K. Birukov, Baltimore, MD, p.A1284
- P781 Wide Individual Heterogeneity in Antigen-Specific Immunity After Coronavirus Disease 2019 (COVID-19) Infection/P.** Marty, M. Shah, V. Van Keulen, C. Erskine, T. Peikert, P. Escalante, Rochester, MN, p.A1285
- P782 Post-Covid Pulmonary Fibrosis Cohort: Preliminary Study/L.G.** Bangun, D.K. Sutoyo, A.G. Icksan, M. Fahmi, S.L. Andarini, Jakarta, Indonesia, p.A1286
- P783 Plasma Markers of Lung Injury and Remodeling Are Associated with Radiographic Features of Fibrosis in Patients with COVID-19 Acute Respiratory Distress Syndrome/S.** Holton, E.D. Morrell, S. Pipavath, P. Bhatraju, M.M. Wurfel, C. Mikacenic, Seattle, WA, p.A1287
- P784 The New Method of Severe COVID-19 Treatment with Inhalations of Ultra-Low Doses of Alkylating Drug/E.** Sinitsyn, K. Zykov, A. Rvacheva, Moscow, Russian Federation, p.A1288
- P785 Fractional Exhaled Nitric Oxide in U.S. Military Veterans with Acute COVID-19 in the Emergency Department (FENOVET-ED)/Z.** Elfessi, I. Rubinstein, B. Steadman, A. Hwang, S. Schiffbauer, Chicago, IL, p.A1289
- P786 Vitamin D Deficiency and Its Effects on COVID Pneumonia Treated With and Without Low Dose Steroids/M.** Duttuluri, S. Nutakki, M.L. Bugayong, S. Yee, A. Mcpherson, J. Shah, R. Ayinla, H. Assallum, New York, NY, p.A1290

BASIC • BEHAVIORAL • CLINICAL

THEMATIC POSTER SESSION

A34 TOPICS IN HEALTH SERVICES RESEARCH AND SELF-MANAGEMENT FOR PATIENTS WITH OBSTRUCTIVE LUNG DISEASE

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area C, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P159 The Societal Cost of ZZ Alpha-1 Antitrypsin Deficiency in an Irish Population/D.** Fraughen, K. McGoldrick, T.P. Carroll, G. Kelly, M. Herron, L. Alhaddah, M. Casey, M.P. Murphy, O. Mcelvaney, O.F. Mcelvaney, R. Heeney, C. Gunaratnam, N.G. Mcelvaney, Dublin, Ireland, p.A1291
- P160 The Effect of Cocooning on Patient-Reported Pulmonary Exacerbation Frequency in A ZZ Alpha-1 Antitrypsin Deficient Irish Population/D.** Fraughen, K. McGoldrick, T. Carroll, M. Herron, L. Alhaddah, M. Casey, M. Murphy, O. McElvaney, O. McElvaney, R. Heeney, C. Gunaratnam, N.G. McElvaney, Dublin, Ireland, p.A1292
- P161 Clinical Practices Surrounding the Prescription of Home Oxygen with COPD and Desaturation/S.E.** Zaeh, D.H. Au, M. DaSilva, K. Deitemeyer, J.R. Delisa, L.C. Feemster, J.A. Krishnan, M. Krishnan, M.C. McCormack, J.A. Sculley, A. Woodruff, M. Eakin, New Haven, CT, p.A1293
- P162 Association Between Chronic Obstructive Pulmonary Disease (COPD) and Stage of Lung Cancer/S.J.** Butler, A.V. Louie, R. Sutradhar, L. Paszat, D. Brooks, A.S. Gershon, Toronto, Canada, p.A1294
- P163 Depression Does Not Modify the Association of Cognitive Impairment with Medication Adherence Among People with COPD/A.** Arora, K. Muellers, M. Peralta, J. Verity, G. Wismer, M.S. Wolf, J. Becker, J.P. Wisnivesky, A.D. Federman, New York, NY, p.A1295
- P164 Automatically Explaining Machine Learning Predictions on Severe Chronic Obstructive Pulmonary Disease Exacerbations: Retrospective Cohort Study/S.** Zeng, M. Arjomandi, G. Luo, Seattle, WA, p.A1296
- P165 Use of Machine Learning to Develop a Screening Tool for COPD/I.** Aiyer, A. Sheta, P.T. Taweeseedt, H. Turabieh, S.R. Surani, Blairstown, NJ, p.A1297

- P166 A National Partnership with the COPD Foundation to Implement the COPD Virtual Medication Reconciliation and Education: COPD V-M(ED) Pilot/S.E. Gray, A. Dawdani, S. Goyal, J. Austin, V.G. Press, Chicago, IL, p.A1298**
- P167 On-line Medical Education Results in Improvement of Knowledge Related to Therapy Choice in COPD/T.A. Lambert, F.J. Martinez, D.B. Price, J.A. Wedzicha, A. Anzueto, G. Griffith, London, United Kingdom, p.A1299**
- P168 Wearable Sensors for Early Detection of COPD Exacerbations/E.B. Engel, A.C. Hill, D. Stempel, L. Kaye, G. Lyng, G.C. Lockhart, R.P. Bowler, Denver, CO, p.A1300**
- P169 Challenges and Successes in COPD Self-Management: A Qualitative Study of Healthcare Providers/A.R. Mathew, S. Dunn, M. Esqueda-Medina, B.T. Tran, L.J. Zimmermann, Chicago, IL, p.A1301**
- P170 On-line Medical Education Aids Optimization of Bronchodilator Therapy in COPD/T.A. Lambert, A. Kaplan, G. Griffith, London, United Kingdom, p.A1302**
- P171 Discrepancies in Predictive Factors of Inhaler Technique vs. Adherence/N. Munger, P. Zajac, N. Kappel, V.G. Press, Chicago, IL, p.A1303**
- P172 Impact of the COVID-19 Pandemic on Health Care Resource Utilization (HCRU) and Costs in Chronic Obstructive Pulmonary Disease (COPD) in the United States: A Population-Based Study/M. Bogart, X. Han, L. Bengtson, K. Rothnie, S. Gelwicks, T. Bancroft, A. Cole, H. Birch, D. Leather, C. Compton, A. Ismaila, Research Triangle Park, NC, p.A1304**
- P173 Impact of the COVID-19 Pandemic on Asthma Exacerbations in the United States: A Population-Based Study/K. Rothnie, X. Han, T. Bancroft, M. Bogart, S. Gelwicks, L. Bengtson, A. Cole, A. Ismaila, N. Swamy, D. Leather, C. Compton, H. Birch, London, United Kingdom, p.A1305**
- P174 Prevalence of Comorbidities in Adults with Severe Asthma: Results from the International Severe Asthma Registry (ISAR)/G. Scelo, C.M. Porsbjerg, V. Carter, C. Ariti, J. Lyu, N. Eleangovan, T.N. Tran, P. Barker, R. Katial, N. Martin, A. Altraja, C.K. Rhee, J.M. FitzGerald, S. Hansen, L.G. Heaney, M. Hew, M. Koh Siyue, P.E. Pfeffer, F. Puggioni, M.J. Tsai, A. von Bulow, E. , p.A1306**
- P175 Determining the Prevalence of Asthma in a Primary Care EMR: Suspected or Confirmed?/M. Moloney, D. Barber, J. Queenan, A. Morra, S. Gupta, T. To, G. Digby, M.D. Lougheed, Kingston, Canada, p.A1307**
- P176 Severity and Prevalence of Comorbidities Among Adults with Asthma in the United States/M. Barrett, V. Vuong, E. Boers, A. Cameron, L. Kaye, C. Woodford, C.M. Nunez, K.L. Sterling, San Diego, CA, p.A1309**
- P177 Mental Health of People with Difficult to Treat Asthma in a Large National Population Survey/H. Reddel, R. Ampon, L. Poulos, B. Toelle, G.B. Marks, L. Guo, S. Davis, Glebe, Australia, p.A1310**
- P178 Correlation Between Asthma Exacerbations and Depression/S. Misra, S. Desai, E. Ozen, A.S. Ray, Chicago, IL, p.A1311**
- P179 A Clustering Analysis of Eosinophilic Asthmatic Patients/H. Nekoe Zahraei, F. Schleich, S. Gerday, M. Henket, V. Paulus, F. Guissard, A.-F. Donneau, R.E. Louis, Liege, Belgium, p.A1312**
- P180 Prevalence and Frequency of Eosinophil (EOS) Testing in Patients with Asthma/T.C. Corbridge, A. Deb, E. Packnett, K. Jariwala-Parikh, M. Bogart, Research Triangle Park, NC, p.A1313**
- P181 The Burden of Asthma in Subjects Receiving Low-Dose ICS/LABA - an Analysis from a Real World Survey/K. Gruffydd-Jones, M. Fagerås, A. Hamblin, L. Draffan, N. Mestdagh, M. Sidaway, A. Sheikh, M. Small, A. Haq, Warminster, United Kingdom, p.A1314**
- P182 Evaluating the Effectiveness and Safety of Switching from Salmeterol - Fluticasone Inhalation to Formoterol - Budesonide Inhalation as Single Maintenance and Reliever Therapy (SMART) Approach in Partly Controlled or Uncontrolled Asthma Patients/N. Khatri, S. Kapoor, N. Arya, S. Bhagat, S. Patil, H. Barkate, Mumbai, India, p.A1315**
- P183 Cost Effectiveness of Inhaled Corticosteroid/Long-Acting Beta-Agonist/Long-Acting Muscarinic Antagonist (ICS/LABA/LAMA) Coverage Related to Reduction in Risk of Exacerbations/J. White, A.M. Szema, South Setauket, NY, p.A1316**
- P184 Inhaler Storage and Use Among Children with Asthma at Home, School, and Community/U. Balachandran, N. Kappel, V.G. Press, A. Volerman, Chicago, IL, p.A1317**
- P185 Demographics and Characteristics of Patients Who Initiate Biologics for Asthma/E. Lu, G. Mu, R. Alfonso Cristancho, Collegeville, PA, p.A1318**
- P186 Dupilumab Asthma ADVANTAGE-US: Characterization of a Large Cohort of Adolescent and Adult Patients with Asthma Initiating Dupilumab in a US-based Electronic Medical Record Database - Analysis of Real-World Evidence/L. Huynh, A. Nag, M. Hardin, K. Borsos, R. Nair, I. Gouia, Y. Song, Z. Yi, L. Yu, R. Stanford, Boston, MA, p.A1319**
- P187 Patient Preferences for Biologic Treatments for Severe Asthma: Pilot Results from a Discrete Choice Experiment/M.D. Williams, C.S. Ambrose, A.W. Lindsley, M.M. Ross, H. Collacott, A. Schulz, Y. Chung, P. Desai, P. Rane, H. Gelhorn, T.F. Carr, Annandale, VA, p.A1320**

- P188 Evaluating Feasibility of Patient-Reported Outcome Measurement and Identifying High-Priority Outcomes among Adult Emergency Department Asthma Patients/M.P. Lin, L. Richardson, New York, NY, p.A1321**
- P189 Using Qualitative Methods to Assess Patient-Reported Outcome Measures of Dyspnea and Self-Efficacy Among Adult Emergency Department Asthma Patients/M.P. Lin, M. Ramirez, J. Teresi, L. Richardson, New York, NY, p.A1322**
- P190 Learnings from More Than 500 Patients Hospitalized for Severe Asthma in the United States/R. Panettieri, C.S. Ambrose, Y. Chung, L. Tan, K. Kilpatrick, A.W. Lindsley, New Brunswick, NJ, p.A1323**
- P191 Characteristics and Outcomes for Adult Patients with Asthma Admitted to Intensive Care: A Retrospective Analysis/J.D. Saliccioli, M. Komorowski, D.C. Marshall, Boston, MA, p.A1324**
- P192 Assessing the Relationship Between Health Information Technology Use and Influenza Vaccine Uptake in Asthmatics/T.O. Babalola, N. Shah, R.C. Da Silva, K. Onoriode, S. Tongia, Athens, GA, p.A1326**
- P193 Concomitant Biologic Agents for the Treatment of Asthma at a Large Academic Medical Center with an Integrated Specialty Pharmacy Program/S.M. Rotolo, E.T. Naureckas, S.R. White, Chicago, IL, p.A1327**
- P194 Asthma Deaths at Home Are Unchanged Despite Declining Mortality in Other Settings: US Death Certificate Data from 2000-2019/K. Kilpatrick, C.S. Ambrose, A.W. Lindsley, J. Oppenheimer, Thousand Oaks, CA, p.A1328**
- P195 Treatable Traits in Severe Asthma: A Scoping Review/D.S. Romero Rojas, C.A. Celis-Preciado, M.J. Fernandez Sanchez, I. Solarte Rodriguez, Bogota, Colombia, p.A1329**
- P196 Incremental Cost Burden Among Patients with Severe Uncontrolled Asthma in US/A. Burnette, Y. Wang, P.B. Rane, Y. Chung, N. Princic, J. Park, J.-P. Llanos Ackert, A.W. Lindsley, C.S. Ambrose, Washington, DC, p.A1330**
- P197 Relationship of Fractional Exhaled Nitric Oxide (FeNO) with Asthma Control Varies by BMI Group/R. Hardwick, A.E. Dixon, D. Kaminsky, Burlington, VT, p.A1331**
- P198 Characteristics of People with Difficult to Treat Asthma in a Large National Population Survey/H. Reddel, R. Ampon, L. Poulos, B. Toelle, G.B. Marks, L. Guo, S. Davis, Glebe, Australia, p.A1332**
- P199 Geographic Variation in Disease Burden Among Patients with Severe Persistent Asthma in the US/P. Rane, C.A. Camargo, A.F. Beck, Y. Wang, Y. Chung, K. McGuinness, J.-P. Llanos Ackert, A.W. Lindsley, C.S. Ambrose, Z. Zhou, H.-C. Chang, R.L. Wade, Thousand Oaks, CA, p.A1333**

- P200 A Real Life Longitudinal Study on Asthma-Related Quality of Life in a Secondary Care Center/G. Louis, B. Pétré, F. Schleich, H. Nekoe Zahraei, A.-F. Donneau, M. Henket, V. Paulus, F. Guissard, M. Guillaume, R.E. Louis, Liège, Belgium, p.A1334**
- P201 Changes in C-Reactive Protein with Elexacaftor/Tezacaftor/Ivacaftor Treatment in Patients with Stable Cystic Fibrosis/E. Carmanov, J. Wang, A.P. Rao, P. Beringer, Los Angeles, CA, p.A1335**
- P202 Chronic Respiratory Diseases in Ethiopia: Risk Factors and Determinants of Pulmonary Function Impairment. Hospital Based Cross-Sectional Study/A.B. Binegdie, T. Haile, A. Worku, E. Kebede, H. Meme, A. El Sony, L.J. Zurba, M. Lesosky, J.R. Balmes, P. Burney, G. Devereux, K.J. Mortimer, Addis Ababa, Ethiopia, p.A1337**

BEHAVIORAL • CLINICAL

THEMATIC POSTER SESSION

A35 TOPICS IN TOBACCO AND E-CIGARETTES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area C, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P204 Feasibility Trial of an Unconventional Financial Incentive Based Smoking Cessation Study (Randomized Clinical Trial)/S.G. Sathya, C. Zaw, G.E. Holt, Miami, FL, p.A1338**
- P205 Adapting Tobacco Treatment to Telemedicine During the COVID-19 Pandemic: Benefits, Barriers, and Results/J. Deepak, J. Chan, J. Melamed, Baltimore, MD, p.A1339**
- P206 Implementing an Inpatient Tobacco Dependence Program in a Community Teaching Hospital/M. Ibrahim, M.-M. Lee, A.M. Ahasic, Norwalk, CT, p.A1340**
- P207 Use of Mobile Health Tools to Facilitate Tobacco Treatment Among Older, Underserved Adults: A Community-Based Approach to Intervention Refinement/J. Hart, T. Klaiman, A. Belk, J. Kim, J. Silvestri, S. Szymanski, D. Sheu, S.D. Halpern, Philadelphia, PA, p.A1341**
- P208 Veterans Affairs Partner Perspectives on Using a Proactive Teachable Moment-Based Opt-Out Method to Improve Smoking Cessation/S. Golden, A.C. Melzer, N.T. Tanner, J. Deepak, C.G. Slatore, Portland, OR, p.A1342**

- P209 Latent Classes of Smoking Behavior Are Differentially Associated with Lung Function Decline: The COPDGene Study/N.** Richmond, K.F. Hoth, C.G. Wilson, Y. Li, D.L. Demeo, G.L. Kinney, E. Austin, K.A. Young, J.E. Hokanson, Aurora, CO, p.A1343
- P210 Exploring the Dangerous Liaisons Between Tobacco Smoking and Alcohol Abuse and Clinical Spectrum of Community Acquired Pneumonia in Developing Countries/K.** Bhandari, D. Bhattarai, N. Bhatta, D.R. Mishra, A.B. Acharya, A. Verma, R. Sahi, S.H. Limbu, S. Katwal, N. Bhatta, Dharan, Nepal, p.A1344
- P211 Chronic Bronchiolocentric Fibrosis from E-Cigarette Use/B.** Flashner, D.J. Kanarek, W.J. O'Donnell, A. Soskis, D.R. Ziehr, A.J. Frank, S. Nandy, S.R. Berigei, A. Sharma, D.J. Mathisen, C. Keyes, M. Lanuti, A. Muniappan, J.-A.O. Shepard, M. Mino-Kenudson, A. Ly, Y.P. Hung, F.V. Castelino, H. Ott, B.D. Medoff, D., p.A1345
- P212 Attitude and General Knowledge of E-cigarette in College Students/K.** Chansri, C. Savigamin, T. Sriprasart, Bangkok, Thailand, p.A1346
- P213 The Association Between E-cigarette Use and Respiratory Symptoms in the Adult Population: A Systematic Review/M.M.** Alqahtani, S. Alqahtani, L. Goodfellow, Birmingham, AL, p.A1347
- P419 Coexistent Crohns Disease with ANCA-Negative Granulomatous Polyangiitis/N.** Khan, B. Zhao, R. Abrencillo, Houston, TX, p.A1350
- P420 When One Diagnosis Does Not Fit All: A Multidisciplinary Approach to an Interesting Case of Interstitial Lung Disease/J.** Sunny, R. Abrencillo, B. Zhao, Houston, TX, p.A1351
- P421 Clinically Amyopathic Dermatomyositis Associated ILD: Rapidly Progressive ILD After Bronchoscopy/J.A.** Moore, Z. Kattih, M. Ballenberger, S. Zajac, B.A. Mina, New York, NY, p.A1352
- P422 Rapidly Progressive Cellular NSIP in a Young Female Found to Have Antisynthetase Syndrome/S.** Baah, M. Urquhart, Louisville, KY, p.A1353
- P423 ECMO as a Bridge to Diagnose Anti-Synthetase Syndrome and Plasmapheresis as Salvage Therapy/U.** Khan, T. Amoun, S. Ausaf, H. Hussain, N. Madan, P.S. Patel, Newark, NJ, p.A1354
- P424 Interstitial Pneumonia with Autoimmune Features: A Precursor to Anti Synthetase Syndrome?/J.** Sunny, I.C. Mira-Avendano, Houston, TX, p.A1355
- P425 Anti-Melanoma Differentiation-Associated Gene 5-Positive Dermatomyositis with RP-ILD: Lessons About Disease Demography Taught by a US Case/T.** Henson, A. Kifayat, A. Wasserman, D. Chandy, O. Epelbaum, Valhalla, NY, p.A1356
- P426 Rheumatoid Lung Treated with Lytic Therapy/A.L.** Haag, V.D. Villgran, B.E. DiSilvio, Pittsburgh, PA, p.A1357
- P427 Spontaneous Pneumothorax in Scleroderma/K.P.** Acosta, N. Chukwu, C.W. Akabusi, O. Ajibola, H. Suseelan, Pougkeepsie, NY, p.A1358
- P428 Shrinking Lung Syndrome: A Rare Cause of Restrictive Lung Disease in Systemic Lupus Erythematosus/S.** Suresh, C. Onofrei, Pittsburgh, PA, p.A1359
- P429 Lungs, or Not the Lungs? Complex Respiratory Complications from Lupus/H.** Li, Y.-C. Lo, M. Baqir, Rochester, MN, p.A1360
- P430 A Case of Rapidly Progressive Anti-Synthetase Syndrome Associated Interstitial Lung Disease Managed with Intravenous Immunoglobulins/S.L.** Dickey, J.A. Huapaya, N.W. Todd, M. Diaz-Abad, Baltimore, MD, p.A1361
- P431 PJP as the Index Presentation for Anti-MDA5+ Dermatomyositis with Associated Rapidly Progressive Interstitial Lung Disease/L.** Onofrey, A. Harper, S. Chung, S. Disharoon, Seattle, WA, p.A1362
- P432 Thrombotic Microangiopathy in the Setting of Systemic Lupus Erythematosus/T.** Cook, Y. Fahmawi, K. Hamid, P. Almalouf, Mobile, AL, p.A1363

CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A36 MORE TO THE STORY: CASE REPORTS IN CONNECTIVE TISSUE DISEASE ASSOCIATED INTERSTITIAL LUNG DISEASE

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

P417 Co-existent Lymphoid Interstitial Pneumonia and Light Chain Deposition Disease in a Patient with Sjögren's Syndrome/M. Steward, J.H. Yu, R. Sayers, M. Powari, A. Spiers, S. Lines, J. Mandizha, M.A. Gibbons, Exeter, United Kingdom, p.A1348

P418 Acute Exacerbation of Rheumatoid Arthritis Associated Interstitial Lung Disease After Emergent Abdominal Surgery/A. Manfra, J.H. Sharma, J.K. Christopher, R. Dy, Las Vegas, NV, p.A1349

- P433** **A Case of Recurrent Spontaneous Pneumothorax in a Patient with Rheumatoid Arthritis**/C. Zhou, P. Mota, Lebanon, NH, p.A1364
- P434** **Rheumatoid Necrobiotic Nodules with Air Crescent Appearance Associated with Caplan Syndrome: A Case Report**/G.E. Fonseca, J.L. Galindo Pedraza, J.R. Lutz Peña, Bogotá, Colombia, p.A1365
- P435** **An Unusual Case of Acute Lupus Pneumonitis**/K.P. Acosta, C.W. Akabusi, K. Kallakuri, A. Iqbal, P. Lam, Poughkeepsie, NY, p.A1366
- P436** **A Case of Autoantibody Melanoma Differentiated Associated Protein Causing Dermatomyositis with Rapidly Progressive Interstitial Lung Disease**/T. Kumar, C.J. Damiano, K. Pathak, S. Giattino, S. Whealon, L.W. Greenspon, Philadelphia, PA, p.A1367
- P437** **Interstitial Pneumonia with Autoimmune Features and Acute Fibrinous Organizing Pneumonia**/N. Nelson, M.F. Sloane, R. Condos, New York, NY, p.A1368
- P438** **A Case of Anti-Ro52 Antibody Myositis-Associated Interstitial Lung Disease**/J.A. Huapaya, A. Rowe, N.W. Todd, Bethesda, MD, p.A1369
- P439** **CTFR Dysfunction in Sjogren Syndrome: A Rare Clinical Association**/S. Suresh, C. Onofrei, Pittsburgh, PA, p.A1370
- P440** **Is Interstitial Pneumonia with Autoimmune Feature a Distinct Entity or a Pathogenic Continuum to Other Autoimmune Disorders and Sarcoidosis: A Puzzle to Solve**/T.M.A. Khan, Y. Ansari, S. Ansari, S. Qadir, I. Waheed, N. Kazimuddin, Bowling Green, KY, p.A1371
- P441** **So, It Is Not Cancer?, A Rare Cause of Pulmonary Nodules**/J. Torrens Olan, H. Collazo Santiago, R. Fernandez, San Juan, PR, p.A1372
- P442** **Lost in Translation**/H.A.H. Albitar, V. Ahluwalia, S. Amin, V.N. Iyer, E.M. Carmona Porquera, Rochester, MN, p.A1373
- P443** **A Case of Acute Shortness of Breath and Acute Refractory Hypoxemia**/R.M. Abdallah, Louisville, KY, p.A1374
- P444** **Vanishing Lung Syndrome (VLS)**/S. Sharma, C. Bendor-Grynbaum, H. Singh, S. Kumar Satish Gupta, W. Pascal, O. Wiesel, New York, NY, p.A1375
- P445** **Vanishing Lung Syndrome: A Rare Cause of Air Fluid Levels**/Y. Farah, W. Farra, Southfield, MI, p.A1376
- P446** **Uncovering the “Why” of Diffuse Alveolar Hemorrhage**/A.L. Jobe, A. Hamza, S.M. Pandya, Kansas City, KS, p.A1377
- P447** **A Rare Case of Adult-Onset Henoch Schonlein Purpura with Pulmonary Involvement**/S. Khauli, D. Kruse, Omaha, NE, p.A1378
- P448** **A Case of Refractory Diffuse Alveolar Hemorrhage Controlled with Inhaled Tranexamic Acid**/G. Wu, R. Rakocovic, L.E. Huerta, M.M. Lee, Los Angeles, CA, p.A1379
- P449** **A Rare Case of GPA During Pregnancy**/H. Channa, J. Packer, Shreveport, LA, p.A1380
- P450** **Granulomatosis with Polyangiitis Presenting with End-Stage Renal Disease at Diagnosis**/M.V. Shah, S. Chandna, S. Bhasin, New Brunswick, NJ, p.A1381
- P451** **Diffuse Alveolar Hemorrhage, an Interplay of Multiple Etiologies**/A. Chohan, S. Choudhury, R. Dadhwal, A. Vakil, Corpus Christi, TX, p.A1382
- P452** **Granulomatous with Polyangiitis Presenting as Testicular Mass and Lung Nodules Mimicking Metastatic Cancer**/R. Kunadharaju, Y. Weiner, S. Saha, Buffalo, NY, p.A1383
- P453** **Anti-Neutrophil Cytoplasmic Antibody Associated Vasculitis Secondary to Pfizer-BioNTech COVID-19 Vaccine**/M. Kaghazian, C.W. Akabusi, K.P. Acosta, K. Kallakuri, P. Shakouri, Poughkeepsie, NY, p.A1384
- P454** **A Case of Seronegative Pulmonary-Renal Syndrome in Advanced IgA Nephropathy**/G. Grecia, A.E. Escudero, E. Serra-Santos, M.M. Tambunting, F. Ferrer, Makati City, Philippines, p.A1385
- P455** **Diffuse Alveolar Hemorrhage in the Setting of Positive ANCA and FITE Stain**/T. Nguyen, M.A. Kalani, K. Dave, Lexington, KY, p.A1386
- P456** **Crazy Paving Leads to a Crazy Differential**/J. Meland, J. Zoglman, St. Louis, MO, p.A1387
- P457** **Coughing It Up: A Case of Diffuse Alveolar Hemorrhage**/M. Gonzalez, S. Gillenwater, D. Viamonte, A. Carter, R. Miret, C. Girard, S. Mahapatra, D. Kotok, J.R. Woytanowski, S. Gebreselassie, I.A. Alshelli, Weston, FL, p.A1388
- P458** **“Breathe-In, Bleed-Out”**/G. Singh, H. Jain, A. Sharma, S. Shah, Y. Goldman, Worcester, MA, p.A1389

CLINICAL

THEMATIC POSTER SESSION

A37 CASE REPORTS: DRUG TOXICITY

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P460** **When Ou Gon Too Far: A Cautionary Tale of Supplement Use/M.** Forster, C.W. Motschwiller, M.F. Sloane, New York, NY, p.A1390
- P461** **Chronic Eosinophilic Pneumonia - A Challenging Case with Multiple Triggers/F.L.** Das Gracias, F.A. Nitol, K. Gafoor, Richmond Hill, NY, p.A1391
- P462** **Pembrolizumab-Induced Sarcoidosis: A Case Report/C.S.** Walmsley, T. Sibert, S. Summers, Worcester, MA, p.A1392
- P463** **A Case of Hydroxyurea-Induced Interstitial Pneumonitis/C.** Williams, S.P. Patel, N. McDonald, V. Patel, Naples, FL, p.A1393
- P464** **Not All That Is Pneumocystis Jirovecii Pneumonia (PCP) Is HIV: A Case of Drug Predisposed PCP Due to Initiation of Tocilizumab in an HIV Negative Patient/D.E.** Walsh, N. Ravikumar, Springfield, MA, p.A1394
- P465** **A Not-So-Common Cause of Chest Pain and Shortness of Breath/I.C.** Ugalde, K. Van Nostrand, M.R. Qureshi, T.J. Floreth, Tampa, FL, p.A1395
- P466** **A Rare Case of Capecitabine Superimposed with Adalimumab: Drug Induced Eosinophilic Pneumonia/A.** Devarajan, N. Azadeh, Phoenix, AZ, p.A1396
- P467** **Radiation Recall Pneumonitis Induced by Anti-PD-L1 Monoclonal Antibody Durvalumab/J.U.** Adunse, M. Kalifa, R.M. Assaly, Toledo, OH, p.A1397
- P468** **A Case Report of Ribociclib-Induced Pneumonitis/J.L.** Moore, S.E. Margolskee, H. Bakhtiar, Norwalk, CT, p.A1398
- P469** **Diffuse Alveolar Hemorrhage in the Setting of Negative Pressure Pulmonary Edema and Sevoflurane/B.** Hyun, S. Bullick, Portland, OR, p.A1399
- P470** **Vaping Induce Pneumonitis: Missed in Pandemic/A.** Iftikhar, M. Patel, M. Cheema, A. Adial, Port Jefferson, NY, p.A1400
- P471** **A Rare Case of Palbociclib Induced Pneumonitis/K.** Shah, J. Ruiz Vega, J. Pham, J. Salazar Castillo, N. Rodriguez, Athens, GA, p.A1401
- P472** **Taxane Induced Interstitial Pneumonitis/J.** Sohn, A. Ramaniuk, S. Hadigal, Gainesville, FL, p.A1402
- P473** **Management of Methamphetamine Induced Pneumonitis/V.S.** Pulivarthi, S.S. Vulasala, R. Herrera, Phoenix, AZ, p.A1403
- P474** **A Rare Case of Fatal Daptomycin Induced Interstitial Pneumonia/P.** Haririan, D.J. Silberstein, S. Natarajan, Los Angeles, CA, p.A1404
- P475** **Unilateral Pneumonitis as a Complication of Amiodarone Toxicity/J.** Odonnell, K. Anacker, J.C. Giudice, J. Chiaffarano, Stratford, NJ, p.A1405
- P476** **Daptomycin-Induced Acute Eosinophilic Pneumonia/M.** Gonzalez, S. Mahapatra, S. Gillenwater, A.M. Lorenzana, J.P. Mehta, Weston, FL, p.A1406
- P477** **Vandetanib Induced Diffuse Interstitial Lung Disease/R.R.** Sanivarapu, B.S.K.R. Sabbula, J. Kang, M. Joy, J. Akella, J. Iqbal, East Meadow, NY, p.A1407
- P478** **Drug Induced Interstitial Lung Disease and Pneumothorax After Treatment with Bevacizumab/T.R.** Woldeyohanes, M. Saleh, E. Pickering, K. Ali, V. Holden, A. Sachdeva, F. Nasim, Largo, MD, p.A1408
- P479** **A Case of Leflunomide-Induced Pulmonary Nodulosis/R.** Gomez, S.C. Wong, San Diego, CA, p.A1409
- P480** **A Case of Cryptogenic Organizing Pneumonia Attributed to PCSK9 Monoclonal Antibody Therapy/M.** Poley, N.G. Shah, S.J. Cassady, Baltimore, MD, p.A1410
- P481** **Daptomycin-Induced Eosinophilic Pneumonia/R.** Chan, P. Sakhamuri, S. Walker, Lafayette, LA, p.A1411
- P482** **Dasatinib Induced Pneumonitis/S.** Chandna, M.V. Shah, K.J. Raj, S. Bhasin, D. Ngo, New Brunswick, NJ, p.A1412
- P483** **Tortured by mTOR Inhibitors? A Case of Pneumocystis Pneumonia Originally Diagnosed as mTOR Pneumonitis/D.** Yee, N.J. Nassikas, Providence, RI, p.A1413
- P484** **Immune Checkpoint Inhibitor-Induced Interstitial Lung Disease Mistaken for Atypical Pneumonia/J.V.** Miller, P. Patel, B. Saeed, T. Shams, Scranton, PA, p.A1414
- P485** **Uncovering Cocaine Induced Eosinophilic Pneumonia/L.** Ramdhanie, A. Daya, F.A. Nitol, K. Cervellione, Richmond Hill, NY, p.A1415
- P486** **Trastuzumab-Induced Pneumonitis/H.I.** Bashir, V. Tondapu, A.R. Cucci, L.K. Venkateshaiah, Akron, OH, p.A1416
- P487** **A Case of Organizing Pneumonia Developed After COVID-19 Vaccine/J.** Ryoo, H.J. Cho, J. Lee, C. Rhee, S.J. Kim, S.C. Kim, S.-Y. Lee, Y.K. Kim, J.Y. Kang, Seoul, Korea, Republic of, p.A1417
- P488** **Daptomycin Induced Eosinophilic Pneumonia/A.** Bajwa, M. Parmar, Oklahoma City, OK, p.A1418
- P489** **A Rare Case of Eltrombopag-Induced Pneumonitis/G.T.** Yoshikawa, M. Chock, G. Devendra, Honolulu, HI, p.A1419
- P490** **Gemcitabine-Induced Non-Cardiogenic Pulmonary Edema/N.** Medina Saavedra, G.D.P. Bridi, G.C. Santos, K.F. Marangoni, Y.P.P. Nascimento, A.D.S. Sciortino, H. Visnadi, R.S. Szor, J. Cury-Martins, A.M. Kawassaki, Sao Paulo, Brazil, p.A1420
- P491** **Sarcoidosis-Like Reaction Secondary to Infliximab/P.M.** Cavalcante Neto, M.R. Soares, M.D.C. Castro, S.L.K. Matias, A.C.L. Resende, S.A.E.H.C. Silva, M.T. Cerezoli, G.F.M. Miranda, C.Y. Fukuda, V.E.M. Arida, R.G. Ferreira, I. Missrie, C.A.D.C. Pereira, Sao Paulo, Brazil, p.A1421

CLINICAL

THEMATIC POSTER SESSION

A38 CASE REPORTS: PUZZLES IN PULMONARY DISEASE9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P493 Recurrent Unilateral Pulmonary Edema in Severe Hypertrophic Cardiomyopathy/S.** Deleveaux, A. Clarke Kregor, N. Hristakos, R. Raghuvir, Oak Lawn, IL, p.A1422
- P494 Acute Unrelenting Cough Due to Aspiration of Iron Tablet/C.W.** Akabusi, K.P. Acosta, O. Ajibola, R. Merrill, Poughkeepsie, NY, p.A1423
- P495 Benign Pneumomediastinum in Diabetic Ketoacidosis/D.** Parfianowicz, C. Menezes, A. Vojtek, S. Blumhof, Allentown, PA, p.A1424
- P496 You Took My Breath Away/A.** Ronghe, A. Ouf, S. Bhura, M.J. Mammen, Buffalo, NY, p.A1425
- P497 Asymptomatic Giant Pericardial Cyst: A Case Report and Review of Literature/V.** Khanna, J. Gorney, T. Reddy, Z. Kulairi, Rochester, MI, p.A1426
- P498 Severe Methemoglobinemia Due to Accidental Ingestion of Poppers/G.** Hernandez Romero, F.M. Reyes, D. Damania, Bronx, NY, p.A1427
- P499 Respiratory Pump Failure: Multi-Factorial Dyspnea Physiology Elucidated by Cardiopulmonary Exercise Testing (CPET)/Z.J.** Tom, W.W. Stringer, Torrance, CA, p.A1428
- P500 An Unusual Presentation of Pheochromocytoma/C.W.** Akabusi, K.P. Acosta, H. Suseelan, Poughkeepsie, NY, p.A1429
- P501 When Blood Flows Uphill: A Case of Platypnea-Orthodeoxia Syndrome Due to Severe Right Atrial Compression/D.J.** Gergen, B. Ahn, A. Kannappan, Aurora, CO, p.A1430
- P502 Post Pneumonectomy Hypoxemia Secondary to Worsening Right-to-Left Shunt Through Existing PFO/A.** Agameya, R. Webster, A.C. Campagna, L. Gazourian, Burlington, MA, p.A1431
- P503 A Rare Instance Where Clinical Exam and Point-Of-Care Ultrasound Findings Are Better Than Objective Data: A Case of Dynamic Patent Foramen Ovale Causing Platypnea-Orthodeoxia Syndrome/I.** Mohammed, M. Zafar, W. Hussain, M.I. Shafi, Huntsville, AL, p.A1432
- P504 Negative Pressure Pulmonary Edema After Upper Airway Obstruction During Transesophageal Echocardiogram/D.** Lim, Y. Kwon, Seattle, WA, p.A1433
- P505 Yellow Nail Syndrome Associated with Dental Abscess/H.** Mallah, E.S. Sriram, D.C. Gomez Manjarres, Gainesville, FL, p.A1434
- P506 Baby Blues: A Rare Case of Transient Pulmonary Arteriovenous Malformation During Pregnancy/B.A.** Bagley, J.P. Smith, Indianapolis, IN, p.A1435
- P507 Negative Pressure Pulmonary Edema Secondary to Generalized Tonic Clonic Seizures/A.** Kaur, A.S. Dhaliwal, S. Luby, A. Rothman, J. Salonia, New York, NY, p.A1436
- P508 When Hearing Hoofbeats Is Actually Zebras: A Common Presentation of Uncommon Pathology/J.** Odonnell, J.C. Giudice, Stratford, NJ, p.A1437
- P509 A Rare Anatomical Variant Causing a Common Respiratory Complain/K.C.** Padilla Rodriguez, J.M. Garcia Puebla, J. Torrens Olan, M. Torres Torres, G. Torres Torres, H.O. Collazo Santiago, C. Quiles Cruz, R. Fernandez, San Juan, PR, p.A1438
- P510 A Case of Strongyloides Stercoralis Induced Chronic Eosinophilic Pneumonia/S.** Luby, A. Kaur, A. Dhaliwal, L. Leys, J. Salonia, New York, NY, p.A1439
- P511 Pneumomediastinum and Subcutaneous Emphysema as a Rare Complication of Rhinovirus and EBV Coinfection/H.I.** Roman Perez, G. Kalapurakal, S. Deleveaux, X.E. Fonseca Fuentes, Oak Lawn, IL, p.A1440
- P512 A Case of Confluence: A Middle-Aged Woman with Progressive Dyspnea and Hypoxia/K.** Holloway, E. Kocurek, S. Vallurupalli, M. Meek, Little Rock, AR, p.A1441
- P513 Bochdalek Hernia Presenting with Local Fat Infiltration/A.N.** Mahendra, S.S. Aleem, T. Uchel, P. Seyed, K.J. Admire, M.R. Cossio, Roanoke, VA, p.A1442
- P514 The Deleterious Effects of Over Correcting pCO₂ in COPD Patients/A.** Adelodun, M.L. Bugayong, Y. Soe-Htwe, S. Sahni, G.R. Pesola, New York, NY, p.A1443
- P515 A Case of Persistent Productive Cough/Y.A.** Gao, R. Alalawi, Phoenix, AZ, p.A1444
- P516 What IZ This? A Case of Alpha 1 Antitrypsin Deficiency with the Rare Pi IZ Phenotype/A.** Vojtek, C. Hayes, S. Bishnoi, D.M. Petrenko, J. Schellenberg, Allentown, PA, p.A1445
- P517 A Case of Methaemoglobinaemia in SARS-CoV-2 Infection/L.** Power, E. O'Brien, Dublin, Ireland, p.A1446
- P518 Epiglottitis in Adult Complicated by Internal Jugular Vein Thrombosis/O.T.** Aroyewun, I. Nwachukwu, M. Fernandes, Brooklyn, NY, p.A1447

P519 Covid -19 Epiglottitis: A Hard Pill to Swallow/A. Saha, S. Sasidharan, A. Muthyala, H. Ahsan, I. Daniel, Worcester, MA, p.A1448

P520 Where Did the Platelets Go- Covid Vaccine Induced Bone Marrow Suppression/N.K. Randhawa, E.-H. Hassanin, S. Randhawa, Olympia Fields, IL, p.A1449

CLINICAL

THEMATIC POSTER SESSION

A39 ACUTE EXACERBATIONS OF COPD

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area H, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

P645 Readmission Related Health Care Utilization and Factors Associated with Hospital Readmission in Patients with Chronic Obstructive Pulmonary Disease (COPD): A US Population Cohort Study/P. Patel, R. Katragadda, P. Patel, A. Kumar, Las Vegas, NV, p.A1450

P646 A Post-Hoc Analysis of the Effect of Smoking Status on COPD Exacerbation Reductions with Budesonide/Glycopyrrolate/Formoterol Fumarate in Patients with COPD in the ETHOS Study/M. Bafadhel, M.K. Han, D. Singh, M. Jenkins, P. Dorinsky, M. Patel, Oxford, United Kingdom, p.A1451

P647 Rescue Medication Use Before, During, and After an Exacerbation of Chronic Obstructive Pulmonary Disease: Post-Hoc Analysis of the ETHOS Study/J. Hurst, G.T. Ferguson, K.F. Rabe, P. Darken, M. Patel, P. Dorinsky, London, United Kingdom, p.A1452

P648 Management of Acute Exacerbations of Chronic Obstructive Pulmonary Disease in the Intensive Care Unit: The Outcomerea Database, 1997-2018/L.-M. Galerneau, S. Bailly, N. Terzi, S. Ruckly, M. Garrouste-Orgeas, Y. Cohen, V. Hong Tuan Ha, M. Gainnier, S. Siami, C. Dupuis, M. Darmon, J.-M. Forel, G. Rigault, C. Adrie, V. Laurent, D. Goldgran-Toledano, E. de Montmollin, L. Argaud, J. Reignier, J. Pepin, J. Timsit, Paris, France, p.A1453

P649 Network Meta-Analysis of the Efficacy of Fluticasone Furoate/Umeclidinium/Vilanterol (FF/UMEC/VI) Versus Other Triple Therapies for the Treatment of Chronic Obstructive Pulmonary Disease (COPD): A Comparison of Annual Moderate and Severe Exacerbations/A.S. Ismaila, K. Haeussler, A. Czira, J.-H. Youn, M. Malmenäs, N. Risebrough, J. Agarwal, M. Nassim, R. Sharma, C. Compton, C.F. Vogelmeier, D.M.G. Halpin, Collegeville, PA, p.A1454

P650 Relationship Between On-Treatment Rescue Medication Use, Exacerbation Rates, and Health-Related Quality of Life in Chronic Obstructive Pulmonary Disease: Post-Hoc Analysis of the ETHOS Study/D. Singh, F.J. Martinez, J.R. Hurst, P. Darken, P. Dorinsky, M. Patel, Manchester, United Kingdom, p.A1455

P651 The Domain Analysis of COPD Assessment Test (CAT) Assists Prediction of Acute Exacerbation Risk in Older Patients with COPD/S. Teramoto, Hachioji-shi, Japan, p.A1456

P652 Conservative Versus Liberal Use of Steroids in the Management of Acute Exacerbation of Chronic Obstructive Pulmonary Disease at a Tertiary Care Center - a QI Study/A. Nasrullah, B.E. DiSilvio, A. Javed, A. Hamza, D. Sarma, A. Sharma, F. Mehdi, V. Chalasani, J. Murone, N. Gupta, T. Dumont, Pittsburgh, PA, p.A1457

P653 Optimizing Corticosteroid Dosing for Acute Exacerbations of Chronic Obstructive Pulmonary Disease: Association with Hospital Readmission/C. Forsyth, S. Treat, G. Kumar, I.N. Biney, J. Ferris, E. Heidel, P. Terry, R. Dhand, Memphis, TN, p.A1458

P654 Exacerbations of Occupational Chronic Obstructive Pulmonary Disease in Workers Exposed to Silica Dust After COVID-19/L. Shpagina, I. Shpagin, O. Kotova, G. Kuznetsova, S. Karmanovskaya, E. Anikina, D. Gerasimenko, Novosibirsk, Russian Federation, p.A1459

P655 Antibiotic Usage in Patients Experiencing Readmissions for Acute Exacerbations of Chronic Obstructive Pulmonary Disease/S. Treat, C. Forsyth, K. Gayathri, I.N. Biney, J. Ferris, R. Heidel, P. Terry, R. Dhand, Knoxville, TN, p.A1460

P656 Theophylline and Its Association with COPD Exacerbations: A Systematic Review and Meta-Analysis/R.R. Bollam, S.A.A. Zaidi, F. Mamauag, Pittsburgh, PA, p.A1461

P657 Predicting Hospital Readmission Due to Acute Exacerbation of Chronic Obstructive Pulmonary Disease (AECOPD); Audit of Pulmonary Discharge Summary from Developing Country/N. Bhatta, K. Bhandari, N. Bhatta, D.R. Mishra, D.A. Bhattarai, A.B. Acharya, A. Verma, R. Sahi, S.H. Limbu, S. Katwal, Dharan, Nepal, p.A1462

P658 Interferon-Gamma and Interleukin-2 in Women with Exacerbations of Chronic Simple Bronchitis of Cytomegalovirus Etiology in the Third Trimester of Pregnancy/I.N. Gorikov, V.P. Kolosov, I.A. Andrievskaya, N.A. Ishutina, L.G. Nakhmchen, I.V. Dovzhikova, Blagoveshchensk, Russian Federation, p.A1463

- P659 Risk for Exacerbation, Hospitalization and Mortality in Global Initiative for Chronic Obstructive Lung Disease Group B Patients With and Without Exacerbations: A Cohort Study/L.** Vanfleteren, L. Holmstrand, A. Lindberg, C. Zhou, F. Nyberg, C. Stridsman, Gothenburg, Sweden, p.A5530
- P660 Impaired Cardiorespiratory Coupling Is Associated with Acute Exacerbation in COPD Patients/Y.-C.** Huang, Taipei, NC, p.A5531
- P661 Predictors of Outcome in COPD Exacerbation-a Retrospective Study/A.** Nasrullah, B.E. DiSilvio, R. Singh, A. Javed, D. Ramanujam, A. Sharma, A. Hamza, J. Murone, N. Gupta, F. Mehdi, V. Chalasani, A. Tekin, T.L. Dumont, Pittsburgh, PA, p.A5532

CLINICAL

THEMATIC POSTER SESSION

A40 INVESTIGATIONS IN CYSTIC FIBROSIS AND NON-CF BRONCHIECTASIS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area H, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P663 Comparison of Cystic Fibrosis (CF) Survival Outcomes Following Second Lung Transplant in Canada and United States/M.** Alshehri, K.J. Ramos, J. Sykes, S. Stanojevic, X. Ma, B. Quon, J. Ostrenga, A. Faro, A. Elbert, C. Chaparro, C.H. Goss, A.L. Stephenson, Toronto, Canada, p.A1464
- P664 The Impact of Elexacaftor/Tezacaftor/Ivacaftor on the Protease-Antiprotease Balance in Cystic Fibrosis Airways/M.** Casey, C. Gabillard-Lefort, D. Fraughen, M. Herron, M.P. Murphy, O. Kerr, A.-M. Lyons, E. Marron, C. Gunaratnam, E.P. Reeves, N.G. McElvaney, Dublin, Ireland, p.A1465
- P665 Real-Life Initiation of Elexa/Iva/Tezacaftor for Severe Cystic Fibrosis Lung Disease Patients/R.** Kos, A.H. Neerincx, D.W. Fenn, P. Brinkman, R. Lub, S.E. Vonk, J. Roukema, M.H. Reijers, S.W.J. Terheggen-Lagro, J. Altenburg, C.J. Majoor, L.D.J. Bos, E.G. Haarman, A.H. Maitland-van der Zee, Amsterdam, Netherlands, p.A1466
- P666 Effect of Exercise Habit Change on the Risk of Cardiovascular Disease in Patients with Non-Cystic Fibrosis Bronchiectasis/S.H.** Kim, H. Choi, B. Yang, K.-D. Han, T.S. Park, D.W. Park, S.-H. Kim, T.-H. Kim, J.W. Sohn, H.J. Yoon, H. Lee, Seoul, Korea, Republic of, p.A1467

- P667 Primary Ciliary Dyskinesia Diagnosis by the Measurement Nasal Nitric Oxide Level in Adults with Bronchiectasis in Ukraine/K.** Suska, K. Gashynova, Dnipro, Ukraine, p.A1468
- P668 Serum Fibrinogen as a Biomarker for Disease Severity and Exacerbation in Patients with Non-Cystic Fibrosis Bronchiectasis/S.J.** Lee, J.D. Lee, Jinju, Korea, Republic of, p.A1469
- P669 Study Design of a Phase II, Randomized, Double-Blind, Placebo-Controlled Trial of a Novel Cathepsin C Inhibitor BI 1291583 in Patients with Bronchiectasis/J.D.** Chalmers, A. Gupta, S.H. Chotirmall, A. Armstrong, P. Eickholz, N. Hasegawa, P.J. Mcshane, A.E. O'Donnell, M. Shteinberg, H. Watz, A. Eleftheraki, C. Diefenbach, W. Sauter, Dundee, United Kingdom, p.A1470
- P670 Pulmonary Exacerbations (PEx) and Hospitalizations in Commercially Insured Patients with Non-Cystic Fibrosis Bronchiectasis (NCFBE) Over 1- and 2-Year Follow-Up Periods/P.A.** Flume, J. Feliciano, S. Burns, J. Wu, S. Fucile, M. Hassan, A. Chatterjee, Charleston, SC, p.A1471
- P671 Azithromycin Use in Patients with Bronchiectasis: Real World Experience from an English DGH/A.** Ponnuswamy, T. Gordon, H. Ajay, N. Khatoon, Chester, United Kingdom, p.A1472

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A41 SEPSIS/SHOCK

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P527 Is Admission Procalcitonin in Septic Shock Associated with Poor Outcomes?/K.** Bhandari, N. Bernskoetter, D. Datta, Farmington, CT, p.A1474
- P528 Prediction of Hypovolemic Instability in Normal Volunteer Blood Donors Using Machine Learning/J.H.** Yoon, C. Gao, J. Kim, J.H. Kim, T. Lagattuta, S. Helman, M. Hravnak, M.R. Pinsky, G. Clermont, Pittsburgh, PA, p.A1475
- P529 Application of Serial Body Composition Variables and Dietitian Intervention in Patients with Sepsis/K.-Y.** Hung, W.-F. Fang, T.-H. Chen, Y.-F. Lee, Y.-H. Tsai, Y.-C. Chang, H.-F. Wu, H. Yeh, Y.-T. Chang, M.-C. Lin, Kaohsiung, Taiwan, p.A1473

- P530 Efficacy of Vitamin C in Septic Patient Population: A Systematic Review and Metanalysis/S.B.A. Sattar, A. Jahangir, A. Kassem, L. Dahabra, M. Muhammad, A. Jahangir, W. Sadiq, M. Niazi, D. Mishiyev, A. Irshad, A. Sammar, M. Chalhoub, Staten Island, NY, p.A1476**
- P531 Sepsis-Induced Disruptions in Blood Acetyl-L-Carnitine/L-Carnitine Ratio Reflect Alterations in Kidney Energy Metabolism/M.R. McCann, T. Flott, M.A. Puskarich, A.E. Jones, G.R. Rosania, C. Fry, J. Nemzek, K.A. Stringer, Ann Arbor, MI, p.A1477**
- P532 Prevalence of Multidrug-Resistant Bacteria According to the Location of Sepsis Onset in South Korea/H.-J. Kim, D.K. Oh, S.Y. Lim, Y.-J. Cho, S. Park, G.Y. Suh, C.-M. Lim, Y.J. Lee, Seongnam, Korea, Republic of, p.A1478**
- P533 Septic Shock in Mechanically Ventilated Patients with Severe COVID-19 Infection in the Intensive Care Unit/T. Olanipekun, T. Abe, N. Bakinde, G.E. Westney, R.H. Snyder, Atlanta, GA, p.A1479**
- P534 Characteristics of Sepsis Patients Who Are Candidates for Minimally Invasive Management Outside of Intensive Care Unit /A. Wahab, A. Lal, L. Flurin, S. Ryan, Y. Dong, O. Gajic, Mankato, MN, p.A1480**
- P535 Persistent Liver Dysfunction and Inflammation in Sepsis Survivors with Obesity/A.J. Kumar, X.Q. Wang, S. Seelye, C. Parthasarathy, M. Newstead, A.C. Bustamante, H.C. Prescott, K. Singer, B.H. Singer, Ann Arbor, MI, p.A1481**
- P536 Behavioral, Cognitive, and Transcriptomic Impact of Sepsis in a Murine Model of Alzheimer's Disease/A.C. Bustamante, M. Padilla, Z. Zeng, M. Newstead, B.H. Singer, Ann Arbor, MI, p.A1482**
- P537 Initiation of Interventions for Cardiovascular and Respiratory Failure with Community-Acquired vs. Hospital-Acquired Sepsis/S. Kamal, A.M. Esper, G.S. Martin, T.-H. Chen, A.L. Holder, Atlanta, GA, p.A1483**
- P538 Combination of Norepinephrine with Phenylephrine versus Norepinephrine with Vasopressin in Critically Ill Patients with Septic Shock: A Retrospective Study/H. Arishi, S. AlQahtani, H. Tamim, M. Sadat, F. Alenizi, F. Bin Humaid, W. AlWehaibi, Y. Arabi, Riyadh, Saudi Arabia, p.A1484**
- P539 Variation in Diagnostic Troponin Orders Among Patients Admitted to the Intensive Care Unit with Sepsis/M.A. Garcia, A.J. Walkey, Boston, MA, p.A1485**
- P540 Midodrine in Intensive Care Unit Patients with Septic Shock: A Systematic Review/S. Perinkulam Sathyanarayanan, M. Ahmed, A.Y. Shah, Sioux Falls, SD, p.A1486**

- P541 Multimodal Quality Initiatives In Sepsis: Impact On Core Measures And Outcomes./F. Abi Fadel, C. Murphy, L. Smultea, K. Fababe, A. Tauquir, M. Rodaitis, M. Kaffel, K. Orlosky, J. Berriochoa, N. Tapryal, K. Mushtaq, B. Ghimire, E. Krishtopaytis, A. Karki, A. Boustany, M. Al-Jaghbeer, Cleveland, OH, p.A5533**
- P542 Circulating Histone H4 Subunit as a Marker of Sepsis Severity Is Affected by Intravenous Heparin/J.E. Brady, F. Alghanim, R. Baalachandran, M.E. Tulapurkar, J.D. Hasday, K.G. Birukov, Baltimore, MD, p.A5534**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
A42 ARF/ARDS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area G, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P544 Clinical Characteristics and Risk Factors in the Development of Postpartum Acute Hypoxic Respiratory Failure/S.M. Scott, J. Lee, Columbia, SC, p.A1487**
- P545 Outcomes of Extracorporeal Membrane Oxygenation in Chronically Immunosuppressed Patients vs. Immunocompetent Patients/C. Blazoski, P. Kirupaharan, L. McDermott, Q. Yang, M. Baram, H. Hirose, Philadelphia, PA, p.A1488**
- P546 Comorbidities Rather Than Driving Pressure Are Major Determinants of Mortality in Patients with Mild Acute Respiratory Distress Syndrome/W.-F. Ou, Taichung, Taiwan, p.A1489**
- P547 Effects of Obesity on Respiratory Parameters and Outcomes in a Cohort of Prone COVID-19 ARDS Patients/R.L. Goetz, J.W. Chiles, S. Gandotra, D. Russell, M. Whitson, M.T. Dransfield, D. Page, Birmingham, AL, p.A1490**
- P548 Using Breathing Features and 3 Vital Signs in Machine Learning to Predict Acute Respiratory Deterioration/G. Singh, L. Gen Liang, L. Pyng, Singapore, Singapore, p.A1491**
- P549 Accuracy of Pulse Oximetry (SpO₂) with Different Oximeters - Oxygap Study/M.-A. Blanchet, G. Mercier, A. Delobel, E. Nayet, P.-A. Bouchard, E. Rousseau, F. Lellouche, Québec, Canada, p.A1492**

- P550** **Impact of Inhaled Nitric Oxide on Clinical Outcomes in Acute Respiratory Distress Syndrome with Right Ventricular Dysfunction**/E. Fritzmann, Y. Matusov, M.I. Lewis, Los Angeles, CA, p.A1493
- P551** **Effects of Analgesia and Sedation Dosing on Mortality in Mechanically Ventilated COVID-19 Patients**/J.H. Choi, T. Shende, D. Engracia, A. Lo, L. Huerta, Los Angeles, CA, p.A1494
- P552** **The Use of Video Assisted Withdrawal of Endotracheal Tube to Assist in Percutaneous Tracheostomy in Patients with COVID-19**/G. Singh, Columbus, GA, p.A1495
- P553** **Elevated Hemoglobin A1c Is Independently Associated with Increased Risk of Acute Respiratory Distress Syndrome**/A.M. Bogart, C. Lopez, C. Wang, J.A. Bastarache, L.B. Ware, Nashville, TN, p.A1496
- P554** **Analysis of Bloodstream Infection in Patients with Femoral Venovenous ECMO cannulation**/S. Moserowitz, E.H. Pratt, C. Rackley, Durham, NC, p.A1498
- P555** **Predictors of Diffuse Alveolar Damage in Autopsy Cases of Acute Respiratory Distress Syndrome**/R. Imai, T. Nakamura, C. So, S. Ro, K. Okafuji, A. Kitamura, Y. Tomishima, T. Jinta, N. Nishimura, Tokyo, Japan, p.A1499
- P556** **Impact of Awake Prone Positioning on Inspiratory Effort and Work of Breathing. A Physiological Study in Healthy Subjects**/F. Damiani, R. Basoalto, M.C. Bachmann, Y. Jalil, V. Acuña, G. Diaz, J. Mella, P. Garcia, E. Moya, G. Villarreal, J.A. Retamal Montes, G. Buggedo, A. Bruhn, Santiago, Chile, p.A1500
- P557** **Forty for Oxygenator Exchanges in Patients Under ECMO: Experience of a Single Center**/G. Thibaut, S. Burguburu, J. Thes, V. Louvain-Quintard, A. Bouteau, F. Stephan, Le Plessis Robinson, France, p.A1501
- P558** **“Split” Ventilation in Bench and Porcine Models of Acute Respiratory Distress Syndrome**/G. Hogan, P. Geoghegan, J. Clarke, A. Keogh, H. Marsh, K. Donnelly, N. McEvoy, A. Doolan, S. Madden, I. Martin-Loeches, M. Power, J.G. Laffey, G.F. Curley, Dublin, Ireland, p.A1502
- P559** **Compared to FiO₂ 0.60, Few Preclinical Animal Studies Have Examined the Effects of Therapeutic FiO₂ = 0.60 in Models of Lung Infection or Noninfectious Injury: Preliminary Results of a Planned Systematic Review and Meta-Analysis**/S. Minkove, C. Xizhong, M. Jeakle, Y. Li, J. Sun, R. Dhamapurkar, D. Cooper, P. Eichacker, P. Torabi-Parizi, Bethesda, MD, p.A1503
- P560** **Helmet Non-Invasive Ventilation for Acute Respiratory Failure: A Case Series**/D. Chaudhuri, R. Sharma, K. Burns, D.J. Cook, J. Leroux, T. Millen, B. Rochweg, Hamilton, Canada, p.A1504
- P561** **Noninvasive Ventilation in Critically Ill Patients with Severe Acute Respiratory Infection**/G.A. Jabri, F. Alotaibi, M. Sadat, F. Al-Enezi, E. Al-Qasim, J. Jose, J.I. Memon, F. Hameed, K. Al Khatib, F. Bin Humeid, Y. Arabi, Riyadh, Saudi Arabia, p.A1505
- P562** **North American Survey of High-Flow Nasal Cannula Therapy Use**/A. Alnajada, M. Shyamsundar, B. Messer, I. Pavlov, Belfast, United Kingdom, p.A5535
- P563** **Red Cell Distribution Width (RDW) as Predictor of Mortality in Critically Ill Patients with Acute Respiratory Distress Syndrome (ARDS): An Observational Study**/M. Menk, F. Schroerer, F. Balzer, J.-A. Graw, O. Hunsicker, S. Boie, Berlin, Germany, p.A5536
- P564** **Nasal Pressure Swings as the Measure of Inspiratory Effort in Spontaneously Breathing Patients with De Novo Acute Respiratory Failure**/R. Tonelli, L. Ball, A. Cortegiani, A. Marchioni, R. Fantini, L. Tabbi, I. Castaniere, L. Manicardi, G. Bruzzi, D. Andrisani, F. Gozzi, S. Busani, M. Girardis, C. Gregoretti, P. Pelosi, E. Clini, Modena, Italy, p.A5537

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THEMATIC POSTER SESSION

A43 COVID-RELATED MECHANICAL VENTILATION AND OTHER MANAGEMENT STRATEGIES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P788 **The Effects of High-Dose Steroids in COVID-19 Induced ARDS**/J.H.J. Jun, R.F. Gomez, Q.N. Hoang, S.R. Spierling Bagic, San Diego, CA, p.A1506

P789 **Rule of Higher-Doses of Corticosteroids in Mortality Reduction in Hospitalized Patients with COVID19, Is It Helpful?**/M. Aldiabat, V.A. Perez Gutierrez, J. Nino Mojica, R. Shafiq, S.O. Heraud, R. Alghareeb, S.F. Ali, A. Khalid, J. Osella, C.M. Sarmiento, K. Omonuwa, V. Menon, Bronx, NY, p.A1507

P790 **The Oxygen System and Monitoring Capacity Across Ecuador During the COVID-19 Pandemic**/B. Seth, P.E. Morejon, J. Vivanco Suarez, W. Checkley, M. Grunauer, Baltimore, MD, p.A1508

- P791 Clinical Characteristics of Barotrauma in COVID-19 Pneumonia and Acute Respiratory Distress Syndrome/S.** Chang, D. Narayanan, J. Hwang, P. Chen, T. Parimon, Los Angeles, CA, p.A1509
- P792 Systemic Inflammatory Response Syndrome After Extracorporeal Membrane Oxygenation Decannulation in COVID-19 Patients/P.** Kirupaharan, C. Blazoski, M. Baram, Philadelphia, PA, p.A1510
- P793 Mechanical Ventilation and COVID-19: A Case-Control Analysis of Clinical Characteristics, Lung Mechanics, and Mortality/A.** Abu Sayf, Detroit, MI, p.A1511
- P794 Temporal Change in Syndecan-1 as a Therapeutic Target and a Biomarker for the Severity Classification of COVID-19/F.** Ogawa, N. Mototsugu, I. Takeuchi, Yokohama, Japan, p.A1512
- P795 A Caveat to Expanding Sepsis Criteria on COVID-19, a Retrospective Study/M.**A. Riego, A. Pattupara, R. Ernest Jean, New York, NY, p.A1513
- P796 Incidence and Outcomes of COVID-Related and Non-COVID-Related Sepsis in Patients Hospitalized with COVID-19/C.**N. Shappell, M. Klompas, S. Kanjilal, C. Chan, C. Rhee, Boston, MA, p.A1514
- P797 Characterizing the Occurrence of Bacterial Superinfections in COVID-19 Patients Admitted to the Intensive Care Unit: A Single Center Retrospective Cohort Study/A.**Y. Al Ali, A. Salam, M. Aloyoni, O. Almuslim, N. Alqadheeb, Dhahran, Saudi Arabia, p.A1515
- P798 Compared to FiO₂ 21%, Exposure to FiO₂ Levels of 30 or 60% Produce Dose-Related Reductions in Survival in a Lethal Murine MHV-1 β -Coronavirus Pneumonia Model/X.** Cui, M. Jeakle, Y. Li, S. Minkove, C.S. Curran, J. Sun, R. Dhamapurkar, P.Q. Eichacker, P. Torabi-Parizi, Bethesda, MD, p.A1516
- P799 A Comparison in the Incidence of Ventilator Associated Pneumonia Among Patients with COVID-19 and Influenza Pneumonia A and B/J.** Grossman, P.S. Richman, R. Panesar, Stonybrook, NY, p.A1517
- P800 Multiple Organ Systems Involvement in COVID-19 Is Associated with Increased Mortality in the ICU/E.** Lam, S. Gomez Paz, L. Gonzalez, S. Mirabella, D. Cardenas-Maldonado, J. Fogel, S. Rubinstein, East Meadow, NY, p.A1518
- P801 Physical Function Trajectories in of Critically Ill Patients by COVID- 19 and Risk Factors: From ICU to Hospital Discharge/C.** Fu, A.C. Lunardi, C.N. Peso, J.E. Pompeo, C.R.F. Carvalho, A.C.B. Schmitt, E.C.G. Silva, C. Tanaka, D.S. Schujmann, Sao Paulo, Brazil, p.A1519
- P802 Clinical Characteristics and Outcomes of Tracheostomized COVID-19 Patients/J.** Bahk, E. Zipf, N. Bilani, J.Y. Fung, New York, NY, p.A1520
- P803 Analyzing the Effect of Tocilizumab in Critical Care Unit COVID-19 Patients/A.** Liaqat, P. Patak, G. Gregory, D. Dahale, S. Tosto, A. Skandhan, R. Nallamotheu, Dothan, AL, p.A1521
- P804 Comparative Safety of Pharmacological Treatment of COVID-19: Methylprednisolone versus Dexamethasone/T.** Kellogg, G.C. Gutierrez, C.E. Small, B. Stephens, P.R. Sanchez, M. Beg, H.L. Keyt, M.I. Restrepo, D.J. Maselli, R. Attridge, San Antonio, TX, p.A1522
- P805 A Comparison of Quality of Life in COVID Versus Non-COVID Patients Requiring VV-ECMO/B.**A. Mcdonald, B. Heather, B. Rigstad, B. Erickson, J. Kummrow, M. LeClaire, M.E. Prekker, Minneapolis, MN, p.A1523
- P806 Multi-Drug-Resistant Infections and Outcomes in Critically Ill Patients with COVID-19 Admitted to Intensive Care Unit: An Azerbaijan Experience/A.**S. Sadigov, E. Gasimov, A. Guliyev, P. Khoshbanyani, L. Namazova, C. Pashayev, Z. Musayev, Baku, Azerbaijan, p.A1524
- P807 Clinical Outcomes of Patients with Severe, Prolonged COVID-19 Who Received a Second Course of Systemic Steroids/A.** Pacheco-Navarro, J. Roque, A.R. Moore, S. Pienkos, C. O'Donnell, M. Joshi, W. Collins, A. Rogers, Stanford, CA, p.A1525
- P808 Proportional Open Ventilation Use in Acute Respiratory Failure of COVID-19 Patients as an Alternative to High Flow Nasal Canula: A Length of Stay Reduction Pilot Study/M.** Remackel, Z. Stachura, St. Paul, MN, p.A1526
- P809 Effect of Inhaled Epoprostenol on P/F Ratio in Covid Acute Respiratory Distress Syndrome/K.** Dittman, A.P. Michelson, M.H. Kollef, St. Louis, MO, p.A5538
- P810 Administration of Inhaled Nitric Oxide for COVID and Non-COVID Acute Respiratory Distress Syndrome in the Intensive Care Unit: A Retrospective Cohort Analysis/T.** Couch, D.L. Gilstrap, T.I. Dahhan, Durham, NC, p.A5539

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A44 ICU CURRICULUM AND SYSTEMS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P567 Intensive Care Unit (ICU) in a Nutshell Curriculum: A Fellow Led Intervention/S. Gayen, V. Dronamraju, N. Van Der Rijst, O.A. O'Corragain, M.E. Vega Sanchez, E.R. Camac, Philadelphia, PA, p.A1527**
- P568 Opinions on Scare Resource Allocation Policy Exemptions and Adjustments Among Laypeople and Healthcare Workers by License Type/J. Channick, L.E. Wisk, R. Buhr, Los Angeles, CA, p.A1528**
- P569 Communication in the ICU: An Unintended Nocebo Effect/I. Riestra Guiance, D. Shilling, K. Varga, A.S. Niven, L. Wallace, K. Philbrick, J. Chitulangoma, O. Gajic, M. Weiman, E. Schmitt, D. Pasko, L. Karnatovskaia, Rochester, MN, p.A1529**
- P570 Unintended Consequences of Code Status in the Intensive Care Unit - What Happens After a Do-Not-Resuscitate Order Is Placed?/K.E. Driggers, L.S. Johnson, M. Atkin, K. Irby, M. Kovacs, M. Mir-Kasimov, W.Z. Sabbahi, J. Sellman, L.M. Keenan, Bethesda, MD, p.A1530**
- P571 Effect of a Policy Change to Invite Family to ICU Procedures on Trainee Educational Satisfaction/B. Harris, A. Butler, E. Wilson, E.L. Hirshberg, R.O. Hopkins, J. Butler, J.F. Orme, S.M. Brown, S. Beesley, Salt Lake City, UT, p.A1531**
- P572 Preliminary Assessment of a Formalized Airway Curriculum in Adult Pulmonary and Critical Care Fellowship Program/J. Mbae, M. Reddy, M. Kaul, I. Imayama, T.M. Ferrer Marrero, Chicago, IL, p.A1532**
- P573 Effect of a Peer Driven ARDS Curriculum: A Quality Improvement Project/M. Ueoka, F. Kan, S.C. Guo, Los Angeles, CA, p.A1533**
- P574 Disconnect Between Provider Expectations and Delivered Therapy: Implications for Patients with Artificial Airways/S.M. Hyder, S.R. Russell, Chicago, IL, p.A1534**
- P575 A Just-in-Time Curriculum to Teach Critical Incident Debriefing/J.H. Wykowski, S. Merel, P.A. Kritek, K.G. Hicks, Seattle, WA, p.A1535**
- P576 Resident Burnout, Moral Distress, and Resilience in the Medical Intensive Care Unit in an Academic Tertiary Care Center/H. Patel, J.-L. Banks, A. Davis, J. Cadigan, B. Forcier, C. Orantes, K.L. Dover, K. Patel, Chapel Hill, NC, p.A1536**
- P577 Mobile Mindfulness Intervention to Reduce Emotional Distress and Burnout in Frontline Healthcare Workers: The LIFT-HCW Pilot RCT/E.H. Pratt, C.E. Cox, M.K. Olsen, A. Parish, A. Jan, Durham, NC, p.A1537**
- P578 ICU Physicians Turning to Social Media to Mitigate Burnout - A Quantitative Study/S. Fatima, O. Haider, M. Khan, I. Ratnani, Houston, TX, p.A1538**
- P579 Inter-Hospital ICU Transfers to a Tertiary Care Center: A Qualitative Analysis/B. Noureddine, J.M. Aliotta, N.S. Ward, Providence, RI, p.A1539**
- P580 Outcomes Associated with Intensive Care Unit Discharge During Times of High Unit Occupancy/H. Soh, R. Fiter, N.N. Goel, V. Astha, Y. Li, E. Benn, K.S. Mathews, New York, NY, p.A1540**
- P581 ICU Structures and Protocols in Ecuador: A Peri-Pandemic Nationwide Assessment/P. Morejon, B. Seth, J. Vivanco-Suarez, W. Checkley, M. Grunauer, Quito, Ecuador, p.A1541**
- P582 Intensive Care Unit Policies Regarding Vasopressor Administration: A Survey of Michigan Hospitals/E. Munroe, H.C. Prescott, Ann Arbor, MI, p.A1542**
- P583 Exploring Factors Affecting Critical Care Response Team (CCRT) Service at a Tertiary Hospital in Riyadh, Saudi Arabia/A. Alhaidari, Riyadh, Saudi Arabia, p.A1543**
- P584 Splatter Paint Room Event in the ICU - An Effort to Mitigate Burnout/I. Ratnani, S. Fatima, F. Masud, Houston, TX, p.A1544**
- P585 The Cost of Re-Consultation: Outcomes of Patients Who Require Repeat Intensive Care Unit Consults/M.T. Freedman, K.A. Hess, K. Miller, M.G. Kashiouris, Richmond, VA, p.A1545**
- P586 Missing the Minnesota: A Trial of Tube Training/M.A. Kalani, K. Khan, R. Berger, Lexington, KY, p.A1546**
- P587 Variation in Bronchoscopy Among Patients Receiving Mechanical Ventilation in the United States (2012-2018)/M. Wayne, S. Seelye, T.S. Valley, D.A. Arenberg, J. De Cardenas, H.C. Prescott, Ann Arbor, MI, p.A1547**
- P588 Development and Incorporation of a 3 Dimensional (3D)-Printed Tracheobronchial Model for Pulmonary Bronchoscopy Training/C. Leba, S. Vydro, S. Drapeau, D. Romero, M. Norris, D. Harmon, San Francisco, CA, p.A1548**
- P589 Improving Knowledge and Confidence in the Resuscitation of the Peripartum Patient Through Simulation/P. Huang, P. Chang, A. Rossetti, C.R. Spitzer, Columbus, OH, p.A5540**
- P590 Assessment of Bedside Teaching in a Tertiary Care Academic Medical Intensive Care Unit/H. Ahmed, A.B. King, N. Mohamed, E. Mokaya, K. Chapman, R. Leonard, Morgantown, WV, p.A5541**
- P591 Improving Safety During Intra-Hospital Transport of Medical Intensive Care Unit Patients/G. Matias, B. White, D. Williams, K.P. Simpson, Maywood, IL, p.A5542**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A45 TOXICOLOGY, PHARMACOLOGY, AND ENDOCRINOLOGY

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P593** **Death by Darvocet**/D.E. Walsh, M.A. Tidswell, Springfield, MA, p.A1549
- P594** **Please Comply: Fentanyl Induced Chest Wall Rigidity Mediating Decompensation in Acute Respiratory Distress Syndrome**/R. Rovinski, V. Kondas, C. Mallow, Miami, FL, p.A1550
- P595** **A Case of Acute Liver Injury Secondary to Ingestion of Fenugreek Seeds**/S.H. Eshan, M.A. Ahmed, E. Ozen, C. Sun, J.F. Lising, Chicago, IL, p.A1551
- P596** **Intravenous Lipid Emulsion Therapy for Amitriptyline Induced Ventricular Arrhythmia**/M. Rudrappa, L. Kokatnur, A. Del Pilar, Joplin, MO, p.A1552
- P597** **Exogenous Vasopressin-Induced Hyponatremia in an Adult with Septic Shock**/M. Assaad, R. Meenakshisundaram, A. Karki, Sayre, PA, p.A1553
- P598** **Huffing-Induced Multi-Organ Failure: A Case of Acute and Long-Term Manifestations Due to Inhalant Abuse**/G.T.D. Truong, Z.A. Creech, M.G. Del Core, Omaha, NE, p.A1554
- P599** **A Real Gut Wrencher: Massive Bowel Infarction and Hepatic Portal Venous Gas Related to Methamphetamine Use**/N. Sharma, N. Fuerst, T. Lim, T.M. Dudney, Knoxville, TN, p.A1555
- P600** **Pembrolizumab Induced Encephalitis; Catching Diagnosis Early Is the Key**/C.R. Chada, B. Stoll, J. Ponzillo, J. Obodozie, St. Louis, MO, p.A1556
- P601** **Reversible Cardiogenic Shock Due to Thyroid Storm**/L.A. Robles, L.C. Beltran, H. Orozco Rodriguez, D.E. Espinoza Barrera, Berwyn, IL, p.A1557
- P602** **A Case of Isolated Right Ventricular Dysfunction in a Thyrotoxicosis Patient**/A. Aladham, B.N. Nguyen, N. Ramesh, Harrisburg, PA, p.A1558
- P603** **Veno-Arterial Extracorporeal Membrane Oxygenation (VA-ECMO) as a Novel Approach to Manage Severe Amlodipine Toxicity**/U. Khan, T. Amoun, J. Grewal, O.Z. Chika-Nwosuh, S. Patel, K. Lipat, M. Montgomery, N. Madan, Newark, NJ, p.A1559
- P604** **Street Drugs Mixed with Rat Poison Cause Spike in Overdose**/A. Iftikhar, M. Patel, M. Cheema, M. Nawaz, A. Adial, Port Jefferson, NY, p.A1560
- P605** **Rapid Recovery of Systolic Dysfunction in a Patient with Myxedema Coma: A Case Report**/T. Li, G. Blayla Rosemberg, R. Ernest Jean, T. Shachi, Y. Herrera, Y. Khachatoorian, C. Kuzmyak, J.M. Marx, T. Burnett, E. Gelman, H.N.U.A. Baloch, J. Salonia, New York, NY, p.A1561
- P606** **Subclinical Hypothyroidism in Multiple Sclerosis: A Rare Presentation of Myxedema Coma**/Z. Kattih, J.A. Moore, S. Meredith, P. Makkar, New York, NY, p.A1562
- P607** **Acquired Methemoglobinemia Secondary to Rasburicase**/K.R. Alexander, O. Nadeem, Detroit, MI, p.A1563
- P608** **A Unique Presentation of Airway Compromise in Myxedema Coma**/A. Menon, M. Bachan, Z. Khan, A. Menon, N. Kottapalli, New York, NY, p.A1564
- P609** **Shot to the Heart: A Case of Glucocorticoid Associated Pheochromocytoma Crisis**/E. Zehr, G. Day, E. Stortz, B. Haugen, S. Sharma, Aurora, CO, p.A1565
- P610** **Methamphetamine Overdose Induced Disseminated Intravascular Coagulation**/M.A. Coghlan, B. Ulrich, L. Hinkle, Indianapolis, IN, p.A1566
- P611** **Non-Hepatic Severe Hyperammonemia and Severe Acidosis Induced by Utilization of Acetazolamide**/K. Nangrani, A. Kumari, J. Chung, I. Zahedi, L.N. Gerolemou, Brooklyn, NY, p.A1567
- P612** **Tizanidine Withdrawal Syndrome: A Case Report**/O.A. Perez, A. Tauquir, J. Janosko, T. Saleem, K. Sarin, Cleveland, OH, p.A1568
- P613** **The Leaking Man - A Case of Systemic Capillary Leak Syndrome Associated with Rhabdomyolysis Thought to Be Due to Cold Medications**/S. Sahni, C. Villavicencio, H. Amin, N. Trenard, A. Poor, New York, NY, p.A1569
- P614** **Subarachnoid and Intraventricular Hemorrhages Following Ethylene Glycol Poisoning, a Novel Complication**/M. Heritage, S.M. Scott, J. DePriest, Columbia, SC, p.A1570
- P615** **We Started the Fire: Hyperpyrexia Caused by Dexmedetomidine**/M. Garcia, J. Scott, S.B. Thapamagar, Riverside, CA, p.A1571
- P616** **Cefepime Toxicity and Respiratory Failure, an Ambiguous Connection**/H.M.S. Qurashi, I. Kovalenko, K. Golubykh, T. Saleem, B. Ravichander, R. Pathak, P. Modelewski, Harrisburg, PA, p.A1572
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THEMATIC POSTER SESSION
A46 INFECTIONS AND INFECTIOUS COMPLICATIONS IN THE ICU
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area K, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

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A48 SARS CoV-2: SURVEILLANCE, PREVENTION, AND IMPACT
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Discussion: 11:15-12:15 authors will be present for individual discussion

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- P862** **Nasal Epithelial Lining Fluid (NELF) Assessment of SARS-Cov-2 Vaccine-Induced Antibody Production**/M.E. Rebuli, K.T. Cao, C. Cobos-Urbe, N.A. Knight, I. Jaspers, Chapel Hill, NC, p.A1691
- P863** **Acceptance of Frequent Point-of-Care Molecular Workplace COVID-19 Surveillance Among Miners**/A. Sood, W.C. Jarrell, X.W. Shore, N.R. Sosa, A.N. Parada, N. Edwardson, A.V. Yingling, I. Hurwitz, L.S. Cook, S. Leng, O.B. Myers, D.J. Perkins, Albuquerque, NM, p.A1692
- P864** **Lack of Acceptance of Web App-Based Smartphone-Administered COVID-19 Surveillance Among Miners**/O. Edeh, S. Pellman, S. Deore, J. Marler, W. Wiggins, V. Garcia, W. Jarrell, A. Sood, Albuquerque, NM, p.A1693
- P865** **Healthcare Workers' User Comfort and Tolerability Ratings of CleanSpace Halo Respirators**/E. Zhuang, H. Chen, O. Kolesnik, S.E. Hines, Baltimore, MD, p.A1694
- P866** **Surface Contamination of Reusable Respirators and Face Shields During COVID-19 Hospital Care**/A. Shah, E. Zhuang, J. German, S. Tai, O. Kolesnik, S.E. Hines, Baltimore, MD, p.A1695
- P867** **Characteristics Associated with Healthcare Worker Knowledge and Confidence in Elastomeric Half Mask Respirator Use**/P. Thurman, H. Chen, M.A. McDiarmid, E. Zhuang, C. McClain, M. Sietsema, S.E. Hines, Baltimore, MD, p.A1696

- P868 A Risk Evaluation for Fugitive Aerosol Emissions When Using Different Nebulizer Systems; Potential Mechanisms, Impact of Device Type, and Mitigation Strategies/J. Suggett, M. Nagel, J. Schloss, D.P. Coppolo, London, Canada, p.A1697**
- P869 Impact of Social Distancing During the SARS-CoV-2 Pandemic on the Association Between Viral Respiratory Illness and COPD Exacerbations/A. Subramanian, T. Acton, S. O'Connor, M. Mamawala, J. Ettlinger, S. Ghamande, C. Boethel, A. Arroliga, Temple, TX, p.A1698**
- P870 Associations of Decreased Asthma Control with Sleep Disturbance Among Adults with Asthma During the COVID-19 Pandemic/K. Eldeirawi, S.M. Nyenhuis, L. Huntington-Moskos, J. Saenz, B.J. Polivka, Chicago, IL, p.A1699**
- P871 Impact of COVID on College Satisfaction/J. Suarez, South Setauket, NY, p.A1700**
- P872 Dynamics of the Level and Structure of the Population Morbidity During the COVID-19 Pandemic Period in the Far Eastern Federal District of Russia/V.P. Kolosov, L.G. Manakov, E.V. Polyanskaya, Blagoveshchensk, Russian Federation, p.A1701**
- P873 COVID-19 Effects on NYC Populations of Different Socioeconomic Strata/M.M. Perveen, Jamaica, NY, p.A1702**
- P874 Dynamics of Mortality Due to Respiratory Diseases During the COVID-19 Pandemic in the Amur Region (Russia)/V.P. Kolosov, L.G. Manakov, E.V. Polyanskaya, Blagoveshchensk, Russian Federation, p.A1703**
- P875 The Johns Hopkins COVID-19 Remote Patient Monitoring Program Clinical Experience/S.E. Zaeh, S. Raju, E. Boorman, M. Lantz-Garnish, M. Millard, B. Hasselfeld, M. Eakin, E. Brigham, New Haven, CT, p.A5546**
- P876 Detection of SARS-CoV-2 Aerosols in Residences and Portable Air Cleaners: A Real-World Study/H.M. Kipen, N. Myers, R.J. Laumbach, K. Black, P. Ohman, S. Alimokhtari, A. Legard, A.D.S.B. De Resende, L. Calderon, F. Lu, G. Mainelis, Piscataway, NJ, p.A5547**
- P877 Asthma and Infection Risk-Risk Tradeoffs Related to Cleaning and Disinfection: Preliminary Data from a Pilot Survey/A.M. Wilson, I. Mussio, S. Chilton, L.B. Gerald, R.M. Jones, F. Drews, J. LaKind, P.I. Beamer, Tucson, AZ, p.A5548**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A49 INTERVENTIONAL PEDIATRIC PULMONOLOGY AND CRITICAL CARE - CASE REPORTS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area E, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P317 Flexible Bronchoscopic Cryotherapy for the Removal of an Obstructive Massive Blood Clot in a 4-Year-Old Child, a Case Report and an Overview of Therapeutic Cryotherapy Experience in Children/D. Gatt, I. Golan Tripto, S. Tsaregorodtsev, M. Aviram, A. Goldbart, Toronto, Canada, p.A1704**
- P318 Polymicrobial Parietal Brain Abscess as the Initial Clinical Manifestation of Hereditary Hemorrhagic Telangiectasia in a Teenage Girl: A Case Report/P.-Y. Tsou, T. Klouda, B. Quinn, A.M.H. Casey, Boston, MA, p.A1705**
- P319 Endobronchial Valve Placement for Persistent Air Leak in a Post-Operative Pediatric Patient/C. Morton, J. Puchalski, New Haven, CT, p.A1706**
- P320 Pediatric CT Navigational Bronchoscopy/S.D. Franklin, P.A. Phinzy, S. Tran, D. Dibardino, A. Haas, J.C. Piccione, Philadelphia, PA, p.A1707**
- P321 Tongue Base Suspension as a New Innovative Approach to Treat Severe and Refractory Obstructive Sleep Apnea in Children/C. Taype, T. Valika, I. Trosman, Chicago, IL, p.A1708**
- P322 Chronic Pulmonary Symptoms Due to Aspiration of a Dog Toenail/D. Shore, N. Wong, M. Chopra, D. Ahmad, J.W. Toth, G.R. Graff, M.C. Santos, Hershey, PA, p.A1709**
- P323 A Case Series of Eosinophilic Bronchitis in 5 Children/L. Feld, B. Johnson, J.P. Needleman, B. DePasquale, J. Pogoriler, J.C. Piccione, Philadelphia, PA, p.A1710**
- P324 Pulmonary Embolus and Golden Bronchoalveolar Lavage Fluid: A Rare and Late Presentation of Sickle Cell SS Disease/N. Krupp, A.O. Delecaris, Indianapolis, IN, p.A1711**
- P325 Major Airway Obstruction by Carbonaceous Fibrin Casts in a Child Due to Smoke Inhalation Injury/A. Wolfe, A. Treece, P.C. Stillwell, L.A. Veress, Aurora, CO, p.A1712**

- P326 Cause for Alarm: Abdominal Distension in a Tracheostomy and Ventilator Dependent Patient/L.** Lazzarini, E. Sohn, C. Hochstim, V. Bhardwaj, C.E. Shin, M. Bansal, Los Angeles, CA, p.A1713
- P327 Post-Natal Ventilatory Needs of and Infant with Congenital High Airway Obstruction Sequence/E.E.** Mchugh, A. Mehollin-Ray, S. Malhotra, Houston, TX, p.A1714
- P328 Pediatric Smoke Inhalation Injury Successfully Treated with Flexible Bronchoscopy in Conjunction to Volumetric Diffuse Respiration Technique/A.** Wannas Daou, G.T. Burg, Cincinnati, OH, p.A1715
- P329 An Unusual and Late Post-Transplant Pulmonary Complication in a Pediatric Patient/K.** Garagozlo, S. Worgall, New York, NY, p.A1716
- P330 Fulminant Sepsis Secondary to Bacillus Cereus in a Pediatric Patient with Acute Lymphoblastic Leukemia/J.** Tepper, J. Collins, A. Lloyd, Indianapolis, IN, p.A1717
- P331 Airway Management of an Infant with Bronchospasm and Respiratory Depression Following General Anesthesia with Lung Hypoplasia and Pierre Robin Sequence/J.D.** Eaton, A.S. Kiefer, C.R. Deskins, Morgantown, WV, p.A1718
- P332 Anemia and Chest X-Ray Bilateral Infiltrates: Is It Really Pneumonia?/M.P.** Gomez, J. Caceres, S.M. Restrepo, O.P. Panqueva, D.M. Palacios, M.S. Naranjo, Bogota, Colombia, p.A1719
- P336 A Unique Case of Pediatric Plastic Bronchitis/J.D.** Fett, Z. Ghazala, A. Agarwal, A. Nolder, Little Rock, AR, p.A1722
- P337 Interstitial Lung Disease Caused by STING-Associated Vasculopathy with Onset in Infancy/L.** Lee, D.N. Cornfield, Palo Alto, CA, p.A1723
- P338 Lipoid Pneumonia Following Chronic Aspiration of Cannabis Oil Used for the Treatment of Seizures/G.** Mhapankar, E. Sell, J. de Nanassy, D. Radhakrishnan, Ottawa, Canada, p.A1724
- P339 Interstitial Lung Disease as a Sole Manifestation of Inherited ISG15 Deficiency/S.** Berger, A.E. Constantinescu, A.D. Boneparth, H. Sadeghi, New York, NY, p.A1725
- P340 Diffuse Alveolar Hemorrhage Secondary to Anti-neutrophil Cytoplasmic Antibody (ANCA)-Associated Vasculitis on a Pediatric Patient with History of Ethmoidal Rhabdomyosarcoma: A Case Report/A.** Wannas Daou, G.T. Burg, Cincinnati, OH, p.A1726
- P341 All That Wheezes Is Not Asthma: A Curious Case of Kikuchi-Fujimoto Disease in a Pediatric Patient/N.J.** Sanchez Solano, T.M. Martinez-Fernandez, Dallas, TX, p.A1727
- P342 Lane Hamilton Syndrome and Type 1 Diabetes: A Case Suggesting a Common Autoimmune Pathway/K.** Tuveson, M. Chan, G.D. Church, San Francisco, CA, p.A1728
- P343 Cryptococcus Gatti Lung Abscess in an Immunocompetent Adolescent Female with Elevated Anti-GM-CSF Autoantibodies/J.** Kaur, S. Sutchu, A. Ataya, Gainesville, FL, p.A1729
- P344 Child Interstitial Lung Disease in an Infant with Surfactant Protein C Dysfunction Due to p.V68F Variant (c.202GT)/H.** Park, A. Bidiwala, L.A. Conrad, N. Aborawi, M. Ewart, M. Josephson, L.M. Noguee, R. Arens, Bronx, NY, p.A1730
- P345 Pulmonary Alveolar Proteinosis Presenting as Indolent Cough in an Immunocompromised Child/J.R.G.** Maniaci, L.R. Young, J.C. Piccione, E.J. Liebling, Philadelphia, PA, p.A1731
- P346 Pulmonary Nodules in an Adolescent with Eosinophilic Granulomatosis with Polyangiitis/L.** Feld, K. Tsukahara, L.R. Young, Philadelphia, PA, p.A1732
- P347 Plastic Bronchitis in an Adolescent with Hodgkin's Lymphoma/G.M.** Brottman-Kagan, S. Lederman, A. Hoover, Minneapolis, MN, p.A1733
- P348 A Pediatric Case of Microscopic Polyangiitis and Pulmonary Hemorrhage/J.** Lee, C.K. Conrad, Palo Alto, CA, p.A1734
- P349 Staphylococcus Aureus Endocarditis Complicated by Cryptogenic Organizing Pneumonia/E.S.** Mull, B.T. Kopp, Columbus, OH, p.A1735

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
A50 DIFFUSE AND ACUTE LUNG DISEASE - CASE REPORTS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area E, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P334 Atypical Alveolar Capillary Dysplasia in a 13-Year-Old Mistaken for Bronchopulmonary Dysplasia/D.** Dinh, R.K. Hopper, L.C. Steffes, Palo Alto, CA, p.A1720
- P335 Unique Presentation of Neuroendocrine Cell Hyperplasia of Infancy Requiring Tracheostomy and Chronic Mechanical Ventilation/M.D.** Mcdowell, J.K. Sharp, R.P. Guillerman, G. Deutsch, D.R. Spielberg, M.D. Silva Carmona, Houston, TX, p.A1721

- P350** **Isolated Pulmonary Sarcoidosis in a 4 Year Old Child/M.** Alsanjalawi, D.R. Ezmigna, Gainesville, FL, p.A1736
- P351** **When the “Hole” Is Larger Than Its Parts/L.** Tan, A.P. Rebaza, New Hyde Park, NY, p.A1737
- P352** **Incidentally Discovered Large, Bilateral Pulmonary Cysts in an Asymptomatic Pediatric Patient/R.** Shah, B. Coakley, C. Spencer Grant, New York, NY, p.A1738
- P353** **Bilateral Lung Transplantation in an Adolescent with Swyer-James Macleod Syndrome/L.**K. Hintz, A.V. Shah, Chicago, IL, p.A1739
- P354** **Dysphagia Distraction:Childhood Interstitial Lung Disease Masquerading as Aspiration/K.** Jordan, P.C. Stillwell, T. Wine, A. Hamilton, E.M. Deboer, Aurora, CO, p.A1740
- P355** **Recurrent Pneumonia in a Child with Jacobsen Syndrome/R.** Thomas, East Lansing, MI, p.A1741
- P356** **Clinical, Imaging, and PFT Characteristics of Teens with Electronic Cigarette or Vaping Use-Associated Lung Injury (EVALI)/K.** Hendra, N.P. Ly, G.D. Church, K. Iwanaga, F. Neemuchwala, M. McGarry, E. Gibb, Oakland, CA, p.A1742
- P357** **Gene Expression Profiling and Signaling Pathway Analysis Contrasting Alloreactive and Tolerant T Cells in a Recipient Following Bilateral Orthotopic Lung Transplant (BOLT) and Bone Marrow Transplant (BMT) from the Same Cadaveric UNOS Donor/P.** Szabolcs, E. Garchar, D. Rajasundaram, X. Chen, Pittsburgh, PA, p.A1743
- P358** **Pulmonary Histoplasmosis in a Pediatric Crohn’s Disease Patient/K.**J. Kokesh, S. Prabhakaran, D. Rajderkar, Gainesville, FL, p.A1744
- P359** **A Unique Case of Pneumocystis Pneumonia in Infancy/B.** Gustafson, S. Pinto, Columbus, OH, p.A1745
- P360** **Progressive Dyspnea, Chronic Cough and Eosinophilia in Adolescent Girl/C.** Dress, C. Siracusa, Cincinnati, OH, p.A1746
- P362** **A Rare Case of Suspected Generalized Arterial Calcification of Infancy (GACI) in An Infant Presenting with Respiratory Failure and Arterial Calcification/L.** Melzer, C. Kral, B. Sullivan, E. Rush, E.K. Khan, Kansas City, MO, p.A1747
- P363** **A Unique Diagnostic Course for an Esophageal Lung/C.** Henderson, T. Isaacs, S. Das, D.R. Spielberg, S. Malhotra, Houston, TX, p.A1748
- P364** **Neonatal TBX4 Variant Mutation Presenting as Neonatal Respiratory Failure/M.**D. Mcdowell, N.M. Villafranco, C. Chartan, R. Coleman, N.P. Varghese, Houston, TX, p.A1749
- P365** **Not All That Wheezes Is Asthma: Case of an Infant with a Posterior Mediastinal Mass Presenting with Recurrent Wheeze and Stridor/K.** Carr, R.F. Brown, J.A. Kaslow, M.G. O’Connor, C. Rosas-Salazar, Nashville, TN, p.A1750
- P366** **Congenital Bronchial-Esophageal Fistula: A Rare Cause of Chronic Pulmonary Aspiration in a Child/O.** Alhalabi, S.G. Hamad, H. Toma, A. Shabani, W. Mubarak, M. Abu-Hasan, Doha, Qatar, p.A1751
- P367** **Isolated Pulmonary Arteriovenous Malformations in the Pediatric Population/I.** Geiculescu, D.M. Bailey, Charlotte, NC, p.A1752
- P368** **Pulmonary Lymphangiectasia in a Pediatric Patient Presenting with Large Neck Mass at Birth/N.** Suresh, C.U.A. Okorie, Palo Alto, CA, p.A1753
- P369** **Severe Tracheomalacia with Vascular Compression as a Cause of Recurrent Admissions in a Previously Repaired Double Aortic Arch: A Pediatric Case Report/M.**A. Gunnett, G.J. Beltran Ale, Birmingham, AL, p.A1754
- P370** **Severe Tracheopathy and Secondary Tracheoesophageal Fistula in a Patient with Mucopolysaccharidosis Type II and Prior Stem Cell Transplant/C.** Mertens, R. Simpson, E. Mertens, W.T. Harris, G.J. Beltran Ale, Birmingham, AL, p.A1755
- P371** **Indirect Calorimetry Testing to Guide Nutritional Management in Patients with Severe Bronchopulmonary Dysplasia/A.** Miller, J. Curtiss, E. Shepherd, L. Nelin, M. Kielt, Columbus, OH, p.A1756
- P372** **A Fatal Case of Pulmonary Alveolar Proteinosis (PAP) in a Three-Month Old/J.** Tepper, J. Collins, A. Lloyd, C. Parker, S. Johnson, Indianapolis, IN, p.A1757
- P373** **Necrotizing Pneumonia Complicating Congenital Surfactant Deficiency/S.** Anbalagan, D. Alapati, Wilmington, DE, p.A1758
- P374** **A Curious Case of Pulmonary Sequestration with Aspiration Features/S.** Khanal, A. Shawkat, Syracuse, NY, p.A1759

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
A51 BPD AND CONGENITAL LUNG DISEASE - CASE REPORTS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area E, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P375 Stridor Beyond Laryngomalacia/D. Rodriguez, R. Rodriguez Rodriguez, E.A. Dominguez Silveyra, El Paso, TX, p.A1760**
- P376 Ebstein's Anomaly with Severe Pulmonary Hypertension in a Patient with Cri-du-chat Syndrome/M.P. Gomez, J. Caceres, S.M. Restrepo, O.P. Panqueva, M.S. Naranjo, Bogota, Colombia, p.A1761**
- P377 Unexpected Histopathology After Resection of Suspected Congenital Lobar Emphysema/T. Isaacs, K. Reiling, K. Wallace, C.L. Cannon, N.M. Villafranco, Houston, TX, p.A1762**
- P378 Lung Agenesis Associated to In Vitro Fertilization Monochorionic Monoamniotic Twin Pregnancy/M.P. Gomez, J. Caceres, S.M. Restrepo, O.P. Panqueva, M.S. Naranjo, Bogota, Colombia, p.A1763**
- P379 Excavating a Solution: A Case of Functional Impairment in Pectus Excavatum/D.M. Petrenko, S. Shah, M. Ali, J. Schellenberg, Allentown, PA, p.A1764**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
A52 PEDIATRIC LUNG INFECTIONS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area E, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P381 A Safe Inhaled Alkaline Medication That Inhibits RSV Infection and Replication/J.L. Saunders, L. Smith, I. Daniels, E. Hanson, B. Gaston, M.D. Davis, Indianapolis, IN, p.A1765**
- P382 Respiratory Syncytial Virus Disrupts the Airway Epithelial Barrier via Attenuating Cortactin Expression and Destabilizing the F-Actin Network/N. Gao, A. Raduka, F. Rezaee, Cleveland, OH, p.A1766**
- P383 Predictors of Severity and Analysis of Diagnostic and Treatment Methods Used for Viral Bronchiolitis in an University Hospital/M.P. Gomez, S.M. Restrepo, J. Caceres, Bogota, Colombia, p.A1767**
- P384 Seasonal Patterns and Temporal Trends of Croup in South Korea During 8 Years/Y. Sun, Incheon, Korea, Republic of, p.A1768**
- P385 Treatment Patterns, Hospitalization Rate and Associating Factors of Bronchiolitis in Pediatric Emergency/L. Jankauskaite, V. Jurgelene, M. Krutulyte, K. Bogdanaviciute, G. Gudaviciute, Kaunas, Lithuania, p.A1769**

- P386 Complicated Pneumonia in the Pediatric Population in a Reference Institution in Bogota: An Approach to Risk Factors/D.L. Medina Vega, S.M. Restrepo, M. Villamil, Bogota, Colombia, p.A1770**
- P387 Performance and Usability of a New Mobile Phone Application in Assessing Respiratory Rate in Pediatric Patients/R. Spurr, E. Ng, F. Onchiri, B. Sekyodwa, J. Nakatumba-Nabende, M. Rosenfeld, J. Stout, I. Najjingo, R. Nantanda, L. Ellington, Seattle, WA, p.A1771**
- P388 Combination of NAP-2 and P-Selectin in an Early Diagnosis of Severe Bacterial Infection in Pediatric Emergency/L. Jankauskaite, G. Laucaityte, A. Pociute, M.F. Kottilingal Farook, A. Dagys, Kaunas, Lithuania, p.A1772**
- P389 Monocytes and Platelets in Peripheral Blood in Children with Pulmonary Tuberculosis from Families with Cases of Covid-19 and Tuberculosis/L. Gorbach, D. Adjablaeva, Minsk, Belarus, p.A1773**
- P390 Electronic Portal Activation Status Among Asthma Patients in an Academic Healthcare System: Demographic Differences and the Impact of COVID-19/M.K. Ross, L. Chen, D. Kafashzadeh, Los Angeles, CA, p.A1774**
- P391 A Prospective Cohort Study Evaluating the Transplacental Transmission of Respiratory Syncytial Virus (RSV) and Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) in Pregnant Women and Their Offspring: The Study Design and Demographic Description/S.H. Ley, Y. Li, G. Piedimonte, New Orleans, LA, p.A1775**
- P392 Dynamics of Bronchiolitis Pre- and During COVID-19 Pandemics: Data Analysis from Lithuanian University Hospital Pediatric Emergency/L. Jankauskaite, E. Gelsvartaitė, K. Snarskis, G. Laucaityte, M. Malinauskas, Kaunas, Lithuania, p.A1776**
- P393 COVID-19 Does Not Cause Critical Asthma Exacerbation in Children/A.P. Volk, A.M. Poole, M.J. Holcomb, A.R. Jamieson, J.M. Chambliss, K.G. Henley, B.E. Nichols, L. Miller, C.A. Menegaz, M.A. Campfield, P.J. Yagnik, P.M. Lockett, Dallas, TX, p.A1777**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
A53 TAKE MY BREATH AWAY: FUNCTIONAL ASSESSMENT OF ASTHMA
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area E, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P396 Isolated Low FEV₁ Is a Unique, Stable, Non-Specific Spirometry Pattern in the Pediatric Population/M.** Wyatt, A.G. Sokolow, R.F. Brown, C. Rosas-Salazar, Nashville, TN, p.A1778
- P397 IL6 High Phenotype in Childhood Asthma/N.** Kung, J. Mansur, M. Moy, B. Laxman, C. Omahen, V.G. Press, C. Ciaccio, S.R. White, Chicago, IL, p.A1779
- P398 Assessing Bronchodilator Response Using the Forced Oscillation Technique in Children with Acute Asthma/A.** Alraimi, M. Alshlowi, C. Beardsmore, E. Gaillard, Leicester, United Kingdom, p.A1780
- P399 Do Payor-Initiated Inhaler Changes Lead to Increased Pediatric Asthma Healthcare Utilization?/S.** Wirkowski, N.S. Eid, R.L. Morton, A.R. O'Hagan, S.G. Bickel, Louisville, KY, p.A1781
- P400 Current Practices, Challenges, and Improvements in School Asthma Care: School Stakeholder Perspectives/D.** Jaishankar, J. Cheatham, T. DeClemente, K. Fox, S. Ignoffo, A. Volerman, Chicago, IL, p.A1782
- P401 Cardiopulmonary Exercise Testing (CPET) Parameters in Children Undergoing Exercise Bronchoprovocation Testing/S.S.** Krishnan, S. Bhela, E. Hernandez Caro, A.J. Dozor, Valhalla, NY, p.A1783
- P402 Navigator-Led Social Determinants of Health Screening in Community-Based Asthma Programs: A Qualitative Study/M.** Udoko, S. Brewer, S.J. Szeffler, Aurora, CO, p.A1784
- P403 Impact of Obesity on Cardiopulmonary Exercise Testing (CPET) Parameters in Children Undergoing Sub-Maximal Exercise Bronchoprovocation/S.S.** Krishnan, S. Bhela, E. Hernandez Caro, A.J. Dozor, Valhalla, NY, p.A1785
- P404 Improved Transition Readiness: An Innovative Approach to Meaningful Gamification/M.** Gubichuk, S. Thammasitboon, J.P. Katkin, M.M. Sockrider, J. Rama, Houston, TX, p.A1786
- P405 Validation of a Novel Wireless Wearable Sensor for Remote Monitoring of Respiratory Flow and Volume in Children/F.** Javed, M. Crocker, S. Chuang, San Diego, CA, p.A1787
- P406 School Attendance and Performance Among Children with Asthma in Addis Ababa Ethiopia, A Cross Sectional Study/B.B.** Kassa, R. Argaw, C.B. Sherman, A. Yeshidinber, Addis Ababa, Ethiopia, p.A1788
- P407 ADRB2 Gene Polymorphism in Children with Bronchial Asthma/R.** Telepneva, G. Evseeva, E. Nagovitsyna, E. Suprun, S. Suprun, O. Lebedko, Khabarovsk, Russian Federation, p.A1789
- P408 Characteristics of High-Acuity Patient Transfer to the Intensive Care Unit for Status Asthmaticus/L.** Melzer, M. Sycip, J. Tam-Williams, Kansas City, MO, p.A1790
- P409 Critical Errors in Inhaler Technique in Patients with Pediatric Asthma and Risk of Hospital Admissions: Socio-Ecological Study from Eastern Nepal/N.K.** Bhatta, H. Prasad, S. Chaudhary, L.R. Sah, Dharan, Nepal, p.A1791
- P410 Pulmonary Function Characteristics in Children with Suspected Asthma and Its Implications for Asthma Diagnosis/M.** Park, Y.Y. Roh, H.M. Kim, J.H. Jung, S.Y. Kim, J.D. Kim, Y.J. Lee, M.J. Kim, Y.H. Kim, K.W. Kim, M.H. Sohn, Seoul, Korea, Republic of, p.A1792
- P411 Asthma Identification and Medication Administration Policies in Ten Largest School Districts in United States/U.** Balachandran, N. Kappel, A. Volerman, Chicago, IL, p.A1793
- P412 Project Breathe a Quality Improvement Initiative/K.** Oliver, J. Nesarajah, D. Hamilton, S. Eng, A. Tobin, H. Lehman, K. Neary, G.F. Perez, Buffalo, NY, p.A1794
- P413 Association of the Exercise Capacity of Asthmatic Children with Control of Asthma/S.** Gupta, S.K. Kabra, R. Lodha, Bilaspur, India, p.A1795
- P414 Burden Among Caregivers for Children with Asthma and Correlation with Knowledge of the Disease and Control of Asthma in a Pediatric Hospital in Bogotá Colombia/M.** Sanchez Peñaranda, M. Villamil, S.M. Restrepo, Bogota, Colombia, p.A1796

CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A54 BAYVIEW: PULMONARY EMBOLI

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area B, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P87 Impact of Acute Pulmonary Embolism on Outcomes of Coronary Artery Bypass Graft Surgery: Analysis of the National Inpatient Sample 2018/M. Odak, A. Alshami, S. Douedi, A. Albayati, F. Ajam, B. Sealove, K. Asgarian, Neptune City, NJ, p.A1797

P88 Pulmonary Embolism Response Team, Outcomes from a Large Tertiary Academic Center/D.C. Fleitas Sosa, O.A. O'Corragain, D. Sacher, V. Lakhter, R. Bashir, G. Cohen, J. Panaro, G.J. Criner, P. Rali, Philadelphia, PA, p.A1798

P89 Clinical Comparison of Black and Caucasian Patients with Pulmonary Embolism in an Urban Underserved Population/V.H. Dronamraju, K.U. Lio, R. Badlani, S. Brosnahan, A. Lehr, P. Rali, Philadelphia, PA, p.A1799

- P90 Renal Dysfunction in Acute Pulmonary Embolism: A Poor Prognostic Sign/D.** Sacher, O.A. O'Corragain, T. Thakur, R. Badlani, H. Davis, N. Mehta, K.U. Lio, J. Moore, R. Bashir, V. Lakhter, J. Panaro, G.J. Criner, P. Rali, Philadelphia, PA, p.A1800
- P91 Sodium Levels in Acute Pulmonary Embolism: Higher May Not Mean Better/D.** Sacher, O.A. O'Corragain, T. Thakur, R. Badlani, H. Davis, K.U. Lio, N. Mehta, J. Moore, R. Bashir, V. Lakhter, J. Panaro, G.J. Criner, P. Rali, Philadelphia, PA, p.A1801
- P92 D-Dimers as a Predictor of PE in Individuals Undergoing CTPA/A.**N. Franciosi, N. McCarthy, B. Gaffney, E. Sweeney, N. O'Connell, J. Duignan, M.P. Keane, D.J. Murphy, K.M. Curran, C. McCarthy, Vancouver, Canada, p.A1802
- P93 Correlation Between Qanadli Index with Serum and Echocardiographic Parameters of Right Ventricular Dysfunction in a Cohort of Patients with Pulmonary Embolism at the Hospital Universitario San Ignacio in Bogota-Colombia Between 2019 and 2020/C.** Villaquiran-Torres, C. Castilla-Balaguera, L. Arias-Alvarez, S. Cifuentes-Sandoval, J.P. Alzate-Granados, Bogotá, Colombia, p.A1803
- P94 Admission Troponin and Rise in Troponin and Outcome in Intermediate Risk (Submassive) Pulmonary Embolism/** M. Zur, S. Congrete, D. Datta, Farmington, CT, p.A1804
- P95 Pulmonary Emboli with Negative Lower Extremity Duplex Scan: Source Exploration Needed or Not?/A.** Refai, M. Goel, A. Aggarwal, A. Khan, S. Bidhan, V. Khanam, S. Kumar, Rochester, MI, p.A1805
- P96 Utility of Admission Serum Lactate as an Indicator of Potential Hemodynamic Decompensation in Intermediate Risk (Submassive) Pulmonary Embolism/M.** Zur, S. Congrete, D. Datta, Farmington, CT, p.A1806
- P97 Improvement of Right Ventricular Function After Novel Pharmaco-Mechanical Catheter Directed Thrombolysis with BASHIR™ Endovascular Catheter - A Single Center Experience/C.**M. Romero, M. Al-Otaibi, K. Frenchu, M. Singh, J. Panero, P. Rali, V. Lakhter, R. Bashir, Philadelphia, PA, p.A1807
- P98 Evolution of Catheter-Directed Therapy for Pulmonary Embolism at an Academic Institution/A.** Lehr, P. Guichet, B.V. Garimella, N.E. Amoroso, S.B. Brosnahan, New York, NY, p.A1808
- P99 Experience of Reduced Dose Alteplase in Patients with Pulmonary Embolism Intermediate-High-Risk: A Single Centre Study/P.** Korkmaz Ekren, Ö.S. Unat, Ö. Can, E. Soydan, A. Cinkooglu, S. Bayraktaroglu, G. Cok, F. Bacakoglu, M. Erdinc, F. Karbek Karca, S. Nalbantgil, M. Akin, R. Savas, C. Cinar, M. Uyar, K. Demirag, T. Yagdi, C. Engin, Izmir, Turkey, p.A1809

- P100 Analysis of Systemic Tissue Plasminogen Activator (tPA) Administration During In-Hospital Cardiac Arrest Secondary to Pulmonary Embolism/N.**B. Pebley, H.M. Mathers, S. Soliman, M.F. Odish, T.M. Fernandes, G. Wardi, R.E. Sell, La Jolla, CA, p.A1810

CLINICAL

THEMATIC POSTER SESSION

A55 TREASURE ISLAND: CASE REPORTS IN AVMS AND ECMO

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area B, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P102 Large Bilateral Pulmonary Arterial Venous Malformations Treated with Embolization and Lingulectomy in a Patient with Hereditary Hemorrhagic Telangiectasia/A.** Wallace, A. Orovec, D. French, C. Lightfoot, Halifax, Canada, p.A1811
- P103 Going Against the Stream - Case of Pulmonary Arteriovenous Malformations and Pulmonary Hypertension Without Hemorrhagic Hereditary Telangiectasia/A.**D. Hyslop, M. Aldred, R.F. Machado, Indianapolis, IN, p.A1812
- P104 A Case of Fistulous Tract Between Left Anterior Descending Artery and Pulmonary Artery/M.** Riasat, A. Bhalla, J. Fox, V. Meghrajani, Manhattan, NY, p.A1813
- P105 Shunted to Psych: A Diagnostic Near-Miss/T.** Gardner, P. Hountras, Aurora, CO, p.A1814
- P106 The Delayed Diagnosis and Screening for Hereditary Hemorrhagic Telangiectasia/D.** Ramanujam, S. Azharuddin, M. Young, Pittsburgh, PA, p.A1815
- P107 ECMO for Severe Refractory Pulmonary Hypertension Associated with Vascular Endothelial Growth Factor Inhibitor Bevacizumab/A.**I. Kim, S. Abadir, J.P. Mehta, Weston, FL, p.A1816
- P108 Extracorporeal Membrane Oxygenation as a Bridge to Treatment in Newly Diagnosed Chronic Thromboembolic Pulmonary Hypertension/N.** Ruopp, H.W. Farber, Boston, MA, p.A1817
- P109 Massive Unilateral Pulmonary Hemorrhage in a Patient with Right Ventricular Assist Device/H.** Asif, W. Ghumman, S.D. Bali, Boca Raton, FL, p.A1818

CLINICAL

THEMATIC POSTER SESSION

A56 MISSION: CASE REPORTS IN THROMBOEMBOLIC DISEASE9:30 a.m. - 3:45 p.m. **MOSCONE CENTER****Area B, Hall F (North Building, Exhibition Level)****Viewing:** Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P111 Immunosuppression: A Hidden Component of Virchows' Triad/C.** Tejera Quesada, J. Baek, R. Reddy, A. Rodriguez, G. Avila Amat, Atlantis, FL, p.A1819
- P112 Transient Ischemic Attack Due to Paradoxical Embolism in Ebstein Anomaly/M.V.** Shah, S. Chandna, New Brunswick, NJ, p.A1820
- P113 No Flow Defect Pulmonary Embolism Diagnosed by Endobronchial Ultrasound (EBUS)/C.** Kahn, C. Izzo, V. Seeram, Jacksonville, FL, p.A1821
- P114 Papillary Muscle... in Transit?/J.D.** Rivera Robles, B. Collura, M. Gonzalez, A. Van, S. Gillenwater, J.P. Mehta, Weston, FL, p.A1822
- P115 A Thrombus in Transit: The Power of Point of Care Ultrasonography in Critically Ill Patients/S.O.** Saidy, J. Bahgat, F. Ilyas, K. Kashinsky, A. Wardhere, F.C. Hastrup, Stamford, CT, p.A1823
- P116 Rouleaux Flow versus Deep Vein Thrombosis in Pregnancy: Ultrasound Pitfalls and Approach to Management/S.** Sundaram, F. Fuentes, E. Oki, Reno, NV, p.A1824
- P117 Use of Catheter-Directed Thrombectomy for Thrombus-In-Transit and Pulmonary Embolism Under Echocardiographic Guidance/M.** Odak, S. Douedi, A. Alshami, D. Berezovsky, F. Ajam, E. Costanzo, Neptune City, NJ, p.A1825
- P118 The Tight Rope Between Bleeding and Clotting in Behcet's Disease/M.** Joo, J. Reisler, M. Baig, S.P.E. Nishi, Galveston, TX, p.A1826
- P119 Pre- and Post-Procedure Lung Perfusion Comparison in Patients Treated with Mechanical Thrombectomy for Intermediate-Risk Pulmonary Embolism (PE)/S.** Gayen, V. Upadhyay, S. Dadparvar, M. Kumaran, G.J. Criner, P. Rali, Philadelphia, PA, p.A1827
- P120 Half Dose and Rescue Thrombolysis in Acute Pulmonary Embolism from Covid-19/M.Y.E.** Pereyra-Borlongan, Quezon City, Philippines, p.A1828
- P121 To Warfarin or Not to Warfarin, That Is the Question!/A.** Soni, A. Muthyala, S. Sasidharan, R. Shrestha, J. Scott, R.A. Rosiello, Worcester, MA, p.A1829
- P122 Bruit Leading to Pulmonary Vein Thrombosis Detection/C.** Molloy, L.E. Meece, C. Donatelli, Des Moines, IA, p.A1830
- P123 A Case of Pulmonary Vein Thrombosis Extending to Left Atrium Leading to Multiple Embolic Strokes in a Patient with Lung Cancer/P.** Khamooshi, N. Haghani Rad, C.-Y. Kang, V. Reyes Pinzon, R. Atluri, Chicago, IL, p.A1831
- P124 A Case of Recurrent Right Ventricular Thrombus/J.** Kim, R. Huang, J. Yeo, T. Nagamine, K. Miyazaki, Honolulu, HI, p.A1832
- P125 Thrombocytopenia Associated with Sub-massive Acute Pulmonary Embolism After Left Leg Massage: Consumption or Donation?/I.I.** Ikwu, L. Rougui, V. Poddar, A. Thomas, Washington, DC, p.A1833
- P126 Clot-in-Transit Crossroads/N.** Sahu, C. Dostal, A. Zamir, Bethlehem, PA, p.A1834
- P127 Right Ventricular Thrombus with Pulmonary Embolism in a COVID-19 Patient/S.** Brahmandam, S. Brahmandam, B. Moldoveanu, J.J. Guardiola-Sala, Louisville, KY, p.A1835
- P128 Pulmonary Embolism in a Patient with Ocular Myasthenia/N.** Biswas, Kolkata, India, p.A1836
- P129 Bilateral Thoracic Outlet Syndrome with Venous Collateralization and Associated Pulmonary Embolism and Chronic Thromboembolic Pulmonary Hypertension/S.** Anderson, R. Katragadda, C. McLaughlin, Las Vegas, NV, p.A1837
- P130 A Rare Coincidence - A Case of Congenital Absence of the Right Pulmonary Artery with Recurrent Contralateral Pulmonary Embolus/S.** Sahni, Y. Soe-Htwe, G.R. Pesola, New York, NY, p.A1838
- P131 Not Every Filling Defect Is a Thrombus/G.I.** Centeno-Saenz, C.S. Alvarez Maldonado, Mexico City, Mexico, p.A1839
- P132 Improvement of Pulmonary Hypertension Due to Pulmonary Tumor Thrombotic Microangiopathy with Carboplatin and Gemcitabine/H.** Tran, K.H. Melamed, N. Kamangar, Sylmar, CA, p.A1840
- P133 Cement Pulmonary Embolism: A Complication of Percutaneous Vertebroplasty/U.** Okoli, H.E. Alhariri, R. Jani, H. Singh, C. Jani, S. Podder, U.K. Ghori, Cambridge, MA, p.A1841
- P134 Pulmonary Artery Dissection: A Rare Presentation of Chronic Thromboembolic Pulmonary Hypertension/A.** Yeo, E. Crossey, E.S. Klings, Boston, MA, p.A1842

- P135** **When the Clot Comes Back: An Unusual Case of Pediatric Chronic Thromboembolic Pulmonary Hypertension (CTEPH)/**H. Belt, M.M. Cirulis, M.W. Dodson, Salt Lake City, UT, p.A1843
- P136** **Chronic Thromboembolic Pulmonary Hypertension: A Case of Severely Dilated Pulmonary Arteries/A.S.** Adebola, C. Small, T. Pelleg, Corvallis, OR, p.A1844
- P137** **CTEPH Following Lung Transplantation for Interstitial Lung Disease/C.** Vahdatpour, C. Eagan, S.S. Kalra, H.M. Alnuaimat, A. Ataya, Gainesville, FL, p.A1845
- P138** **Successful Outcome of Clot-in-Transit with Early Initiation of VA-ECMO/A.** Wasim, A. Jose, N. Ay, Boston, MA, p.A1846

CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A57 FILLMORE: CTED, CTEPH, AND COVID9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P879** **Inpatient Procedures for Chronic Thromboembolic Pulmonary Hypertension; National Analysis of United States Inpatient Hospitalizations/G.** Emasoga, K.C. Meremikwu, J. Shi, T. Chkhikvadze, Brooklyn, NY, p.A1847
- P880** **Cardiopulmonary Exercise Testing in Patients with Persistent Dyspnea After Acute Pulmonary Embolism/L.A.** Mounsey, A.S. Witkin, C.C. Hardin, J.M. Rodriguez-Lopez, Boston, MA, p.A1848
- P881** **Pre-Operative Soluble ST2 Concentration Is Not Predictive of Post-Operative Hemodynamics or Pulmonary Thromboendarterectomy Complications/E.A.** Keiler, K.M. Kerr, N.H. Kim, M.M. Madani, D.G. Papamatheakis, D.S. Poch, V. Pretorius, J. Yang, T.M. Fernandes, La Jolla, CA, p.A1849
- P882** **Venous Thromboembolism Is Associated with Right Sided Cardiac Dysfunction and Mortality in Patients with Sick Cell Disease/M.** Spring, J. Newman, S. Khan, R.C. Lawrence, B. Scarpato, R. Strykowski, A. Yeo, R.T. Cohen, S.M. Nouraie, E.S. Klings, Boston, MA, p.A1850
- P883** **Predictors of Pulmonary Embolism in Hospitalized Patients with COVID-19/J.** Bahk, B. Narasimhan, K.S. Ho, M. El Halabi, M.J. Alexander, J. Filopei, L. Yesha, R. Lookstein, D. Steiger, New York, NY, p.A1851

- P884** **Utilization of IMPROVED VTE Risk Score for Venous Thromboembolism (VTE) Risk Stratification in COVID-19 Pneumonia/H.** Tahanulquiwa, M. Goel, W. Zaidi, A. Aggarwal, S. Kumar, V. Tegeltija, N. Rao, A. Ahmed, Rochester Hills, MI, p.A1852

BASIC • CLINICAL

THEMATIC POSTER SESSION

A58 BACTERIAL INFECTIONS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P965** **CT Guided Percutaneous Drainage of Large Lung Abscesses Successfully Avoiding Surgical Intervention/H.M.** Thomas, P.C. Jorge, S. Arshad, Tampa, FL, p.A1853
- P966** **Wrong Bug in Wrong Space - A Case of Spontaneous Bacterial Empyema/B.S.K.R.** Sabbula, R. Sharma, R.R. Sanivarapu, P.K. Upadrista, J. Iqbal, J. Akella, East Meadow, NY, p.A1854
- P967** **A Rare Case of Pulmonary Sequestration with Atypical Symptoms in an Adult/M.** Waqas, S. Tariq, M.Z. Munir, M.T. Latif, Waterbury, CT, p.A1855
- P968** **Mediastinitis After Ivor Lewis Resection of Esophageal Cancer/N.L.** Miller, J.N. Greene, K.E. Finley, J.J. John, Tampa, FL, p.A1856
- P969** **A Case of Stenotrophomonas Maltophilia Empyema/K.C.** Guice, N. Sharif, A. Azim, K. Gannamraj, M. Haltom, J.A. Lanfranco, I.H. Romero-Legro, Memphis, TN, p.A1857
- P970** **A Peculiar Case of Lemierre's Syndrome/D.** Ahmed, H. Channa, J.D. Packer, R.C. Holladay, Shreveport, LA, p.A1858
- P971** **A Large Infected Bronchogenic Cyst In a Dangerous Location: Partial Resection as a Solution/A.** Elkhapery, C. Iyer, L.K.T. Boppana, C. Niu, M.-Y. Chow, L.B. Lerner, Rochester, NY, p.A1859
- P972** **Interferon-Producing Activity of Mononuclear Peripheral Blood of Patients with Community-Acquired Pneumonia Associated with Non-Alcoholic Fatty Liver Disease/R.** Razumnyi, Dnipro, Ukraine, p.A1860
- P973** **When It's Not a Contaminant: A Case of Corynebacterium Infection/L.** Harper, K. Lyn-Kew, Denver, CO, p.A1861

- P974 Polymicrobial Multi-Drug Resistant Empyema: The Chicken or the Egg?**/K. Golubykh, I. Kovalenko, H.M.S. Qurashi, T. Saleem, N. Ramesh, Harrisburg, PA, p.A1862
- P975 A Rare Case of Empyema Necessitans**/N. Kika, I. Boumaza, I. Wong, Brooklyn, NY, p.A1863
- P976 When Pneumonia Isn't Just Pneumonia - Necrotizing Pneumococcal Pneumonia with Empyema, Bronchopleural Fistula, and Hydropneumothorax in a Young, Immunocompetent Patient**/J.J. Chacko, M. Ameri, L. Villareal, Galveston, TX, p.A1864
- P977 Strangers in the Lung: A Rare Case of Pseudomonas Fluorescens Complex Pneumonia**/Q.C. Bongers, K.M. Kunisaki, Minneapolis, MN, p.A1865
- P978 Achromobacter Xylooxidans/Denitrificans: An Important Emerging Respiratory Pathogen**/B. Ohiokpehai, D. Seepedad, J. Gharbin, K. Pais, K. Davis, A. Thomas, Washington, DC, p.A1866
- P979 Pleural Fluid Analysis Finding of a Very Low pH in the Absence of Empyema in a Case of Post-Obstructive Pneumonia**/J. Wang, D. Patel, Gainesville, GA, p.A1867
- P980 Rare Case of Moraxella Catarrhalis Bacteremia in an Immunocompetent Patient**/R. Anwar, T. Smith, Albany, NY, p.A1868
- P981 Impact of Proper Antibiotics Use in Prognosis of Mild Community-Acquired Pneumonia, Korean Nationwide Study**/S. Kim, H.K.Y. Yoon, J.-P. Myong, T.J. An, Seoul, Korea, Republic of, p.A1869
- P982 Positive Polymerase Chain Reaction on Culture-Negative Bronchoalveolar Lavage May Predict Future Culture-Positive Pneumonia in Critically Ill Patients**/E.E. Rabin, M. Kang, J.M. Walter, C. Qi, C. Gao, B.D. Singer, R.G. Wunderink, C. Pickens, Chicago, IL, p.A1870
- P983 Pseudomonas Aeruginosa Antibiotic Resistance and Virulence: A Tale of Two Stories**/M. Vaillancourt, A.C. Milesi Galdino, P.A. Jorth, Los Angeles, CA, p.A1871
- P984 Agree to Agree? Pilot Deployment of Artificial Intelligence Pneumonia Detection in Seven Emergency Departments**/J.R. Carr, J. Irvin, K. Kuttler, M. Lungren, N.C. Dean, Salt Lake City, UT, p.A1872
- P985 Validation of IDSA/ATS Guidelines for Intensive Care Unit Admission in Patients Older Than 80 Years Old with Community-Acquired Pneumonia: A Multicenter Study**/M. Ferrer, C. Cilloniz Campos, J.M. Pericas, L. Serrano, R. Méndez Ocaña, H.J. Peroni, A. Gabarrus, L.A. Ruiz, R. Menendez, R. Zalacain, A. Torres, Barcelona, Spain, p.A1873
- P986 Etiology and Outcome of Pleural Effusion at Butare University Teaching Hospital, Butare, Rwanda**/S. Jean Pierre, A. Bekele, K.H. Dawit, T. H. Gebremariam, O. Niyigena, C. Niyonzima, A. Tuyizere, C.B. Sherman, N.W. Schluger, H. Grosu, H. Yusuf Ahmed, Kigali, Rwanda, p.A1874
- P987 Mucus Properties Associate with Clinical Outcomes in Asians with Chronic Obstructive Pulmonary Disease**/O. Meldrum, P.Y. Tiew, H. Xu, T.K. Jaggi, J.A. Abisheganaden, S.H. Chotirmall, Singapore, Singapore, p.A1875
- P988 Tissue Plasminogen Activator (TPA) and DNase Treatment for Pleural Infections Among Different Specialties with Different Chest Tubes Sizes**/H. Yousaf, C. McLouth, R. Berger, Lexington, KY, p.A1876
- P989 Vacuum-Assisted Open Window Thoracostomy and Rethoracotomy in Management of Lung Abscess and Gangrene**/S. Yermashkevich, V. Petukhov, M. Kuntsevich, Vitebsk, Belarus, p.A1877
- P990 Analysis for Composition Ration and Drug-Sensitivity Distribution of Phlegmy Patogenic Bacteria from Acute Exacerbation of COPD Inpatients**/Y. Hu, Y. Guo, T. Ma, Changchun, China, p.A1878
- P991 Use of Fibrinolytics for Infectious Pleural Effusions - Alteplase Vs Alteplase and Dornase, a Real-World Experience in a Major Tertiary Referral Center**/S. Perinkulam Sathyanarayanan, K. Hamid, M. Hamza, K. Taggart, H. Ateeli, F.G. Jamous, Sioux Falls, SD, p.A1879
- P992 A Rare Bacterial Superinfection in Immunocompetent COVID-19 Patient, a Case Report**/M. Hayrabadian, R. Sreedhar, Springfield, IL, p.A1880

BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
A59 TUBERCULOSIS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area K, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P994 Immune Profiling and Paraffin Tissue Immunostaining in a Case of Subclinical Pulmonary Tuberculoma/P. Marty, M. Shah, V. Van Keulen, C. Erskine, A. Roden, J. Wilson, T. Peikert, P. Escalante, Rochester, MN, p.A1881

P995 Hemophagocytic Lymphohistiocytosis as the Presenting Finding in a Pregnant Patient with Disseminated Tuberculosis/C. Baker, K. Sayad, N. Antonios, E. Kalimullah, Chicago, IL, p.A1882

- P996 An Unexpected Return: TB Reactivation After COVID Infection/J. Bahgat, F. Ilyas, S. Saidy, K. Kashinsky, F.C. Hastrup, Stamford, CT, p.A1883**
- P997 Tuberculosis Facilitating Diffuse Alveolar Hemorrhage in Dermatomyositis/D. Briganti, C.K. Hwe, J.R. Vintch, Torrance, CA, p.A1884**
- P998 A Case of Miliary Tuberculosis and Anthracosis/R. Krakora, C. Chou, D.C. Weir, J. Mailman, New York, NY, p.A1885**
- P999 Severe Tuberculosis Sepsis and Acute Respiratory Distress Syndrome Requiring Veno-Venous Extracorporeal Membranous Oxygenation Support in a Young Immunocompetent Female/J. Whealdon, M. Forster, C. Alviar, C. Caplan-Shaw, R. Postelnicu, D. Pradhan, New York, NY, p.A1886**
- P1000 An Elusive Tuberculosis/G. Mudigonda, M. Bhamrah, P. Krishnan, Shreveport, TX, p.A1887**
- P1001 A Case of Disseminated TB with Genitourinary Involvement/K. Aribindi, N. Sood, Sacramento, CA, p.A1888**
- P1002 Development of Achalasia and Broncho-Esophageal Fistula in the Setting of Active Pulmonary Tuberculosis/S. Tabba, P. Hosseini, W.T. Farrington, S. Sannapaneni, G.L. Weinstein, Dallas, TX, p.A1889**
- P1003 Rare Presentation of Primary Tuberculosis: A Case Report/A. Ashamo, A.S. Seid, C.B. Sherman, A.B. Bindegdie, Addis Ababa, Ethiopia, p.A1890**
- P1004 Active Tuberculosis Reactivation After COVID-19 Infection/K. Johnson, U. Dhamrah, E.C. Bradley, S. Ricker, A.J. Astua, Elmhurst, NY, p.A1891**
- P1005 An Unusual Case of Aspiration Pneumonia/S. Choudhury, A. Chohan, R. Dadhwal, A. Vakil, Corpus Christi, TX, p.A1892**
- P1006 Multiple Tuberculosis Brain Abscesses in an Immunocompetent Adult/R. Diaz Lankenau, S.S. Wu, R. Rico, Miami, FL, p.A1893**
- P1007 Tuberculosis Diagnosis After COVID-19/R.C. Flowers, C. Trujillo, M. Andrew, R. Rico, Miami, FL, p.A1894**
- P1008 Disseminated Tuberculosis Masquerading as a Bladder Tumor/B.H. Lashari, V. Dronamraju, T. Thakur, P.B. Desai, Philadelphia, PA, p.A1895**
- P1009 Tuberculosis in the Abdomen: A Clinical Dilemma/M. Patel, H. Patel, K. Sadik, Augusta, GA, p.A1896**
- P1010 Endobronchial Tuberculosis (EBTB) - A Hidden Danger/A. Chakraborti, P.S. Patel, A. Fernandes, S. Shah, B. Bangash, Newark, NJ, p.A1897**
- P1011 A Case of Pulmonary TB Presenting as Pseudo-Bechet's Disease/E. Lim, C.V. Choong, Singapore, Singapore, p.A1898**
- P1012 Simultaneous Diagnoses of Primary TB and Squamous Cell Carcinoma from Cavitary Lung Mass Biopsy/E. Smallwood, B. Giri, S. Pourshahid, A. Dursun, Roanoke, VA, p.A1899**
- P1013 Persistent Tuberculous Pleural Effusion Despite Months-Long Anti-tuberculosis Treatment/A. Arjuna, M.T. Olson, S. Suady Barake, Phoenix, AZ, p.A1900**
- P1014 Post Covid-19 Tuberculosis: Reactivation of Latent TB in the Pleura/Z.A. Creech, G.T.D. Truong, M. Velagapudi, Omaha, NE, p.A1901**
- P1015 Unusual Lung Mass Masquerading as Tuberculosis/K. Nangrani, A. Kumari, A. Shivalingaiyah, N. Mesiha, Brooklyn, NY, p.A1902**
- P1016 A Rare Diagnostic Challenge: TB Meningitis in an Immunocompetent Host/L. Ran, M. Lee, Los Angeles, CA, p.A1903**
- P1017 A Case Report of a 48-Year-Old Female with Covid-19 Pneumonia and Pulmonary Tuberculosis Presenting with Acute Respiratory Distress Syndrome/M.A.G. Donguines, M.R. Gabitan, Quezon City, Philippines, p.A1904**
- P1018 TB or Not TB, That's the Question: Drug Induced Hepatotoxicity DIH or Drug Induced Liver Injury DILI in Patients with Underlying Hepatic Impairment/M.D.C. Valdes Bracamontes, H. Patel, T. Ullah, F. Bagheri, Jamaica, NY, p.A1905**
- P1019 A Rare Case of Multifocal Tuberculosis: Pulmonary, Otolaryngology and Osteoarticular in an Immunocompetent Patient/F.C. Fouh Mbindi, K. Marc Olivier, K. Alima, D. Eudoxie, A.B. Jean Marcel, B.G. Virginie Constance, N. Abdoukarim Severin, H. Kigninlman, K. Boko Alexandre, K. Ngoran Bernard, Abidjan, Côte D'Ivoire, p.A1906**
- P1020 "Cryptic Bacilli": A Case of Pleural and Pericardial Effusion in a 48 Years Old Male with a Histopathologic Findings Consistent of Tuberculosis/J.-L.S. Saniatan, Quezon City, Philippines, p.A1907**
- P1021 Testicular Tuberculosis/I... Budi, I. Djaharuddin, D.J.M.S. Madolangan, Makassar, Indonesia, p.A1908**
- P1022 A Case of Tuberculous Pleural Effusion/S. Ghaus, B. Dang, Los Angeles, CA, p.A1909**
- P1023 Pleural Tuberculosis: A Modern Era Diagnostic Challenge/F.W. Wireko, L. Rougui, S. Mahbour, I.E. Eze, A. Thomas, V. Poddar, Washington, DC, p.A1910**
- P1024 Tuberculosis Associated Chronic Lung Disease Status and Transforming Growth Factor Beta1 in a Post-Tuberculosis HIV Infected Cohort in Uganda/A. Ddungu, B. Kirenga, K.M. Kunisaki, C.-W. Sekaggya, B. Castelnuovo, L. Davis, D. Meya, Kampala, Uganda, p.A1911**

- P1025 The Effects of Indoor Air Pollution on Peripheral Innate Lymphocyte Abundances in Children Exposed to Tuberculosis/R.J. Blount, M. Zavala, M.R. Segal, H. Phan, T. Trinh, T. Tran, V.T. Thanh, J. Zabner, J. Balmes, N.V. Nhung, P. Nahid, D. Lewinsohn, D. Lewinsohn, Iowa City, IA, p.A1912**
- P1026 The Effects of BCG Vaccination on Tuberculosis Infection in Child Household Contacts/N. Nikiforenko, M. Lozovskaya, Saint Petersburg, Russian Federation, p.A1913**
- P1027 Plasma Levels of Anti-Tubercular Drugs in Extra-Pulmonary Tuberculosis (Lymph Nodes and Pleural Effusion) and Its Association with Treatment Outcomes/A. Mohan, B. Baldwa, T. Velpandian, U. Singh, R. Pandey, D. Mitra, A.S. Bhalla, K. Madan, V. Hadda, S. Mittal, P. Tiwari, R. Guleria, New Delhi, India, p.A1914**
- P1028 Clinical Presentations and Outcome of Tuberculosis in Infancy: A Tertiary Care Center Experience in Bangladesh/N. Akand, P. Sarkar, M. Kamruzzaman, S. Tahura, M.J. Alam, Dhaka, Bangladesh, p.A1915**
- P1029 Risk Factors for False-Negative Results of T-SPOT.TB in Smear-Positive Pulmonary Tuberculosis/Y. Kishimoto, S. Sugiyama, K. Shiratori, K. Okawa, H. Nakayasu, T. Masuda, S. Takahashi, Y. Kitahara, S. Sakurai, M. Saigusa, T. Akamatsu, A. Yamamoto, S. Morita, K. Asada, T. Shirai, Shizuoka, Japan, p.A1916**
- P1030 Diagnostic Accuracy of Interferon-Gamma Release Assays for Diagnosis of Smear-Negative Pulmonary Tuberculosis: A Systemic Review and Meta-Analysis/P. Lertjitbanjong, D. Eksombatchai, S. Chesdachai, P.T. Taweedsedt, A. Pornchai, C. Thongprayoon, Z. Wang, T. Petnak, Memphis, TN, p.A1917**
- P1031 Epidemiology of Hemoptysis and Its Relation to Treatment Outcomes in a Developing Country/B.S. Virk, S. Chakrabarti, N.K. Gupta, P. Ish, N. Gupta, R. Kumar, R.N. Misra, P. Garg, Delhi, India, p.A1918**
- P1032 Nephrotoxicity Consideration in DR TB Patients Treated with Injectable Short Term Regimen (STR) with Prior Comorbidities/A. Aldiani, F. Hatim, G. Adyasiwi, D. Handayani, F. Isbaniah, H. Agustin, E. Burhan, P.Z. Soepandi, Jakarta, Indonesia, p.A1919**
- P1033 Tuberculosis and COVID-19: A Double Jeopardy of Healthcare?/A. Alaga, C.T. A Hing, G. Balakrishnan, N.Y.S. Mohd Yusoff, A.F. Ahmad, C. Huan Keat, Alor Setar, Malaysia, p.A1920**
- P1034 Multicenter Prospective Study on Gouty Arthritis and Predictors of Outcomes Among Filipino Patients on Anti-Tuberculosis Treatment/A.K.R. Chua, A.O. Urbano-Guelos, Batac City, Philippines, p.A1921**

- P1035 Retrospective Analysis of Diagnosis and Outcomes of Patients with Culture-Negative Tuberculosis in a North London Hospital/M. Blank, S. Lozewicz, London, United Kingdom, p.A1922**

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

A60 PULMONARY FIBROSIS: ANIMAL AND CELL CULTURE MODELS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area D, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P229 Hypoxia, Cytokines, and Growth Factors Exhibit Distinct and Synergistic Roles in Transforming Normal Pulmonary Fibroblasts into Persistently Activated Fibroblasts/C.-J. Hu, A. Laux, L. Wang, H. Zhang, M.G. Frid, S. Kumar, S. Riddle, M. Li, K.R. Stenmark, Aurora, CO, p.A1923**
- P230 Gut Microbiota Modulates Lung Fibrosis Severity Following Acute Lung Injury /O.S. Chioma, L. Hesse, E.K. Mallot, A. Chapman, J.C. Van Amburg, H. Wu, B. Shah-Gandhi, M.B. Piazuelo, J.E. Johnson, G.R. Bernard, S.R. Bodduluri, S. Davison, H. Bodduluri, S. Bordenstein, W.P. Drake, Nashville, TN, p.A1925**
- P231 Fibrotic Lung Matrix Derived Hydrogels as an In-Vitro 3D Platform for Drug Discovery in Idiopathic Pulmonary Fibrosis/J. Fernandez Davila, D.W. Moore, J. Khan, A.C. Collins, M. Lemma, C.S. King, S.D. Nathan, L.R. Rodriguez, G.M. Grant, J.L. Moran, Manassas, VA, p.A1926**
- P232 A Novel Function of Inositol in Reducing Pulmonary Fibrosis Progression/L. Li, J.-M. Li, D.C. Yang, A. Linderholm, L. Franzi, S.-W. Hsu, C.-H. Chen, Davis, CA, p.A1927**
- P233 Matrix Stiffness Regulates Macrophage Phenotype in Pulmonary Fibrosis/C. He, J.L. Larson-Casey, Y. Zhu, Y. Zhou, A.B. Carter, Birmingham, AL, p.A1928**
- P234 Using Adeno-Associated Virus Vectors for Cell-Specific CRISPR-Cas9 Mediated Knockouts in Mice Models of Lung Fibrosis/E.S. Charette, G.J. Fonseca, Montreal, Canada, p.A1929**
- P235 Transglutaminase Type II (TGM2) Expression and Tissue Localization Contributes to Changes in Extracellular Matrix (ECM) During Idiopathic Pulmonary Fibrosis (IPF) Development/A. Estrada-Bernal, T. Trudeau, J. Sembrat, O. Eickelberg, Pittsburgh, PA, p.A1930**

- P236 Anoctamin-1 Is a Profibrotic Chloride Channel That Is Induced by TGF-Beta and Contributes to Lung Myofibroblast Differentiation/N.O. Dulin, A.A. Mongin, S. Orbeta, E.B. Reed, G.M. Mutlu, Chicago, IL, p.A1931**
- P237 One Carbon Metabolism Is Required for Glycine Biosynthesis and Collagen Production in Lung Fibroblasts/R.B. Hamanaka, A.Y. Meliton, R. Cetin-Atalay, P.S. Woods, K.A. Sun, O. Shamaa, G.M. Mutlu, Chicago, IL, p.A1932**
- P238 BAX Inhibitor 1 (BI-1) Promotes Survival Against ER Stress in Idiopathic Pulmonary Fibrosis/D.W. Moore, J.G. Fernandez Davila, S. Bui, A.C. Collins, M. Lemma, C.S. King, S.D. Nathan, L. Rodriguez, G.M. Grant, Manassas, VA, p.A1933**
- P239 Tripartite Motif Protein 72 (TRIM72) Regulates Renewal Ability and Senescence of Alveolar type-2 Epithelial Cells in Bleomycin-Induced Pulmonary Fibrosis/N. Nagre, G. Nicholson, R. Rathi, J. Lockett, R. Gowanda, D. Duffy, Norfolk, VA, p.A1934**
- P240 Cellular Stress-Induced MNK/eIF4E Ser209 Phosphorylation and Activation in Lung Derived Mesenchymal Cells/N.M. Walker, P. McLinden, Y. Ibuki, R. Vittal, V.N. Lama, Ann Arbor, MI, p.A1935**
- P241 ASK1p38 Signaling Is Down-Regulated in Bleomycin-Induced Pulmonary Fibrosis in Aged Mice/S. Dos Santos Valenca, B.E. Dong, J.J. Uriarte, E.M. Gordon, C.M. Waters, Lexington, KY, p.A1936**
- P242 Radiation Induces a Pro-Fibrotic Pattern of Metabolic Reprogramming in Mice/J. Pierre-Louis, M.A.T. Freeberg, S.V. Camus, B.B. Szomju, T.H. Thatcher, V.A. Yakovlev, P.J. Sime, Richmond, VA, p.A1937**
- P243 Mechanical Properties of Enzymatically Digested Bovine Lung Collagen Fibers/Y. Deng, J. Herrmann, M.L. Smith, D.M. Roblyer, E. Bartolak-Suki, B. Suki, Boston, MA, p.A1938**
- P244 Clearance of Apoptotic Alveolar Epithelial Cells by Macrophages Mediates Fibrotic Remodeling/L. Gu, J.L. Larson-Casey, J. Kang, A.B. Carter, Birmingham, AL, p.A1939**
- P245 The Role of Phosphate as a Novel Mediator of Cell Senescence in Lung Fibrosis/M.J. Hirsch, S. Bollenbecker, A.J. Smith, M. Easter, S. Vang, J.W. Barnes, S. Krick, Birmingham, AL, p.A1940**
- P246 Chemical Activation of Protein Phosphatase 2A Counters Transforming Growth Factor Beta (TGFβ)-Dependent Induction of Extracellular Matrix Proteins in Fibroblasts/Z. Sattar, S. Alam, J. Reece, B. Soto, R.R. Ortega, A. Wyman, M. Ohlmeyer, P. Geraghty, Brooklyn, NY, p.A1941**
- P247 Involvement of FGF21 in Pulmonary Fibrosis/M. Ghanem, A. Justet, M. Hachem, T. Boghanim, A. Vadel, M. Jaillet, A. Mailleux, B. Crestani, Paris, France, p.A1942**
- P248 Reduction in Systemic Noradrenaline Does Not Suppress Bleomycin Induced Lung Fibrosis/H. Sun, C. Perry, A. Ghincea, T. Baerenthaler, E. Herzog, New Haven, CT, p.A1943**
- P249 Improved Treatment of Pulmonary Fibrosis Using Nanomedicine/L. Ferguson, E. Ma, J. Wu, M. Beers, J. Brenner, Philadelphia, PA, p.A1944**
- P250 Treprostinil Exerts Anti-Fibrotic Effects via the Prostanoid Receptor Subtype EP2 in Human Lung Fibroblast/M.R. Corboz, D. LaSala, T.L. Nguyen, D. Cipolla, W. Perkins, R.W. Chapman, Bridgewater, NJ, p.A1945**
- P251 Effects of Anti-Fibrotic Standard-of-Care and Senolytic Drugs on Senescent Human Lung Fibroblasts/S. Garcia, M. Hohmann, M.S. Espindola, C.M. Hogaboam, Los Angeles, CA, p.A1946**
- P252 Fenbendazole Attenuates Bleomycine-Induced Pulmonary Fibrosis in Mice via Suppression of Fibroblasts-to-Myofibroblasts Differentiation/K. Xu, W. Zhao, X. Guo, W. Zhao, X. Chen, X. Pan, L. Wang, J. Yang, G. Yu, Xinxiang, China, p.A1947**
- P253 Differential DNA Methylation in IPF Fibroblasts Is Associated with Increased Expression of DNMT3a, TET2, and UHRF1/A. Scruggs, G. Ligresti, S.K. Huang, Ann Arbor, MI, p.A1948**
- P254 Aberrant Regulation of Lactate Dehydrogenase by TGF-β in IPF Fibroblasts/R. Nho, K. Glenn, H. Bone, J. Prasad, J.C. Horowitz, Columbus, OH, p.A1949**
- P255 Regulation of SMAD7 and SOCS1 Through Metabolic and Epigenetics Crosstalk by Mesenchymal Stem Cell-Derived Humoral Factor STC1 Induces Anti-Fibrotic and Anti-Inflammatory Effects in Bleomycin-Induced Lung Fibrosis Model/S. Ohkouchi, T. Irokawa, H. Ogawa, H. Kurosawa, Sendai, Japan, p.A1950**
- P256 ZNF365 Downregulation Induces Senescence in Lung Fibroblasts and Epithelial Cells/J.M. Pérez Huacuja Urista, M. Maldonado, F. Toscano-Marquez, R. Ramírez, C. Becerril, Y. Romero, M. Selman, A. Pardo, Mexico City, Mexico, p.A1951**
- P257 Canonical WNT Pathway Activation in Bleomycin-Induced Lung Fibrosis/S. Pontis, Parma, Italy, p.A1952**
- P258 Transforming Growth Factor-β Induces Changes in the Volatile Metabolite Profile of Human Lung Cells In Vitro/C. Hayton, W. Ahmed, J. Blaikley, P. Cunningham, K. Piper-Hanley, N. Chaudhuri, C.T. Leonard, S.J. Fowler, Manchester, United Kingdom, p.A1953**

- P259 The Role of Fibulin-5 in Lung Fibroblasts/S.** Saito, Y. Zhuang, New Orleans, LA, p.A1954
- P260 Isoflurane Anesthetic Attenuates Lung Inflammation and Fibrosis/F.** Gonzalez De Los Santos, T. Liu, A. Rinke, A. Ando, G. Pulivendala, S. Phan, Ann Arbor, MI, p.A1955
- P261 Computational Drug Repositioning Approach Identifies Polo-Like Kinase Inhibitors as Potential Therapeutics for Pulmonary Fibrosis/T.** Imakura, S. Sato, K. Koyama, H. Ogawa, T. Niimura, K. Murakami, Y. Yamashita, K. Haji, N. Naito, K. Kagawa, H. Kawano, Y. Zamami, K. Ishizawa, Y. Nishioka, Tokushima, Japan, p.A1956
- P262 p53 Restricts Lung Fibroblast Proliferation and Extracellular Matrix Production/L.** Fan, A. Kumar, D. Korir, S. Shetty, Tyler, TX, p.A1957
- P263 A Novel Purified Exosome Product Ameliorates the Profibrotic Effects of TGF- β on Human Lung Fibroblasts In Vitro/B.F.** Samhour, F. Wang, W. Xuan, S. Wang, T. Peterson, P. Stalboerger, A. Behfar, R. Vassallo, Rochester, MN, p.A1958
- P264 Single Cell RNA-seq Analysis of Fibrocytes in Silica Induced Mouse Pulmonary Fibrosis Model/K.** Koyama, H. Kawano, A. Mitsuhashi, K. Murakami, T. Imakura, Y. Yamashita, K. Haji, K. Kagawa, S. Sato, H. Ogawa, Y. Nishioka, Tokushima, Japan, p.A1959
- P265 Lung Fibroblast Phenotypes Are Regulated by Micro-Environmental Culture Conditions/C.** Novak, S. Ghadiali, M.N. Ballinger, Columbus, OH, p.A1960
- P266 Discovery of Intra-Pulmonary Adipose Tissue Deposits in Pulmonary Fibrosis/K.** El Hussein, N. Pote, M. Jaillet, P. Mordant, H. Mal, J. Fria-Masson, R. Borie, A. Cazes, B. Crestani, A. Mailleux, Paris, France, p.A1961
- P267 Proteasome Subunit Expression Is Decreased in the IPF Alveolar Epithelium and Contributes to Abnormal Protein Aggregation/W.** Roque, S. Poli De Frias, Philadelphia, PA, p.A1962
- P268 Thyroid Hormone Signal Attenuates Pulmonary Fibrosis Through Cell Interaction and Communication in Bleomycin-Induced Mouse Lung/L.** Wang, Z. Li, J. Yang, P. Yan, X. Pan, H. Yuan, M. Zhao, R. Wan, G. Yu, Xinxiang, China, p.A1963
- P269 Mitochondrial Characterization in the Setting of Telomere Dysfunction/D.I.** Sullivan, F. Bello, A. Hinchie, A. Gil Silva, L. Giordano, L. Edmunds, B.A. Kaufman, M.J. Jurczak, J.K. Alder, Pittsburgh, PA, p.A1964
- P270 Integrated Bioinformatics Analysis Identifies Established and Novel TGF β 1-Regulated Genes Modulated by Anti-Fibrotic Drugs/A.C.** Wilson, J.W. Chiles, A. Shah, D. Chanda, P. Lakshman, J. Mobley, E.R. Neptune, V.J. Thannickal, M.-L.N. McDonald, Birmingham, AL, p.A1965
- P271 Baseline Stiffness Modulates the Non-Linear Response to Stretch of the Extracellular Matrix in Pulmonary Fibrosis/I.** Almendros, C. Júnior, M.L. Narciso, E. Marhuenda, R. Farre, D. Navajas, J. Otero, N. Gavara, Barcelona, Spain, p.A1966
- P272 Selective Expression of MOXD1 in IPF Fibroblast Correlates with Cell Senescence/L.** Rosas, M. Jia, T. Cruz, M. Kapetanaki, T. Tabib, J. Sembrat, S. Stacey, B. Reader, V. Peters, M. Riley, K. Kralovic, R.A. Lafyatis, A.L. Mora, P.V. Benos, M. Rojas, Columbus, OH, p.A1967
- P273 Myosin VB Transports Fibronectin Containing Vesicles and Facilitates Fibronectin Secretion from Human Pleural Mesothelial Cells/Y.** Choo, T. Sakai, R. Ikebe, A. Jeffers, S. Idell, T.A. Tucker, M. Ikebe, Tyler, TX, p.A1968
- P274 Elastin Degradation Products Differentially Respond to Anti-Fibrotic Medications/D.** Nagel, R.M. Kottmann, Rochester, NY, p.A1969
- P275 Inhibition of p38 Promotes Lung Myofibroblast De-Differentiation/S.M.** Fortier, L.R.K. Penke, M. Peters-Golden, Ann Arbor, MI, p.A1970
- P276 A Role for Distinct Lymphatic Endothelial Cell Subsets in Pulmonary Lymphangiogenesis/E.** Crossey, S. Carty, M.R. Jones, A. Fine, Boston, MA, p.A1971
- P277 New Insights on Idiopathic Pulmonary Fibrosis Revealed by Proteomics and Lipidomics Analysis of Human Tissue Cores/G.** Clair, J.E. Kyle, J.T. Melchior, H.M. Olson, V.L. Paurus, K.J. Bloodsworth, J.C. Schupp, J.E. McDonough, W.A. Wuyts, B. Vanaudenaerde, N. Kaminski, Richland, WA, p.A1972
- P278 Increases in Glutathione-Dependent Oxidation of Collagen 1 Occur in Idiopathic Pulmonary Fibrosis and Are Associated with Fibroblast Activation/Y.M.W.** Janssen-Heininger, J.E. Druso, C. Chia, E. Corteselli, E. Elko, R. Aboushousha, V. Anathy, Burlington, VT, p.A1973
- P279 Tumor Suppressor Tuberin (TSC2) Negatively Regulates the Expression of Sphingolipid Metabolism Genes and Functions/J.J.** Yu, E. Zhang, Cincinnati, OH, p.A1974
- P280 Fibroblast Heterogeneity in Normal and Fibrotic Mouse Lung/C.** Trempus, B. Papas, X. Xu, C. Bortner, E. Scappini, A.-K.T. Perl, S. Garantziotis, Research Triangle Park, NC, p.A1975
- P281 Mitochondrial Uncoupling Protein-2 Promotes Aerobic Glycolysis and Redox Imbalance in Age-Related Lung Fibrosis/S.** Rangarajan, P. Londono, C.M. Evans, V.J. Thannickal, Aurora, CO, p.A5550
- P282 Durotaxis in Lung Fibrosis: Transitioning from In Vitro Mechanisms to In Vivo Imaging/I.** Ganzleben, M.-A. Chrysovergi, T.A. Al-Hilal, F. Liu, A. Santos, L.G. Vincent, C. Happe, E. Chaum, C.R. Yates, T.R. Mempel, A.J. Engler, D.J. Tschumperlin, D. Lagares, Boston, MA, p.A5551

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

A61 BPD, LUNG DEVELOPMENT, AND NEONATAL LUNG DISEASE9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area D, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P285 Increased Cytotoxic T Cells in the Large Airways in Adults Born Prematurely with a History of Bronchopulmonary Dysplasia**/J. Gao, P.J. Um-Bergstrom, M. Pourbazargan, E. Berggren-Brostrom, C.-X. Li, H. Merikallio, K. Riitta, S. Reinke, C.E. Wheelock, E. Melen, A. Linden, A.M. Wheelock, G. Rassidaki, C. Ortiz-Villalon, S. Magnus, Stockholm, Sweden, p.A1976
- P286 STAT3 Mutations Lead to Defective Mucociliary Clearance in the Autosomal Dominant Hyper IgE Syndrome (AD-HIES) Airways**/L. Sun, N.L. Quinney, P.R. Sears, L. Zhou, F.U. Dizmond, D.M. Cholon, T.D. Rogers, R.C. Gilmore, C.X. Chang, A.S. Ceppe, K.A. Ramsey, H. Dang, C.R. Esther, M. Chua, B.R. Grubb, M. Kesimer, D.B. Hill, L.E. Ostrowski, B. Button, M. Gentzsch, W.K. O'Neal, A., p.A1977
- P287 Increased microRNA-34a Contributes to Hypoxia-Induced Senescence in Lung Epithelial Cells**/H. Maeda, H. Yao, D. Teape, P.A. Dennerly, Providence, RI, p.A1978
- P288 Longitudinal and Dynamic miRNA Expression in Saliva Samples of Extremely Preterm Infants**/R. Siddaiah, L. Dogbe, A. Donnelly, K. Wisecup, H. Stephens, J. Erkingler, C. Anderson, C. Oji-Mmuo, S. Amatya, P. Silveyra, Hershey, PA, p.A1979
- P289 Hippo Signaling Pathway Variant Is Associated with BPD in ELBW Infants**/N. Palla, V. Trinh, L.A. Parton, Valhalla, NY, p.A1980
- P290 Csf2ra Gene Correction and Pulmonary Macrophage Transplantation Therapy of Hereditary Pulmonary Alveolar Proteinosis in Mice Does Not Cause an Immune Response to the Transgene Product**/P.I. Arumugam, B.C. Carey, M. Wessendarp, Y. Ma, K. Shima, J. Stock, C. Chalk, B.C. Trapnell, Cincinnati, OH, p.A1981
- P291 Prenatal Exposure to Polycyclic Aromatic Hydrocarbons (PAHs) Augments Neonatal Hyperoxic Lung Injury: Role of Cytochrome P450 (CYP)1A1, 1A2, and 1B1**/B. Moorthy, L. Swanson, K. Lingappan, R. Stading, Houston, TX, p.A1982

- P292 Methods to Evaluate Macrophage Activation State and Endotoxin Levels for Use in Pulmonary Macrophage Transplantation Therapy**/P.I. Arumugam, B.C. Carey, M. Wessendarp, Y. Ma, J. Stock, C. Chalk, B.C. Trapnell, Cincinnati, OH, p.A1983

- P293 Transcriptional and Morphological Analysis of Human Developing Pleura Reveals Age-Specific, Species-Specific and Visceral Versus Parietal Differences**/H. Yung, A. Alhendi, D. Pearce, V. Teixeira, S. Arathimou, M. Yoshida, J. Barnes, R.E. Hynds, D. Moore, S. Janes, M. Nikolic, London, United Kingdom, p.A5552

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

A62 CYSTIC FIBROSIS AND NON-CF BRONCHIECTASIS: MECHANISTIC INSIGHTS9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area D, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P295 Sexually Dimorphic Innate Immune Programs of Airway Monocytes in Cystic Fibrosis**/H. Yin, N. Li, N. Shiner, S. Khanal, J.C. Schupp, G.L. Chupp, J.L. Gomez, C.J. Britto-Leon, New Haven, CT, p.A1984
- P296 Loss of Small Pulmonary Blood Vessels in Cystic Fibrosis**/J.-P. Amoakon, J. Lee, A. Naren, Los Angeles, CA, p.A1985
- P297 Multi-Omics Comparisons Between CFBE410- Cells Stably Expressing Wild-Type CFTR and F508del-Mutant CFTR**/S. Lu, J.K. Kolls, New Orleans, LA, p.A1986
- P298 The Novel Mucolytic Agent MUC-031 Reduces Airway Mucus Plugging and Inflammation in Mice with Muco-Obstructive Lung Disease**/A. Addante, R. Wilfred, A. Kuppe, J. Duerr, M. Danilchenko, M. Drescher, S. Oscarson, A.-M. Healy, I. Gitlin, J.V. Fahy, M.A. Mall, Berlin, Germany, p.A1987
- P299 Sex-Based Differences in Sputum Inflammation Markers of Acute Cystic Fibrosis Exacerbation**/A. Ayala, H. Yin, S. Khanal, N. Niu, M. Nunez, G.L. Chupp, T.A. Laguna, C.J. Britto-Leon, Atlanta, GA, p.A1988

- P300 Collagen Neopeptide Biomarkers Are Increased in Allergic Broncho-Pulmonary Aspergillosis in Cystic Fibrosis**/M.D. Weckmann, G. Nissen, J.M.B. Sand, H. Jessen, D.J. Leeming, B. Tümmler, M.V. Kopp, G. Hansen, E. von Mutius, K.F. Rabe, T. Bahmer, A. Möller, A. Jung, A.-M. Dittrich, Luebeck, Germany, p.A1989
- P301 Select Amino Acids Increased Anion Secretion in Primary F508del/F508del HBEC by Activating CFTR and Alternative Anion Secretory Pathways**/A. Grosche, X. Xu, D. Angoli, J. Guo, S. Prabhakaran, S. Vidyasagar, Gainesville, FL, p.A1990
- P302 IL-22 Binding Protein (IL-22RA2) Is Associated with Chronic Sinopulmonary Infections in Cystic Fibrosis**/C.M. Bojanowski, K. Choi, J. Bodnar, S. Lee, G. Trevejo-Nunez, G. Kurland, J. Bomberger, R. Schleimer, J.K. Kolls, New Orleans, LA, p.A1991
- P303 Comparison of Neutrophil Elastase to the Lower Airway Microbiota in Children with Cystic Fibrosis**/J.B. O'Connor, B.D. Wagner, J.K. Harris, T.A. Laguna, Chicago, IL, p.A1992
- P304 Th2 Dysfunction in Cystic Fibrosis**/D.P. Cook, C. Thomas, A. Wu, A. Norlander, D.A. Stoltz, R.S. Peebles, Nashville, TN, p.A1993
- P305 Decline in Vitamin D Levels During Hospitalization for CF Pulmonary Exacerbations**/A. Lennox, E. Brutsaert, H. Weber, M. Gorgy, D. Lindsay-Adler, Z. Messer, J. Welter, S. Krishnan, A.J. Dozor, Valhalla, NY, p.A1994
- P306 Analysis of Th2 Biomarkers to Identify a Th2-High Subgroup of Cystic Fibrosis Patients**/J. Barry, P. Akuthota, D.J. Conrad, La Jolla, CA, p.A1995
- P307 Antibody Response to SARS-CoV-2 mRNA Vaccination in Patients with Cystic Fibrosis**/L. Lee, C.E. Milla, P.S. Kim, Palo Alto, CA, p.A1996
- P308 The Relationship Between Airway Interleukin-1 Beta, Microbial Dysbiosis and Mucus Hyperconcentration in Bronchiectasis: The EMBARC-BRIDGE Study**/L. Perea, H. Richardson, A.J. Dicker, E. Cant, M. Bottier, M. Shuttleworth, H.R. Keir, Y.H. Giam, S. Finch, J.T.J. Huang, M. Shteinberg, P.C. Goeminne, E. Polverino, J. Altenburg, F. Blasi, T. Welte, S. Aliberti, O. Sibila, J.D. Chalmers, A. Shoemark, Dundee, UK, p.A1997
- P309 Rescue of Ciliary Function in Cell-Based Primary Ciliary Dyskinesia Models Using Nebulized, Lipid Nanoparticle (LNP)-Formulated mRNA**/R. Bhattacharjee, M. Hennig, D. Ishimaru, D.R. Liston, J.K. Eby, C.C. Corona, J.E. Casillas, T. Molla, M.S. Sidhu, J. Poniatoski, S. Comini, A. Ashworth, X. Yu, P. Gao, H.E. Lister, O.M. Mousa, H.L. Gollhofer, W. Yin, P.R. Sears, M.J. Torres, D.J. Siegwart, V. Kharitonov, L. E. Ostrowski, D. J. Lockhart, B. A. Wustman; Dallas, TX, p.A1998
- P310 Airway Obstruction Produces Chronic Hypoxia-Dependent Cellular Adaptation and Mucus Dehydration in Human Airway Epithelial Cells**/Y. Mikami, B. Grubb, T. Rogers, H. Dang, P. Kota, T. Asakura, J. Vilar, R. Gilmore, K. Okuda, L. Morton, G. Chen, L. Sun, M. Gentzsch, S.H. Randell, W.K. O'Neal, R.C. Boucher, Chapel Hill, NC, p.A1999
- P311 Characterization of Ciliary Function in Bronchiectasis (EMBARC-BRIDGE Study)**/M. Bottier, L. Delgado, M.K. Shuttleworth, D.M. Cassidy, M.L. Crichton, S. Gallant, L. Perrea, S. Aliberti, J. Altenburg, M. Shteinberg, T. Welte, F. Blasi, P.C. Goeminne, O. Sibila, E. Polverino, C. Hogg, S. Ollosson, M.R. Loebinger, N. Lorent, J. D. Chalmers, A. Shoemark; Dundee, UK, p.A2000
- P312 The Mucoid Pathobiome and Its Clinical Implications in Non-Cystic Fibrosis Bronchiectasis**/L. Fernandez-Barat, R. López-Aladid, V. Alcaraz, N. Vázquez, L. Bueno, R. Pastor, L. Lingren, H. Sanz, P. Oscanoa, R. Amaro, A. Motos, R. Cabrera, J. Vila, D. Martinez, J. Otero, R. Farre, N. Hoiby, A. Torres, Barcelona, Spain, p.A2001
- P313 An mRNA-Based Therapy to Treat Primary Ciliary Dyskinesia: Aerosol Delivery, Biodistribution and Tolerability**/D. Liston, M. Hennig, D. Ishimaru, J.K. Eby, S. Ahmed, X. Yu, A. Alfaifi, H.E. Lister, M.S. Sidhu, S.R. Comini, P. Gao, A. Ashworth, O.M. Mousa, M.J. Torres, D.J. Siegwart, V.G. Kharitonov, D.J. Lockhart, B.A. Wustman, Menlo Park, CA, p.A2002
- P314 MUC5B-Dominated Mucus Hyperproduction in the Bronchiolectatic Airway of Non-Cystic Fibrosis Bronchiectasis (NCFB)**/T. Asakura, K. Okuda, G. Chen, T. Kato, Y. Mikami, G.C. Rodney, S.M. Barbosa Cardenas, M. Chua, Y. Masugi, P.G. Noone, C.M.P. Ribeiro, C.M. Doerschuk, K.N. Olivier, N. Hasegawa, S.H. Randell, W.K. O'Neal, R.C. Boucher, Chapel Hill, NC, p.A2003
- P315 Proteomic Markers of Eosinophilic Inflammation and Disease Severity in Bronchiectasis**/J. Pollock, H.R. Keir, A. Shoemark, A.J. Dicker, Y.H. Giam, M.L. Crichton, E. Cant, J.T.J. Huang, J.D. Chalmers, Dundee, United Kingdom, p.A2004
- P316 Optimization of DNAI1 mRNA Constructs to Treat Primary Ciliary Dyskinesia**/M. Hennig, D. Ishimaru, D. Liston, R.B. Bhattacharjee, M.S. Sidhu, J.R. Poniatoski, J.E. Casillas, H.E. Lister, S.R. Comini, V.G. Kharitonov, D.J. Lockhart, B.A. Wustman, Menlo Park, CA, p.A2005

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A63 MECHANISMS AND SUPPORT FOR THE DYSFUNCTIONAL LUNG9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P1 Impact of Airway Pressure Release Ventilation and Acinar Interdependence on Lung Recruitment: A Computational Modeling Study/A.** Fonseca Cruz, J. Herrmann, H. Ramcharan, M. Kollisch-Singule, M.H. Tawhai, J.H.T. Bates, G. Nieman, D.W. Kaczka, Iowa City, IA, p.A2006
- P2 Bronchoscopy Without Sedation: A Valuable Research Tool/J.I.** Peters, K. Proud, H. Singh, D. Maselli, San Antonio, TX, p.A2007
- P3 Chlorogenic Acid Alleviates LPS/POLY:IC Induced Oxidative Stress, Cytokine Storm and Platelet Aggregation in an ALI Model/S.** Jain, P. Saha, S.R. Panda, P. Sharma, V.G.M. Naidu, Guwahati, India, p.A2008
- P4 VEGFR2-Dependent Restoration of Pulmonary Endothelial Barrier Function by Perfusion with Optimal Physiological Viscosity Solution Following Ischemia-Reperfusion Injury/D.** Walsh, J.F. Boylan, P. Mcloughlin, Dublin, Ireland, p.A2009
- P5 Pressure-Volume Characteristics of the Acutely Injured Porcine Lung Assessed with Quantitative CT Imaging/E.A.** Akor, A.F. Cruz, J. Herrmann, S.E. Gerard, J.M. Reinhardt, J. Guo, E.A. Hoffman, D.W. Kaczka, Iowa City, IA, p.A2010
- P6 Effects of One-Lung Ventilation and Body Position on Regional Respiratory Mechanics and Ventilation Distribution in Pigs/J.** Wittenstein, M. Scharffenberg, X. Yang, T. Koch, R. Huhle, M. Gama de Abreu, Dresden, Germany, p.A2011
- P7 In Vivo Assessment of Mechanical Ventilation-Induced Alveolar Deformation/A.C.** Jardim-Neto, C.E. Perlman, Hoboken, NJ, p.A2012
- P8 Post-Extubation CPAP Support and Oxygenation in Morbidly Obese Patients - A Prospective Randomized Controlled Trial/F.** Girrbach, K. Brechtelsbauer, A. Hezel, K. Aehling, M. Lange, A. Dietrich, H. Wrigge, P. Simon, Leipzig, Germany, p.A2013

- P9 Selective Dysfunction of Crural Diaphragm in Chronic Restrictive Lung Disease: Rationale for Gastro-esophageal Reflux/C.** Pathak, J.K. Joshua, A. Malhotra, A. Zifan, R. Mittal, San Diego, CA, p.A2014
- P10 Hemodynamic Effects of Positive End-Expiratory Pressure in Simulated Hemorrhagic Shock: Predictions Based on Computational Modeling/A.** Fonseca Cruz, F. Varghese, J. Herrmann, B.C. Harvey, G. Beck, J. Lampe, D. Rodriguez, R.D. Branson, D.W. Kaczka, Iowa City, IA, p.A2015
- P11 Acute Respiratory Distress Syndrome Associated Cytokines Inhibit Bronchial Epithelial Sodium Channel and Barrier Function: A Therapeutic Role for Proprietary Amino Acid Formulation/A.** Sasidharan, A. Grosche, X. Xu, D. Angoli, S. Vidyasagar, Gainesville, FL, p.A2016
- P12 TRPV1 Containing Neurons Regulate Two B-Cell Populations in Response to Streptococcus Pneumoniae/D.** Aguilar, K. Zyuzin, L. Benefield, M. Swidergall, N. Jendzjowsky, Torrance, CA, p.A2017
- P13 Comparison of Cytokine Adsorption During Ex Vivo Lung Perfusion or Post-Transplantation to Restore Function in a Porcine Transplant Model of Acute Respiratory Distress Syndrome/A.** Niroomand, H. Ghaidan, M. Stenlo, D. Edstrom, G. Hirdman, M. Mittendorfer, E. Broberg, O. Hallgren, F. Olm, L. Pierre, S. Hyllen, S. Lindstedt, New Brunswick, NJ, p.A2018
- P14 Extubation with Reduced Inspiratory Oxygen Improves Post-Extubation Lung Function in Morbidly Obese Patients - A Prospective Randomized Controlled Trial/P.** Simon, F. Girrbach, S. Mols, K. Aehling, A. Hezel, M. Lange, A. Dietrich, H. Wrigge, Leipzig, Germany, p.A2019
- P15 Development of a Unilateral Porcine Emphysema Model/Y.** Tajima, D.M. Vasilescu, C.Y. Seow, S. Dong, M. Tsutsui, C.Y. Cheung, I. Welch, L. Mowbray, B. Imlach, J. Hodasova, R. Hildebrandt, B. Ryomoto, E. Goodacre, K. Singh, K. Wolff, E. Elizur, D.D. Sin, Vancouver, Canada, p.A2020

CLINICAL

THEMATIC POSTER SESSION

A64 PULMONARY CLINICAL CASES I9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P17 Delayed Bilateral Pneumothorax Due to Multiple Pneumatoceles, a Rare Complication of COVID-19** /B. Khiatah, R. Akl, B. Utz, A. Frugoli, Ventura, CA, p.A2021
- P18 Distinctive Lung Pathology in Fibrotic COVID-19**/J. Lee, S.M. Raman, M.R. Morrell, J. Stringham, R. Paine, A. Garrett, B.C. Cahill, Salt Lake City, UT, p.A2022
- P19 Catching Bubbles at the Right PEEP - A Case of Refractory Hypoxemia**/B.C. Park, S. Zarbiv, L. Glaspey, S. Patel, Camden, NJ, p.A2023
- P20 A 44 Year Old Stone Worker with Progressive Dyspnea**/R.P. Manglani, S. Akbar, F. Shakil, M.B. Beasley, O. Epelbaum, Valhalla, NY, p.A2024
- P21 Spontaneous Pneumomediastinum and Bilateral Pneumothoraces in a Self-Ventilating COVID-19 Positive Patient Within 24 Hours of Starting Continuous Positive Airway Pressure**/A. Dhara, A. Gillespie, L. Chauhan, London, United Kingdom, p.A2025
- P22 Atypical Symptom of COVID-19 Pneumonia**/A. Kumari, K. Nanrani, I. Zahedi, J. Chung, T. Jahir, R. Risal, A.A. Khan, D. Enriquez, H. Patel, M.F. Schmidt, Brooklyn, NY, p.A2026
- P23 Surfactant Therapy in COVID-19 Related Acute Respiratory Distress Syndrome: A Case Study in a Community Teaching Hospital**/D.P. Fribourg, M.W. Farra, M. Ehtesham, Southfield, MI, p.A2027
- P24 Spontaneous Pneumomediastinum in COVID-19**/A.S. Kallur, O.G. Schwartz, Washington, DC, p.A2028
- P25 A Rare Case of Sarcoidosis**/Y. Khaskia, S. Blumhof, Allentown, PA, p.A2029
- P26 Concomitant Tracheal Bronchus with Tracheomalacia: Coincidence or Association?**/J. Baek, A. Rodriguez Lopez, C. Tejera Quesada, C. Wood, A.L. Friedlander, Atlantis, FL, p.A2030
- P27 Birt-Hogg-Dube Syndrome with Familial Spontaneous Pneumothorax and Bibasilar Cystic Lung Disease**/B. Liu, M.J. Burton, St. Joseph, MI, p.A2031
- P28 A Case of Pulmonary Amyloidosis as the Presenting Finding in a Patient with Multiple Myeloma**/R.J. Kronen, D.R. Ziehr, A.E.D. Kane, P. VanderLaan, C.A. Kholdani, R. Hallowell, Seattle, WA, p.A2032
- P29 Air Travel Leading to Air Traveling: A Stable Case of Extensive Free Air Secondary to Slow Gastrointestinal Leak Post Gastrojejunostomy**/K. Moody, S. Lim, C. Sennett, V. Laskova, New York, NY, p.A2033
- P30 Metastatic Cervical Adenocarcinoma Presenting as Diffuse Cystic Lung Disease with Spontaneous Pneumothorax and Bronchopleural Fistula**/B.T. Chaucer, B. Javier, R. Kumar, M.J. Junqueira, Pueblo, CO, p.A2034
- P31 Double Jeopardy: Rare Presentation of Interstitial Lung Disease in a Patient with a History of Acute Respiratory Distress Syndrome**/A. Shaikh, K. Meinhof, Elmhurst, NY, p.A2035
- P32 Sarcoidosis Presenting with Massive Pleural Effusion and Elevated CA-125 Levels**/N. Sayedy, R. Juta, J. Akella, J. Iqbal, East Meadow, NY, p.A2036
- P33 Cardiac Right-to-Left Shunt in a Patient with Normal Right-Side Pressures Diagnosed by the Hyperoxia Test: A Case Report**/J.S. Sierra Duarte, J.D. Botero Bahamon, H.J. González, A. Vejarano, C.A. Celis-Preciado, J.R. Lutz Peña, J.I. Lasso Apráez, C. Villaquiran-Torres, Bogotá, Colombia, p.A2037
- P34 Help I Can't Breathe: A Case of Atelectasis Causing Profound Hypoxemia**/E. Rojas, J. Anwar, V. Badami, A. Ahmed, L.E. Stawovy, S. Sharma, R.C. Stansbury, R. Leonard, K. Chapman, Morgantown, WV, p.A2038
- P35 A Rare Case of Pulmonary Fibrosis Developing in a Patient with Pulmonary Alveolar Proteinosis**/M. Maccougall, R. Patel, N. Patel, J. Longoria, Orange, CA, p.A2039
- P36 A Rare Case of Pleuroparenchymal Fibroelastosis in a Patient with Asbestos Exposure**/N. Patel, T. Mccann, D.W. Wiltse, Cincinnati, OH, p.A2040

CLINICAL

THEMATIC POSTER SESSION

A65 PULMONARY CLINICAL CASES II

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P38 Respiratory Impedance in a Patient with Jarcho-Levin Syndrome Measured by Forced Oscillation**/C.A. Monroig-Rivera, N. Ramirez-Lluch, S.E. Carlo, A. Santiago Cornier, W. De Jesus-Rojas, Ponce, PR, p.A2041
- P39 A Challenging Diagnosis of Adult-Onset Asthma in a Patient with Congenital Agenesis of the Right Lung**/A.A. Abdalla, S. Biswas Roy, L.J. Wesselius, Phoenix, AZ, p.A2042
- P40 A Diagnostic Dilemma of Hypercapnic Respiratory Failure**/A. Korzhuk, H.M.S. Qurashi, A. Avula, Harrisburg, PA, p.A2043

- P41** **An Overlooked Cause of Dyspnea on Exertion: A Case of Exercise-Induced Laryngeal Obstruction in a Patient with Scleroderma**/L. Rosenberg, S. Sears, Portland, OR, p.A2044
- P42** **Postpneumonectomy Syndrome**/P.J. Fransway, S. Sears, Portland, OR, p.A2045
- P43** **The Lazy Diaphragm with a Sugarcoated Phrenic Nerve**/G. Ang, I. Galperin, Forest Hills, NY, p.A2046
- P44** **An Unusual Case of Bronchoesophageal Fistula**/N. Valizadeh, M.R. Al Ajam, Brooklyn, NY, p.A2047
- P45** **Air Space Jam: Vanishing Lung Syndrome Seen in a Competitive Basketball Player**/K.J. Admire, S.S. Aleem, A.N. Mahendra, S. Pourshahid, T. Uchel, M.R. Cossio, Roanoke, VA, p.A2048
- P46** **Heliox in Critical Asthma Syndrome**/C. Chen, R. Sharma, J. Kilburn, Las Vegas, NV, p.A2049
- P47** **The Face Says It All: A Rare Case of Central Venous Obstruction Mimicking Angioedema in a Patient with Permcath Dysfunction**/M. Abdullah, K. Ebeid, M. Hintze, S. Chen, F. Hsiao, S. Mughal, Johnson City, NY, p.A2050
- P48** **Laryngeal Mass Misdiagnosed as Recurrent Exacerbations of Chronic Obstructive Pulmonary Disease (COPD): A Reminder of the Importance of Pulmonary Auscultation in the Diagnostic Process**/S. Reid, O. Bruck, Worcester, MA, p.A2051
- P49** **Within-Breath Analysis of Respiratory Mechanics in a Marfan Syndrome Adolescent with Exertional Dyspnea**/L. Reyes, W. De Jesus-Rojas, Caguas, PR, p.A2052
- P50** **Unilateral Diaphragmatic Paralysis Following COVID-19 Infection**/N. Valizadeh, P. Belligund, Brooklyn, NY, p.A2053
- P51** **Assessing Treatment Response to Endobronchial Bronchial Valve Therapy Using CT Based Densitometry: A Case Study**/R. Baron, S. Kadlecek, H. Hamedani, F. Amzajerdian, Y. Xin, J. Thomas, I. Duncan, M. Ismail, L. Loza, T. Achekezai, M. Cereda, G.J. Criner, R.R. Rizi, Philadelphia, PA, p.A2054
- P52** **Severe Episodic Respiratory Distress Due to Diaphragm Spasm and Complete Resolution with Cyclobenzaprine**/L. Wolf, J. Alpers, A. Mainardi, Chattanooga, TN, p.A2055
- P53** **A Classic Presentation of Catamenial Pneumothorax**/M. Mayo, P. Neupane, D. Baum, Boca Raton, FL, p.A2056
- P54** **Implications of a Misdiagnosis**/A. Hu, E.S. Edell, Rochester, MN, p.A2057
- P55** **Concomitant Use of Mepolizumab and Ixekizumab in a Patient with Severe Eosinophilic Asthma and Psoriasis: A Case Study**/M.D. Saint-Pierre, Ottawa, Canada, p.A2058

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A66 **PHYSIOLOGIC STUDIES OF LUNG FUNCTION**

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P57** **Variations in Functional Residual Capacity in Men and Women with Obesity**/D.M. Bhammar, V. Bernhardt, B.N. Balmain, T.G. Babb, Columbus, OH, p.A2059
- P58** **Body Composition and Functional Residual Capacity (FRC) Before and After One Year in Early Pubescent Children With and Without Obesity**/F.N. Fatima, D.P. Wilhite, D.M. Bhammar, J.Z. Granados, T.G. Babb, Dallas, TX, p.A2060
- P59** **Rapid Lung Function Decline and Lung Cancer Incidence in Asian Population**/H.W. Lee, H.J. Lee, J.-K. Lee, T.Y. Park, E.Y. Heo, D.-K. Kim, Seoul, Korea, Republic of, p.A2061
- P60** **Can Impulse Oscillometry Detect a Bronchoprotective Effect of Deep Inspiration in Healthy Subjects?**/P.A. Donohue, N. Love, M. Connolly, S. Khurana, S.N. Georas, Rochester, NY, p.A2062
- P61** **Acute Effect of Pyridostigmine in Exertional Intolerance in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS): A Randomized Placebo-Controlled Clinical Trial**/M.C. Stovall, P. Joseph, R. Pari, A. Warren, S. Miller, J. Squires, W. Xiao, A.B. Waxman, D.M. Systrom, Boston, MA, p.A2063
- P62** **Impact of Stated Race and Ethnicity on Evaluation of Pulmonary Function Testing**/R. Dhawan, M.L. Konopka, E. Becker, A.P. Trivedi, Chicago, IL, p.A2064
- P63** **Does Socioeconomic Status Explain the Observed Differences in Lung Function Between Black and White Populations? A Systematic Review**/R. Holland, C. Bowerman, S. Stanojevic, Halifax, Canada, p.A2065
- P64** **Assessment of Bronchiectasis by Impulse Oscillometry in Primary Ciliary Dyskinesia**/P.M. Quiles Ruiz De Porras, W. De Jesus-Rojas, Caguas, PR, p.A2066
- P65** **Improved DLco Instrument Repeatability and Long-Term Stability in the COPD Gene Study**/M.J. Hegewald, C. Cook, R. Jensen, C. Buess, B.J. Make, Murray, UT, p.A2067
- P66** **Is It Time to Use Bronchodilator Response in the Evaluation of the Non-Specific Pattern on Pulmonary Function Testing?**/J. Tasch, S. Abujaber, L. Hattar, A. Jose, L.L. Price, P. Lacamera, H. Avella, Boston, MA, p.A2068

- P67** **Reference Equations for Oscillometry in Adults and Their Differences Between Populations: A Systematic Scoping Review and Analysis**/S. Moitra, A. Deprato, O.S. Usmani, G. Ferrara, N. Murgia, L. Melenka, P. Lacy, Edmonton, Canada, p.A2069
- P68** **Changes in Pulmonary Function Test Results and Respiratory Symptoms Before and After Airway Stent Removal**/H. Handa, O. Masahide, S. Hideo, K. Yoshihito, N. Hideyuki, Y. Arisa, T. Atsushi, A. Masahiko, M. Masamichi, Kawasaki, Japan, p.A2070
- P69** **Prevalence and Magnitude of Submaximal Inhalation Error (SIE) in Forced Spirometry in Clinical Trials for Asthma**/K. Mccarthy, P. Lake, D. Patterson, R. Farienfar, M.-A. Baeumle, Philadelphia, PA, p.A2071
- P70** **Exploring Dimensionality Reduction Across Spirometry and Forced Oscillation Technique in a Healthy Subject Population Using Principal Component Analysis**/J. Therkorn, D.L. Ibraheem, B. Samy, M.J. Falvo, East Orange, NJ, p.A2072
- P71** **Consequences of the Use Waterpipe (Hookah) Smoking on Pulmonary Function in Young Adult Males**/N. Uzma, A. Hasan, F. Abdullah, Hyderabad, India, p.A2073
- P72** **Segmental Linear Regression Should Be Used to Develop Reference Equations for Pulmonary Diffusing Capacity**/G.S. Zavorsky, J. Cao, Sacramento, CA, p.A2074
- P76** **Combined Effects of Mandibular Advancement and Surgical Hyoid Bone Repositioning on Upper Airway Collapsibility**/J. Amatoury, C.J. Samaha, J. Ghafari, H.J. Tannous, Beirut, Lebanon, p.A2077
- P77** **Role of Hyoid Bone Position in Upper Airway Patency and Tissue Mechanics: A Computational Finite Element Modeling Approach**/J. Amatoury, D. Salman, Beirut, Lebanon, p.A2078
- P78** **Design and Rationale for the Treating Obstructive Sleep Apnea Using Targeted Hypoglossal Nerve Stimulation (OSPREY) Trial**/O. Jacobowitz, A.R. Schwartz, E. Lovett, G. Ranuzzi, A. Malhotra, New York, NY, p.A2079
- P79** **Rapid Effective Compliance Estimation from Dynamic Volume MRI Using Breath Analysis Interactive Tool (BAIT)**/D. Wootton, K.R. Choy, S. Sin, L. Xie, Y. Tong, J. Udupa, M. Wagshul, R. Arens, New York, NY, p.A2080
- P80** **Feasibility of Oropharyngeal and Respiratory Muscle Training in Veterans with OSA and Spinal Cord Injury: Pilot Study**/S.A. Maresh, J. Prowting, C. Fung, A. Knack, M.S. Badr, A. Sankari, Detroit, MI, p.A2081
- P81** **Evolution, Comparative Zoology, and the Origins of Pharyngeal Dysfunction in Sleep Disordered Breathing**/D. Dewald, K.P. Strohl, Cleveland, OH, p.A2082
- P82** **Sleep Apnea Severity and Pathogenesis in COPD-OSA Overlap Patients: A Matched Cohort Study**/A. Sanchez Azofra, J.E. Orr, L. Mcginnis, G. Parra, J.M. Marin, R.L. Owens, A. Malhotra, C.N. Schmickl, La Jolla, CA, p.A2083
- P83** **Differences in Sleep Disordered Breathing and Underlying Mechanisms in Patients with Schizophrenia Compared with Matched Controls**/Z. Chen, L. Mcginnis, G. Parra, J.E. Orr, B. Nokes, D. Gilbertson, R.L. Owens, E. Lee, A. Malhotra, C.N. Schmickl, La Jolla, CA, p.A2084
- P84** **Analysis of Clinical Characteristics According to Upper Airway Obstruction Observed on Drug-Induced Sleep Endoscopy**/C. Sung, K. Hee-Young, H.C. Yang, Gwangju, Korea, Republic of, p.A2085
- P85** **Cerebrovascular CO₂ Responsiveness in Opioid Associated Sleep Disordered Breathing**/S. Chowdhuri, J. Bansal, D. Greig, S. Khan, A. Lazar, R. Rastogi, B. Morgan, M.S. Badr, P. Mishra, L. Zhao, Detroit, MI, p.A2086
- P86** **Study of Upper Airway Anatomy Using MRI in Bariatric Surgery Patients with Sleep Disturbances**/S. Sinha, B. Mohan Lal, S. Vyas, S. Agarwal, B. Nokes, A. Malhotra, New Delhi, India, p.A2087

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A67 FLIPPING THE SCRIPT ON SLEEP APNEA PATHOGENESIS

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P74** **The Effect of Sex on OSA Severity and Pathophysiology in a Cohort of General Sleep Clinic Patients**/L. Mcginnis, G. Parra, S. Manoharan, J.E. Orr, N.-O.A. Bosompra, B. Nokes, P.N. DeYoung, A. Malhotra, C.N. Schmickl, La Jolla, CA, p.A2075
- P75** **The Effect of a Family History of OSA on OSA Severity and Pathophysiology**/G. Parra, L. Mcginnis, J.E. Orr, B. Nokes, P.N. DeYoung, R.L. Owens, A. Malhotra, C.N. Schmickl, La Jolla, CA, p.A2076

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A68 INFLAMMATION, CARDIOVASCULAR DISEASE, COVID-19: WHAT DO THEY HAVE IN COMMON?

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
 12:15-1:15 authors will be present for discussion with assigned facilitators.

- P886 Comparative Transcriptome Analysis of OSA Mouse Models Identified New Inflammation and Adhesion Targets in Endothelial Cell Activation/R. Cetin-Atalay, A.Y. Meliton, P.S. Woods, K. Sun, X. Sue, Y.-J. Peng, R.B. Hamanaka, N. Prabhakar, G.M. Mutlu, Chicago, IL, p.A2088**
- P887 Risk for Obstructive Sleep Apnea in Pediatric Patients with Pulmonary Hypertension/D.A. Ignatiuk, K. Miles, M. Cash, N. Gurbani, R. Hirsch, M. Hossain, M. Magness, D. Tadesse, N. Simakajornboon, Cincinnati, OH, p.A2089**
- P888 Brainstem Inflammation During Sterile Lung Injury in Rats via Immunohistochemistry of IL-18 and IL-1 β Cytokine Expression/A.M. Vergis, C.C. Campanaro, G. Kola, D.E. Nethery, C.W. Clifford, Y.-H.H. Hsieh, T.E. Dick, F.J. Jacono, Cleveland, OH, p.A2090**
- P889 D-Dimer in Marfan Syndrome: Effect of Obstructive Sleep Apnea Induced Blood Pressure Surges/M. Sowho, H. Schneider, J.C. Jun, H. Dietz, G. MacCarrick, L.V. Pham, A.R. Schwartz, F. Sgambati, P.L. Smith, S. Polotsky, E.R. Neptune, Baltimore, MD, p.A2091**
- P890 Screening for Sleep Disordered Breathing in Patients Recovered from COVID-19 Hospitalization/J. Cheung, P. Castellanos, C. Aleger, C.D. Burger, P. Castillo, B. Colaco, B. Dredla, E. Festic, P. Satashia, L. Speicher, J. Kaplan, K. Walsh, N. Werninck, M. Yin, V. Arunthari, Jacksonville, FL, p.A2092**
- P891 Sleeping Characteristics in Post-COVID-19: Preliminary Data/I. Jarosch, T. Schneeberger, A. Stegemann, D. Leidl, R. Gloeckl, V. Swan, C. Schoen, A.R. Koczulla, Schoenau am Koenigssee, Germany, p.A2093**

BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A69 TOY STORY 4: ADVENTURES IN INTERVENTIONAL PULMONARY PROCEDURES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area H, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
 12:15-1:15 authors will be present for discussion with assigned facilitators.

- P673 Thin Bronchoscopic Cryobiopsy Using a Nasobronchial Tube/M. Oki, H. Saka, Y. Kogure, H. Niwa, A. Yamada, A. Torii, C. Kitagawa, Nagoya, Japan, p.A2094**
- P674 Efficacy and Safety of Cone-Beam Computed Tomography Augmented Electromagnetic Navigation Bronchoscopic Biopsy of Indeterminate Pulmonary Nodules/H. Singh, J.S. Kurman, M. Abdalla, C. Jani, B.S. Benn, Milwaukee, WI, p.A2095**
- P675 The Diagnostic Yield of Robot Assisted Bronchoscopy in the Evaluation of Pulmonary Nodules: A Retrospective Analysis/A.V. Sharma, E. Snowden, D. Kapadia, H. Abdulla, M. Simoff, Detroit, MI, p.A2096**
- P676 Combination of ION Robotic Bronchoscopy with Body Vision C-Arm Based Tomography for Optimal Lesion Localization and Sampling/G. Cho, M. Matti, V. Nobari, G. Cheng, R. Miller, M. Nobari, San Diego, CA, p.A2097**
- P677 Successful Sampling of a Subcentimeter Subpleural Perivascular Lung Nodule Using Robotic Bronchoscopy/P. Lamothe, N. Smirnova, A. Sardi, Atlanta, GA, p.A2098**
- P678 Biopsy Site Selection - A Diagnostic Dilemma/E. Myers, N.H. Siddiqui, R.Z. Abraham, Kankakee, IL, p.A2099**
- P679 A Tale of Two Biopsies - When Clinical Intuition and an Extra Biopsy Turn Fortuitous/E. Myers, T.M. Betlej, R.Z. Abraham, Kankakee, IL, p.A2100**
- P680 Synchronous Bilateral Lung Cancer with Simultaneous Robotic Bronchoscopy and Biopsy/L.E. Meece, J.P. Moran, M.B. Shaw, S. Velani, Des Moines, IA, p.A2101**
- P681 Persistent Consolidation in the ICU and the Role of Robotic Bronchoscopy/L.A. Seifer, A. Singh, F. Safdie, M. Csete, Miami Beach, FL, p.A2102**
- P682 Using O-Arm Imaging System with Electronic Navigational Bronchoscopy: A Case Report/M. Alsaggaf, D. Baram, K.J. Diab, Washington, DC, p.A2103**

- P683 Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration Healthcare Outcomes Compared to Age/A.** Sharma, F. Anwar, T. Kemnic, R.M. Prasad, E. Wang, A.M. Abramovitz, Lansing, MI, p.A2104
- P684 Characterization of EBUS Findings/Z.** Muzaffarr, F. Ujueta, F. Safdie, Miami Beach, FL, p.A2105
- P685 Robotic Assisted Bronchoscopy in Evaluation of Peripheral Lung Nodules/H.** Tavakoli, C.T. Tao, J.K. Chung, H. Ismail, San Francisco, CA, p.A5553
- P686 The Use of Robotic Assisted Bronchoscopy in the Diagnostic Evaluation of Peripheral Pulmonary Lesions; A Paradigm Shift/H.** Hammad Al Taq, S. Hussain, M. Parmar, F. Chaudry, J.M. Reinersman, Oklahoma City, OK, p.A5554
- P687 Electromagnetic Navigation Bronchoscopy Versus Radial Endobronchial Ultrasound Under Moderate Sedation for Diagnosing Lung Cancer: A Propensity Score-Matched Analysis/Y.W.** Kim, H.-J. Kim, S.H. Yoon, M.J. Song, B.S. Kwon, S.Y. Lim, Y.J. Lee, J.S. Park, Y.-J. Cho, H.I. Yoon, J.H. Lee, C.-T. Lee, Seongnam, Korea, Republic of, p.A5555
- P688 Novel Robotic-Assisted Cryobiopsy for Peripheral Pulmonary Lesions, a Pilot Study/C.** Oberg, R.P. Lau, E.E. Folch, T. He, R. Ronaghi, C.L. Channick, I. Susanto, R.E. Garcia Tome, S.S. Oh, Los Angeles, CA, p.A5556
- P692 A 71 Year Old Woman with Tracheal Lesions: A Case of Tracheal Plasmacytomas Treated with Endobronchial Cryotherapy/V.** Hegde, L. Thomas, M. Postigo, Kansas City, KS, p.A2108
- P693 Stridor and Lung Mass: A Rare Case of Isolated Nodal Involvement of NSCLC/P.** Sharma, P. Sivaramakrishnan, G. Sindhvani, Rishikesh, India, p.A2109
- P694 An Endobronchial Obstruction: A Curious Presentation of Yolk Sac Tumor/D.** Ahmed, N. Siddiqui, R.C. Holladay, Shreveport, LA, p.A2110
- P695 Salivary Glands in the Airway Anyone?/C.Y.** Maehara, R. Rakocevic, D.H. Yu, Los Angeles, CA, p.A2111
- P696 A Rare Case of Massive Hemoptysis and Mycobacterium Chimaera Masking Pulmonary Adenocarcinoma/A.** Pham, T. Czech, Honolulu, HI, p.A2112
- P697 Conservative Management of Tracheal Fistula Due to Radiation Necrosis/P.** Conrad, M. Tharp, C.M. Kniese, Indianapolis, IN, p.A2113
- P698 A Unique Case of Alveolar Hemorrhage/P.J.** Gary, G.E. Ortiz Jaimes, A.M. Patel, Rochester, MN, p.A2114
- P699 A Rare Case of Isolated Thoracic AL-Amyloidoma Causing Complete Atelectasis of the Right Lung/S.** Rath, N. Bhan, M. Adrish, Houston, TX, p.A2115
- P700 A Fatal Case of Acquired Broncho-Esophageal Fistula/S.** Chandna, M. Groetsch, M.V. Shah, S. Bhasin, New Brunswick, NJ, p.A2116
- P701 An Unfamiliar Tumor of the Trachea/S.** Sasidharan, Y.X. Teo, A. Muthyala, B. Brown, Worcester, MA, p.A2117
- P702 Endobronchial Chondroma: A Rare Case of Benign Tumor with Inadequately High SUV by the PET Interpretation/M.** Assaad, L. Dahabra, A. Abou Yassine, A. Kassem, A. itany, D. Elsaygeh, Staten Island, NY, p.A2118
- P703 Recurrent Metastatic Adenocarcinoma Presenting as Respiratory Failure with Diffuse Bronchial Cobblestoning/M.U.** Ahmed, I. Makki, J. Egan, Grand Rapids, MI, p.A2119

BEHAVIORAL • CLINICAL
THEMATIC POSTER SESSION
A70 CLOGGED PIPES: OBSTRUCTION AND HEMORRHAGE
9:30 a.m. - 3:45 p.m. MOSCONE CENTER
Area H, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators..

- P690 19-Year-Old with Complete Lung Collapse, Respiratory Failure, and Septic Shock/Y.** Abderrahman, N. Parikh, K. Helmkamp, M. Luangrath, R. Sanchez, Iowa City, IA, p.A2106
- P691 Pulmonary Papillary Adenoma Presenting as Non-Massive Hemoptysis: A Case Report and Review of Published Journals/N.G.** Gomez, V.S. Delos Reyes, K.N.R. Aleta, Quezon City, Philippines, p.A2107

ATS 2022

INTERNATIONAL CONFERENCE

San Francisco, CA



Sunday Mid-day, May 15

[Click Here to Access Sunday Sessions and Presentations to Your Calendar](#)

11:45 a.m. - 1:15 p.m.

ATS DIVERSITY FORUM

San Francisco Marriott Marquis
Yerba Buena Ballroom Salon 1 (Lower B2 Level)



The annual ATS Diversity Forum focuses on diversity within the fields of pulmonary, critical care, and sleep medicine and research. All ATS Members are invited to attend this event to find inspiration and valuable career insights. This year's speaker is **Jesse Roman, MD**. Dr. Roman is committed to diversity, equity, and inclusion, having served as a founding leader of the Health Equity Subcommittee within the Health Equity and Diversity Committee.

The Minority Trainee Development Scholarships (MTDS), which recognize trainees who are members of underrepresented minority groups will be presented at this forum.

The 2022 Diversity Fellowship recipients will also be presented during the forum. These fellowships are designed to support the efforts of senior fellows, post-doctoral students, or junior faculty with research, clinical and policy endeavors to advance health equity for patients with respiratory disease, critical care illness or injury, and sleep disordered breathing.

The Diversity Forum is organized and presented by the ATS Membership Committee and will be hosted by its Chair **Clement Ren MD, MBA, ATSF** and Vice Chair **Meshell Johnson, MD**. The Minority Trainee Development Scholarships are supported by the American Thoracic Society.

*The Diversity Forum is generously sponsored by
Janssen, a Pharmaceutical Company of Johnson & Johnson.*

Registration Fee: \$30 (includes lunch)

Seating is limited. Pre-registration is required. Please register through online general registration by clicking the Register Now button above

ADULT CLINICAL CORE CURRICULUM

CME Credits Available: 1.5

MOC Points Available: 1.5

CC1 CRITICAL CARE CLINICAL CORE CURRICULUM

Education Committee

11:30 a.m. - 1:00 p.m.

MOSCONE CENTER

Hall E (North Building, Exhibition Level)

Target Audience

Practicing internists, subspecialists, registered nurses and advanced practice providers in pulmonary, critical care, and sleep medicine who work in a clinical setting and are currently engaged in maintenance of certification.

Objectives

At the conclusion of this session, the participant will be able to:

- describe diagnosis and management of ICU Delirium;
- identify long term sequelae of critical illness including cognitive impairments and critical illness myopathy;
- define the diagnosis of Post Intensive Care Unit Syndrome and describe management strategies including the use of Post ICU Clinics.

The goal of the core is to support clinicians who are engaged in maintenance of certification activities by providing updates on subjects that are not only included in recertification requirements, but also are timely and relevant to clinical practice in 2022. The ATS Clinical Core Curriculum Symposia focus on key topics in the areas of Pulmonary, Critical Care, and Sleep Medicine. The topics are aligned with corresponding MOC Medical Knowledge modules. This symposium is intended to help clinicians stay up to date with important information relevant to their medical practices, and to provide an opportunity for clinicians to evaluate their individual knowledge and skills while earning MOC Medical Knowledge points.

Chairing: S. Ahmed, MBBS, FCCP, Albuquerque, NM

Moderators: D. Kelm, MD, ATSF, Rochester, MN
J. Diaz-Mendoza, MD, Detroit, MI

11:30 Dealing with Delirium: Diagnosis and Management of ICU Delirium

M.F. Mart, MD, Nashville, TN

12:00 Critical Illness Myopathy

S.E. Jolley, MD, Aurora, CO

12:30 Cognitive Effects of Critical Illness

J. Gardner-Gray, MD, Detroit, MI

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

L1 CLIMATE CHANGE - AIR POLLUTION INTERACTIONS AND PULMONARY HEALTH: WHAT'S THE CURRENT STATE OF SCIENCE?

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 2001/2003 (West Building, Level 2)

Target Audience

Clinicians, clinician scientists, basic research scientists, fellows and residents

Objectives

At the conclusion of this session, the participant will be able to:

- gain understanding on the role of environmental factors as comorbidity factors in evolving cardiopulmonary morbidity;
- gain knowledge on the air quality due to changing climate on associated consequences in developing prevention and intervention strategies for preexisting pulmonary morbidity.

Global climate change has already begun to have both direct and indirect impacts on human health in the U.S. and around the world. The connection between the sources of local air pollution and the emissions that drive climate change is very clear. The broader climate change research agenda includes mitigation and adaptation strategies to reduce greenhouse gas emissions and introduce renewable energy technologies. The NIH research program aims to assess both positive and negative impacts of these on the air quality and pulmonary health. This session will assess the current state of science on pulmonary health and future research needs.

Chairing: J.R. Balmes, MD, ATSF, San Francisco, CA
S.S. Nadadur, PhD, Research Triangle Park, NC

12:00 The Effect of Air Pollution and the Changing Climate on the Immune Response to Respiratory Viral Infection
D. Croft, MD, MPH, Rochester, NY

12:15 Impact of Wildland Fire Smoke Exposure on Respiratory Function
J.M. Oakes, PhD, Boston, MA

12:30 What We Know About Climate Change Health Impacts From California and Rwanda
J.R. Balmes, MD, ATSF, San Francisco, CA

12:45 NIEHS Research Initiatives on Climate Change and Health
S.S. Nadadur, PhD, Research Triangle Park, NC

12:57 Discussion
S.S. Nadadur, PhD, Research Triangle Park, NC

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES/NIH

L2 SEPSIS RESEARCH AT THE NIH/NIH/NIGMS

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Target Audience

Investigators working on sepsis research who are interested in learning more about the current funding opportunities at a few NIH ICs

Objectives

At the conclusion of this session, the participant will be able to:

- understand the different types of sepsis research supported by various NIH institutes;
- understand the funding mechanisms used by NIH to support sepsis research;
- learn about NIH-supported resources to enable/facilitate sepsis research.

Program directors from four NIH institutes, i.e., NHLBI, NIGMS, NIAID, and NICHD, will describe the types of sepsis research supported by each institute. The different types of grant mechanisms and funding opportunities announcements that are used to support sepsis research at each above NIH IC will be explained in detail.

Chairing: X. Zhao, PhD, MS, Bethesda, MD
L. Reineck, MD, MS, Bethesda, MD

12:00 Sepsis Research at NHLBI
L. Reineck, MD, MS, Bethesda, MD

12:15 Sepsis Research at NIGMS
X. Zhao, PhD, MS, Bethesda, MD

12:30 Sepsis Research at NIAID
P.M. Becker, MD, Bethesda, MD

12:45 Panel Discussion

U. S. FOOD AND DRUG ADMINISTRATION

L3 GENERIC DRUG DEVELOPMENT FOR RESPIRATORY PRODUCTS: U.S. FOOD AND DRUG ADMINISTRATION UPDATEUS

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Target Audience

Clinicians in practice, researchers, pharmaceutical industry representatives, international drug regulators

Objectives

At the conclusion of this session, the participant will be able to:

- recognize key aspects of the generic drug regulatory approval process, and how the Office of Generic Drugs (OGD) evaluates comparative clinical information to support bioequivalence for complex inhaled generic drug products;
- describe product-specific guidance for generic drug products recently posted by the Office of Generic Drugs (OGD), with a focus on how these can inform complex orally inhaled and nasal generic drug development;
- articulate how emerging technologies and innovative approaches are being utilized for FDA-funded research, FDA guidance development, and regulatory decision-making.

Session will describe respiratory product development of generic drugs within the U.S., focusing on paths forward to bring safe and effective generic respiratory products to the American public. A general overview will summarize the generic drug approval process, including demonstration of bioequivalence and therapeutic equivalence utilizing comparative clinical information. Discussion of recent generic product approvals and posted regulatory guidance will provide the audience a greater understanding of the generic approval process, and how the use of emerging technologies and outcomes of research projects contribute to scientific understanding for these complex orally inhaled and nasal drug products to inform regulatory actions.

Chairing: K. Witzmann, MD, Silver Spring, MD

12:00 Introduction and Update for Generic Orally Inhaled and Nasal Drug Products

K. Witzmann, MD, Silver Spring, MD

12:20 Emerging Concepts and New Technologies for Bioequivalence of Orally Inhaled and Nasal Drug Products

D. Santos Conti, PhD, Silver Spring, MD
Comparative Clinical Considerations in Determination of BE
L. Faulcon, MD, Silver Spring, MD

12:54 Questions

**NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION**

**L4 INTEGRATING NASA SATELLITE DATA IN
CROSS-CUTTING APPLICATIONS IN
RESPIRATORY HEALTH**

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 2014/2016 (West Building, Level 2)

Target Audience

Physicians; nurses; allied health professionals; public health practitioners; community health educators; researchers who are

interested in using Earth observation data for environmental and occupational health research applications

Objectives

At the conclusion of this session, the participant will be able to:

- describe key public health applications of the NASA Health and Air Quality Program relating that are of interest to pulmonary clinicians and researchers;
- inform clinicians and researchers about current NASA projects related to pulmonary and cardiovascular disease. Analyze at least three examples where NASA Earth observation data can be applied to air pollution as a global health risk;
- offer key updates and resources related to local, state, national and international levels on air pollution.

Novel applications of NASA remote sensing data offer real-time environmental information of public health importance about the dynamic processes of the Earth's systems. These data can complement traditional epidemiological surveillance and provide in-depth understanding of health risks associated with air pollution. This session will present an overview of how NASA satellite data contribute to cross-cutting environmental health research that fosters key partnerships with community stakeholders. This session will highlight current NASA projects that integrate satellite data to examine health risks associated with exposure to urban ambient pollution and dust storms, with the potential to inform clinical practice and policy decision-making.

Chairing: H. Chapman, MD, PhD, MPH, Washington, DC
L. Judd, PhD, Hampton, VA

12:00 Integrating Satellite Data to Examine Respiratory Health Risks: NASA Health and Air Quality Applications

J. Haynes, MS, Washington, DC

12:15 Satellite Data for Air Quality and Health

T. Holloway, PhD, Madison, WI

12:30 From Space to the Street: Using Satellite Data to Address Inequities in Health Risks from Transportation-Related Air Pollution

G. Kerr, PhD, Washington, DC

12:45 Experimental Air Quality Monitoring System for Saharan Dust to Improve Public Health in Puerto Rico

P. Méndez-Lazaro, PhD, San Juan, Puerto Rico

**THE NATIONAL INSTITUTE FOR
OCCUPATIONAL SAFETY AND HEALTH (NIOSH)**

**L5 WORK-RELATED COVID-19: WHAT WE
HAVE LEARNED**

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 3014 (West Building, Level 3)

Target Audience

Providers of lung health; those interested in prevention of work-related COVID-19.

Objectives

At the conclusion of this session, the participant will be able to:

- describe characteristics of certain workplaces and workers placing them at increased risk from COVID-19, disparities associated with increased risk, and general approaches to prevention;
- learn new findings about associations between various occupations, risk of COVID-19, and proportion of workers vaccinated;
- gain understanding of considerations in estimating consumption of respirators and estimated numbers of respirators consumed in the COVID-19 pandemic by workers outside of the healthcare industry.

The session will provide an update on important aspects of work-related COVID-19. It will touch on factors conferring risk of exposure, vulnerability and susceptibility on workers and general approaches to workplace prevention. It will address occupational health disparities and provide an update on population data showing trends in risk, disease, and vaccination in workers. It will also address the important issue of respirator consumption needed to protect non-healthcare workers during infectious disease outbreaks such as from COVID-19.

Chairing: D.N. Weissman, MD, ATSF, Morgantown, WV

12:00 Introduction to Session

D.N. Weissman, MD, ATSF, Morgantown, WV

12:03 COVID-19 as an Occupational Disease

C. Carlsten, MD, MPH, Vancouver, Canada

12:22 Occupational Trends in COVID-19 Risk and Vaccination

P.K. Henneberger, ScD, MPH, Morgantown, WV

12:41 Estimating N95 Respirator Consumption By Non-Health Care Essential Workers

E. Fechter-Leggett, DVM, MPVM, Morgantown, WV

DIVISION OF LUNG DISEASES, NHLBI/NIH

L6 PREMATURITY VENTILATORY CONTROL: THE PRE-VENT STUDY AND ITS POTENTIAL LEGACY

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 3001/3003 (West Building, Level 3)

Target Audience

Providers of Neonatal Intensive Care, pediatric pulmonologists, neonatal and pediatric sleep specialists, respiratory physiologists, data scientists, statistical modelers, basic and translational scientists in ventilatory control

Objectives

At the conclusion of this session, the participant will be able to:

- understand the clinical and physiological significance of apnea, bradycardia and desaturation from continuous cardiorespiratory waveforms of preterm neonates in the ICU;
- better diagnose the underlying pathobiology of cardiorespiratory abnormalities in premature babies to refine therapeutic intervention;
- learn to apply data science to identify clinical phenotypes and predict outcomes.

Pre-Vent is a prospective multi-site cohort study aimed to elucidate clinical mechanisms and predictors of neonatal breathing complications and outcomes in premature infants born before 29 weeks gestation. Pre-Vent examined 725 infants from birth until one year, using clinically acquired continuous physiologic waveforms from bedside neonatal intensive care unit monitors. The study addresses critical questions related to the central vs. peripheral respiratory pathobiology in prematurity, applying data science to routinely monitored cardiorespiratory signals to develop predictive models of clinical course and outcomes, and identifying markers to determine optimal treatment strategies to ultimately improve immediate and long-term outcomes of babies born pre-term.

Chairing: A. Natarajan, MD, PhD, Bethesda, MD
A. Laposky, PhD, Bethesda, MD

12:00 The Pre-Vent Study Synergy: Aerial View

P.A. Dennery, MD, Providence, RI

12:12 Detection of Disordered Neonatal Breathing in Continuous Cardiorespiratory Monitoring

J.R. Moorman, MD, Charlottesville, VA

12:24 Clinical Outcomes in the Pre-Vent Study

N. Ambalavanan, MD, Birmingham, AL

12:36 Developmental Trajectories of Physiologic Measures by Gestational and Chronological Age in the Pre-Vent Study

D.E. Weese-Mayer, MD, Chicago, IL

12:48 Control of Breathing in Sleep and Wakefulness: Loop Gain in Pre-Vent

J.S. Kemp, MD, St. Louis, MO

DIVISION OF LUNG DISEASES, NHLBI/NIH

L7 ADVANCES IN RARE LUNG DISEASE RESEARCH: PRECLINICAL PULMONARY FIBROSIS (PREPF) AND GENETIC DISORDERS OF MUCOCILIARY CLEARANCE CONSORTIUM

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 3005/3007 (West Building, Level 3)

Target Audience

Physician scientists, health providers, researchers, clinicians, nurses and educators interested in pulmonary fibrosis & primary ciliary

dyskinesia. Junior professionals interested in rare lung disease research (IPF and primary ciliary dyskinesia)

Objectives

At the conclusion of this session, the participant will be able to:

- learn new technologies to investigate the pathogenic mechanisms and prediction of pulmonary fibrosis and genetic disorders of mucociliary clearance;
- understanding the pathogenesis, genetic, and environmental risk factor of Pulmonary fibrosis and genetic disorders of mucociliary clearance;
- understand clinical phenotyping of pulmonary fibrosis and disorders of mucociliary clearance to understand, diagnose, predict and improve outcomes.

This session will focus on rare lung disease research with presentations from two cohort studies, the Genetic Disorders of Mucociliary Clearance Consortium (GDMCC) and Preclinical Pulmonary Fibrosis (PrePF) study. Both study teams will provide a description of disease phenotypes, genetic risk factors, disease burden and influence of environmental and exacerbation risk factors. The GDMCC will present their study design for three longitudinal studies as well data from interim analysis. PrePF will present updates on analyses of the RNA transcriptome of (PrePF) and clinical lung images of IPF patients and relatives. The session will conclude with a general discussion on future directions and needs for rare lung disease research.

Chairing: M.E. Lachowicz-Scroggins, PhD, Bethesda, MD
L.J. Vuga, MD, MPH, PhD, Bethesda, MD

12:00 Preclinical Pulmonary Fibrosis: An Opportune Rare Disease Cohort

D.A. Schwartz, MD, MPH, Aurora, CO

12:15 Overview Genetic Disorders of Mucociliary Clearance Consortium (GDMCC)

S.D. Davis, MD, ATSF, Chapel Hill, NC

12:30 Pilot Studies, Clinical Trials and Training in Rare Diseases Research

T.W. Ferkol, MD, ATSF, Saint Louis, MO

12:45 Final Session Discussion: Q&A

D.A. Schwartz, MD, MPH, Aurora, CO

DIVISION OF LUNG DISEASES, NHLBI/NIH

L8 THE COLLABORATIVE COHORT OF COHORTS FOR COVID-19 RESEARCH (C4R)

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 3006/3008 (West Building, Level 3)

Target Audience

Researchers, trainees, those with interest in COVID-19 risk, severity, and outcomes

Objectives

At the conclusion of this session, the participant will be able to:

- learn about harmonization among prospective observational cohorts;
- understand and learn about the C4R and RECOVERY cohorts to study COVID-19 and post-acute outcomes of COVID-19;
- learn how to get involved in the C4R study.

C4R is a cohort of 14 ongoing longitudinal observational cohorts funded by NHLBI, NINDS, and NIA to better understand COVID-19. The C4R cohort includes over 45,000 US-based participants on whom years and, in some cases, decades of clinical, behavioral, and genomic data have been collected. The goal of C4R is to use pre-pandemic measures to identify risk factors of COVID-19 disease, severity, and outcomes. Participants in this session will learn about the C4R study and how it will help the pulmonary community understand COVID-19 outcomes including long COVID.

Chairing: L. Postow, PhD, Bethesda, MD
E. Oelsner, MD, New York, NY

12:00 An Overview of the C4R Study, Harmonization, and How To Get Involved

E. Oelsner, MD, New York, NY

12:15 An Overview of the C4r Serosurvey

J. Kim, MD, MS, Charlottesville, VA

12:30 CT Harmonization In the C4r Cohort of Cohorts

E.A. Hoffman, PhD, ATSF, Iowa City, IA

12:45 C4R and the RECOVER Cohort

R.G. Barr, MD, DrPH, New York, NY

DIVISION OF LUNG DISEASES, NHLBI/NIH

L9 LATEST DISCOVERIES FROM THE NHLBI PVDOMICS PROGRAM IN PATIENTS WITH PULMONARY HYPERTENSION

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 3010/3012 (West Building, Level 3)

Target Audience

Health providers, trainees, and researchers

Objectives

At the conclusion of this session, the participant will be able to:

- learn about the new clinical findings in PVDOMICS patients across the WHO groups of pulmonary hypertension;
- understand and learn about new metabolomic signatures and consequences of pulmonary hypertension based on omics findings in PVDOMICS patients;
- learn about the new right ventricle findings in PVDOMICS patients with pulmonary hypertension.

Pulmonary hypertension (PH) has no cure, and PH research remains a high priority for NHLBI. The current PH classification is difficult to apply clinically for precision medicine therapy. In 2014, NHLBI launched a multi-center clinical study named: Redefining Pulmonary Hypertension through Pulmonary Vascular Disease Phenomics (PVDOMICS), which includes 1 Data Coordinating Center & 6 clinical centers to conduct an observational study in PH patients. The overall goal of the PVDOMICS is to perform deep phenotyping across all PH groups and intermediate phenotypes in order to reconstruct the traditional classification and define new meaningful subclassifications. About 1200 participants have been enrolled, and the clinical and omics results from these subjects will be presented at this noon session.

Chairing: L. Xiao, MD, PhD, Bethesda, MD
N.S. Hill, MD, Boston, MA

12:00 The Metabolic Consequences of Pulmonary Vascular Dysfunction

J. Leopold, MD, Boston, MA

12:12 Metabolomic Signatures of Pulmonary Hypertension Associated With Congenital Systemic to Pulmonary Shunts

M. Griffiths, MD, New York, NY

12:24 Insights Into Clinical and Metabolic Signatures of Long-Term Hemodynamic WSPH Group 1 Super-Responders

E.B. Rosenzweig, MD, New York, NY

12:36 Sex-Based Differences in RV Function Across the Spectrum of Pulmonary Vascular Disease

N.J. Shelburne, MD, Nashville, TN

12:48 Phenotyping Right Ventricular Diastolic Stiffness in Patients with Pulmonary Hypertension

R.R. Vanderpool, PhD, Columbus, OH

MEET THE EXPERTS

CME Credits Available: 1

Pre-registration and additional fees required. Attendance is limited.

Member: \$100

LMIC Member: \$70.

12:15 p.m. - 1:15 p.m.

MOSCONE CENTER

ME10 ANTIFIBROTICS IN ILD: WHO, WHAT, WHEN, WHY AND HOW

M. Cohen, MD, PhD, San Francisco, CA

Room 50/62 (South Building, Lower Mezzanine)

ME11 IMMUNODEFICIENCY AND PARENCHYMAL LUNG DISEASES

D.C. Gomez Manjarres, MD, Gainesville, FL

D.C. Patel, DO, MBA, Gainesville, FL

J. Squire, MD, Jacksonville, FL

Room 52/54/56 (South Building, Lower Mezzanine)

ME12 INTERPRETATION OF VENTILATOR WAVEFORMS

H.L. Manning, MD, Lebanon, NH

Room 58/60 (South Building, Lower Mezzanine)

ME13 SMALL AIRWAYS DISEASE: WHEN IT'S NOT ASTHMA

M. Koslow, MD, Denver, CO

S.J. Callahan, MD, Salt Lake City, UT

E. Kazerooni, MD, Ann Arbor, MI

E.S. Yi, MD, Rochester, MN

Room 70/72 (South Building, Lower Mezzanine)

ME14 HOSPITAL SLEEP MEDICINE: UNDERSTANDING PRACTICE MODEL AND IMPACT

S. Sharma, ATSF, MD, Morgantown, WV

R. Stansbury, MD, MORGANTOWN, WV

Room 74/76 (South Building, Lower Mezzanine)

PEDIATRIC CLINICAL CORE CURRICULUM

CME Credits Available: 1.5

MOC Points Available: 1.5

PCC1 PEDIATRIC CLINICAL CORE CURRICULUM

Education Committee

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

Pediatric pulmonary and critical care physicians who work in a clinical setting and are currently engaged in maintenance of certification

Objectives

At the conclusion of this session, the participant will be able to:

- identify diagnostic and management strategies, including pulmonary function testing and appropriate ventilation strategies, for pediatric neuromuscular diseases;
- describe new and evolving treatments for pediatric neuromuscular diseases;
- characterize the use of palliative care consultation to guide physicians, patients, and families through challenging care decisions that occur in pediatric neuromuscular disease cases.

The goal of the core is to support clinicians who are engaged in maintenance of certification activities by providing updates on subjects included in recertification requirements. The Pediatric Core Curriculum symposia promote lifelong learning and the enhancement of the clinical judgment and skills essential for practicing pediatrician.

Chairing: J. Gross, MD, PhD, Denver, CO
C. Okorie, MD, MPH, Palo Alto, CA
M. Mccown, DO, Takoma Park, MD


Moderators: J. Gross, MD, PhD, Denver, CO
F.J. Dy, MD, MS, Worcester, MA

- 12:00 Making the Diagnosis: Diagnostic Strategies in Neuromuscular Disease**
O. Kupfer, MD, Aurora, CO
- 12:30 Pulmonary Function Testing for Monitoring and Management**
S. Puranik, MBBS, DCH, MD, ATSF, Indianapolis, IN

MEDICAL EDUCATION SEMINAR

CME Credits Available: 1.5

ME101 MEDICAL EDUCATION SEMINAR SERIES: Beyond the Individual: Team Cognition in Critical Care

 Pre-registration and additional fees required. Attendance is limited.
Member: \$100 LMIC Member: \$70

Assembly on Behavioral and Health Services Research

12:15 p.m. - 1:15 p.m. MOSCONE CENTER

Room 101-102 (South Building, Street Level)

Target Audience

All educators and trainees in critical care

Objectives

At the conclusion of this session, the participant will be able to:

- Define and differentiate between microcognition, macrocognition and team cognition .
- Understand how these concepts impact the decision-making process in critical care teamwork.
- Apply these concepts to provide feedback to trainees after a team interaction.

This session will delve into the differences between microcognition, macrocognition and team cognition and will explain the impact of each on teamwork efficacy and patient care in the ICU. Participants will gain a better understanding of these concepts, which are the building blocks to formulate accurate diagnoses, make efficient decisions in a group setting, and ultimately improve patient outcomes. An interactive tabletop simulation of teamwork with feedback practice for the educator will be used to solidify how to incorporate these concepts in the daily practice of trainees and educators.

Faculty: A. Alismail, MS, MA, RRT, FCCP, Loma Linda, CA
L. Blackwell, MD, New York, NY
J. Chiarchiaro, MD, MSCR, Portland, OR

12:00 p.m. - 2:00 p.m.

SECTION ON GENETICS AND GENOMICS MEMBERSHIP MEETING

MARRIOTT MARQUIS

Yerba Buena Ballroom, Salon 14-15 (Lower B2 Level)



The Section meetings are open to all ATS members and other interested individuals.

Items to be discussed include the Section's current projects and future directions.

 **ATS 2022**
INTERNATIONAL CONFERENCE
 San Francisco, CA



Sunday Afternoon, May 15

[Click Here to Access the Program Itinerary and Add Sunday Sessions and Presentations to Your Calendar](#)

1:15 p.m. - 2:15 p.m

VISIT THE EXHIBIT HALL

Take this opportunity between sessions to visit the Exhibit Hall to gain practical knowledge to advance care and research. Exhibitors will be on hand to provide information on pharmaceutical products, medical equipment, publications and research services.

BEHAVIORAL • CLINICAL • TRANSLATIONAL

YEAR IN REVIEW

CME Credits Available: 1.5

A81 NURSING YEAR IN REVIEW: PALLIATIVE CARE ACROSS THE LIFESPAN

Assembly on Nursing

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3014 (West Building, Level 3)

Target Audience

Nurses, physicians, physical and respiratory therapists, physician assistants, physiotherapists, behavioral and clinical scientists, and others involved in providing or directing palliative care

Objectives

- At the conclusion of this session, the participant will be able to:
- describe new advances in palliative care across the lifespan;

- define communication strategies in the ICU;
- define symptom management and caregiver palliative interventions.

This session will cover up-to-date related to palliative care. The session will include an across the lifespan approach, and consider needs across the illness trajectory, with representation for neonatal/pediatric and adult patients.

Chairing: L.A. Matura, PhD, RN, Philadelphia, PA
 S.J. Crowder, PhD, RN, ATSF, Indianapolis, IN

2:15 Welcome and Introduction

L.A. Matura, PhD, RN, Philadelphia, PA

2:20 Neonatal Palliative Care

C.A. Fortney, PhD, Columbus, OH

2:40 Symptom Management Strategies in Palliative Care

J.B. Seaman, PhD, RN, CHPN, Pittsburgh, PA

3:00 Advances in Symptom Management in Acute and Critical Illness

J.L. Guttormson, MS, PhD, RN, Milwaukee, WI

3:20 Caregiver Palliative Interventions

N.S. McAndrew, PhD, RN, ACNS-BC, CCRN, Milwaukee, WI

3:40 Summary

S.J. Crowder, PhD, RN, ATSF, Indianapolis, IN

CLINICAL • TRANSLATIONAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

A82 INTERSTITIAL LUNG ABNORMALITIES: CATCHING THE BULL BEFORE IT DESTROYS THE SHOP

Assembly on Clinical Problems

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 209-211 (South Building, Level 2)

Target Audience

Clinicians who care for patients at risk for developing interstitial lung abnormalities (ILA) and interstitial lung disease (ILD); Clinical and translational researchers interested in methods of early detection and diagnosis of ILD and ILA

Objectives

At the conclusion of this session, the participant will be able to:

- Improve understanding of ILA classification and features of radiologic progression. Learn about new methods to evaluate ILA, such as serum biomarkers and optical imaging with microscopic resolution.
- Learn new findings about interstitial lung abnormalities (ILAs), their prevalence and rates of progression in high-risk patient populations,

including individuals with family history of ILD and/or personal history of connective tissue disease

- Learn new information about clinical management and follow-up for patients with ILA.

In this session, we will discuss interstitial lung abnormalities (ILA), their potential role as an identifiable precursor to symptomatic progressive fibrosis, and their classification and features of radiologic progression. Speakers will discuss the prevalence of ILA and rates of progression in patient populations at risk for developing progressive fibrosis, namely patients with connective tissue disease or family history of ILD. Novel microscopic optical imaging as a potential method to assess ILA microscopically and detect early, high risk features for progressive fibrosis will be covered. The session will also cover a direct clinical perspective and relevance to the symposium by discussing clinical considerations for ILA management, follow-up, and potential future therapeutic options.

Chairing: L.P. Hariri, BS, MD, PhD, ATSF, Boston, MA
T.S. Blackwell, MD, Nashville, TN
R.K. Putman, MD, MPH, Boston, MA

2:15 Interstitial Lung Abnormalities on CT: Definition, Classification, and Progression
D.A. Lynch, MB BCH, Denver, CO

2:30 Undiagnosed Interstitial Lung Disease in Relatives of Patients with Pulmonary Fibrosis
G.M. Hunninghake, MPH, MD, Boston, MA

2:45 Development and Progression of Radiologic Interstitial Lung Abnormalities in Individuals at Risk for Familial ILD
M.L. Salisbury, MD, MS, Nashville, TN

3:00 Radiologic and Serum Biomarkers to Assess Subclinical Interstitial Lung Disease in Community-Dwelling Adults
A. Podolanczuk, MD, New York, NY

3:15 Endobronchial Optical Imaging for Microscopic Assessment of Early Interstitial Lung Disease and Interstitial Lung Abnormalities
L.P. Hariri, BS, MD, PhD, ATSF, Boston, MA

3:30 Clinical Perspectives on Interstitial Lung Abnormalities: Considerations for Patient Management
L. Richeldi, PhD, Rome, Italy

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CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

A83 GREAT CASES: CLINICAL, RADIOLOGIC, AND PATHOLOGIC CORRELATIONS BY MASTER CLINICIANS

Council of Chapter Representatives

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3-4 (South Building, Exhibition Level)

Target Audience

Clinicians in PCCM

Objectives

At the conclusion of this session, the participant will be able to:

- gain knowledge about treatment/management approach to different pathologies;
- understand clinical reasoning used to reach a differential diagnosis based on a multidisciplinary team model.

Young physicians present interesting cases to a multidisciplinary panel to demonstrate a team approach to diagnosing and managing challenging cases. It will enhance medical knowledge, and diagnostic and management skills.

Chairing: M.J. Mammen, MD, MS, ATSF, Buffalo, NY
J. Trevor, MD, Birmingham, AL

2:15 As Lady Macbeth Would Say, 'Out, Damn'd Spot'
T.S. Yang, MD, Woodland Hills, CA

2:27 Their Lives a Mimicry
M. Desta, MD, New York, NY

2:39 When Lungs Get Struck by Halley's Comet
H. Rajevac, MD, Burlington, MA

2:51 There Must Be Something in The Water
J.R. Angel, MD, Pittsburgh, PA

3:03 Radiologic Findings
A.G. Wilcox, Los Angeles, CA

3:13 Pathologic Findings
J.L. Myers, MD, Ann Arbor, MI

3:34 Master Clinicians
J.H.. Hansen-Flaschen, MD, ATSF, Philadelphia, PA
S.I. Rounds, MD, Providence, RI
P.C. Stillwell, MD, Aurora, CO

BASIC CLINICAL

CRITICAL CARE TRACK

CME Credits Available: 1.5

A84 JAMA AND THE NEW ENGLAND JOURNAL OF MEDICINE. DISCUSSION ON THE EDGE: REPORTS OF RECENTLY PUBLISHED CRITICAL CARE RESEARCH

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3000/3002/3004 (West Building, Level 3)

This session will provide a forum for attendees to interact with the authors and editors about papers published in JAMA and the New England Journal of Medicine. Papers presented will be recent publications, selected by the editors, to be of significant importance to the field of pulmonary medicine. Attendees will have the opportunity to hear presentations directly from the author and address questions to both the authors and editors. The discussion is intended to provide a unique insight into these papers, the selection process, and how the research applies directly to the field of pulmonary medicine.

Chairing: C.W. Seymour, MD, MSC, Pittsburgh, PA
D.B. Taichman, MD, PHD, Philadelphia, PA

Speakers and Talks to be Announced

BEHAVIORAL • TRANSLATIONAL

BASIC CORE

CME Credits Available: 1.5

A85 DEVELOPMENT AND WOUND HEALING: WHERE SENESCENCE IS THE SILVER LINING

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Target Audience

Scientists and Physician Scientists interested in understanding the role of senescence in development, wound healing and homeostasis in the lung, to then be able to draw contrasts when disruption of these processes contributes to mechanisms that drive dis

- understand senescence as a physiological process important in development and homeostasis in the lung;
- appreciate the importance of senescence in wound repair and how dysregulation of these processes may lead to lung disease;
- explain the value of model systems for investigating the role of senescence in health and repair processes in the lung.

Senescence is a cell fate decision characterized by irreversible arrest of proliferation accompanied by a senescence-associated secretory

phenotype. While the role of senescence in disease affecting processes is emerging, it is important to also recognize the non-pathological roles of senescence. In this session experts will summarize the state of the art in the role of senescence in development, and how this knowledge has been advanced through the use of model systems, and the importance of senescence in wound healing and repair processes in different cellular compartments within the lung.

Chairing: J.K. Burgess, PhD, BSc, ATSF, Groningen, Netherlands
A.L. Mora, MD, Columbus, OH
C.R. Kliment, MD, PhD, Pittsburgh, PA

2:15 The Role of Senescence in Development and Tissue Homeostasis: What Have We Learnt from Model Organisms?

M. Yun, PhD, Dresden, Germany

2:45 Senescence in Lung Epithelial Differentiation in Health and Disease

R.L. Zemans, MD, Ann Arbor, MI

3:05 Senescence in the Vascular Niche

S. Adnot, MD, Créteil, France

3:25 Impaired Resolution of Fibrosis with Age: Is There a Role for Senescence?

P.J. Wolters, MD, San Francisco, CA

BEHAVIORAL • CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A86 THE ONGOING EPIDEMIC OF ADOLESCENT VAPING: THE LATEST EVIDENCE ON PREVENTION, PULMONARY HARMS, AND TREATMENT

Assemblies on Pediatrics; Behavioral and Health Services Research; Environmental, Occupational and Population Health; Tobacco Action Committee; Pediatric Advocacy Committee

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Target Audience

Pediatric and adult pulmonologists, fellows, researchers, other multidisciplinary clinicians (nurses, etc.), and public health professionals who are interested in addressing the use of e-cigarettes in adolescents

Objectives

At the conclusion of this session, the participant will be able to:

- identify the importance of e-cigarette screening, and cessation support for adolescents, a vulnerable group targeted by e-cigarette companies globally;

- gain understanding and describe the spectrum of harmful pulmonary effects associated with vaping in adolescents;
- describe the importance of continued evidence-based education and advocacy efforts necessary to curb the youth vaping epidemic in the U.S. and abroad.

Pediatric pulmonologists are faced with screening their patients for e-cigarette use amidst the ongoing epidemic of adolescent vaping, a reflection of successful e-cigarette marketing strategies. This session will feature expert e-cigarette researcher advocates who will discuss the road to vaping addiction in the U.S. and abroad, the spectrum of pulmonary complications of vaping, and the novel success of anti-vaping education and treatment in multidisciplinary clinics and schools. Session attendees will find themselves better prepared to screen, diagnose and educate their vulnerable adolescent patients and will feel empowered to employ pediatric advocacy strategies to help their communities.

Chairing: D.R. Rao, MD, Dallas, TX
F. Afolabi, MD, Dallas, TX
A.M.H. Casey, MD, Boston, MA

- 2:15 Introduction**
D.R. Rao, MD, Dallas, TX
- 2:16 I Used to Vape: What Medical Professionals Should Know**
Speaker To Be Announced
- 2:21 The Evolution of E-Cigarette Marketing and the Sustained Prevalence of Adolescent Vaping**
M. Eakin, PhD, Baltimore, MD
- 2:36 Practical Approaches to Pulmonary Complications of E-Cigarette Use**
A.M.H. Casey, MD, Boston, MA
- 2:51 The Use of Marijuana Containing E-Cigarette Products: Lessons Learned From the EVALI Outbreak**
D.R. Rao, MD, Dallas, TX
- 3:06 Adolescent Perceptions of E-Cigarettes in Latin America**
G.E. Zabert, MD, Neuquén, Argentina
- 3:21 Lessons Learned From “CATCH My Breath”: A School-Based E-Cigarette Education Curriculum**
S.H. Kelder, PhD, MPH, Austin, TX
- 3:36 Conclusion/ Q&A**
F. Afolabi, MD, Dallas, TX

CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A87 EMERGING PROGRAM MODELS FOR PULMONARY REHABILITATION

Assembly on Pulmonary Rehabilitation

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

Respiratory physicians, respiratory therapists, physiotherapists, occupational therapists, nurses, physician assistants, dieticians, medical students, patients, scientists, healthcare policy makers, psychologists, social workers, ehealth specialists

Objectives

At the conclusion of this session, the participant will be able to:

- gain understanding of the strengths and limitations of different program models for pulmonary rehabilitation in terms of patient selection, patient-reported outcomes, and program availability/adherence;
- implement the essential components of pulmonary rehabilitation in the program model that is suitable for the local care setting and the needs of the individual patient;
- describe differences between home-based pulmonary rehabilitation, center-based rehabilitation, and telerehabilitation for patients with chronic respiratory diseases.

Pulmonary rehabilitation (PR) is a very effective treatment for patients with chronic respiratory diseases. However, PR remains underused in many parts of the world, due to poor access, uptake and completion of programs. In recent years, several new program models have emerged that aim to overcome these hurdles in the use of PR. These models include home-based PR and telerehabilitation as alternatives for traditional center-based comprehensive PR. Despite their alternative approach, all PR models share a set of essential components, including patient assessment at baseline and outcome, program content, method of delivery, and quality assurance. While the emerging models bring new opportunities for PR, future programs will include even more patient involvement to ensure broad and long-term success.

Chairing: F. Franssen, MD, PhD, Horn, Netherlands
L. Houchen-Wolloff, PhD, CERS, Leicester, United Kingdom

2:15 Essential Components of Pulmonary Rehabilitation
C.L. Rochester, MD, New Haven, CT

2:35 Center-Based Comprehensive Pulmonary Rehabilitation
M.A. Spruit, PT, PhD, Horn, Netherlands

2:55 Home-Based and Telerehabilitation
A.E. Holland, PT, PhD, Melbourne, Australia

3:15 The Future of Pulmonary Rehabilitation is Personalised
N.J. Greening, MBBS, PhD, MRCP(UK), BMedSci, Leicester, United Kingdom

3:35 General Discussion

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BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A88 AS PEOPLE AGE, DOES COPD SUSCEPTIBILITY ORIGINATE FROM DIFFERENT CELL TYPES

Assemblies on Respiratory Cell and Molecular Biology; Allergy, Immunology and Inflammation; Environmental, Occupational and Population Health

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2001/2003 (West Building, Level 2)

Target Audience

Physicians and scientists who are interested in understanding the underlying mechanisms that drive the development of aging-related diseases

Objectives

At the conclusion of this session, the participant will be able to:

- understand and describe the processes that takes place during early stages of COPD development;
- gain knowledge of and describe various cell types that are involved in the development of COPD;
- describe possible endotypes of COPD.

Chronic obstructive pulmonary disease (COPD) is a syndrome that comprises several lung pathologies, but sub-phenotyping the various disease subtypes has not been successful. Functional studies of these polymorphisms suggest that susceptible airway, endothelial, hematopoietic, or smooth muscle cells initially may generate COPD endotypes that are characterized by distinct pathobiological mechanisms. These endotypes may ultimately manifest themselves as emphysematous destruction of the lung as people age. Polymorphisms in cells other than those listed may remain to be identified and could represent yet other endotypes of COPD.

Chairing: F. Polverino, MD, PhD, Houston, TX
I. Petrache, MD, ATSF, Denver, CO
Y. Tesfaigzi, PhD, Boston, MA

2:15 Is COPD a Disease of Only the Older Population?
M.K. Han, MD, MS, ATSF, Ann Arbor, MI

2:20 Macrophage Susceptibility and COPD
P. Woodruff, MD, MPH, San Francisco, CA

2:35 Susceptibility of Endothelial Cells in COPD
I. Petrache, MD, ATSF, Denver, CO

2:50 Susceptibility of Airway Epithelia Drives Chronic Bronchitis and COPD
Y. Tesfaigzi, PhD, Boston, MA

3:05 Deficiency in B Cells in COPD
F. Kheradmand, MD, Houston, TX

3:20 Mast and Dendritic Cells as Origins of COPD Development
I.M. Adcock, PhD, London, United Kingdom

3:35 How Understanding Susceptible Cell Types Can Help Improve Clinical Intervention
S.I. Rennard, MD, Omaha, NE

BASIC • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A89 ASTHMA BEYOND T2 INFLAMMATION: ADDITIONAL AND ALTERNATIVE PATHWAYS FOR SEVERE ASTHMA

Assemblies on Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2014/2016 (West Building, Level 2)

Target Audience

Researchers in severe asthma and clinicians who treat asthmatic patients

Objectives

At the conclusion of this session, the participant will be able to:

- understand the potential and limitations of immune profiling in identifying asthma inflammatory endotypes;
- gain understanding of potential contributions of non-T2 inflammation in severe asthma;
- understand the effect of pediatric lung inflammation on later adult disease.

While recent advances in T2 inflammation in asthma have yielded novel biologics that have significantly improved disease management, use of these agents is limited to patients with evidence of significant T2 inflammation, and some of these patients do not respond to therapy. Additional insight is needed into other contributing or alternative pathologies that underly severe asthma. Significant progress has been

made in the last several years in understanding some alternative pathways for inflammation in asthma and how these may contribute to severity. Further understanding of these pathways may lead to novel therapeutic strategies and targets for asthma management.

Chairing: B.D. Levy, MD, ATSF, Boston, MA
A. Ray, PhD, Pittsburgh, PA

2:15 High-Dimensional Immune Phenotyping in Severe Asthma
M. Camiolo, MD, PhD, Pittsburgh, PA

2:30 Obesity and Asthma
N.L. Lugogo, MD, Ann Arbor, MI

2:45 Non-Th2 Mechanisms of Severe Asthma
P. Hansbro, PhD, Sydney, Australia

3:00 CXCR3 and CCR5 as Mediators of T1 High Severe Asthma
M. Gauthier, MD, Pittsburgh, PA

3:15 Early Life Origins of Asthma and COPD
S. Saglani, BSc(Hons), MD, MBChB, MRCP(UK), London, United Kingdom

3:30 Panel Discussion

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CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A90 RECENT ATS CLINICAL PRACTICE GUIDELINES

Assemblies on Allergy, Immunology and Inflammation; Clinical Problems; Critical Care; Environmental, Occupational and Population Health; Pediatrics; Pulmonary Infections and Tuberculosis; Documents Development and Implementation Committee

2:15 p.m. - 3:45 p.m. MOSCONE CENTER

Room 205-206 (South Building, Level 2)

Target Audience

Clinicians; interprofessionals; medical educators; nurses

Objectives

At the conclusion of this session, the participant will be able to:

- understand how evidence is used to inform diagnostic and treatment recommendations;
- apply clinical recommendations from recently published guidelines in clinical practice, improving patient outcomes;

- obtain new strategies to approach: COPD, asthma, non-tuberculous mycobacterial disease, community acquired pneumonia, sarcoidosis, and post prematurity lung disease.

This session is the 7th annual scientific symposium highlighting ATS clinical practice guidelines. This year's symposium will highlight guidelines on: COPD Pharmacotherapy, Diagnosis of Sarcoidosis, Use of FeNO in Asthma, Post- Prematurity Lung Disease, Non-tuberculous Mycobacteria, and the use of PCR for pneumonia. Speakers describe how the guidelines provide the foundation for improving care.

Chairing: C. Strange, MD, ATSF, Charleston, SC
M.L. Metersky, MD, Farmington, CT
K.A. Riekert, PhD, Baltimore, MD

2:15 Clinical Practice Guideline Methodology
K. Wilson, MD, New York, NY

2:20 Pharmacotherapy of COPD
L. Nici, MD, Providence, RI

2:35 FeNO Use in Asthma
R.A. Dweik, MD, ATSF, Cleveland, OH

2:45 Diagnosis of Sarcoidosis
L.A. Maier, MSPH, MD, ATSF, Denver, CO

3:00 Community Acquired Pneumonia: PCR Testing
S.E. Evans, MD, ATSF, Houston, TX

3:10 Post Prematurity Lung Disease
A.I. Cristea, MD, MS, ATSF, Indianapolis, IN

3:25 Non-Tuberculous Mycobacterium Treatment Guidelines
C.L. Daley, MD, Denver, CO

3:40 Guideline Implementation
J. Ruminjo, MD, New York, NY

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CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

A91 MYTHS OR TRUTHS: CONTROVERSIES IN RESPIRATORY MEDICINE

Assemblies on Sleep and Respiratory Neurobiology; Critical Care; Pulmonary Circulation; Respiratory Structure and Function

2:15 p.m. - 3:45 p.m. MOSCONE CENTER

Room 3001/3003 (West Building, Level 3)

Target Audience

Clinicians and researchers working in the fields of critical care, obstructive lung disease, pulmonary hypertension and sleep medicine

Objectives

At the conclusion of this session, the participant will be able to:

- inform the clinicians and researchers about specific areas of debate in management of common and burdensome respiratory conditions: 1) Pulmonary embolism; 2) OSA; 3) COPD and 4) ARDS;
- apply state of the to help the audience decide on appropriate management of intermediate risk pulmonary embolism; use of CPAP in OSA patients; diagnosis of COPD and prognostication and treatment of ARDS for their patients;
- identify key gaps for conditions mentioned in objectives 1 and 2 that should inform future research.

The pulmonary, critical care and sleep communities have made great strides towards providing evidence-based care. However, recent data challenge current approaches to, and create uncertainty about, the management of common and highly burdensome conditions. These controversies include 1) therapy for intermediate risk pulmonary thromboembolism, 2) effective sleep apnea treatment with continuous positive airway pressure, 3) physiology driven diagnosis of chronic obstructive pulmonary disease and 4) utility of phenotypes in management of acute respiratory distress syndrome. This session will address the state of the and evidence for aspects of managing these conditions to help inform clinical decision making and future research.

Chairing: A. Zinchuk, MD, MHS, BS, New Haven, CT
A.M. Esper, MD, MS, ATSF, Atlanta, GA
Z.-G. Zhai, MD, PhD, Beijing, China
J.C. Woods, PhD, Cincinnati, OH

2:15 Introduction to Mythbusters in Respiratory Medicine

A. Zinchuk, MD, MHS, BS, New Haven, CT

2:20 Truth: Patients With Intermediate Risk Pulmonary Embolism Should Undergo Catheter Directed Therapy

P. Rali, MD, Philadelphia, PA

2:28 Myth: Patients With Intermediate Risk Pulmonary Embolism Should Undergo Catheter Directed Therapy

B.N. Rivera-Lebron, MD, MS, Pittsburgh, PA

2:36 Myth Busted or Confirmed?

Z.-G. Zhai, MD, PhD, Beijing, China

2:40 Truth: CPAP Is an Effective Treatment for OSA

R.L. Owens, MD, ATSF, San Diego, CA

2:48 Myth: CPAP Is an Effective Treatment for OSA

N.A. Shah, MD, MPH, MSci, New York, NY

2:56 Myth Busted or Confirmed?

A. Zinchuk, MD, MHS, BS, New Haven, CT

3:00 Truth: Flow Limitation Is Essential to Diagnosis and Treatment of COPD

D.D. Sin, MD, Vancouver, Canada

3:08 Myth: Flow Limitation Is Essential to Diagnosis and Treatment Of COPD

D.D. Marciniuk, MD, Saskatoon, Canada

3:16 Myth Busted or Confirmed?

J.C. Woods, PhD, Cincinnati, OH

3:20 Truth: ARDS Phenotypes: Pathophysiology Is a Promising Approach to Tailor Therapy

N. Qadir, MD, Los Angeles, CA

3:28 Myth: ARDS Phenotypes: Pathophysiology Is a Promising Approach to Tailor Therapy

E. Fan, MD, PhD, Toronto, Canada

3:36 Myth Busted or Confirmed?

A.M. Esper, MD, MS, ATSF, Atlanta, GA

3:40 Closing Remarks

A.M. Esper, MD, MS, ATSF, Atlanta, GA

CLINICAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

A92 LIVING BETTER, LIVING LONGER: CF CARE ACROSS THE LIFESPAN IN THE NEW ERA OF CF THERAPEUTICS**Assemblies on Pediatrics; Clinical Problems**

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3010/3012 (West Building, Level 3)

Target Audience

Pediatric pulmonologist, adult pulmonologists, caregivers and providers of care for people with cystic fibrosis, trainees, multi-disciplinary providers

Objectives

At the conclusion of this session, the participant will be able to:

- describe new findings about racial and ethnic disparities in regards to CFTR modulator availability;
- define new strategies to incorporate antimicrobial stewardship into CF care;
- define new strategies to manage the care of adults with CF, including being able to better counsel patients on fertility and pregnancy considerations with CFTR modulator use, and considerations for lung transplant evaluation and advanced lung disease

The session will discuss the changing landscape of care of people with cystic fibrosis now that highly effective CFTR modulators are available for the majority population. Topics covered will include racial and ethnic disparities in modulator access and outcomes, implications for airway infection epidemiology and management in childhood to de-escalation

of therapies and antibiotic stewardship, gender-specific health issues, and care of older adults with CF, including advanced lung disease and lung transplant.

Chairing: L. Caverly, BA, MD, Ann Arbor, MI
J.L. Taylor-Cousar, MD, MSc, ATSF, Denver, CO
C.S. Thornton, MD, PhD, Calgary, Canada

- 2:15 Chair Introduction**
L. Caverly, BA, MD, Ann Arbor, MI
- 2:20 Health Disparities in CF Outcomes and CFTR Modulator Access**
M. McGarry, MD, San Francisco, CA
- 2:35 Early Life CF Lung Disease, and Lessons Learned From Animal Models**
A.J. Fischer, MD, PhD, Iowa City, IA
- 2:50 Changing Landscape of CF Therapies, and Opportunities for Antibiotic Stewardship**
G. Davies, MBChB, PhD, London, United Kingdom
- 3:05 Gender-Specific Considerations in CF Care**
R. Jain, MD, MSc, ATSF, Dallas, TX
- 3:20 Changes in Advanced Lung Disease, Lung Transplants, and Care of the Aging Patient With CF**
D.E. Tullis, MD, Toronto, Canada
- 3:35 Chairs Wrap-up Discussion**
J.L. Taylor-Cousar, MD, MSc, ATSF, Denver, CO

BEHAVIORAL

MINI SYMPOSIUM

A93 QUALITY OF CARE, HEALTH DISPARITIES, AND HEALTHCARE UTILIZATION AMONG PATIENTS WITH ASTHMA OR COPD

2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**
Room 3005/3007 (West Building, Level 3)

Chairing: V.G. Press, MD, MPH, ATSF, Chicago, IL
M.F. Griffith, MD, MPH, Aurora, CO
N. Thakur, MD, MPH, San Francisco, CA

Oral Presentations

- 2:15 Assessing Quality of Care for Patients Hospitalized for Acute Asthma in US Hospitals/S. Chokkara, V.G. Press, J.C. Rojas, Chicago, IL, p.A2120**
- 2:25 Geographic Disparities in Health Services Among COPD Patients in National VA Data/A.K. Baldomero, K.M. Kunisaki, C.H. Wendt, A. Bangerter, D.B. Nelson, C. Henning-Smith, R.A. Dudley, Minneapolis, MN, p.A2121**

- 2:35 Association Between Self-Reported Falling and Risk of Hospitalizations for Patients with Chronic Obstructive Pulmonary Disease/V.S. Fan, A.M. Yohannes, E.R. Locke, P.L. Hebert, T.L. Simpson, J.C. Fortney, C.T. Battaglia, R.B. Trivedi, E.R. Swenson, J.D. Edelman, K.C. Ritchey, Seattle, WA, p.A2122**
- 2:45 Association Between Race, Geography, and 1-Year Mortality After Hospitalization for Chronic Obstructive Pulmonary Disease/S. Jain, A. Priya, P. Lindenauer, New Haven, CT, p.A2123**
- 2:55 Lifestyle Intervention Targeting Weight Loss to Reduce Dyspnea in Chronic Lung Disease/M.V. Benzo, M. Roy, R. Benzo, Rochester, MN, p.A2124**
- 3:05 Are Patients Treated According to GINA? Treatment and Exacerbation Patterns in UK Primary Care from SABINA Heatmaps/K. Maslova, J.K. Quint, M. Fagerås, A. Baheti, S. Siddiqui, R.J.P. van der Valk, Cambridge, United Kingdom, p.A2125**
- 3:15 Identifying Unmet Needs in Moderate Asthma Using Hidden Depths Methodology/M. Fagerås, L. Draffan, M. Sidaway, A. Hamblin, N. Mestdagh, S. Thapar, S. Riley, M. Tedeschi, Molndal, Sweden, p.A2126**
- 3:25 Healthcare Resource Consumption and Care Pathway of Patients Who Died from Asthma in France/L. Guilleminault, C. Conte, M. Mounie, C. Camus, A. Didier, A. Sommet, N. Costa, Toulouse, France, p.A2127**
- 3:35 Availability, Affordability and Access to Essential Medications for Asthma and Chronic Obstructive Respiratory Disease in Three Low and Middle-Income Country Settings/N. Robertson, S. Pollard, N. Rahman, L. Underhill, S. Mohan, M. Soares, R. Padalkar, S. McKeown, N. Rykiel, O. Flores Flores, S. Quaderi, M.K. Cárdenas, J. Miranda, P. Alupo, B. Kirenga, W. Checkley, J. Hurst, T. Siddharthan, Lexington, KY, p.A2128**

CLINICAL

MINI SYMPOSIUM

A94 INNOVATIONS IN COPD MANAGEMENT

2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**
Room 11-12 (South Building, Exhibition Level)

Chairing: F.C. Scirba, MD, Pittsburgh, PA
C. Macrosty, DO, Chapel Hill, NC
D.-J. Slebos, MD, PhD, Groningen, Netherlands

Featured Speaker:

- 2:15 Lung Volume Reduction: Proven Benefit, But Unanswered Questions/F.C. Scirba, Pittsburgh, PA**

Oral Presentations

- 2:25 Quantitative Pulmonary Tomoscintigraphy to Guide Target Selection for Bronchoscopic Lung Volume Reduction with Endobronchial Valves/T. Egenod, Limoges, France, p.A2129**
- 2:35 Bilateral Endobronchial Valves Treatment for Severe Emphysema/N. Guibert, R. Fumat, F. Favard, M. Dusselier, V. Héluain, R. Barthes, G. Plat, Y. Simonneau, T. Egenod, Toulouse, France, p.A2130**
- 2:45 Bronchoscopic Lung Volume Reduction with Endobronchial Valves Decreases Dynamic Hyperinflation and Improves Respiratory Muscles Function in Patients with Severe Emphysema/N. Guibert, M. Dupuis, F. Favard, Y. Simonneau, M. Dusselier, V. Héluain, A. Le Borgne-krams, G. Plat, T. Egenod, R. Fumat, Toulouse, France, p.A2131**
- 2:55 Less Is More: Low Rate of Post-Endobronchial Valve Pneumothorax Rate Using Intra-Procedure Low FiO₂ Strategy/S.-W. Low, M. Aboudara, M.G. Lester, O.B. Rickman, F. Maldonado, R.J. Lentz, Nashville, TN, p.A2132**
- 3:05 Lobar Perfusion Changes Following Bronchoscopic Lung Volume Reduction/N. Van Der Rijst, S. Gayen, S. Dadparvar, T. Sinha, B.H. Lashari, O.A. O'Corragain, R. Townsend, N. Patlakh, J. Thomas, N. Marchetti, G.J. Criner, Philadelphia, PA, p.A2133**
- 3:15 Weight Gain Following Bronchoscopic Lung Volume Reduction/O.A. O'Corragain, R. Townsend, B. Lashari, T. Sinha, N. van der Rijst, G.J. Criner, Philadelphia, PA, p.A2134**
- 3:25 Improving Exertional Dyspnea and Desaturation with Use of a Novel PEP Device in Patients with COPD/A.M. Cattran, R. Panos, R. Baker, M.A. Zafar, Cincinnati, OH, p.A2135**
- 3:35 The Use of Oscillating Positive Expiratory Pressure (OPEP) Therapy in Patients with COPD or Chronic Bronchitis with Excess Mucus Secretion: A Randomized Controlled Trial/M.J. Van Es, S.S. Schokker, S. Been-Buck, W.J. Wiersema, T. Klemmeier, H.A.M. Kerstjens, W. Jacobs, Groningen, Netherlands, p.A2136**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL**MINI SYMPOSIUM****A95 THE IDEA GENERATOR: NOVEL RISK FACTORS AND FRESH APPROACHES TO DISEASE CHARACTERIZATION****2:15 p.m. - 3:45 p.m.****MOSCONE CENTER****Room 201-202 (South Building, Level 2)**

Chairing: N.E. Alexis, PhD, Chapel Hill, NC
G.C. Goobie, MD, Pittsburgh, PA
A.A. Litonjua, MD, MPH, ATSF, Rochester, NY

Oral Presentations

- 2:15 Combined Effect of Socioeconomic, Environmental, and Lifestyle Factors on Asthma: An Exposome Study in the French Nutrinet-Santé Cohort/A. Guillien, A. Bédard, O. Dumas, J. Allegre, N. Arnault, A. Bochaton, N. Druesne-Pecollo, D. Dumay, L. Fezeu, S. Hercberg, N. Le Moual, H. Pilkington, S. Rican, G. Sit, F. Szabo, M. Touvier, P. Galan, T. Feuillet, R. Varraso, V. Siroux, Grenoble, France, p.A2137**
- 2:25 Development of New Asthma in Fertile Women Is Associated with Use of Orally Administered Hormonal Contraceptives in a Population Based, Nationwide Case Control Study/E.S.H. Hansen, K. Aasbjerg, A.L. Moeller, A. Meaidi, E.J. Gade, C. Torp-Pedersen, N.V. Backer, Copenhagen, Denmark, p.A2138**
- 2:35 Using Novel Imaging Techniques to Characterize Asthma Patients/C.E. Brehm, N. Lugogo, S. Wang, B. Derstine, J. Sullivan, S. Holcombe, Ann Arbor, MI, p.A2139**
- 2:45 Nasal Epithelial Lining Fluid (nELF) Cytokines as Biomarkers to Characterize T2-High Asthma in Children/A.Y. Qiu, E. Brigham, H. Woo, N.N. Hansel, R. Koehl, N.E. Alexis, M.E. Rebuli, M.C. McCormack, Baltimore, MD, p.A2140**
- 2:55 Plasma Protein Signatures of Adult Asthma/G. Smilnak, J.D. White, M. Lee, S.J. London, Research Triangle Park, NC, p.A2141**
- 3:05 Serum Metabolomics in Sarcoidosis/S.-Y. Liao, C. Restrepo, K. MacPhail, B.Q. Barks, P. Mroz, C. Riley, T.E. Fingerlin, L.A. Maier, Denver, CO, p.A2142**
- 3:15 Plasma Sphingolipids, Lung Function, and Obstructive Lung Disease: The Cardiovascular Health Study/A. Gharib, P. Jensen, B. Psaty, A. Hoofnagle, S.A. Gharib, N. Sotoodehnia, R. Lemaitre, Seattle, WA, p.A2143**
- 3:25 Markers of Sputum Dehydration Modify the Response to Long-Term Ozone Exposure in Individuals with and At-Risk of COPD/L.M. Paulin, N.E. Alexis, H. Woo, C. Liu, M. Kesimer, B. Button, C.S. Pirozzi, R. Paine, P. Galiatsatos, V. Tejwani, A. Fawzy, A. Gassett, K. Kirwa, J.D. Kaufman, N.N. Hansel, Lebanon, NH, p.A2144**
- 3:35 Deep Learning Utilizing Discarded Spirometry Data to Improve Lung Function and Mortality Prediction in the UK Biobank/D. Hill, M. Torop, A. Masoomi, P.J. Castaldi, J. Dy, M.H. Cho, B.D. Hobbs, Boston, MA, p.A2145**

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

A96 GIANTS STADIUM: TREATMENTS AND TRIALS IN PULMONARY HYPERTENSION2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 3020/3022/3024 (West Building, Level 3)

Chairing: M.J.C. Humbert, MD, PhD, Bicetre, France
 N. Al-Naamani, MD, MS, Philadelphia, PA
 J.M. Elinoff, MD, ATSF, Bethesda, MD

Oral Presentations

- 2:15 BET Family Inhibition for Pulmonary Arterial Hypertension: A Pilot Study/S.** Provencher, F. Potus, P. Blais Lecours, S. Bernard, J.C. Weatherald, M. Sweeney, E. Kulikowski, O. Boucherat, S. Bonnet, Quebec City, Canada, p.A2146
- 2:25 Distensibility with Inhaled Nitric Oxide as a Predictor of Treatment Response in WSPH Group 3 Pulmonary Hypertension/E.** Harder, D.M. Systrom, A.B. Waxman, Boston, MA, p.A2147
- 2:35 Long-Term Effects of Pulmonary Endarterectomy on Pulmonary Hemodynamics and RV Function in Chronic Thromboembolic Pulmonary Hypertension/A.** Kianzad, N.J. Braams, J. van Wezenbeek, F.P. Oosterveer, P. Symersky, E.J. Nossent, A. Boonstra, A. Vonk Noordegraaf, F.S. de Man, L.J. Meijboom, H.J. Bogaard, Amsterdam, Netherlands, p.A2148
- 2:45 Long-Term Data from Study APD811-007, an Open-Label Extension Study Evaluating Ralinepag for the Treatment of Pulmonary Arterial Hypertension/E.S.** Klings, J.A. Barbera, R. Grover, P. Jansa, Y. Rao, I. Saib, D.T. Solum, Boston, MA, p.A2149
- 2:55 PULSAR Open-Label Extension: Long-Term Efficacy and Safety of Sotatercept for the Treatment of Pulmonary Arterial Hypertension (PAH)/M.** Humbert, V.V. McLaughlin, S.R. Gibbs, M. Gomberg-Maitland, M. Hoeper, I.R. Preston, R. Souza, A.B. Waxman, H.A. Ghofrani, P. Escribano Subias, J.P. Feldman, G.M. Bohns Meyer, D. Montani, K.M. Olsson, S. Manimaran, J. de Oliveira Pena, D.B. Badesch, Bic, p.A2150
- 3:05 Safety and Tolerability of LIQ861 in Pulmonary Arterial Hypertension (PAH): Results from INSPIRE Study/N.S.** Hill, J.P. Feldman, S. Sahay, D.J. Levine, S. Patel, A. Galloway, T.M. Bull, Boston, MA, p.A2151
- 3:15 Long-Term Efficacy of Oral Treprostinil in Subjects with Pulmonary Arterial Hypertension: FREEDOM-EV Open-Label Extension Study/R.J.** White, M. Broderick, C. Deng, R. Grover, L. Holdstock, A. Khan, G.M. Bohns Meyer, B. Ng, T. Pulido Zamudio, I. Saib, P. Sepulveda, Rochester, NY, p.A2152

3:25 Socioeconomic Status Is Associated with Treatment Delays in Pulmonary Arterial Hypertension/K.R. Gillmeyer, S.T. Rinne, S.X. Qian, B.A. Maron, S.W. Johnson, E.S. Klings, R.S. Wiener, Boston, MA, p.A2153

3:35 External Validation of a Refined 4 Strata Risk Assessment Score from the French Pulmonary Hypertension Registry/A. Boucly, J.C. Weatherald, L. Savale, P. De Groote, V. Cottin, G. Prévot, A. Chauat, F. Picard, D. Horeau-Langlard, A. Bourdin, E.-M. Jutant, A. Beurnier, M. Jevnikar, X. Jais, G. Simonneau, D. Montani, O. Sitbon, M. Humbert, Le Kremlin Bicêtre, France, p.A2154

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

A97 RESEARCH OUTSIDE OF THE NTM BOX2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 215-216 (South Building, Level 2)

Chairing: K.N. Olivier, MD, MPH, ATSF, Bethesda, MD
 C.L. Daley, MD, Denver, CO

Oral Presentations

- 2:15 Rhesus Macaque Model of Pulmonary Aging and Non-tuberculous Mycobacterium Infection Reveals Age Related Mechanisms of Disease Severity/N.** Rhoades, M.H. Davies, S. Kohama, L. Bermudez, K.L. Winthrop, J. Mattison, C. Fuss, E. Spindel, I. Messaoudi, Irvine, CA, p.A2155
- 2:25 Vanadium in Groundwater Aquifers Increases the Risk of MAC Infection in Hawaii/E.** Lipner, J.P. French, S. Nelson, J.O. Falkinham, R. Mercaldo, R. Blakney, Y. Daida, T. Frankland, J.R. Honda, S. Honda, R. Prevots, Rockville, MD, p.A2156
- 2:35 Healthcare-Associated Links in Transmission of Nontuberculous Mycobacteria in Patients with Cystic Fibrosis (HALT NTM): A Multicenter Study/J.E.** Gross, S. Caceres, N. Hasan, E. Lipner, J.R. Honda, M. Strand, M. Strong, R. Davidson, J.A. Nick, Denver, CO, p.A2157
- 2:45 Anti-Mycobacterials and Micro-Aspiration Drive Lower Airway Dysbiosis in NTM Bronchiectasis/S.** Singh, A. Hoque, I. Sulaiman, Y. Li, B. Wu, M. Chang, Y. Kyeremateng, D.E. Collazo, D. Kamelhar, D.J. Addrizzo-Harris, L.N. Segal, New York, NY, p.A2158
- 2:55 Soluble Programmed Death Protein-1 and Disease Progression in Patients with Nodular Bronchiectatic (NB) Nontuberculous Mycobacterial Lung Disease (NTM-LD)/S.-W.** Pan, M.-L. Ho, J.-Y. Feng, C.-C. Shu, Taipei, Taiwan, p.A2159

- 3:05 Large-Scale Profiling of Bacterial Killing Reveals Clinical Outcomes/D.A.S. Jovanovic, F. Bright, B. Wicki, L. Sauteur, A. Wuest, D.M. Grogono, F. Geier, M. Tamm, P. Dehio, J. Nemeth, M. Abanto, R. Thomson, S. Bell, A. Floto, L. Boeck, Basel, Switzerland, p.A2160**
- 3:15 Tolerability Outcomes of Guideline-Based Multi-Drug Antibiotic Therapy for Pulmonary Nontuberculous Mycobacterial Infection Due to Mycobacterium Avium Complex in U.S. Medicare Beneficiaries with Bronchiectasis/J.H. Ku, E. Henkle, K.F. Carlson, M. Marino, S.K. Brode, T.K. Marras, K.L. Winthrop, Pasadena, CA, p.A2161**
- 3:25 Host-Pathogen Interactions Between Healthy Alveolar Macrophages and Mycobacterium Abscessus Isolates Recovered from People with Cystic Fibrosis/J.R. Honda, C.K. Vang, F. Jia, B. Vestal, S. Alper, J.A. Nick, R. Davidson, Denver, CO, p.A2162**
- 3:35 The Role of Gut Microbiota Dysbiosis in Nontuberculous Mycobacterial Lung Disease: Possible Causal Relationship and Pathogenesis/C.-C. Shu, H.-C. Lai, Taipei, Taiwan, p.A2163**
- 2:45 Gramd2^{CreERT2};mTmG Cells Support AT1 Cell Plasticity in Organoid Cultures/H. Shen, Y. Liu, Y. Ji, A. Castaldi, P. Flodby, B. Zhou, C. Li, P. Minoo, C. Marconett, Z. Borok, Los Angeles, CA, p.A2167**
- 2:55 A Single Cell Atlas of Late Lung Development Identifies Unexpected AT1 Expression Patterns and Similarities to Regeneration After Adult Injury/N. Negretti, E.J. Plosa, J.T. Benjamin, B.A. Schuler, A.C. Habermann, C.S. Jetter, S.H. Guttentag, T.S. Blackwell, N.E. Banovich, J.A. Kropski, J.M.S. Sucre, Nashville, TN, p.A2168**
- 3:05 A Novel Role of Endogenous Fibroblast S100A4 in Stiffness-Induced Myofibroblast Differentiation and Pulmonary Fibrosis/B.D. Southern, H. Li, L. Grove, R.G. Scheraga, H. Mao, A.I. Ivanov, M.A. Olman, Cleveland, OH, p.A2169**
- 3:15 Effect of Hedgehog Signaling on Alveolar Platelet-Derived Growth Factor Receptor Alpha (PDGFRa) Expressing Cells in Postnatal Lung/M.C. Kugler, T.-A. Yie, J. Nowatzky, A. Khodadadi-Jamayran, C.A. Loomis, New York, NY, p.A2170**
- 3:25 Single Cell RNA Sequencing Identifies Aberrant Distal Lung Epithelial Progenitor Cells in Chronic Obstructive Pulmonary Disease/Y. Hu, Q. Hu, K. Riemondy, M. Ansari, B. Gao, W.J. Janssen, H. Schiller, C. Evans, M. Koenigshoff, Aurora, CO, p.A2171**
- 3:35 Role of Human Secretory Cells as Potential Airway Progenitor Cells During Re-Epithelialization/G.S. Romano Ibarra, I. Thornell, N.D. Gansamer, A.A. Pezzulo, D.A. Stoltz, Iowa City, IA, p.A2172**

BASIC • TRANSLATIONAL

MINI SYMPOSIUM

A98 EPITHELIAL-MESENCHYMAL BIOLOGY IN LUNG DEVELOPMENT AND REGENERATION

2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 2018/2020 (West Building, Level 2)

Chairing: V.P. Krymskaya, PhD, MBA, Philadelphia, PA
T. Peng, MD, San Francisco, CA
J. Sucre, MD, Nashville, TN
Z. Borok, MBChB, ATSF, La Jolla, CA

Oral Presentations

- 2:15 Loss of GATA6 in Alveolar Fibroblasts Impairs Alveolar Septation and Epithelial Cell Differentiation/M.G. Ushakumary, J. Green, M. Riccetti, C.-L. Na, A.-K.T. Perl, Cincinnati, OH, p.A2164**
- 2:25 TAZ Is Preferentially Localized to Distal Secretory Cells in the Lung Epithelium and Attenuates Mature Secretory Cell Gene Expression/J.B. Blackburn, R.-H. Du, J. Schaff, M. Xin, L.B. Ware, J.A. Kropski, T.S. Blackwell, B.W. Richmond, Nashville, TN, p.A2165**
- 2:35 Establishing Relevant Emphysema Model Using Induced Pluripotent Stem Cell (iPSC)-Derived Alveosphere Co-Culture with Human Fibroblasts/R. Dagher, A. Moldobaeva, X. Qu, P. Byrne, P. Shahi Thakuri, K. Grime, M. Ghaedi, Gaithersburg, MD, p.A2166**

CLINICAL • TRANSLATION

MINI SYMPOSIUM

A99 LOOK AT THAT! NEW FINDINGS FROM LUNG IMAGING

2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 3006/3008 (West Building, Level 3)

Chairing: S.B. Fain, PhD, Iowa City, IA
P.J. Niedbalski, PhD, Kansas City, KS

Oral Presentations

- 2:15 The Effect of the CFTR Potentiator Icentrifator (QBW251) on Regional High-Resolution Computed Tomography Features in COPD Patients with Chronic Bronchitis/M. Meadowcroft, D. Ngo, D. Yates, K. Hijazi, E. Khokhlovich, M. Schönberger, S. Grant, M. Obeidat, S. Chandra, Cambridge, MA, p.A2173**

- 2:25 Imaging Gas Exchange Using Hyperpolarized ^{129}Xe as a Better Predictor of Endobronchial Valve Outcome/H.**
Hamedani, R. Baron, F. Amzajerdian, S. Kadlecek, K.C. Ma, D. Dibardino, I. Duncan, K. Ruppert, R.R. Rizi, Philadelphia, PA, p.A2174
- 2:35 Physiological Phenotypes of Patients with Asthma and/or COPD Using ^{129}Xe MRI/H.** Marshall, L.J. Smith, A. Biancardi, G.J. Collier, H.F. Chan, P.J.C. Hughes, M.L. Brook, J. Astley, R. Munro, S. Rajaram, A.J. Swift, D. Capener, J. Bray, J. Ball, O. Rodgers, D. Jakymelen, I. Smith, B.A. Tahir, M. Rao, G. Norquay, N.D. Weatherley, L. A, p.A2175
- 2:45 Airway Inflammatory Endotypes and Magnetic Resonance Imaging Ventilation Heterogeneity in Severe Asthma/H.** Serajeddini, C.P. Venegas, N.B. Konyer, M. Kjarsgaard, P. Nair, S. Svenningsen, Hamilton, Canada, p.A2176
- 2:55 Quantitative Analysis of Mucus Plugs in Computed Tomography (CT) Lung Scans from Patients with Severe Asthma Reveals Heterogeneous Mucus Plug Phenotypes and Enables Automation via Deep Learning Approaches/B.** Huang, F. Heng, T. Henry, B. Elicker, K. Kallianos, E.A. Hoffman, D. Mauger, S.B. Fain, E. Israel, B.D. Levy, L.C. Denlinger, S.E. Wenzel, M. Castro, J.V. Fahy, San Francisco, CA, p.A2177
- 3:05 Evaluation of Change in Upper Lung Zone Radiologic Pleuroparenchymal Fibroelastosis (PPFE) as a Predictor of Mortality in Idiopathic Pulmonary Fibrosis (IPF)/R.** Chapman, E. Gudmundsson, A. Zhao, N. Mogulkoc, I. Stewart, M.G. Jones, C.H.M. van Moorsel, R. Savas, C.J. Brereton, H.W. van Es, A. Ezircan, K. Pontoppidan, F. van Beek, M. Velkamp, B. Gholipour, A.U. Wells, S.M. Janes, D.C. Alexander, J. Jacob, Londo, p.A2178
- 3:15 Free-Breathing ^1H MRI Specific Ventilation and Biomarkers of Type-2 Inflammation in Severe Asthma/D.P.I.** Capaldi, N. Konyer, M. Kjarsgaard, P. Nair, S. Svenningsen, San Francisco, CA, p.A2179
- 3:25 Ventilation and Diffusion Abnormalities in Young People with Cystic Fibrosis Using ^{129}Xe Gas-Exchange MRI/L.** Walkup, M. Willmering, E. Kramer, Z.I. Cleveland, J.C. Woods, Cincinnati, OH, p.A2180
- 3:35 Sensitivity and Specificity of ^{129}Xe -MRI as a Biomarker to Detect Bronchiolitis Obliterans Syndrome in Pediatric Post-Hematopoietic Stem-Cell Transplant Patients/J.W.** Plummer, M.M. Willmering, C. Towe, K. Myers, L. Walkup, Cincinnati, OH, p.A2181

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

A101 DEFINING CELLULAR AND MOLECULAR IMMUNE MECHANISMS IN LUNG INFECTIONS, ARDS, AND SEPSIS

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2009/2011 (West Building, Level 2)

- Discussion** 2:15-2:45
- Poster Viewing** 2:45-3:45
- Chairing:** G. Matute-Bello, MD, Seattle, WA
N.S. Mangalmurti, MD, Philadelphia, PA
- 701 Macrophage TRPV4 Protects Against Bacterial Pneumonia-Induced Lung Injury Through the NF- κ B Pathway/Y.** Liu, Y. Wang, S. Abraham, L. Grove, B.D. Southern, A. Reinhardt, E.M. Orsini, M.A. Olman, R.G. Scheraga, Cleveland, OH, p.A2182
- 702 Defining Interstitial Macrophage Heterogeneity in Response to Hypoxia/N.V.** Campbell, C. Mickael, I.L. Campbell, S. Kumar, T. Phang, R. Kumar, S. Gu, S. Riddle, V.O. Kheifets, D. Brown, B.B. Graham, K.R. Stenmark, Aurora, CO, p.A2183
- 703 LOX-1 Limits Inflammatory Lung Injury During Pneumonia, Regulating Alveolar Macrophage Immunometabolic Function/F.T.** Korkmaz, A.T. Shenoy, E. Symer, L. Baird, C. Odom, E.I. Arafa, E. Na, E. Dimbo, W. Molina-Arocho, M. Brudner, T.J. Standiford, J. Mehta, T. Sawamura, M.R. Jones, K. Traber, J.P. Mizgerd, L.J. Quinton, Worcester, MA, p.A2184
- 704 DEPDC7 Augments Anti-Viral Immune Response Through Regulation of Cytokine Release in Macrophages and During Lung Injury/A.** Sharma, K. Konstantinos, A. Jayaraman, A. Mann, S.J. Robertson, S.M. Best, M. Bosmann, Boston, MA, p.A2185
- 705 PD-L1 and PD-1 Are Associated with Alveolar Immune Cell Function and Clinical Outcomes in ARDS/E.D.** Morrell, S. Holton, A. Wiedeman, S.A. Long, N.A. Sathe, S. Kosamo, V. Dmyterko, R.D. Stapleton, M. Wurfel, C. Mikacenic, Seattle, WA, p.A2186
- 706 Neutrophil Depletion Leads to Increased IL-17A Production After Aspergillus and Impairs the Response to Repeat Infection/R.E.** Cagnina, R.J. Bolognese, B. Mehrad, B.D. Levy, Boston, MA, p.A2187

- 707 Neutrophil Efferocytosis Induces an Immunometabolic Switch via UCP-2 in Alveolar Macrophages to Support Resolution of Inflammation/J. Better, M. Wetstein, M. Langelage, M. Estiri, I. Kuznetsova, C. Malainou, S. Mansouri, I. Vazquez-Armendariz, L.M. Kimmig, R. Savai, N. Sommer, S. Herold, U. Matt, Giessen, Germany, p.A2188**
- 708 STAT1 Modulates Neutrophilic Inflammation During Acute Pulmonary Infection with Klebsiella Pneumoniae/S. Gonzalez-Ferrer, H. Peñaloza, A. McCollum, R. Van Der Geest, N. Kohli, M. Tabary, Z. Xiong, T.L. Suber, W. Bain, D. Van Tyne, A. Ray, P. Ray, J. Lee, Pittsburgh, PA, p.A2189**
- 709 Platelet-Derived Thrombospondin-1 Regulates Neutrophil Degranulation and NETosis During Pseudomonas Aeruginosa-Induced Pulmonary Injury/H.F. Penaloza, S. Gonzalez-Ferrer, R. Van Der Geest, E. Meyler, W. Bain, Z. Xiong, J. Zupetic, S. Gingras, M.R. Looney, J. Lee, Pittsburgh, PA, p.A2190**
- 710 Vaccine Mediated Lung Tissue Resident Memory T Cells Require IL-1 and CCR2 Signaling to Protect Against K. Pneumoniae Challenge/J.P. Hoffmann, N. Iwanaga, H. Yang, E.B. Norton, J.E. McCombs, J.K. Kolls, New Orleans, LA, p.A2191**
- 711 Tetracycline Inhibits Pulmonary Inflammation Activation via Caspase-1 in COVID-19 Patients with ARDS/K. Peukert, C. Feuerborn, A. Sauer, M. Fox, S. Schulz, F. Steinhagen, C. Putensen, E. Latz, C. Wilhelm, C. Bode, Bonn, Germany, p.A2192**
- 712 Mer Tyrosine Kinase (Mertk) Impairs the Clearance of Streptococcus Pneumoniae/M.K. Mcpeek, J.R. Martin, J.C. Gomez, H. Dang, C.M. Doerschuk, Chapel Hill, NC, p.A2193**
- 713 The Effect of a Single Exposure to Simulated Burn Pit Products in Mice with Healthy and Inflamed Airways and Their Response to Influenza A/J.R. Martin, J.C. Gomez, Y.H. Kim, A. Volmer, W.K. O'Neal, M.I. Gilmour, C.M. Doerschuk, Chapel Hill, NC, p.A2194**
- 714 Requirements for Resident Memory B Cell Establishment After Bacterial Respiratory Infection/N.S. Etesami, K.A. Barker, A.T. Shenoy, C. Lyon De Ana, E.I. Arafa, W.N. Goltry, A.C. Belkina, P.J. Maglione, L.J. Quinton, M.R. Jones, K.E. Traber, J.P. Mizgerd, Boston, MA, p.A2195**
- 715 Development of TLR2/6 Agonist (INNA-051) to Protect the Elderly Against Respiratory Virus Infection/G.P. Anderson, A. Jarnicki, S.L. Loo, J. Ciccotosto, J. Girkin, R. O'Donoghue, F. Mercuri, N.W. Bartlett, Parkville, Australia, p.A2196**
- 716 Potential Functional Roles for CD26/Dipeptidyl Peptidase-4 in Mediating Responses of Human Lung Microvascular Endothelial Cells/Y. Takahashi, T. Kawasaki, H. Sato, Y. Hasegawa, S.M. Dudek, O. Ohara, K. Tatsumi, T. Suzuki, Chiba, Japan, p.A2197**
- 717 Lipoxin A4 Mediates Mesenchymal Stromal Cell Therapeutic Effects in Sepsis/A. Keogh, J. Clarke, R. Rabani, J. Dalli, C. Godson, G. Curley, Dublin, Ireland, p.A2198**
- 718 Aging, AMPK and Parkin-Dependent Mitochondrial Dynamics in Host Defense in Sepsis/J.W. Zmijewski, E. Becker Jr, V.J. Thannickal, Birmingham, AL, p.A2199**
- 719 Targeting Metabolic Pathways in Acute Lung Injury/K. Shenderov, S. Collins, L. Zhao, Y. Chan-Li, M.R. Horton, Baltimore, MD, p.A2200**
- 720 Nitric Oxide Metabolites Differ Among Subphenotypes of Acute Respiratory Distress Syndrome/T.L. Suber, B. Zuchelkowski, S. Mullett, F.A. Shah, B. McVerry, W. Bain, G. Kitsios, Y. Zhang, S.G. Wendell, S.M. Nouraie, J. Lee, Pittsburgh, PA, p.A2201**
- 721 Resolution of Pneumonia/ARDS by DHX58 in Mice and Humans/A.F. Villabona-Rueda, Y. Xiong, N.J. Meyer, R.L. Damico, F.R. D'Alessio, Baltimore, MD, p.A2202**
- 722 Heparin-Binding Protein Is Increased in the Lung After Intra-bronchial Endotoxin Exposure/M. Paulsson, E.I. Cardenas, K.F. Che, B. Brundin, M. Smith, I. Qvarfordt, A. Linden, Lund, Sweden, p.A2203**
- 723 TRPV4 Regulates the Immuno-Metabolic Response to Leptin and Infection in a Stiffness-Dependent Manner/R.G. Scheraga, A. Perelas, S. Roychowdhury, S. Abraham, V. Vachharajani, M.A. Olman, Cleveland, OH, p.A2204**
- 724 SARS-CoV-2 and HRV-16 Replication in Organotypic Bronchial Airway Epithelial Cell Cultures Is Associated with IFIH1 (MDA5) Polymorphism rs1990760/E.R. Vanderwall, L.M. Rich, O. Okoloko, K.A. Barrow, M.P. White, J.S. Debley, Seattle, WA, p.A2205**
- 725 RNA m6A Methylation Regulates Virus Host-Interaction in Rhinoviral Infection/J. Yang, Y. Zhang, Galveston, TX, p.A2206**

CLINICAL

POSTER DISCUSSION SESSION

A102 ASSESSMENT OF RESPIRATORY PHYSIOLOGY

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 203-204 (South Building, Level 2)

Discussion 2:15-2:45

Poster Viewing 2:45-3:45

Chairing: R. Casaburi, PhD, MD, ATSF, Torrance, CA
S.P. Bhatt, MD, MSPH, Birmingham, AL
M.C. McCormack, MHS, MD, Baltimore, MD

201 Differentiating Spirometric Features Between Patients with Amyotrophic Lateral Sclerosis and Primary Lateral Sclerosis/F. Pyarali, R. Lewis, F. Diaz, A. Elsayegh, Los Angeles, CA, p.A2207

202 Application of Impulse Oscillometry (IOS) to Spirometry Interpretation: A Case-Series Study Report/K.Y. Chen, Yi-Lung County, Taiwan, p.A2208

203 Noninvasive Estimation of Dead-space Ratio Using Transcutaneous CO₂ Monitoring During Cardiopulmonary Exercise Testing in Patients with Unexplained Dyspnea/W.C. McGuire, M. Alotaibi, J. Yang, A.E. Salcido, B.G. Money, T.M. Fernandes, T.A. Morris, La Jolla, CA, p.A2209

204 Post-Exercise Physiologic Variables by Invasive Cardiopulmonary Exercise Testing in Patients with Post-Acute Sequelae of SARS-CoV-2 Infection Identify Impaired Pulmonary Vascular Recovery/M.G. Risbano, C.R. Kliment, D.G. Dunlap, C. Koch, S.M. Nouraie, F.C. Sciruba, A. Morris, Pittsburgh, PA, p.A2210

205 Variable Physiologic Dysfunction Identified by Invasive Cardiopulmonary Exercise Testing in Patients with Post-Acute Sequelae of SARS-CoV-2 Infection with Dyspnea and Exercise Intolerance/M.G. Risbano, C.R. Kliment, D.G. Dunlap, C. Koch, S.M. Nouraie, F.C. Sciruba, A. Morris, Pittsburgh, PA, p.A2211

206 Pulmonary Function Tests Parameters Are Poor Predictors of Disease Severity in Patients with Severe Excessive Central Airway Collapse/J.P. Uribe, K. Swenson, M.S. Parikh, S. Gangadharan, W. Wilson, F. Kheir, C. Zhang, A. Majid, Boston, MA, p.A2212

207 Prevalence of Abnormal Spirometry in Ever Smokers with No Known Obstructive Lung Disease/T. Tran, G.L. Kinney, A.P. Comellas, K.F. Hoth, A.K. Baldomero, C. Wilson, M. Strand, D.L. Demeo, N. Putcha, J.E. Hokanson, J.D. Crapo, N.A. Hanania, E.S. Wan, M.T. Dransfield, A.J. Mamary, J.L. Curtis, R. Casaburi, K. Young, V. Kim, B.J. Make, A.A. Diaz, E. K. Silverman, S. P. Bhatt, E. A. Regan, S. Fortis; Iowa City, IA, pA2213

208 Relationship Between Peak Inspiratory Flow and Patient Characteristics: Analysis of Trends from the TRONARTO Population/M.B. Drummond, H. Watz, J. Ritz, A. Gardev, A. Shaikh, D.A. Mahler, Chapel Hill, NC, p.A2214

209 The Variability of Peak Inspiratory Flow: Analyses of the TRONARTO Population/D.A. Mahler, H. Watz, J. Ritz, A. Gardev, A. Shaikh, M.B. Drummond, Hanover, NH, p.A2215

210 Flow-Volume Curve Patterns in Expiratory Central Airway Collapse/J. Kalehoff, S. Bodduluri, H. Nath, S.P. Bhatt, Birmingham, AL, p.A2216

211 Inspiratory Flow Rates Through Inhaler Devices Across Demographic and Anthropometric Parameters of Patients with Chronic Obstructive Pulmonary Airway Disease/A.O. Adetiloye, O.F. Awopaju, O.O. Adewole, G. Erhabor, Ile-Ife, Nigeria, p.A2217

212 Can Exercise-Induced Dynamic Hyperinflation Predict Mortality in Patients with Chronic Obstructive Pulmonary Disease?/K. Sayad, S. O'Connell Schnell, C. Jelineck, H. Shaikh, C. Joyce, F. Laghi, E.G. Collins, Maywood, IL, p.A2218

213 Continuous Positive Airway Pressure Titration During Dynamic Bronchoscopy for the Evaluation of Adult Tracheobronchomalacia and Excessive Dynamic Airway Collapse/N. Nowalk, K.J. Potts, E. Ho, S. Murgu, Chicago, IL, p.A2219

214 Use of a Ramped Protocol Treadmill Test to Evaluate for Exertional Hypoxemia in Idiopathic Pulmonary Fibrosis (IPF)/K. Clark, M. Kerr, D. Kass, Pittsburgh, PA, p.A2220

215 Identification of Two Different Lung Function Trajectories in Adult Pulmonary Langerhans Cell Histiocytosis/A. Benattia, R. Porcher, E. Bugnet, C. De Margerie-Mellon, G. Lorillon, A. Tazi, Paris, France, p.A2221

216 Vocal Capacity as a Surrogate for Vital Capacity in Patients with Interstitial Lung Disease/A. Chandel, A.C. Collins, K. Ahmad, S. Aryal, C.S. King, S.D. Nathan, Bethesda, MD, p.A2222

217 Symptoms Are Associated with an Obstructive Lung Disease Diagnosis in Subjects with the Non-Specific Pulmonary Function Test Pattern/J. Tasch, S. Abujaber, L. Hattar, A. Jose, L.L. Price, P. Lacamera, H. Avella, Boston, MA, p.A2223

- 218 **Underreporting of Expiratory Reserve Volume on PFTs - Is There a Pattern of Significance?**/J. Lenka, Tucson, AZ, p.A5557
- 219 **Home-Based Spirometry Quality in Patients with ILD Using Digital Health Platforms: Data from the RALPMH Study**/M. Althobiani, Y. Ranjan, J. Jacob, M. Orini, R. Dobson, J.C. Porter, J.R. Hurst, A.A. Folarin, London, United Kingdom, p.A5558

CLINICAL

POSTER DISCUSSION SESSION

A103 CHALLENGING PULMONARY CASES

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 9-10 (South Building, Exhibition Level)

Discussion 2:15-2:45

Poster Viewing 2:45-3:45

Chairing: M. Kreider, MD, MSCE, ATSF, Philadelphia, PA
K. Melamed, MD, Los Angeles, CA
S. Maximous, MD, MS, Pittsburgh, PA

- 101 **Acute Stridor Post-Intubation: A Case of Tracheal Pseudomembrane**/K.A. Sandejas, M.D.C. Valdes Bracamontes, S. Chauhan, K. Gafoor, Jamaica, NY, p.A2224
- 102 **Tracheoesophageal Fistula (TEF) as a Complication of Herpes Simplex Virus (HSV) Esophagitis in Immunocompetent Host**/P. Pikman, A.C. Campagna, D. Fitelson, S.K.V. Guda, C. Paquette, R.J. Webster, Burlington, MA, p.A2225
- 103 **A Hardened Culprit: An ABC as the Cause of Pneumothorax**/S. Gillenwater, M. Gonzalez, R. Miret, A. Bello, J.R. Woytanowski, P. Bejarano, P. Bongiorno, J. Reith, I.A. Alshelli, Weston, FL, p.A2226
- 104 **More Blood Than Needed: A Rare Case of Pulmonary Extramedullary Hematopoiesis**/K. Jakharia, B.W. Kinder, Chapel Hill, NC, p.A2227
- 105 **Starved of Air: A Case of Nutritional Emphysema**/G.L. Day, A. Hudler, T.C. Steinbach, Aurora, CO, p.A2228
- 106 **Spontaneous Pneumothorax Caused by Suspected Thoracic Endometriosis in the Setting of Coronavirus Disease 2019 (COVID-19) Infection**/M. Tiwari, D. Panchal, A. Berman, Newark, NJ, p.A2229
- 107 **Ventriculo-Pleural Shunt Effusion**/A.J. Sweidan, M. Elnaggar, Long Beach, CA, p.A2230
- 108 **Endobronchial Hamartoma Presenting as Spontaneous Pneumomediastinum and Hydropneumothorax**/H. Kim, C.H. Lee, Dae-gu, Korea, Republic of, p.A2231

- 109 **A Case of Plastic Bronchitis in an Adult**/P. Fay, Z. Stachura, Tampa, FL, p.A2232
- 110 **Disseminated Mycobacterium Avium Complex Causing Endobronchial Obstruction and Broncho-Mediastinal Fistula**/B. Demarco, S. Mehta, A.C. Burks, Chapel Hill, NC, p.A2233
- 111 **Pleural Effusion Secondary to Pancreaticopleural Fistula**/J.I. Wang, A.L. Lanier, C.A. Yard, S. Young, Dayton, OH, p.A2234
- 112 **Pulmonary Involvement in Systemic Mastocytosis**/J.L. Moore, S. Margolskee, M.-M. Lee, Norwalk, CT, p.A2235
- 113 **Post-Transplant Lymphoproliferative Disorder Diagnosed with Pleural Fluid Cytology in a Patient with Recent Orthotopic Heart Transplantation**/B. Khan, D. Khemasuwan, Richmond, VA, p.A2236
- 114 **Microscopic Polyangiitis Presenting with Eosinophilic Pleural Effusions**/L. Nasouf, M. Elnaggar, R. Zopey, B. Liu, Orange, CA, p.A2237
- 115 **Acute Respiratory Failure with Widened Mediastinum: A Case of Right-Sided Aortic Arch Anomaly**/H. Tokashiki, A. Velasquez, Dorchester, MA, p.A2238
- 116 **A Bile Case of the Lungs**/P. Fay, E.C. Santillana, K. Van Nostrand, Tampa, FL, p.A2239
- 117 **William-Campbell Syndrome: A Rare Cause of Cystic Bronchiectasis in an Adult Patient**/J. Kaur, S. Sutchu, A. Ataya, Gainesville, FL, p.A2240
- 118 **Saddle Nail Aspiration**/E. Lu, N. Sharma, L. Barnes, M. Nobari, R.J. Miller, G.Z. Cheng, La Jolla, CA, p.A2241
- 119 **Swallow Don't Aspirate: A Case of Non-Resolving Pneumonias Secondary to Foreign Body**/E. Rojas, A. Ahmed, H. Ahmed, J. Anwar, L.E. Stawovy, V. Badami, R. Leonard, Morgantown, WV, p.A2242
- 120 **Bilateral Chylothorax in a Patient with Paget-Schroetter Syndrome**/S. Batra, K. Maken, Loma Linda, CA, p.A2243

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

A104 ALL THAT ISN'T THE HEART AND LUNGS

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3009/3011 (West Building, Level 3)

Discussion 2:15-2:45

Poster Viewing 2:45-3:45

Chairing: G.W. Garrison, MD, Burlington, VT
J.R. Beitler, MD, MPH, New York, NY
L. Munshi, MD, Toronto, Canada

- 901 **Quit Bugging Me! A Case of Complete Heart Block Caused by Lyme Disease Requiring ICU Admission and Permanent Pacemaker.**/E. Rojas, N. Mohamed, V. Badami, T. Szymanski, P.J. Mccarthy, Morgantown, WV, p.A2244
- 902 **Hemodynamic Instability Associated with Spontaneous Carcinoid Crisis**/J. Collins, J. Tepper, G. Smithson, Indianapolis, IN, p.A2245
- 903 **Not All Who Sundown Have Dementia: A Case of Creutzfeld-Jacob Disease**/J. Michalik, K. Amlani, R. Crusio, Bridgeport, CT, p.A2246
- 904 **A Rare Manifestation of Native Valve Infective Endocarditis: Burkholderia Cepacia Complex**/S.X. Lee, J. Juskowich, M. Fisher, Morgantown, WV, p.A2247
- 905 **Treatment of Vancomycin Induced DRESS Syndrome with Mepolizumab**/J. Hershey, F. Holguin, N. Agarwal, Aurora, CO, p.A2248
- 906 **More Than Just a Probiotic: A Rare Case of a Hepatic Abscess Complicated by Lactobacillus Bacteremia**/K. Gaur, L. Ran, M.M. Lee, Los Angeles, CA, p.A2249
- 907 **Kelch-Like Protein 11 Paraneoplastic Syndrome Presenting with Ataxia Leading to Diagnosis of Testicular Cancer**/M. Orlov, A.N. Rizzo, Aurora, CO, p.A2250
- 908 **Consider This Cause of Critical Illness: Kaposi Sarcoma Inflammatory Cytokine Syndrome**/L. Sullivan, San Diego, CA, p.A2251
- 909 **Candida Empyema Thoracis: A Fungal Mystery**/M.A. Amjad, A.A.E. Sheikh, H. Hanif, R. Naseer, P.O. Ochieng, Scranton, PA, p.A2252
- 910 **Severe Type B Lactic Acidosis Following Large Volume Dextrose Infusion: A Case of the Warburg Effect**/L. Ruvuna, N. Held, J.A. Hippensteel, Aurora, CO, p.A2253
- 911 **Anti-NMDA Receptor Encephalitis: Is the True Incidence Higher Than Known**/S.A. Mohammed, D.C. Gomez Manjarres, A. Saleem, Gainesville, FL, p.A2254
- 912 **Absent Left Internal Carotid Artery with Cerebral Aneurysms in a Patient with Hemorrhagic Stroke**/H. Asif, A.M. Obuchowski, C. Wood, Boca Raton, FL, p.A2255
- 913 **Pineapple Predisposing Pyrexia: Pineapple Induced Serotonin Syndrome**/T. Salimnia, R. Ghandchi, K. Hughes, R. Chawla, M.A. Hicks, T. Marchewka, M. Shatila, Royal Oak, MI, p.A2256
- 914 **Of Mice & Men: Extracorporeal Membrane Oxygenation Is an Effective Rescue Therapy for Fulminant Hantavirus Cardiopulmonary Syndrome**/S. Mayer, J. Walker, G. Schlessinger, Lone Tree, CO, p.A2257
- 915 **If It Walks Like Sepsis and Talks Like Dyspnea, It Must Be? Cancer?**/B.D. Vadhar, J.W. Zweigle, A.D. Parikh, O.N. Obi, Greenville, NC, p.A2258
- 916 **A Case of Hemophagocytic Lymphohistiocytosis and Purpura Fulminans Secondary to Capnocytophaga Canimorsus Sepsis**/J. Tiahnybik, E. El-am, S. Zhang, E. Aly, M. Siebert, R. Kapoor, Indianapolis, IN, p.A2259
- 917 **Gunshot Wound Causing Urinary Leakage into the Epidural Space: A Puzzling Case**/H. Abdulla, D. Galusca, A. Chhina, M. Nanamori, Detroit, MI, p.A2260
- 918 **Graft-associated Epithelioid Angiosarcoma Presenting as Multifocal Strokes**/S.S. Bains, Seattle, WA, p.A2261
- 919 **A Rare Case of Gardnerella Vaginalis Causing Severe Sepsis from Ventilator Associated Pneumonia in a Patient with Traumatic Brain Injury**/H. Abdulla, A. Chhina, Detroit, MI, p.A2262
- 920 **A Rare Presentation of “the Forgotten Disease”: Septic Thrombophlebitis of the Internal Jugular Vein (Lemierre’s Syndrome) Complicated by Empyema and Pyogenic Brain Abscess**/R. Jokomo-Nyakabau, M. Velagapudi, N. Mendoza, R. Vivekanandan, P. Millner, Omaha, NE, p.A2263
- 921 **Cardiac Mass-Querade: Widespread Burkitt’s Lymphoma Presenting as Thromboembolic Bi-Atrial Mass**/S. Malhotra, A. Hornick, S. Lilly, Columbus, OH, p.A2264
- 922 **Fulminant Disseminated Intravascular Coagulation Due to Exertional Heat Stroke in a Marathon Runner**/A. Karambelkar, S.M. Hon, X. Han, Boston, MA, p.A2265
- 923 **An Unusual Case of Acute Hemolysis in a Jehovah’s Witness After Stem Cell Transplant**/A.A. Mitma, A. Venkata, L.F. Carrillo, F. van Rhee, Little Rock, AR, p.A2266
- 924 **Central Nervous System Vasculitis and Cerebral Infarction Secondary to Cryptococcal Meningitis in an Immunocompetent Patient: A Rare Diagnostic Challenge**/M. Aldiabat, Y. Mubarak, M. Alkhdour, M. Al-Khateeb, Y. Al-Jabiri, A. Horoub, Bronx, NY, p.A2267
- 925 **Blackwater Fever in a Returning Airman**/B. Gray, Bethesda, MD, p.A2268

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

A105 YOU CAN PREDICT ALL YOU WANT, BUT EVERYONE KNOWS...

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3016/3018 (West Building, Level 3)

Discussion 2:15-2:45

Poster Viewing 2:45-3:45

Chairing: C.T. Hough, MD, MSc, Portland, OR
 C.E. Cox, MD, MPH, MHA, Durham, NC
 M.W. Sjoding, MD, Ann Arbor, MI

- 1001 What Happens Next? Long-Term Post-ICU Outcomes from 119 VA Medical Intensive Care Units: Clarifying the Unknown/S.E. Stern, M. Nevers, J. Ying, R. Brenner, M.A. Christensen, B.E. Jones, Salt Lake City, UT, p.A2269**
- 1002 Racial and Ethnic Differences in Shared Decision-Making Behaviors During Intensive Care Unit Family Meetings: A Rapid Qualitative Content Analysis/H. You, J. Ma, M.C. Haverfield, C.E. Cox, T.O. Oyesanya, D.C. Ashana, Durham, NC, p.A2270**
- 1003 Occult Hypoxemia Is Not Associated with Race but Is Associated with Increased In-Hospital Mortality/J. Tunnage, J. Berger, J. Wu, S. Rednor, A. Mohamed, A. Moskowitz, M.N. Gong, J.-T. Chen, Bronx, NY, p.A2271**
- 1004 Trajectories of Inpatient Palliative Care Need Prevalence, Type, and Severity Among ICU Patients and Their Family Members/C.E. Cox, J. Gu, D.C. Ashana, E.H. Pratt, J. Ma, K. Haines, A. Parish, M.K. Olsen, M.S. Al-Hegelan, J.N. Katz, D. Casarett, R.W. Harrison, C. Naglee, Y.A. O'Keefe, A. Frear, I.L. Riley, K.S. Johnson, S.L. Docherty, Durham, NC, p.A2272**
- 1005 Effects of Household Income and Education Level on Functional Morbidities or Health-Related Quality of Life Outcomes of Pediatric Acute Respiratory Distress Syndrome/R. Chen, M. Klein, J. Kwok, J.C. Hotz, L.P. Nelson, D. Baron, J. Bonilla-Cartagena, C.J. Newth, R.G. Khemani, A.K. Bhalla, Los Angeles, CA, p.A2273**
- 1006 Early Prediction of Long-Term Cognitive Impairment After Critical Illness/A.J. Wodarczyk, T.D. Girard, J.C. Jackson, E.W. Ely, P. Pandharipande, C. Wang, J. Zhao, N.E. Brummel, Columbus, OH, p.A2274**
- 1007 Continuous Prediction of Organ Dysfunction in Hospitalized Adults/J. Brogan, B. Aasman, M.N. Gong, P. Mirhaji, Bronx, NY, p.A2275**
- 1008 Relationship Between Delirium and Cognitive Function in Survivors of Critical Illness with Long-Term Caregiver Burden/S. Macdowell, J. Zhao, C. Wang, N.E. Brummel, Columbus, OH, p.A2276**
- 1009 Pre-Critical Illness Frailty and Delirium-Coma Free Days in Critically Ill Adults/M.F. Mart, P. Pandharipande, T.D. Girard, E.W. Ely, C. Birdrow, R. Raman, N.E. Brummel, Nashville, TN, p.A2277**
- 1010 Rural-Urban Differences in Long-Term Outcomes After Critical Illness/K. Stinehart, E.W. Ely, J.C. Jackson, J. Zhao, C. Wang, N.E. Brummel, Columbus, OH, p.A2278**
- 1011 Does the Severity of Functional Limitation Impact Long-Term Functional Recovery in Patients Weaning from Prolonged Mechanical Ventilation/D. Platou, Hinsdale, IL, p.A2279**
- 1012 Including Organ Dysfunctions in a Predictive Score for Nosocomial Pneumonia After Cardiothoracic Surgery: Diagnostic Accuracy (The DIPOD Study)/F. Stephan, T. Kortchinsky, T. Genty, A. Gigandon, A. Bouteau-Durand, S. Rezaiguia-Delclaux, Le Plessis Robinson, France, p.A2280**
- 1013 Machine Learning Models Can Predict Mortality and Organ-Specific Deterioration in Mechanically Ventilated Patients/S. Sonthalia, M. Kusmanov, A.S. Ding, M. Sanchez, Y. Chen, T. Bedard, J. Greenstein, R. Winslow, P.A. Mendez-Tellez, Baltimore, MD, p.A2281**
- 1014 Preliminary Analysis of Biotrauma and Organ Dysfunction Caused by Driving Pressure, Mechanical Power and Other Ventilator-Induced Lung Injury Parameters/E.R. Barbeta, M. Ferrer, A. Artigas, C. Ferrando, R. Mellado, A. Motos, L. Fernández-Barat, A. Ceccato, R. Lopez, L. Bueno, A. Palomeque, R. Andrea, P. Castro, A. Tellez, J. Fernández, M.C. Castella, J.R. Badia, M. Camprubi, A. Torres, Barcelona, Spain, p.A2282**
- 1015 Ultrasonographic Measurement of the Endotracheal Tube/Tracheal Diameter (ETT/TD) Ratio: Potential Method for Early Detection of Post-Extubation Upper Airway and Swallowing Dysfunction/M. Calzia, P.D. Sottile, J. McKeehan, M. Moss, Aurora, CO, p.A2283**
- 1016 Multiple Statistical Approaches to a Clinical Prediction Rule for Sedative-Associated Delirium During Acute Respiratory Failure/N. Prendergast, P.J. Tiberio, C.A. Onyemekwu, K.M. Potter, S.M. Nouriae, K.F. Rengel, C. Boncyk, E.W. Ely, P.P. Pandharipande, T.D. Girard, Pittsburgh, PA, p.A2284**
- 1017 Training and Clinical Validation of Artificial Intelligence Derived Right Atrial Cardiovascular Magnetic Resonance Measurements/F. Alandejani, S. Alabed, P. Garg, Z.M. Goh, K. Karunasaagar, M. Sharkey, M. Salehi, Z. Aldabbagh, K. Dwivedi, P. Metherall, J. Uthoff, C.S. Johns, A. Rothman, R. Condliffe, A. Hameed, A. Charalampopoulos, H. Lu, S. Plein, J.P. Greenwood, A. Lawrie, J.M., p.A2285**
- 1018 Return of Spontaneous Circulation Versus Survival to Hospital Discharge for in-Intensive Care Unit Cardiac Arrests/L.M. Cagino, A. Moskowitz, B.K. Nallamotheu, J.I. Mcsparron, T.J. Iwashyna, Ann Arbor, MI, p.A2286**
- 1019 The Impact of Obesity on Outcomes of Patients Admitted to Intensive Care After Cardiac Arrest/S. Bihari, M. Chavda, R. Woodman, P. Secombe, D. Pilcher, Bedford Park, Australia, p.A2287**

- 1020 Impact of Weekend Admission and Insurance Status on Cardiac Arrest Outcomes- A Retrospective Analysis Using National Inpatient Sample/K.J. Raj, U. Bhagat, M.V. Shah, S. Chandna, New Brunswick, NJ, p.A2288**
- 1021 Distressing Symptoms Before and After Critical Illness Among Community-Living Older Adults/S. Jain, T.E. Murphy, E. Gahbauer, L. Leo-Summers, L.E. Ferrante, T.M. Gill, New Haven, CT, p.A2289**
- 1022 Identification of Safety Threats in a Post-Intensive Care Clinic/K.J. Karlic, H.C. Prescott, T.J. Iwashyna, T.S. Valley, R.A. Mohammad, M. Pitcher, E. Haezebrouck, J.I. Mcsparron, Ann Arbor, MI, p.A2290**
- 1023 The Impact of Telemedicine Implementation on Appointment Attendance Rates in a Post-Intensive Care Recovery Clinic/T.A. Di Vitantonio, E. Lafond, K. Weidman, L. Lief, New York, NY, p.A2291**
- 1024 Circadian Dysrhythmias Are Associated with Worse Outcomes After Critical Illness/M.-A. Melone, T.C. Becker, S.B. Patel, R. Leproult, J.T. Poston, A. Pohlman, M. Pohlman, A. Miller, A. Nedeltcheva, J.B. Hall, E. Van Cauter, J. Zabner, B.K. Gehlbach, Iowa City, IA, p.A2292**
- 1025 Decline in Health-Related Quality of Life Following Pediatric Acute Respiratory Distress Syndrome Among Critically Ill Children/R.T. Ohman, L.A. Dervan, M. Smith, R.S. Watson, E.Y. Killien, Seattle, WA, p.A2293**
- 503 Longitudinal Analysis of the Lung Microbiome and Chronic Lung Allograft Dysfunction After Transplant/J.E. McGinniss, S.A. Whiteside, R.A. Deek, A. Simon-Soro, M. Brown, E. Cantu, A.R. Lanfranco, A. Haas, J.M. Diamond, H. Lee, J.D. Christie, F.D. Bushman, R.G. Collman, Philadelphia, PA, p.A2296**
- 504 Pseudomonas Aeruginosa Elicits Sustained IL-1 β Upregulation in Alveolar Macrophages from Lung Transplant Recipients/N. Britton, A.F. Villabona-Rueda, S. Whiteside, S. Agbor, J.F. McDyer, J.D. Christie, R.G. Collman, P.M. Shah, F.R. D'Alessio, Baltimore, MD, p.A2297**
- 505 Longitudinal Analysis of the Lower Airway Metatranscriptome in Patients with Severe SARS-CoV-2/C.R. Barnett, I. Sulaiman, M. Cheng, Y. Li, R. Postelnicu, R. Postelnicu, L.F. Angel, D. Pradhan, S.B. Brosnahan, E. Ghedin, L.N. Segal, New York, NY, p.A2298**
- 506 The Gut Microbiome Modulates Body Temperature in Both Health and Experimental Sepsis/K.S. Bongers, R. Chanderraj, R. McDonald, M. Adame, N. Falkowski, C. Brown, J.M. Baker, K. Winner, D. Fergle, M.W. Sjoding, R.P. Dickson, Ann Arbor, MI, p.A2299**
- 507 Culture-Independent Study of Respiratory Microbial Communities in Aspiration Pneumonia/V.D. Nguyen, N. Al-Yousif, H. Yang, C. Schaefer, F. Shah, A. Fitch, K. Li, X. Wang, S. Qin, H. Gentry, B. Methe, B.J. McVerry, A. Morris, G. Kitsios, Pittsburgh, PA, p.A2300**
- 508 Severity of Oxygen Toxicity in Mice Is Modulated by Antibiotics and Preceded by Depletion of Commensal Gut Anaerobes/J.M. Baker, R. Chanderraj, R.A. McDonald, D.J. Fergle, K.J. Hinkle, C.A. Brown, P. Ranjan, N.R. Falkowski, G.B. Huffnagle, R.P. Dickson, Ann Arbor, MI, p.A2301**
- 509 Characterizing the Lung Microbiome in a Well-Defined Chronic Bronchitis Cohort Undergoing Bronchial Rheoplasty/D.G. Dunlap, K. Li, A. Fitch, B. Methe, A. Morris, F.C. Sciruba, Pittsburgh, PA, p.A2302**
- 510 Correlation of Environmental Microbial Diversity with Airway Disease in Refractory Asthma/V.P. Guntur, L.A. Manka, L.E. Epperson, J. Hendrix, M. Strong, R.J. Martin, Denver, CO, p.A2303**
- 511 Airway Bacterial Community Composition in Persons with Advanced Cystic Fibrosis Lung Disease/C.S. Thornton, L.A. Carmody, L.M. Kalikin, K. Opron, R.H. Simon, L.J. Caverly, J.J. LiPuma, Ann Arbor, MI, p.A5559**

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

A106 A DEEP DIVE INTO THE MICROBIOME

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 303-304 (South Building, Level 3)

Discussion 2:15-2:45**Poster Viewing 2:45-3:45**

Chairing: H.L. Twigg, MD, Indianapolis, IN
L.N. Segal, MD, New York, NY
G. Kitsios, MD, PhD, Pittsburgh, PA

501 The COPD Frequent Exacerbator Phenotype Is Associated with Decreased Sputum Microbiome Alpha Diversity/A. Pragman, S.W. Hodgson, T. Wu, A. Zank, C. Reilly, C.H. Wendt, Minneapolis, MN, p.A2294

502 Chronic Lower Airway Dysbiosis with Human Oral Commensals Leads to Both Increased IL-17A and Immune Exhaustion Tone in the Lower Airways/M. Chang, Y. Kyeremateng, D. Collazo, I. Kocak, S. Singh, Y. Li, J.-C. Tsay, L.N. Segal, B.G. Wu, New York, NY, p.A2295

BASIC • TRANSLATIONAL

POSTER DISCUSSION SESSION

A107 MECHANISMS OF FIBROSIS/FIBROBLAST BIOLOGY

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 212-214 (South Building, Level 2)

Discussion 2:15-2:45

Poster Viewing 2:45-3:45

Chairing: R.S. Knipe, MD, Boston, MA
M.N. Ballinger, PhD, Columbus, OH
M. Peters-Golden, MD, Ann Arbor, MI
D.W.H. Riches, PhD, Denver, CO

- 401 Fibronectin-EDA Accumulates via Reduced Ubiquitination and Lysosomal Degradation in Scleroderma Lung Fibroblasts Downstream of Toll Like Receptor 9 Activation/J. Evankovich, F. Tuncer, M. Bulik, J. Villandre, T. Lear, D. Kass, E. Valenzi, R.A. Lafyatis, B. Chen, Pittsburgh, PA, p.A2304**
- 402 Peptidylarginine Deiminase-2 Is Highly Expressed in Rheumatoid Arthritis-Associated Interstitial Lung Disease Derived Lung Fibroblasts and Contributes to Their Profibrotic Phenotype/K. Tsoyi, R. Bowen, X. Liang, F. Poli, R.E. Cardenas Castillo, S.W. Ryter, F. Romero, L.J. Celada, M.J. Robertson, M.A. Perrella, I.-C. Ho, I.O. Rosas, Houston, TX, p.A2305**
- 403 Preclinical Evaluation of Dimethyl Fumarate in an Aging Model of Pulmonary Fibrosis In vivo/K. Kato, L. Hecker, Atlanta, GA, p.A2306**
- 404 Caveolin Scaffolding Domain LTI-03 Modulates Both Inflammatory and Fibrotic Responses in Aged Mice After Bleomycin Challenge/B. Mackenzie, E. Maier, B. Creyns, A.L. Coelho, B. Windsor, C.M. Hogaboam, Austin, TX, p.A2307**
- 405 Non-enzymatic Glycation of Extracellular Matrix Proteins Augments Fibroblast Activation in the Pathogenesis of Pulmonary Fibrosis/H. Ediga, R.K. Kasam, D. Sundararajan, G. Bhanuprakash Reddy, S.K. Madala, Cincinnati, OH, p.A2308**
- 406 Metabolic Reprogramming of Senescent Lung Epithelial Cells: U-13C6 Glucose Fluxomics Study/H. Shaghghi, Y. Ojeda-Lassalle, C. Tarn, F. Romero, R. Rara, D. Capreri, R.S. Summer, Philadelphia, PA, p.A2309**
- 407 CD38 Mediates Lung Fibrosis by Promoting Alveolar Epithelial Cell Aging/G. Liu, H. Cui, N. Xie, S. Banerjee, R.-M. Liu, V.B. Antony, Y.Y. Sanders, V.J. Thannickal, N. Kaminski, Birmingham, AL, p.A2310**
- 408 Lipidomics of Idiopathic Pulmonary Fibrosis Lung Tissue Identifies a Novel Role for Phosphatidylinositol Regulation in Alveolar Structural Cells/M.J. Robertson, R. Taituri, F. Romero, B.J. Moss, T. Adams, S. Poli De Frias, A. Ebrahimpour, M. Planchart, M.G. Perez, R.E. Cardenas Castillo, F. Poli, X. Yan, L.J. Celada, G.M. Hunninghake, S.W. Ryter, B.A. Raby, G.R. Washko, M.A. Perrella, S.Y. El-Che, p.A2311**
- 409 Increases in Glutathione Dependent Protein Oxidation Impair Airway Basal Cell Differentiation/E. Corteselli, J. Druso, C. Erickson, R. Aboushousha, M. MacPherson, Y.M.W. Janssen-Heininger, Burlington, VT, p.A2312**
- 410 Characterization of Lung Endothelial Cell Heterogeneity in Idiopathic Pulmonary Fibrosis (IPF)/J. Lee, T.X. Pham, N. Caporarello, S.K. Huang, G. Ligresti, Boston, MA, p.A2313**
- 411 Role of Accumulated Myeloid Derived Suppressor Cells in Pulmonary Fibrosis Mediated by B7H3/T. Liu, A.E. Rinke, F. Gonzalez De Los Santos, C. Fang, S.H. Phan, Ann Arbor, MI, p.A2314**
- 412 The Importance of Lung Microenvironment on Gremlin1 Regulation and Pulmonary Fibrosis Pathogenesis/Q. Zhou, T. Yanagihara, K. Tsubouchi, W. Shi, S. Revill, A. Noble, A. Dvorkin-Gheva, J. Gaudie, K. Ask, M.R.J. Kolb, Hamilton, Canada, p.A2315**
- 413 FOS Transcription Factor Associations with Lung Tissue RXFP1 Gene Expression and Pulmonary Function in Idiopathic Pulmonary Fibrosis/X. Li, T. Chen, G.C. Goobie, D. Kass, Y. Zhang, Pittsburgh, PA, p.A2316**
- 414 Interleukin-11 Perpetuates a Vicious Cycle of Lung Macrophage and Mesenchymal Cell Activation in IPF/M. Hohmann, S. Garcia, M.S. Espindola, B. Creyns, A.L. Coelho, T. Jun, D. King, J. Swaney, C.M. Hogaboam, Los Angeles, CA, p.A2317**
- 415 Leveraging Cell-Specific Disease Signatures to Predict New Drug Therapies for Idiopathic Pulmonary Fibrosis/T.S. Adams, Q. Song, A. Justet, J.E. McDonough, G. Deluiliis, X. Yan, Z. Bar-Joseph, N. Kaminski, New Haven, CT, p.A2318**
- 416 Microenvironment Regulates CD44v6 Expression and Disease Progression in LAM/G. Pacheco-Rodriguez, W. Steagall, R. Onishi, C. Glasgow, M. Stylianour, J. Kato, S. Li, L. Samsel, J.P. McCoy, T.N. Thomas, J. Moss, Bethesda, MD, p.A2319**
- 417 Assessing the Ability of Homeobox Protein Nkx2.5, a Mechanosensitive Repressor of Fibrosis, to Prevent Progression of Pulmonary Fibrosis in a 3D Decellularized Lung Model/A.J.J. Noble, K. Tsubouchi, Q. Zhou, C.B. Upagupta, T. Yanagihara, J.A. Hirota, M.R.J. Kolb, Hamilton, Canada, p.A2320**

- 418 **S100A4 Regulates Fibrotic Response Through Modulation of Matrix Expression**/S. Li, M. Li, P. Fang, Y.-H. Chang, Q. Ding, P. Che, Birmingham, AL, p.A2321
- 419 **MMP19 Mediates Pulmonary Fibrosis by Induction of Endothelial-to-Mesenchymal Transition**/W. Zhao, L. Wang, J. Yang, X. Chen, X. Guo, K. Xu, G. Yu, Xinxiang, China, p.A2322
- 420 **Profibrotic Role for a Dysregulated D-Dopachrome Tautomerase-Cullin 3 Signaling Axis in Alveolar Type II Epithelial Cells**/S.-H. Kim, T. Yang, X.Y. Peng, L. Leng, R. Bucala, P. Lee, E. Herzog, M. Sauler, New Haven, CT, p.A2323
- 421 **Heme Oxygenase 1 Contributes to TGF- β 1-Induced Lung Myofibroblast Differentiation**/Q. Ye, S. Taleb, H. Wang, K. Tran, J. Zhao, Y. Zhao, Columbus, OH, p.A2324
- 422 **GPR87 - a G-Coupled Protein Receptor Overexpressed in Human and Murine Pulmonary Fibrosis, Localizes to Aberrant Basaloid Cells in the IPF Lung**/J. Khoury, F. Ahangari, T. Barnthaler, J. McDonough, N. Kothapalli, T. Adams, J.C. Schupp, G. Deluliis, J.L. Gomez, N. Kaminski, New Haven, CT, p.A2325
- 423 **Integrating Gene Expression with Genome-Wide Association Summary Statistics to Identify Genes Associated with Idiopathic Pulmonary Fibrosis Survival**/X. Hu, J. Kim, S.F. Ma, Y. Huang, J. Oldham, R. Allen, P.L. Molyneaux, C. Joseph, B. Guillen Guio, T. Hernández Beeffink, J. Kropski, C.T. Lee, A.O. Adegunsoye, J.V. Pugashetti, A. Linderholm, M.E. Streck, R.B. Hubbard, S.P. Hart, A. Nicholson, L. Lancaster, J. M. Lorenzo-Salazar, V. Vo, N. Hirani, M. K. Whyte, H. Parfrey, D. Rassl, W. Wallace, E. Valenzi, Y. Zhang, A. Stockwell, N. Kaminski, P. J. Wolters, M. Molina-Molina, F. J. Martinez, I. P. Hall, M. D. Tobin, T. M. Maher, T. S. Blackwell, B. L. Yaspan, R. Jenkins, L. V. Wain, C. Flores, I. Noth, A. Manichaikul; Charlottesville, VA, p.A2326
- 424 **CYB5R3 Deficiency Imparts Dysfunctional Phenotype on Type II Alveolar Epithelial Cells in Mice**/T. Khaliullin, M. Bueno, J. Calyeca, T. Tabib, A.C. Straub, R.A. Lafyatis, M. Rojas, A.L. Mora, Columbus, OH, p.A2327
- 425 **Discovery of Novel Genes of Macrophages Related to Lung Fibrosis Pathways Based on Single-Cell RNA Sequencing**/J.H. Kim, M. Sung, K. Jeong, Y.R. Park, Seodaemun-gu, Seoul, Korea, Republic of, p.A2328

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

A108 PHARMACOTHERAPY TO PREVENT AND MITIGATE CONSEQUENCES OF SLEEP DISORDERED BREATHING

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2022/2024 (West Building, Level 2)

- Discussion** 2:15-2:45
- Poster Viewing** 2:45-3:45
- Chairing:** A. Malhotra, MD, ATSF, La Jolla, CA
P.A. Cistull, MD, MBA, PhD, Sydney, Australia
S. Pamidi, MD, MScI, Montreal, Canada
- 801 **Atomoxetine Plus Oxybutynin for Symptomatic Snoring and Airflow Limitation**/N. Calianese, A. Azarbarzin, L.B. Hess, D. Vena, L. Gell, D. Mann, L. Taranto-Montemurro, S.M. Bertisch, S.A. Sands, Boston, MA, p.A2329
- 802 **Mandibular Movements Are a Reliable Noninvasive Alternative to Esophageal Pressure for Measuring Respiratory Effort in Patients with Sleep Apnea Syndrome**/J.-B.G. Martinot, N.-N. Le-Dong, V. Cuthbert, N. Coumans, R. Tamisier, A. Malhotra, J.-L. Pépin, Namur, Belgium, p.A2330
- 803 **Solriamfetol and Modafinil Mitigate Chronic Sleep Fragmentation-Induced Increases in Sleep Propensity**/M. Badran, C. Puech, D. Gozal, Columbia, MO, p.A2331
- 804 **Cognitive Deficits in Mice Exposed to Chronic Intermittent Hypoxia: Effect of Solriamfetol**/C. Puech, M. Badran, M.B. Barrow, A.R. Runion, D. Gozal, Columbia, MO, p.A2332
- 805 **Solriamfetol and Modafinil Ameliorate Excessive Sleepiness in Mice Exposed to Chronic Intermittent Hypoxia**/M. Badran, C. Puech, D. Gozal, Columbia, MO, p.A2333
- 806 **Solriamfetol Improves Chronic Sleep Fragmentation-Induced Adverse Effects on Novel Object Recognition in Mice**/C. Puech, M. Badran, M.B. Barrow, A.R. Runion, D. Gozal, Columbia, MO, p.A2334
- 807 **The Benefit of a Liraglutide-Based Weight Loss Regimen Alone or in Addition to Standard CPAP Therapy on Metabolic Function, Atherosclerosis and Inflammation in Patients with Obstructive Sleep Apnoea - an Explorative, Proof of Concept Study**/C. O'Donnell, R. Gitau, A. O'Mahony, E. O'Neill, J.D. Dodd, D. Murphy, D. O'Shea, S. Ryan, Dublin, Ireland, p.A2335

- 808 **Spironolactone Improves Coronary Artery Function and Reserve in Mice Exposed to Chronic Intermittent Hypoxia Mimicking Sleep Apnea**/M. Badran, S.B. Bender, D. Gozal, Columbia, MO, p.A2336
- 809 **Undesirable Levels of Circulating Lipids in Patients with Coronary Artery Disease and Obstructive Sleep Apnea Despite Lipid Lowering Drugs: A Secondary Analysis of the RICCADSA Cohort**/Y. Celik, E. Thunström, Y. Peker, Istanbul, Turkey, p.A2337
- 810 **Central Sleep Apnea in Patients with Coronary Heart Disease Taking P2Y12 Inhibitors**/C. Klein, W. Tzeng, R. Roth, J.M. Lobo, Y. Cho, W.J. Healy, S. Mazimba, Y. Cho, Y. Kwon, Seattle, WA, p.A2338

BEHAVIORAL • CLINICAL
POSTER DISCUSSION SESSION
A109 THE ODYSSEY, NO LONGER A TRAGEDY: THE CONTINUUM OF LUNG CANCER
2:15 p.m. - 3:45 p.m.
MOSCONE CENTER
Room 207-208 (South Building, Level 2)
Discussion 2:15-2:45
Poster Viewing 2:45-3:45
Chairing: M.C. Aldrich, MPH, PhD, Nashville, TN
 D.A. Arenberg, MD, FCCP, ATSF, Ann Arbor, MI
 K.A. Crothers, MD, Seattle, WA

- 301 **Lung Cancer Mortality in the United States Between 1999 and 2019: An Observational Analysis of Disparities by Gender and Race**/C. Jani, O. Al Omari, A. Ahmed, H. Singh, A. Radwan, P. Bhatt, L. Agarwal, P. Patel, R. Goodall, J. Shalhoub, D. Marshall, C.C. Thomson, J.D. Saliccioli, U. Tapan, Cambridge, MA, p.A2339
- 302 **Treatment and Outcomes of Early-Stage Non-Small Cell Lung Cancer in the Veteran Health Administration**/R. Sanchez, M.S. Vaughan Sarrazin, R. Hoffman, Iowa City, IA, p.A2340
- 303 **Lung Cancer Is Just Different: Comparing the Social Determinants and Baseline Health of Patients with Lung, Colon, and Breast Cancer**/J. Lozier, D. Blanding, G.A. Silvestri, Charleston, SC, p.A2341
- 304 **Racial Difference in Lung Cancer: A Retrospective Study from National Inpatient Sample (NIS)**/K.J. Raj, U. Bhagat, S. Chandna, M.V. Shah, S. Bhasin, K. Jyotheeswara Pillai, New Brunswick, NJ, p.A2342

- 305 **Disentangling Racial Disparities in Lung Cancer Stage of Diagnosis**/J. Richmond, M. Hollister Murray, C.M. Milder, J.D. Blume, M.C. Aldrich, Nashville, TN, p.A2343
- 306 **Identifying Eligible Participants for Lung Cancer Screening: Leveraging the Electronic Health Record and Tobacco Use History**/C. Jani, H. Singh, C.C. Thomson, Cambridge, MA, p.A2344
- 307 **Can Brief Telehealth Encounters Increase Lung Cancer Screening of Eligible Veterans Residing in Rural Wisconsin?**/S. Hamidi, T. Beck, I. Rubinstein, Chicago, IL, p.A2345
- 308 **The Impact of a "Commonly Asked Questions" Handout Accompanying Lung Cancer Screening Results on Patient Understanding and Distress: A Pilot Pragmatic Trial**/M. Triplette, E.K. Kross, M.A. Snidarich, S. Shahrir, D.S. Hippe, K.A. Crothers, Seattle, WA, p.A2346
- 309 **The Philadelphia Lung Cancer Learning Community: A City-Wide Approach to Characterizing and Improving Lung Cancer Screening**/J.A. Barta, C.P. Erkmen, R.E. Myers, C.S. Shusted, S. Cohen, C. Saia, J. Wainwright, F. Dako, R. Wender, G.C. Kane, A. Vachani, K.A. Rendle, Philadelphia, PA, p.A2347
- 310 **Improved Adherence to USPSTF Guidelines for Lung Cancer Screening After Initiation of a Comprehensive and Centralized Lung Cancer Screening Program: An Institutional Experience**/M.A. Alkhunaizi, S. Chan, J. Gago-Pinero, M. Velasco, J. Ramey, S.R. Bujarski, Houston, TX, p.A2348
- 311 **Appropriate Follow-Up After Abnormal Lung Cancer Screening Examinations**/L.M. Henderson, D. Durham, P. Perera, J. Long, L. Lane, D. Lamb, E.M. Metwally, M.P. Rivera, Chapel Hill, NC, p.A2349
- 312 **Reduction of Time from Diagnosis to Treatment of Lung Cancer: A Single Center Quality Improvement Experience**/C.S. Davila-Chapa, S. Boparai, S. Vutukuri, J.D. Packer, T. Sartawi, R.C. Holladay, K. Beedupalli, Shreveport, LA, p.A2350
- 313 **Variation in Reporting of Incidental Findings on Lung Cancer Screening and Association with Subsequent Assessment**/B. Atoma, A.E. Fabbrini, B. Clothier, M.E. Campbell, A.C. Melzer, Minneapolis, MN, p.A2351
- 314 **Characterizing Screen-Detected Small Cell Lung Cancer in a Lung Cancer Screening Program and in the National Lung Screening Trial**/B.M. Ruane, C.S. Shusted, E. Muse, L. Emeigh-McBride, B. Jackson, G.C. Kane, N.R. Evans III, R. McIntire, C. Zeigler-Johnson, H.-S. Juon, J.A. Barta, Philadelphia, PA, p.A2352

- 315 Impact of Lung Diseases on Survivals in Lung Cancer Patients with Rheumatoid Arthritis/D.W. Park, J. Choi, K.-I. Han, M.J. Jo, J.-H. Kang, S.J. Chung, Y. Yeo, T.S. Park, H. Lee, J.-Y. Moon, S.-H. Kim, T.-H. Kim, S.-J. Lee, H.J. Yoon, J.W. Sohn, Seoul, Korea, Republic of, p.A2353**
- 316 Overall Survival Associated with Image-Guided Thermal Ablation (IGTA) and Stereotactic Body Radiation Therapy (SBRT) for Patients with Non-Small Cell Lung Cancer: A Systematic Review and Meta-Regression Analysis/P. Laeseke, C. Ng, N. Ferko, A. Naghi, G. Wright, Y. Zhang, I. Kalsekar, B. Laxmanan, S.K. Ghosh, M. Zhou, P. Szapary, M. Pritchett, Madison, WI, p.A2354**
- 317 Ventilatory Efficiency Can Stratify Risk of Major Pulmonary Complications After Lobectomy in Patients with Moderate Peak Oxygen Uptake/K. Kristenson, J. Hylander, M. Boros, A. Fyrenius, K. Hedman, Linköping, Sweden, p.A2355**
- 318 Pneumonitis in Locally-Advanced NSCLC Treated with Definitive Chemoradiation and Durvalumab: A Single-Center Retrospective Study/J. Solanki, X. Von Buttlar, J. Ahn, R. Krochmal, J.E. Reuss, Washington, DC, p.A2356**
- 319 Initial Results from the First Diagnosis and Treat Study: A Phase 1 Trial of EBUS-TBNI Cisplatin for Stage 4 Non-Small Cell Lung Cancer/E. Ducomb, V. Mori, B. Cole, S. Wagner, P. Gibson, S. Anderson, P. Kaufman, F. Khan, C.M. Kinsey, Boston, MA, p.A5560**
- 320 The Safety of Transbronchial and Percutaneous Delivery of Pulsed Electric Fields in Lung/T.J. O'Brien, W.S. Krimsky, R. Neal, San Carlos, CA, p.A5561**
- 321 Rapid Evaluation of Bronchoscopic Biopsies Using Stimulated Raman Histology/D.J. daCosta, Y.M. Htwe, V. Murthy, S. Rafeq, D.H. Sterman, H. Pass, A.L. Moreira, N. Narula, S. Ratna, S. Pastore, D. Orringer, J.L. Bessich, Bronx, NY, p.A5562**

4:00 p.m. - 5:00 p.m.

SUNDAY AWARDS SESSION

MOSCONE CENTER

Hall E (North Building, Exhibition Level)



Amberson Lecture

The Amberson Lecture recognizes major lifetime contributions to clinical or basic research that have advanced our fundamental understanding of the basic, translational, or clinical approaches to respiratory disease, critical illness, or sleep disorders. This award also recognizes exemplary professionalism, collegiality and citizenship through mentorship and leadership in the ATS community. The Lecture is given in honor of James Burns Amberson, an international authority on chest disease and tuberculosis.

Lecturer: Naftali Kaminski, MD, ATSF, New Haven, CT

Lecturer Title: Charting a Road Map to Curing Human Pulmonary Fibrosis

Trudeau Medal

The Trudeau Medalist is an individual with lifelong major contributions to the prevention, diagnosis and treatment of lung disease, critical illness, or sleep disorders through leadership in research, education, or clinical care. The Trudeau Medal is the highest honor bestowed by the ATS and is given in honor of Edward Livingston Trudeau, a founder and the first president of the American Lung Association.

Awardee: Courtney Broaddus, MD, San Francisco, CA

Distinguished Achievement Award

The Distinguished Achievement Award is given to individuals who have made outstanding major contributions that advance the missions of the American Thoracic Society. The Award recognizes the substantial contributions to prevention, diagnosis and treatment of lung disease, critical illness, or sleep disorders through advocacy, training, and mentorship. This award recognizes one major accomplishment or cumulative impact on the field.

Awardees: Meilan K. Han, MD, MS, ATSF, Ann Arbor, MI
Francine Comi, BS, New York, NY

5:00 p.m. - 7:00 p.m.

ASSEMBLY MEMBERSHIP MEETINGS

The fourteen Assemblies are the primary groups of the American Thoracic Society. Each Assembly holds an annual Membership Meeting at the International Conference. The meetings will be held on Sunday, May 15th from 5-7 PM and Monday, May 16th from 5-7 PM.

All Assembly members and other interested individuals are invited to attend.

To learn more about an Assembly, please click the button and you will be re-directed to that Assembly's page.

BEHAVIORAL SCIENCE AND HEALTH SERVICES RESEARCH (BSHSR)

MOSCONE CENTER

Room: 3010/3012 (West Building, Level 3)



ENVIRONMENTAL, OCCUPATIONAL AND POPULATION HEALTH (EOPH)

MOSCONE CENTER

Room: 3006/3008 (West Building, Level 3)



PULMONARY INFECTIONS & TUBERCULOSIS (PI-TB)

MOSCONE CENTER

Room: 3000/3002/3004 (West Building, Level 3)



PULMONARY REHABILITATION (PR)

MOSCONE CENTER

Room: 3014 (West Building, Level 3)



RESPIRATORY CELL & MOLECULAR BIOLOGY (RCMB)

MOSCONE CENTER

Room: 3001/3003 (West Building, Level 3)



RESPIRATORY STRUCTURE & FUNCTION (RSF)

MOSCONE CENTER

Room: 3020/3022/3024 (West Building, Level 3)



THORACIC ONCOLOGY (TO)

MOSCONE CENTER

Room: 3005/3007 (West Building, Level 3)






ATS 2022
INTERNATIONAL CONFERENCE
San Francisco, CA

Monday Morning, May 16

[Click Here to Access the Program Itinerary and Add Monday Sessions and Presentations to Your Calendar](#)

MEET THE EXPERTS

CME Credits Available: 1

 Pre-registration and additional fees required. Attendance is limited.
Member: \$100 LMIC Member: \$70.

7:00 a.m. - 8:00 a.m. MOSCONE CENTER

- ME15 PATIENT-CENTERED CARE FOR ILD: ESTABLISHING CORE COMPONENTS AND OVERCOMING CHALLENGES IN PRACTICE**
K.I. Aronson, MD, MSci, New York, NY
A. Podolanczuk, MD, New York, NY
Room 52/54/56 (South Building, Lower Mezzanine)
- ME16 BIOLOGICS FOR SEVERE ASTHMA IN CHILDREN: HOW TO CHOOSE YOUR TARGETED THERAPY**
S.J. Szeffler, MD, Aurora, CO
C. Rosas-Salazar, MD, MPH, ATSF, Nashville, TN
Room 58/60 (South Building, Lower Mezzanine)
- ME17 MULTIDISCIPLINARY APPROACHES TO MANAGING NON-ORGAN RELATED MANIFESTATION OF SARCOIDOSIS**
D.C. Patel, DO, MBA, Gainesville, FL
V. Kahlmann, PhD, Rotterdam, Netherlands
Room 70/72 (South Building, Lower Mezzanine)
- ME18 NEW DIAGNOSTICS AND THERAPEUTIC INTERVENTIONS IN LATENT, INCIPENT, AND SUBCLINICAL TB INFECTIONS**
P. Escalante, MD, MSc, Rochester, MN
Room 74/76 (South Building, Lower Mezzanine)

10:45 a.m. - 11:45 a.m. MOSCONE CENTER

- ME19 GUARDIANS OF SPACE: LEVERAGING PSYCHOLOGICAL SAFETY FOR LEARNER SUCCESS**
W. Brown, MD, Nashville, TN
M.M. Lee, MD, ATSF, San Francisco, CA
L. Santhos, MD, MEd, San Francisco, CA
N.H. Stewart, DO, Kansas City, KS
Room 50/62 (South Building, Lower Mezzanine)
- ME20 TOLERATING UNCERTAINTY: CHANGING THE MINDSET OF DOCTORS AND PATIENTS**
R.M. Schwartzstein, MD, Boston, MA
Room 52/54/56 (South Building, Lower Mezzanine)
- ME21 ENGAGING PROFESSIONALS ON THE ROLE OF EARLY PALLIATIVE CARE IN PATIENTS WITH INTERSTITIAL LUNG DISEASE AND THEIR CAREGIVERS**
K.O. Lindell, PhD, RN, ATSF, FAAN, Charleston, SC
Room 58/60 (South Building, Lower Mezzanine)
- ME22 ADAPTING PULMONARY REHABILITATION FOR ADULTS WITH SEVERE ASTHMA**
R.A. Evans, MBChB, FRCP, PhD, Leicester, United Kingdom
Room 70/72 (South Building, Lower Mezzanine)
- ME23 COMISA: HOW TO DIAGNOSE AND TREAT INSOMNIA COMORBID WITH SLEEP APNEA**
M. Grandner, PhD, Tucson, AZ
Room 74/76 (South Building, Lower Mezzanine)

BASIC • BEHAVIORAL • TRANSLATIONAL

KEYNOTE SERIES

CME Credits Available: 1.5

K2 CUTTING THROUGH THE SMOKE: CONFRONTING THE CLIMATE CRISIS THROUGH PATIENT CARE AND POLICY

8:15 AM - 9:00 AM MOSCONE CENTER
Room 7-8 (South Building, Exhibition Level)

This keynote talk will discuss how medical professionals can accelerate action to confront the climate crisis. Dr. Mary Rice pulmonologist, air pollution researcher and former chair of the ATS environmental health policy committee will discuss the health effects of fossil fuel air pollution and climate change, and opportunities to address the crisis through patient care, research and advocacy.

Secretary John Kerry, United States Special Presidential Envoy for Climate, will participate by video to discuss government and private sector responses that are urgently needed to confront this multilateral health crisis.

Introduction: Juan C. Celedon, MD, DrPH, ATSF, Pittsburgh, PA

Featured Speakers: Mary B. Rice, MD, MPH, Boston, MA

Video Discussion: Secretary John Kerry, Washington, DC

YEAR IN REVIEW

CME Credits Available: 1.5

MOC Points Available: 1.5

B1 CLINICAL YEAR IN REVIEW 2

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Hall E (North Building, Exhibition Level)

Target Audience

Pulmonary, critical care and sleep providers. The program will discuss general topics of interest to a broad group of providers, inside and outside of these subspecialties. The program is relevant to not only clinicians, but also to researchers and administrators.

Objectives

At the conclusion of this session, the participant will be able to:

- apply new clinical research knowledge to clinical practice;
- learn new findings about key conditions in pulmonary, critical care and sleep;
- have new strategies to manage the care of common conditions in pulmonary, critical care, and sleep.

Clinical Year in Review sessions will include core topics in pulmonary, critical care, and sleep medicine. The goal of the session is to discuss critical state of the art topics and evolving concepts. The learner will be exposed to a carefully curated review of the current literature by emerging leaders in the field. After the course, participants will better understand novel concepts in each specific domain that we hope will translate to improved patient care.

Chairing: J.L. Gomez, MS, MD, ATSF, New Haven, CT
R.J. Shah, MD, MSCE, San Francisco, CA
J.C. Ferreira, MD, PhD, Sao Paulo, Brazil

9:30 COPD

B.D. Hobbs, MD, MSci, Boston, MA

9:52 Asthma

F. Schleich, MD, PhD, Liège, Belgium

10:15 Sleep Medicine

A. Zinchuk, MD, MHS, BS, New Haven, CT

10:37 Health Disparities in Pulmonary, Critical Care and Sleep Medicine

I.L. Riley, MD, MPH, Durham, NC

This session and the International Conference are supported by an independent medical educational grant from Genentech, Inc.

All CME sessions have been planned and implemented in accordance with the Accreditation Criteria of the Accreditation Council for Continuing Medical Education (ACCME®) and are free of the control of ineligible companies (formerly commercial interests).

CLINICAL**CLINICAL TOPICS IN PULMONARY MEDICINE**

CME Credits Available: 1.5

B2 THE RICHARD LIGHT SYMPOSIUM ON PLEURAL DISEASES STATE OF THE ART 2022

Assemblies on Clinical Problems; Thoracic Oncology

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 205-206 (South Building, Level 2)

Target Audience

Clinicians, nurses, allied health staff and researchers in respiratory diseases: chest physicians, interventional pulmonologists, thoracic/general surgeons, oncologists, general/emergency physicians, junior staff and scientists

Objectives

At the conclusion of this session, the participant will be able to:

- gain knowledge about advances in the diagnosis and treatment of pleural effusions;
- understand latest clinical trial evidence and guideline recommendations on best management of malignant effusions;
- gain knowledge on the latest research finding on management of pneumothorax including conservative approach and ambulatory care.

This session pays tribute to Dr. Richard Light and describes many recent exciting and practice-changing advances in the pleural disease since the publication of Light's Criteria. Recent research advances have allowed less invasive approaches in diagnosis of pleural effusions, and transformed the care of malignant effusion, empyema and pneumothorax. Results of many high-profile trials have transformed care eg on pneumothorax [PSP trial NEJM2020; RAMPP study Lancet2020]; malignant effusions (IPC-PLUS [NEJM2018]; AMPLE-1 [JAMA2017] and AMPLE-2 [LancetRM2018] and pleural infection. The session will inform pulmonologists on practical application of these exciting advances in everyday practice.

Chairing: C. Broaddus, MD, San Francisco, CA
D.J. Feller-Kopman, MD, Lebanon, NH

9:30 From Light's Criteria to State of the Art Molecular Diagnostics of Pleural Effusions

C. Broaddus, MD, San Francisco, CA

9:48 From Light's Formula on Pneumothorax Size to Conservative Management: State of the Art Pneumothorax Care

N. Maskell, DM, Bristol, United Kingdom

- 10:06 From Light's "Sun Never Set on Parapneumonic Effusion" to State of the Art Care of Pleural Infection**
N. Rahman, BM BCH, MSc, MRCP(UK), Oxford, United Kingdom
- 10:24 From Light's Preclinical Models to State of the Art Malignant Pleural Effusion Care**
Y.C.G. Lee, MBChB, PhD, Perth, Australia
- 10:42 State of the Art Pleural Interventions for Pulmonologists in 2022**
D.J. Feller-Kopman, MD, Lebanon, NH

CLINICAL • TRANSLATIONAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

B3 WHAT'S NEW IN ANCA-ASSOCIATED VASCULITIS?

Assemblies on Clinical Problems; Allergy, Immunology and Inflammation; Critical Care

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 7-8 (South Building, Exhibition Level)

Target Audience

Providers of lung health and critical care, clinical and translational researchers, and those interested in multidisciplinary care

Objectives

At the conclusion of this session, the participant will be able to:

- critically evaluate the role of treatments for patients with ANCA-associated vasculitis, including plasma exchange;
- improve patient outcomes and quality of life with new and proven strategies to decrease systemic glucocorticoids in ANCA-associated vasculitis;
- describe new findings on the role of emerging treatment pathways in ANCA-associated vasculitis.

Multiple new pivotal studies in ANCA-associated vasculitis have been published since the last full ATS conference, with practice and paradigm changing results. These have contributed to the development of new guidelines from the American College of Rheumatology that will be published by the time of the conference. This session will focus on important clinical updates, as well as how translation from bench to bedside has impacted the landscape of vasculitis management. Additionally, we will highlight important patient-centered outcomes in vasculitis, including how these should impact current management and outcome measures.

Chairing: L. Fussner, MD, Columbus, OH
U. Specks, MD, Rochester, MN

- 9:30 From Pathogenesis to Novel Therapeutic Approaches in ANCA-Associated Vasculitis**
U. Specks, MD, Rochester, MN
- 9:50 Patient Centered Outcomes and Outcome Measures in ANCA-Associated Vasculitis**
T. Kermani, MD, Santa Monica, CA
- 10:05 What's New in Management of Alveolar Hemorrhage?**
L. Fussner, MD, Columbus, OH
- 10:20 Strategies to Minimize Glucocorticoid Exposure in ANCA-Associated Vasculitis**
P. Merkel, MD, MPH, Philadelphia, PA
- 10:35 What's New in Management of Eosinophilic Granulomatosis with Polyangiitis (EGPA)?**
B. Hellmich, MD, Ostfildern, Germany
- 10:50 Panel Discussion**
L. Fussner, MD, Columbus, OH

CLINICAL

CRITICAL CARE TRACK

CME Credits Available: 1.5

B4 CURRENT STATE AND BEYOND: MANAGEMENT OF ACUTE RESPIRATORY FAILURE

Assembly on Critical Care

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3020/3022/3024 (West Building, Level 3)

Target Audience

Healthcare professionals providing critical care (including intensivists, advanced practice providers, hospitalists, trainees, and nurses), and researchers interested in acute respiratory failure

Objectives

At the conclusion of this session, the participant will be able to:

- integrate the latest evidence for mechanical ventilation management for patients with ARDS;
- appropriately use different modalities for non-invasive respiratory support prior to intubation for patients with acute respiratory failure;
- improve awareness of the unique needs of survivors of acute respiratory failure.

In the wake of the COVID-19 pandemic, the critical care community has been reinvigorated to evaluate our current practices and to consider the future of respiratory failure management. Other than low tidal volume ventilation, the optimal approach for supporting acute respiratory failure patients remains uncertain. This symposium will explore high priority topics and emerging concepts for the treatment of acute respiratory failure.

- Chairing:** S. Sahetya, MD, MHS, Baltimore, MD
E. Fan, MD, PhD, Toronto, Canada
- 9:30 Defining ARDS: Moving on From Berlin**
B.T. Thompson, MD, Boston, MA
- 9:39 Noninvasive Support for the Hypoxemic Patient**
L. Munshi, MD, Toronto, Canada
- 9:48 New Targets for Lung Protective Ventilation: Driving Pressure and Mechanical Power**
L.D.J. Bos, PhD, MD, Amsterdam, Netherlands
- 9:57 PEEP for Lung Protective Ventilation: Beyond Higher vs Lower**
S. Sahetya, MD, MHS, Baltimore, MD
- 10:06 Spontaneous Breathing: Should Patients Breathe on Their Own?**
J.R. Beitler, MD, MPH, New York, NY
- 10:15 The Promise of ECLS: Should Patients Breathe?**
E. Fan, MD, PhD, Toronto, Canada
- 10:24 Beyond Ventilation: Oxygen Therapy in Acute Respiratory Failure**
M.W. Semler, MD, MSc, Nashville, TN
- 10:33 Survivorship: Moving Past Mortality**
C.T. Hough, MD, MSc, Portland, OR
- 10:42 Panel Discussion**
S. Sahetya, MD, MHS, Baltimore, MD

BASIC • TRANSLATIONAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

B5 ATS MTHBUSTERS: AGING BIOLOGY AND CELLULAR SENESENCE IN CHRONIC LUNG DISEASE - CHICKEN OR THE EGG

Assemblies on Respiratory Cell and Molecular Biology; Allergy, Immunology and Inflammation; Environmental, Occupational and Population Health; Respiratory Structure and Function

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 2010/2012 (West Building, Level 2)

Target Audience

Anyone interested in the pathobiology and potential new therapies for COPD and IPF, which includes researchers and clinicians

Objectives

At the conclusion of this session, the participant will be able to:

- describe new findings about the roles of aging biology and cellular senescence in the pathogenesis of IPF and COPD;
- identify potential therapies that target cellular senescence and their potential implication for patient care;

- determine whether cellular senescence and aging biology are indeed important in the pathogenesis of COPD and IPF.

In this interactive and provocative session, audience members will learn about new insights into the biology of lung aging as it relates to COPD and IPF. There will be a specific focus on cellular senescence, one of the hallmark mechanisms of aging biology and the basic core theme for ATS 2022. The session will be conducted using the “mythbusters” format; following talks by leading researchers, the mythbusters will discuss the validity of the hypothesis and the session will end with a vote by the audience.

Chairing: C.R. Kliment, MD, PhD, Pittsburgh, PA
M. Lehmann, PhD, Neuherberg, Germany
M. Rojas, MD, Columbus, OH

- 9:30 Introduction to Cellular Senescence in Chronic Lung Disease**
P. Lee, MD, Durham, NC
- 9:40 COPD Is Caused by Cellular Senescence**
Speaker To Be Announced
- 9:52 IPF Is Caused by Cellular Senescence**
V.J. Thannickal, MD, New Orleans, LA
- 10:04 Oxidative Stress and Mitochondrial Dysfunction Contributes to Cellular Senescence in IPF and COPD**
A.L. Mora, MD, Columbus, OH
- 10:16 DNA Damage and Telomere Shortening Contributes to Cellular Senescence in IPF and COPD**
P.J. Wolters, MD, San Francisco, CA
- 10:28 Current Therapeutic Approaches to Targeting Cellular Senescence in IPF and COPD**
M. Koenigshoff, MD, PhD, ATSF, Pittsburgh, PA
- 10:40 Mythbuster 1: COPD and Cellular Senescence**
M. Sauler, MD, New Haven, CT
- 10:50 Mythbuster 2: IPF and Cellular Senescence**
N. Kaminski, MD, ATSF, New Haven, CT

BASIC • TRANSLATIONAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

B6 EMERGING INSIGHTS INTO HETEROGENEITY OF LUNG MACROPHAGES, NEUTROPHILS, AND DENDRITIC CELLS

Assemblies on Allergy, Immunology and Inflammation; Pulmonary Infections and Tuberculosis; Respiratory Cell and Molecular Biology

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 2001/2003 (West Building, Level 2)

Target Audience

Basic, translational, and clinical researchers interested in learning the latest knowledge about how subsets of developmentally, anatomically, and functionally distinct macrophages and neutrophils subserve specialized roles in lung disease

Objectives

At the conclusion of this session, the participant will be able to:

- understand that developmentally, anatomically, and functionally distinct macrophage subpopulations recently identified in the lung are subsets that play unique and unexpected roles in lung disease;
- understand updated FACS-based and intersectional genetics-based strategies for studying these phagocyte populations selectively;
- appreciate the emerging sophistication of neutrophil biology that has been revealed in non-pulmonary fields, including evolving concepts of NETosis and neutrophil subsets.

Our understanding of macrophages, neutrophils, and other phagocytes and their roles in lung health and disease has been fundamentally revised in recent years by scRNA-Seq, intravital imaging, and other technologies. Macrophage subsets inhabiting distinct microanatomic niches of the lung exhibit distinct developmental histories and functions and may be selectively targeted using intersectional genetics and other approaches. Likewise, we now understand that neutrophils patrol the lung endothelium during health and use a distinct mode of cell death ('NETosis') to kill microbes and amplify inflammatory signals. The speakers, all world-class experts in phagocyte biology, will provide perspective on this quickly evolving field.

Chairing: M.B. Fessler, MD, Research Triangle Park, NC
W.J. Janssen, MD, Denver, CO

- 9:30 Macrophage Biology: From Development to Functions**
F. Ginhoux, PhD, Singapore, Singapore
- 9:50 Multiple Types and Functions of Macrophages in the Lung**
P. Kubes, PhD, Calgary, Canada
- 10:10 Innate Immunity and Lung Cancer**
C.V. Jakubzick, PhD, Lebanon, NH
- 10:30 To NET or Not to NET: Neutrophils in Autoimmunity, Host Defense, and Vascular Disease**
M. Kaplan, MD, Bethesda, MD
- 10:50 Panel Discussion and Recommendations**
M.B. Fessler, MD, Research Triangle Park, NC

BASIC • CLINICAL • TRANSLATIONAL

BASIC CORE

CME Credits Available: 1.5

B7 EARLY PULMONARY COMPLICATIONS OF PEDIATRIC STEM CELL TRANSPLANT**Assembly on Pediatrics****9:30 a.m. - 11:00 a.m.****MOSCONE CENTER****Room 2006/2008 (West Building, Level 2)****Target Audience**

Pediatric and adult pulmonologist, fellows, residents and medical students, basic researchers in lung injury

Objectives

At the conclusion of this session, the participant will be able to:

- understand the many factors involved in early lung injury post hematopoietic stem cell transplantation;
- define future direction in research and treatment of early lung disease post hematopoietic stem cell transplantation;
- understand the knowledge gaps in early lung injury post hematopoietic stem cell transplantation.

Pediatric hematopoietic stem cell transplantation (HSCT) is performed for malignant and non-malignant conditions. Pulmonary complications constitute the leading cause of death during the initial year after transplantation. Allogeneic HSCTs are associated with more severe pulmonary complications such as pneumonitis (infectious and non-infectious) and pulmonary hemorrhage during the first year after transplant. Predictors of these life-threatening conditions are unknown. A recent NIH workshop explored the etiology of lung injury occurring within a year after HCT in children, to identify critical gaps in existing knowledge, and to explore avenues for research to address these knowledge gaps to advance care and optimize outcomes.

Chairing: S.B. Goldfarb, MD, ATSF, Minneapolis, MN
A. Natarajan, MD, PhD, Bethesda, MD

- 9:30 Update Pulmonary Complications of Pediatric Hematopoietic Cell Transplantation (HCT) Current Landscape and Future Research Directions**
S.B. Goldfarb, MD, ATSF, Minneapolis, MN
- 9:34 Overview of Indications for Stem Cell Transplants and Early and Late Pulmonary Complications**
W.A. Gower, MD, MS, Chapel Hill, NC
- 9:44 Early Lung Injury Post HSCT**
S. Davies, MBBS, PhD, MRCP, Cincinnati, OH
- 10:03 Advances in Understanding Pulmonary Infections after Hematopoietic Cell Transplantation**
M. Zinter, MD, San Francisco, CA

10:22 Pathways to Fibrosis: Viral Infections and Animal Models
B.B. Moore, PhD, ATSF, Ann Arbor, MI

10:41 Imaging and Early Detection of Lung Injury Post HSCT
J.C. Woods, PhD, Cincinnati, OH

CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B8 ADDRESSING CHALLENGES TO TOBACCO TREATMENT IN THE SETTING OF SCREENING AND TREATMENT FOR LUNG CANCER

Assemblies on Thoracic Oncology; Tobacco Action Committee

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 3-4 (South Building, Exhibition Level)

Target Audience

Pulmonologists and allied health professionals; those with clinical and administrative responsibilities for smoking cessation programming and/or lung cancer screening; those needing assistance providing evidence-based smoking cessation.

Objectives

At the conclusion of this session, the participant will be able to:

- apply evidence-based best practices for tobacco treatment for patients who smoke, including medical therapies and counseling;
- integrate smoking cessation into lung cancer screening and treatment using evidence from large-scale implementation studies;
- define new strategies to overcome healthcare disparities in tobacco cessation access and resources.

This session will address evidence and implementation strategies that inform best-practices for the provision of smoking cessation in lung cancer screening and lung cancer settings. This session is broadly applicable to cessation in other settings as well. There will be a review of the evidence for cessation therapeutics (including pharmacologic treatment and counseling methods) and implementation strategies gleaned from large scale multicenter trials and cohorts to provide facilitators and overcome barriers to cessation. Finally, we will examine disparities in smoking cessation and strategies to overcome disparities in resource access and utilization.

Chairing: M. Triplette, MD, MPH, Seattle, WA
L. Carter-Harris, PhD, APRN, ANP-BC, RN, New York, NY

9:30 Evidence for Effective Cessation Counseling and Treatment in the Setting of Cancer Screening and Diagnosis
F.T. Leone, MD, MS, ATSF, Philadelphia, PA

9:50 Optimizing Integration of Smoking Cessation in Lung Cancer Screening

K. Foley, PhD, Winston-Salem, NC

10:15 Lessons in Providing Comprehensive Smoking Cessation in Patients With Cancer

M.C. Fiore, MD, MPH, MBA, Madison, WI

10:40 Examining Solutions to Disparities in Tobacco Treatment Resource Utilization and Access

H. Kathuria, MD, ATSF, Boston, MA

This session and the International Conference are supported by an independent medical educational grant from Merck & Co.

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SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B9 COVID-19 PANDEMIC AND POST PANDEMIC: DO AIR POLLUTION AND CLIMATE CHANGE HAVE A ROLE?

Assemblies on Environmental, Occupational and Population Health; Allergy, Immunology and Inflammation; Nursing; Pediatrics; Pulmonary Infections and Tuberculosis; Respiratory Cell and Molecular Biology

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2018/2020 (West Building, Level 2)

Target Audience

Scientists, clinicians (pulmonology, cardiology, pediatrics, gerontology), public health/global health practitioners, and trainees interested in environmental impact of health.

Objectives

At the conclusion of this session, the participant will be able to:

- gain knowledge on the impacts of air pollution and climate change on morbidity and mortality due to COVID-19;
- understand the mechanisms underlying the interaction between air pollutants and SARS-CoV-2 and other respiratory viruses;
- encourage ATS members and others to become involved and respond to the health challenges posed by air pollution and global climate change through influencing policy makers.

SARS-CoV-2 has caused a pandemic since early 2020. Studies suggest that air pollution and global climate change may have played a role in outbreak of the disease. Indeed, an association between air pollution and COVID-19 morbidity and mortality has been observed. Air pollutants including PM_{2.5-10}, and NO₂ were positively associated with increases in COVID-19 deaths and daily cases. Mechanistic studies

suggest an interaction between pollutants and respiratory viruses including SARS-CoV-2 in lung cells. This session will present recent developments in our understanding of role of air pollution and climatological factors in SARS-CoV-2. Leading scientists will discuss the scale of the problem, epidemiological evidence, vulnerability, mechanisms, and a policy development for intervention and mitigation.

Chairing: J.R. Harkema, DVM, PhD, ATSF, East Lansing, MI
E. Brigham, MD, MHS, Vancouver, Canada
H. Bayram, MD, PhD, ATSF, Istanbul, Turkey

9:30 Air Pollution and Respiratory Viral Infections: Is There a Connection?

M.B. Rice, MD, MPH, Boston, MA

9:45 Air Pollutants and Respiratory Viruses and SARS-CoV-2: How Do They Interact?

I. Jaspers, PhD, Chapel Hill, NC

10:00 Impact of Air Pollution on SARS-CoV-2 Infection and Mortality

H. Bayram, MD, PhD, ATSF, Istanbul, Turkey

10:15 Climate Change/Climatological Factors: Any Role in SARS-CoV-2 Spread Globally?

M. Akpınar-Elci, MD, MPH, ATSF, Reno, NV

10:30 Data From Satellites: Can It Help With the Assessment of Air Quality and COVID-19 Epidemiology?

A. Naeger, PhD, Huntsville, AL

10:45 Lessons for Developing Environmental Health Policies in a Post-Pandemic, Climate-Changed World

J.R. Harkema, DVM, PhD, ATSF, East Lansing, MI

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B10 TRANSLATIONAL APPROACHES AND VISUALIZATION OF DISEASE MECHANISMS IN PULMONARY HYPERTENSION

Assembly on Pulmonary Circulation

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2014/2016 (West Building, Level 2)

Target Audience

Basic scientists as well as clinicians working with pulmonary hypertension/pulmonary vascular disease

Objectives

At the conclusion of this session, the participant will be able to:

- gain understanding about promising molecular imaging approaches in human disease and methodologies for characterizing pulmonary

vascular remodeling and the RV, with a particular emphasis on the detection of early changes;

- identify potential collaborators and resources to facilitate the incorporation of novel imaging approaches into their own research;
- learn to apply new techniques in clinical practice.

Tremendous progress has been made in the development of new imaging approaches to the pulmonary vasculature and the right ventricle for both pre-clinical and clinical practice. High-resolution and molecular imaging studies are powerful tools to identify the spatial distribution of cells and molecular markers making them an important complement to all types of OMICS. This session will explore how new imaging technologies can enhance the understanding of the pathophysiology of pulmonary hypertension. Speakers will present new ways to image pulmonary vascular remodeling and right ventricular adaptation and failure in humans and animal models.

Chairing: M. Rabinovitch, MD, Stanford, CA
R.T. Schermuly, PhD, Giessen, Germany
W.M. Oldham, MD, PhD, Boston, MA

9:30 Introduction

R.T. Schermuly, PhD, Giessen, Germany

9:35 Advanced Imaging Combined with Molecular Biology to Explore Pulmonary Vascular Remodeling in Animal Models

M. Kumar, PhD, Stanford, CA

9:47 Imaging Biomarkers of Adaptive and Maladaptive RV Remodeling in Experimental Pulmonary Hypertension

B. Kojonazarov, MD, PhD, Giessen, Germany

9:59 Improved Understanding of Pulmonary Vascular Disease With Synchrotron-Based Phase Contrast Micro-CT

K. Tran-Lundmark, MD, PhD, Lund, Sweden

10:11 Variations of Aberrant Angiogenesis in Pulmonary Disease

D.D. Jonigk, MD, Hannover, Germany

10:23 Novel PET-CT Modalities for Imaging Inflammation and Angiogenesis in PAH

P.B. Yu, MD, PhD, Boston, MA

10:35 Imaging Clinical Adaptive and Maladaptive RV Remodeling

R.R. Vanderpool, PhD, Columbus, OH

10:47 General Discussion

This session and the International Conference are supported by an independent medical educational grant from Actelion Pharmaceuticals US, Inc.,

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TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B11 BACTERIOPHAGE THERAPY OF COMPLEX PULMONARY INFECTIONSAssemblies on Pulmonary Infections and Tuberculosis;
Pediatrics

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 201-202 (South Building, Level 2)

Target Audience

Clinicians and Physician-Scientists interested in the recent developments using bacteriophage as therapy in complex pulmonary infections

Objectives

At the conclusion of this session, the participant will be able to:

- describe the lifecycle of bacteriophage and how it might be used to help control infection;
- understand and describe the major challenges for successful phage therapy including patient and phage selection;
- describe the available assessments that can be used to measure the success of phage therapy.

Bacteriophage therapy is now used on a compassionate need basis for patients with highly resistant microbial communities that no longer responding to standard therapy. Furthermore, clinical trials are being planned in North America and Europe that are designed to answer the challenges of patient selection, phage cocktail design, dosing schedule, and measures of efficacy. This symposium is designed to provide the basic information to healthcare providers of how phage therapy works. Discussions will cover considerations for clinical trial designs surrounding challenges in determining efficacy and safety; early patient experience; and how phage therapy might fit into future therapeutic strategies.

Chairing: D.J. Conrad, MD, La Jolla, CA
L. Caverly, BA, MD, Ann Arbor, MI

9:30 Phage Therapy: Clinical Perspectives and Basic Phage Biology

L. Caverly, BA, MD, Ann Arbor, MI

9:40 Challenges of Bacteriophage Therapy from the Perspective of a Phage Biologist

A. Segall, PhD, San Diego, CA

10:00 Leveraging Evolutionary Trade-Offs and Phage Selection Pressure to Reduce Bacterial Pathogenicity

P. Turner, PhD, New Haven, CT

10:20 The Challenges of Bacteriophage Therapy of Mycobacterial Disease

G. Hatfull, PhD, Pittsburgh, PA

10:40 Measuring Success of Bacteriophage Therapy

D. Pride, MD, PhD, San Diego, CA

CLINICAL TRIALS SESSION

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B12 BREAKING NEWS: CLINICAL TRIAL RESULTS IN PULMONARY MEDICINE

9:30 AM - 11:00 AM

MOSCONE CENTER

Room 209-211 (South Building, Level 2)

Target Audience

Providers of lung health; those who are providers of critical care; those who are in training to be providers of lung health, sleep and critical care; providers and administrators of public health practices and policies; those with clinical, research, or administrative responsibilities

Objectives

At the conclusion of this session, the participant will be able to:

- learn new findings from recent clinical trials that can be integrated in treatment options for patients with pulmonary disease;
- learn new findings about emerging biologic therapies for moderate and severe asthma in adult and pediatric subjects;
- learn new findings about opportunities for outpatient use of monoclonal antibody therapy to treat SARS Co-V2 infection and reduce risk for critical illness.

Chairing: J. Bon, MD, MS, ATSF, Pittsburgh, PA
N.A.. Shah, MD, MPH, MSci, New York, NY
E. Wilcox, MD, MSc, PhD, FRCPC, Toronto, Canada

9:30 Welcome and Introduction

J. Bon, MD, MS, ATSF, Pittsburgh, PA

9:33 SPRINTER: A Randomized, Double-Blind, Placebo-Controlled, Phase 3 Trial to Determine the Efficacy and Safety of Inhaled Interferon Beta-1a (SNG001) for the Treatment of Patients Hospitalized Due to COVID-19

T. Wilkinson, Cantab, MBBS, PhD, FRCP Southampton, United Kingdom

9:46 Discussion/Q&A

N.A.. Shah, MD, MPH, MSci, New York, NY

9:54 Efficacy and Safety of Colistimethate Sodium Delivered Via the I-Neb in Patients with Bronchiectasis and Pseudomonas Aeruginosa

C. Haworth, MD, Cambridge, United Kingdom

- 10:07 Discussion/Q&A**
E. Wilcox, MD, MSc, PhD, FRCPC, Toronto, Canada
- 10:15 Phosphodiesterase Inhibition as a Novel Strategy to Stop Fibrosis in the Lung**
L. Richeldi, PhD, Rome, Italy
- 10:28 Discussion/Q&A**
J. Bon, MD, MS, ATSF, Pittsburgh, PA
- 10:36 Efficacy and Safety of Albuterol-Budesonide versus Albuterol Administered As Needed in Patients with Moderate-to-Severe Asthma: Results of the Mandala Study**
A. Papi, MD, Ferrara, Italy
- 10:49 Discussion/Q&A**
N.A.. Shah, MD, MPH, MSci, New York, NY
- 10:57 Closing Remarks**
E. Wilcox, MD, MSc, PhD, FRCPC, Toronto, Canada

ATS PRESIDENT'S SYMPOSIUM

CME Credits Available: 1.5

B13 INSIGHTS INTO MECHANISMS AND FUTURE DIRECTIONS OF HIV ASSOCIATED LUNG DISEASE

Behavioral Science, Clinical Science, Translational

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 215-216 (South Building, Level 2)

Target Audience

Clinicians and clinical and laboratory investigators; health care professionals involved in patient care; physicians, trainees, physician assistants, nurse practitioners and nurses; those needing instruction in HIV and HIV-related lung disease

Objectives

At the conclusion of this session, the participant will be able to:

- learn about changes in the care of HIV over 40 years and the global burden of HIV;
- understand the spectrum of lung diseases in people living with HIV, and how these differ in adults and youth;
- learn about mechanisms contributing to chronic lung disease in people living with HIV.

This session provides an overview of the evolution of HIV care and pulmonary complications of HIV globally, 40 years after the first report of cases now recognized as AIDS. From the beginning of the AIDS epidemic, the lungs have been a major target of end-organ injury, and a chief cause of morbidity and mortality. This session will highlight changes in HIV care and outcomes over the epidemic and the global burden of HIV. Participants will learn about the spectrum of pulmonary complications impacting aging adults as well as youth with HIV, how these have evolved over time with effective antiretroviral therapy (ART),

and the high burden of cigarette smoking and challenges in smoking cessation amongst people living with HIV (PWH). Participants will also learn about mechanisms contributing to chronic lung disease in HIV, potential therapeutic interventions, and future directions for research.

Chairing: L.M. Schnapp, MD, ATSF, Madison, WI
K.A. Crothers, MD, Seattle, WA
K. Kunisaki, MD, MS, Minneapolis, MN

- 9:30 HIV Over 40 Years: Lessons Learned**
A.S. Fauci, MD, Bethesda, MD
Recorded Presentation
- 9:45 Global Burden of HIV**
L. Huang, MD, ATSF, FCCP, San Francisco, CA
- 10:00 Evolution of Pulmonary Manifestations with HIV**
E.F. Attia, MD, MPH, Seattle, WA
- 10:20 Threats to Survival: The Epidemic of Smoking in HIV**
K.P. Reddy, MD, MS, Boston, MA
- 10:35 Insights into Mechanisms and Future Directions into HIV Associated Lung Disease**
J. Leung, MD, Vancouver, Canada

CLINICAL

LATE BREAKING MINI SYMPOSIUM

B14 OLD DOGS NEW TRICKS: LATE-BREAKING ABSTRACTS IN OBSTRUCTIVE LUNG DISEASE

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3001/3003 (West Building, Level 3)

Chairing: A.J. Halayko, PhD, ATSF, MSc, BSc(Hons),
Winnipeg, Canada
J.A. Krishnan, MD, PhD, ATSF, Chicago, IL
F.J. Rosser, MD, MPH, Pittsburgh, PA

- 9:30 A Human Asthma Exacerbation Model Identifies Pathogenic Cellular and Molecular Programs in the Lower Airway Mucosa Specific to Allergic Asthma/J.**
Alladina, N. Smith, K. Manakongtreecheep, J. Tantivit, K. Slowikowski, H. Keen, T. Kooistra, R.A. Rahimi, F. Giacona, S. Sheng, L.P. Hariri, D. Hamilos, A. Luster, A.-C. Villani, J.L. Cho, B.D. Medoff, Boston, MA, p.A5563
- 9:40 Iron-Induced Aspergillus Proteases: Novel Therapeutic Target for Allergic Bronchopulmonary Aspergillosis/P.**
Chatterjee, W. Chiu, E.B. Burgener, P. Bollyky, J. Hsu, Palo Alto, CA, p.A5564

- 9:50 Survival and Hemodynamics in PH Patients with Bronchopulmonary Dysplasia in the PPHNet Registry/E.D. Austin, M.P. Mullen, E.G. Elia, L.A. Sleeper, C.M. Avitabile, A. Bates, R.L. Keller, J.P. Kinsella, U.S. Krishnan, S.A. Mcgrath-Morrow, M.L. Bernier, L.J. Romer, L.C. Steffes, D. Yung, J.U. Raj, K.D. Mandl, S.H. Abman, Nashville, TN, p.A5565**
- 10:00 Application of Modified Delphi Expert Consensus Thresholds on SABA Reliever Use in Asthma to Data Obtained from a 12-Week Study of a Digital Inhaler in Suboptimally Controlled Asthma Patients/N.L. Lugogo, J. Oppenheimer, R. Merchant, M. George, J. Portnoy, M. O'Connor, G. Bensch, M. Castro, G. Safioti, T. Hill, M. Reich, R. Brown, Ann Arbor, MI, p.A5566**
- 10:10 The Effect of Inhaled Corticosteroid Withdrawal on Inflammation and the Airway Microbiome in COPD: The INCOGNITO Trial/H.R. Keir, H. Richardson, A. Veluchamy, D. Alferes de Lima, C. Hennayake, D. Cassidy, A.J. Dicker, C. Clarke, M. Band, S.M. Finch, P. Billingham, M.L. Crichton, S. Bourke, J. Haughney, B.J. Lipworth, D. Shaw, J.D. Chalmers, Dundee, United Kingdom, p.A5567**
- 10:20 Intervention Study in Overweight Patients with COPD (INSIGHT COPD): A Pulmonary Trials Cooperative Randomized Clinical Trial/D.H. Au, E. Gleason, R. Hunter-Merrill, A. Barón, M. Collins, N. Lv, C. Ronneberg, P. Rise, R. Plumley, S. Wisniewski, F.C. Scirba, D.-Y. Kim, P.F. Simonelli, J.A. Krishnan, C.H. Wendt, L.C. Feemster, G.J. Criner, V. Maddipati, A. Mohan, J. Ma, Seattle, , p.A5568**
- 10:30 INBRX-101: A Novel Recombinant AAT-Fc Fusion Protein That Achieves Normal Serum AAT Levels with Extended Interval Dosing for Patients with Alpha-1 Antitrypsin Deficiency/A. Veale, J. Kalabus, H. Farah, R. Mahadeva, B.T. Kuhn, A. Cole, C.L. Chang, C.D. Brown, M.A. Campos, K.W. Wagner, V. Andrianov, S. Bhagwat, B.P. Eckelman, Q. Deveraux, J. Lascano, M.L. Brantly, Ascot Avenue Greenlane East, New Zealand, p.A5817**
- 10:40 Increased Programmed Death Ligand 1 (PD-L1) Expression Profile in Structural and Immune Cells from Mild COPD Patients and Lung Cancer/D. Mirra, R. Esposito, G. Spaziano, M. Sgambato, E. Piegari, A. Cozzolino, E. Cione, L. Gallelli, A. Capuozzo, C. Santoriello, L. Berrino, B. D'Agostino, F. Polverino, Caserta, Italy, p.A5570**

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

B15 NOVEL BIOMARKERS AND USES OF THERAPEUTICS IN ASTHMA

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3006/3008 (West Building, Level 3)

Chairing: L.E. Crotty Alexander, MD, ATSF, San Diego, CA
M. Gauthier, MD, Pittsburgh, PA

Oral Presentations:

- 9:30 Persistent Mucus Plugs in Asthma Associate with Changes in Airflow Over Time/M. Tang, B.M. Elicker, T. Henry, D.S. Gierada, M.L. Schiebler, B. Huang, M.C. Peters, M. Castro, E.A. Hoffman, S.B. Fain, S. Ash, J. Choi, C. Hall, B.R. Phillips, D.T. Mauger, L.C. Denlinger, N.N. Jarjour, E. Israel, W. Phipatanakul, B.D. Levy, S.E. Wenze, p.A2357**
- 9:40 A Polyclonal Airway Autoimmune Response Is Associated with Clinical Indices of Asthma Severity/B. Salter, N. Zhao, K. Son, A. Gheva-Dvorkin, K. Radford, N. Lavigne, C. Huang, M. Kjarsgaard, N. Khalidi, P. Nair, M. Mukherjee, Hamilton, Canada, p.A2358**
- 9:50 Tezepelumab Reduces Biomarkers of Airway Remodeling, MMP-10 and MMP-3: Exploratory Results from the Phase 3 NAVIGATOR Study/T.-H. Pham, B. Cook, J.R. Parnes, G. Colice, J.M. Griffiths, Gaithersburg, MD, p.A2359**
- 10:00 Clinically Meaningful Improvements in St George's Respiratory Questionnaire Score with Tezepelumab Versus Placebo in Patients with Severe, Uncontrolled Asthma: Results from the Phase 3 NAVIGATOR Study/M. Kraft, J. Corren, C.S. Ambrose, B. Cook, N. Clarke, G. Hunter, N. Molfino, S. Ponnarambil, Tucson, AZ, p.A2360**
- 10:10 High TSLP Responses in the Pediatric Airway Epithelium Are Linked to a Global Pro-Inflammatory State Instead of Type 2 Polarization/E. Chorvinsky, K. Salka, B.S. Bera, S. Gaviria, H.M. Aguilar, R. Kahanowitch, G. Gayoso Liviach, X. Xu Chen, J.J. Weinstock, M.A. Arroyo Morr, M.J. Gutierrez, D.K. Pillai, G.R. Nino, Washington, DC, p.A2361**
- 10:20 Sputum Eosinophil Peroxidase Identifies a Subset of Asthmatics with Severe Airflow Obstruction and Frequent Exacerbations/M. Tang, M.C. Peters, A.R. Charbit, E. Dunican, W.W. Raymond, M. Castro, A.M. Coverstone, S.C. Erzurum, S.A.A. Comhair, A.T. Hastie, W.C. Moore, M.W. Johansson, N.N. Jarjour, B.D. Levy, E. Israel, B.R. Phillips, D.T. Mauger, E.R. Bleeker, S.E. Wenzel, M., p.A2362**

- 10:30 Elevated Exhaled Nitric Oxide with Low Airway Epithelial Catalase Expression Predicts a Poorly Controlled Asthma Phenotype/B.** Lee, M. Peters, J. Fahy, J. Zein, X. Li, D.A. Meyers, E. Bleecker, W. Moore, N.N. Jarjour, L.C. Denlinger, M. Castro, B. Gaston, E. Israel, B.D. Levy, D. Mauger, S.E. Wenzel, Pittsburgh, PA, p.A2363
- 10:40 Efficacy of Dupilumab in Pediatric Patients with Uncontrolled, Moderate-to-Severe Asthma With and Without Ongoing Atopic Comorbid Disease: LIBERTY ASTHMA VOYAGE/T.**W. Guilbert, A. Deschildre, D.J. Jackson, P. Begin, R.S. Zeiger, S.J. Szeffler, A. Altincatal, R. Gall, J.A. Jacob-Nara, P.J. Rowe, Y. Deniz, M. Djandji, Cincinnati, OH, p.A2364
- 10:50 Persistent Reductions in OCS Use in Patients with Severe, OCS-Dependent Asthma Treated with Dupilumab: LIBERTY ASTHMA TRAVERSE Study/M.** Gurnell, C. Domingo Ribas, K.F. Rabe, A. Menzies-Gow, D. Price, G. Brusselle, M.E. Wechsler, C. Xia, M. Djandji, R. Gall, J.A. Jacob-Nara, P.J. Rowe, Y. Deniz, S. Siddiqui, Cambridge, United Kingdom, p.A2365

BEHAVIORAL • TRANSLATIONAL

MINI SYMPOSIUM

B16 TOPICS IN CRITICAL CARE: SEPSIS, PALLIATIVE CARE, AND DECISION-MAKING

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3010/3012 (West Building, Level 3)

Chairing: E.K. Kross, MD, Seattle, WA
I.D. Peltan, MD, MSc, Murray, UT
A.E. Turnbull, DVM, MPH, PhD, Baltimore, MD

Oral Presentations:

- 9:30 Medical Decision Making for Hospitalized Incarcerated Patients Lacking Decisional Capacity/J.**D. Duke, S. Batbold, K.A. Riggan, E.S. DeMartino, Rochester, MN, p.A2366
- 9:40 The Duality of “Goals of Care” Language Among Frontline Clinicians in the ICU: A Qualitative Study/M.** Reif, K.E. Secunda, E.M. Vigilanti, R. Mylvaganam, M. Peliska, K. Krolikowski, J.M. Kruser, Madison, WI, p.A2367
- 9:50 Timing of Code Status Discussion in Patients with Cancer Admitted to the Intensive Care Unit/M.** Theodore, T. Dechen, A.L. O'Donoghue, J. Stevens, Boston, MA, p.A2368

- 10:00 Effect of a Collaborative Palliative Care Intervention vs Usual Care on Quality of Life of Patients with Symptomatic Heart and Lung Diseases: The ADAPT Randomized Clinical Trial/D.** Bekelman, W. Feser, A. Baron, E.C. Parsons, C.H. Welsh, G. Paden, C. McBryde, A. Cheng, C. Turvey, D.H. Au, Aurora, CO, p.A2369
- 10:10 A Race Conscious Approach Toward Investigation of Discrimination in Racially Marginalized Patients with Serious Illness/C.**E. Brown, R.A. Engelberg, J.R. Curtis, Seattle, WA, p.A2370
- 10:20 New Medical Conditions Are Common Among Pediatric Sepsis Survivors/E.** Carlton, A. Gebremariam, A.B. Maddux, S. Weiss, N. McNamara, L. Prosser, H.C. Prescott, Ann Arbor, MI, p.A2371
- 10:30 The Effect of a Sepsis-Specific Transitional Care Intervention on 12-Month Outcomes After Sepsis Hospitalization/M.** Kowalkowski, A. Rios, S. Murphy, A. McWilliams, T. Hetherington, W. Rossman, S.-H. Chou, S. Taylor, Charlotte, NC, p.A2372
- 10:40 Clinical Pathways Leading to Antibiotic Initiation in Patients with Suspected Infection and Their Association with Delays and Mortality/X.** Han, C. Lopez-Espina, P.A. Verhoef, A. Spicer, A. Bhargava, L. Schmalz, M. Sims, A.V. Palagiri, K.V. Iyer, M.J. Crisp, A. Halalau, N. Maddens, F. Gosai, A. Syed, S. Azad, A. Espinosa, B. Reddy Jr., M.M. Churpek, Boston, MA, p.A2373
- 10:50 Association of Antibiotic Ordering and Administration Delays with Patient Outcomes in Hospital-Acquired Sepsis/J.**C. Ginestra, R. Kohn, A. Crane-Droesch, M.P. Kerlin, G.E. Weissman, Philadelphia, PA, p.A2374

BEHAVIORAL • CLINICAL

MINI SYMPOSIUM

B17 BETTER BEDSIDE CARE: “A HOW TO”

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3005/3007 (West Building, Level 3)

Chairing: A. Gallo De Moraes, MD, Rochester, MN
T.J. Iwashyna, MD, PhD, Ann Arbor, MI

Featured Speaker:

- 9:30 Everyday ICU Care and Its Impact on Health Disparities/**T.S. Valley, Ann Arbor, MI

Oral Presentations:

- 9:40 Evaluating the Pragmatism of Pragmatic Critical Care Trials: A Systematic Review/J.**A. Palakshappa, K.W. Gibbs, M. Lannan, A. Cranford, S.P. Taylor, Winston-Salem, NC, p.A2375

- 9:50 The Relationship Between Metabolic Syndrome and Acute Respiratory Distress Syndrome: An Ancillary Analysis of the ARDSNet and PETAL Databases/K. Tea, C.H. Chung, J. Pagliaro, D.E. Espinoza Barrera, Y. Zu, P. Mehta, J.L. Denson, New Orleans, LA, p.A2376**
- 10:00 Race, SpO₂, and SaO₂ in Critically Ill Adults/K.P. Seitz, L. Wang, J.D. Casey, S.A. Markus, K.E. Jackson, E.T. Qian, W.H. Self, T.W. Rice, M.W. Semler, Nashville, TN, p.A2377**
- 10:10 The Role of Semi-Quantitative Pneumonia Panel in Intubated Patients with Severe Pneumonia/M. Arabiat, J.A. Henao Correa, A.S. Qadir, R. Steff, H.A. Matos Casano, T.M.A. Khan, K. Singh, M.A. Ahmed, I. Waheed, E. Catelli, R. Wruble, P. Bhat, N. Kazimuddin, Bowling Green, KY, p.A2378**
- 10:20 Thoracic Epidural Analgesia for Acute Pancreatitis: A Multicenter Randomized Trial/M. Jabaudon, A. Genevrier, S. Jaber, L. Bühler, S. Bulyez, P.-F. Laterre, E. Escudier, A. Sossou, P. Guerci, P.-M. Bertrand, P.-E. Danin, M. Bonnassieux, O. Windisch, R. Chabanne, T. Godet, L. Roszyk, V. Sapin, C.P. Heidegger, E. Futier, B. Pereira, J.-M., p.A2379**
- 10:30 Impact of a Real-Time Ventilator Management Dashboard with Alerts: Sustained Hospital-Wide Improvement in Lung Protective Ventilation/P. Tandon, K.-A.-N. Nguyen, G. Raut, S. Ranginwala, G. Oldenberg, K.S. Mathews, P. Timsina, R. Kohli-Seth, R. Freeman, C.A. Powell, M. Levin, New York, NY, p.A2380**
- 10:40 Inhaled Sevoflurane Sedation vs Propofol in Intubated Patients with Severe Exacerbation of COPD: A Pilot Randomised Controlled Study/B. Jung, F. Garnier, M. Sibari, A. Bourdin, M. Amalric, V. Brunot, K. Klouche, M. Soler, N. Molinari, S. Matecki, Montpellier, France, p.A2381**
- 10:50 The 3 Wishes Program Improves Families' Experience of Emotional and Spiritual Support at the End-Of-Life/Z.J. Taich, N.S. Wenger, A.M. Walling, D. Bear, D.J. Cook, C.-H. Tseng, T.H. Neville, Los Angeles, CA, p.A2382**

CLINICAL

MINI SYMPOSIUM

B18 SYMPTOMS AND COMMUNICATION AMONG PATIENTS AND FAMILIES9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3014 (West Building, Level 3)

Chairing: J.B. Seaman, PhD, RN, CHPN, Pittsburgh, PA
M.M. Lyons, PhD, MSN, ACNP-BC, Columbus, OH

Oral Presentations:

- 9:30 Asynchronous Case-Based Sleep Education Outcomes Among Primary Care Nurse Practitioner Students/B. Sacconi, A.M. Sawyer, M. Melanie Lyons, R. Lang-Gallagher, S.M. Renz, A.J. Watach, M.V. McPhillips, I.M. Rosen, Philadelphia, PA, p.A2383**
- 9:40 Discharge Destination Among Latent Subgroups of Acute Respiratory Failure Survivors/K. Potter, H. Dunn, A. Krupp, M. Mueller, S. Newman, T.D. Girard, S. Miller, Pittsburgh, PA, p.A2384**
- 9:50 Symptom Assessment in the Home Environment Using a Technology-Enhanced Self-Management Intervention in Adults with COPD and Dyspnea/S. Miller, D. Layne, M. Nichols, M. Mueller, C. Strange, P. Davenport, T. Kelechi, M. Pittman, M. Madisetti, R. Teufel, Charleston, SC, p.A2385**
- 10:00 Family Engagement Using Technology in Adult Intensive Care Units: An Integrative Review/J.W. Shin, J. Choi, J. Tate, Sacramento, CA, p.A2386**
- 10:10 Higher Levels of Perceived Stress Are Associated with Distinct Shortness of Breath Profiles in Oncology Patients Receiving Chemotherapy/J. Shin, K. Kober, B. Cooper, S. Paul, C. Miaskowski, San Francisco, CA, p.A2387**
- 10:20 COMFORT Communication in the ICU: Pilot Test of a Nurse-Led Communication Intervention for Surrogates/C. Chen, S. Sullivan, R. Lorenz, E. Wittenberg, C.-S. Li, Y.-P. Chang, Buffalo, NY, p.A2388**
- 10:30 Impact of the Global Pandemic on Accrual for a Non-Covid-19 ICU Clinical Trial/L.L. Chlan, M.F. Tracy, J. Ask, A. Lal, J. Mandrekar, Rochester, MN, p.A5571**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

B19 UNCOVERING HEALTH DISPARITIES IN PEDIATRIC LUNG DISEASE9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 2002/2004 (West Building, Level 2)

Chairing: R. Cohen, MD, MPH, Boston, MA
E. Forno, MD, MPH, ATSF, Pittsburgh, PA

Oral Presentations:

- 9:30 Contribution of Area-Level Socioeconomic Deprivation to PICU Admission and Mortality/H. Mitchell, J. Radack, M. Passarella, S. Lorch, N. Yehya, London, United Kingdom, p.A2389**

- 9:40 Respiratory Syncytial Virus-Specific Immunoglobulin G (IgG) Concentrations Associate with Environmental and Genetic Factors: The Factors Influencing Pediatric Asthma Study/D.G. Torgerson, E. Erdei, R. O’Leary, M. Spear, M. Shedden, M. O’Leary, K. Enright, L. Best, San Francisco, CA, p.A2390**
- 9:50 Maternal Lifetime Trauma and Incident Childhood Asthma: Effect Modification by Maternal Pre-Pregnancy Body Mass Index and Race/Ethnicity/K.N. Carroll, Y.-H.M. Chiu, H.-H. Hsu, B. Coull, R.J. Wright, New York, NY, p.A2391**
- 10:00 Persistent Overweight or Obesity, Lung Function, and Asthma Exacerbations in Puerto Rican Youth/M.S. Wong, Y.-Y. Han, F.J. Rosser, E. Acosta-Pérez, G. Canino, E. Forno, J.C. Celedon, Pittsburgh, PA, p.A2392**
- 10:10 Diet, Asthma, and Severe Asthma Exacerbations in a Prospective Study of Puerto Rican Youth/J. Reyes Angel, Y.-Y. Han, F.J. Rosser, E. Forno, E. Acosta- Perez, G. Canino, J.C. Celedon, Pittsburgh, PA, p.A2393**
- 10:20 The Assessment of Asthma Control in Diagnosed African Adolescents/V. Oyenuga, G. Mosler, E. Addo-Yobo, O.O. Adeyeye, R. Masekela, H.A. Mujuru, R. Nantanda, S. Rylance, I. Ticklay, J.M. Grigg, London, United Kingdom, p.A2394**
- 10:30 The Vaping Epidemic in Latinx Adolescents/M.K. Yamamura, B. Canales, S. Commodore, F. Holguin, P. Valverde, S. Sharma, Aurora, CO, p.A2395**
- 10:40 Food Insecurity and Mental Health During the COVID-19 Pandemic in Cystic Fibrosis Households/M. McGarry, J.T. Lim, N.P. Ly, S. Willen, K. Iwanaga, E. Gibb, M. Chan, G.D. Church, F. Neemuchwala, San Francisco, CA, p.A2396**

Featured Speaker:

- 10:50 Reimagining a World Without Health Inequity/ S. Lovinsky-Desir, New York, NY**

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B21 BASIC, CLINICAL, AND TRANSLATIONAL COPD STUDIES: THE ONGOING HUNT FOR UNDERLYING MECHANISMS AND THERAPEUTIC TARGETS

9:30 a.m. - 11:00 a.m. MOSCONE CENTER
Room 9-10 (South Building, Exhibition Level)

Poster Viewing 9:30-10:00
Discussion 10:00-11:00

Chairing: C.P. Hersh, MD, MPH, ATSF, Boston, MA
 V. Tejwani, MD, Cleveland, OH

Oral Presentations:

- 101 Proof of Mechanism for Anti-Interleukin-33 Antibody Tozorakimab in a Phase 1 Study in Healthy Adults and Patients with Chronic Obstructive Pulmonary Disease/I. Scott, H. Killick, P. Newcombe, N. White, A. Williams, F. Reid, H. Pandya, S. Cohen, C. Kell, M. Gavala, Cambridge, United Kingdom, p.A2397**
- 102 Safety, Pharmacokinetics and Immunogenicity of the Anti-Interleukin-33 Antibody, Tozorakimab: Results of a Phase 1 Study in Healthy Adults and Patients with Chronic Obstructive Pulmonary Disease/F. Reid, D. Singh, M. Albayaty, R. Moate, E. Jimenez, M.W. Sadiq, D. Howe, I.C. Scott, H. Killick, S. Krishnan, A. Godwood, A. Shukla, L. Hewitt, A. Lei, C. Kell, H. Pandya, Cambridge, United Kingdom, p.A2398**
- 103 Clinical and Demographic Features Associated with All-Cause Mortality within One Year of Hospitalization for Acute Exacerbation of Chronic Obstructive Pulmonary Disease/G.B. Carey, J.L. Gomez, New Haven, CT, p.A2399**
- 104 Predicting Pneumonia Events in COPD Patients Using Medical Records/D.B. Price, W. Henley, V. Carter, D. Skinner, L. Alexander, R. Vella, A. Papi, L.M. Fabbri, H.A.M. Kerstjens, N. Roche, D. Singh, C.F. Volgemeier, E. Sen, J.E.D. Cançado, M. Kots, E. Nudo, S. Barile, G. Georges, Singapore, Singapore, p.A2400**
- 105 Inflammatory Ligands of CXC Chemokine Receptor 2 (CXCR2) Are Associated with Coronary Artery Calcification in COPD/R.C. Wade, D. Xing, V. Lin, Y. Wu, C. Song, X. Xu, N. Harris, J.M. Wells, G.A. Payne, Birmingham, AL, p.A2401**
- 106 Topological Data Analysis (TDA) of Allergic Sensitization in Bronchiectasis and COPD/J.K. Narayana, P.Y. Tiew, Y.Y. Ang, M.S.L. Quek, F.W. Ko, A.Y.H. Lim, M.E. Poh, T. Jaggi, H. Xu, M.S. Koh, T.B. Low, T. Hassan, T.H. Ong, H.R. Keir, A. Tee, J.A. Abisheganaden, S. Aliberti, F. Blasi, J.D. Chalmers, F.T. Chew, K. Tsaneva-Atanasova, S. H. Chotirmall, Singapore, Singapore, p.A2402**
- 107 Fibrinogen, a Predictor of Cadmium Exposure and Macrophage Activation In Chronic Obstructive Pulmonary Disease (COPD)/F.J. Li, R. Suroli, P. Singh, K.G. Dsouza, C.T. Stephens, Z. Wang, R.-M. Liu, S. Bae, Y.-I. Kim, M. Athar, M.T. Dransfield, V.B. Antony, Birmingham, AL, p.A2403**
- 108 Seroprevalence of Bordetella Pertussis in Patients with Chronic Obstructive Pulmonary Disease (COPD) in the UK/H. Richardson, D. Alferes de Lima, D. Cassidy, C. Hennayake, S. Haynes, H.R. Keir, A. Dicker, J.D. Chalmers, Dundee, United Kingdom, p.A2404**

- 109 Biofilm Infections of Endobronchial Valves in COPD Patients After Endoscopic Lung Volume Reduction/E.** Pappe, R.-H. Hübner, J. Saccomanno, M. Witzenrath, N. Suttorp, A. Wiessner, A. Moter, J. Kikhney, Berlin, Germany, p.A2406
- 110 Inhibiting RIPK1 Kinase Activity Is Protective in Experimental Models of COPD/H.P.** Van Eeckhoutte, C. Donovan, R. Kim, H. Khan, R. Jayaraman, Y. Dondelinger, T. Delanghe, A. Beal, B. Geddes, J. Bertin, T. Vanden Berghe, P. Vandenabeele, B. Vanaudenaerde, D. Deforce, S. Skevin, F. Van Nieuwerburgh, F. Verhamme, G. Joos, G. G. Brusselle, M. Bertrand, P. Hansbro, K. Bracke; Gent, Belgium, p.A2407
- 111 Defining Regulatory T Cell Subsets in Murine Smoking-Induced Model of COPD/C.M.** Freeman, M.S. Toma, D.T. Mengistu, K. Raslan, B.C. Anderson, M. Busschots, A. Hwang, T. Chen, J.L. Curtis, Ann Arbor, MI, p.A2408
- 112 Bcl-2 Modifying Factor (Bmf) Protects from Cigarette Smoke but Exacerbates Bleomycin Induced Lung Injury/J.J.** Rojas-Quintero, Z.H. Negasi, S.J. Saliba, Y. Tesfaigzi, Boston, MA, p.A2409
- 113 Glucose Turnover and Neutrophil-Related Cytokines in Smokers With and Without Chronic Obstructive Pulmonary Disease/N.** Pournaras, A. Andersson, K. Melissa, M. Padra, K.F. Che, B. Brundin, S. Bozinovski, S.K. Lindén, P.-A. Jansson, M. Sköld, I. Ovarfordt, A. Linden, Stockholm, Sweden, p.A2410
- 114 Quantification of B Cell Subsets in Cigarette Smoke-Exposed Mice/M.** Jacobs, A. Bontinck, J. De Volder, C. Bosteels, G.G. Brusselle, K.R. Bracke, Gent, Belgium, p.A2411
- 115 Characterization of a Novel Murine COPD Model to Study Mechanistic Disease Drivers and to Identify New Drug Targets/J.** Kim, T. Kenny, M. Kehl, B. Mindt, A. Lidwell, V. Gopalakrishnan, C. Morehouse, A. Chiang, J. Silver, L. Cazares, A. Digiandomenico, Gaithersburg, MD, p.A2412
- 116 Hydrogen Sulfide Prevents Cigarette Smoke-Induced Development of Hallmark Features of COPD in Mice and Interleukin-8 Production in Human Primary Bronchial Epithelial Cells/V.** Kumar, J. Horvat, M. Whiteman, P. Hansbro, Newcastle, Australia, p.A2413
- 117 Peripheral Regulatory T Cell Count as a Potential Prognostic Factor for Chronic Obstructive Pulmonary Disease/T.** Imamoto, T. Kawasaki, D. Ishii, K. Yoshioka, T. Suzuki, K. Tatsumi, Chiba, Japan, p.A2414
- 118 C3d Triggers Neutrophil Degranulation And Decreases Endothelial Cell Migration, with Implications for Patients with Alpha-1 Antitrypsin Deficiency/D.** Gogoi, L.T. Fee, M.E. O'Brien, M. Murphy, A. Hopkins, T.P. Carroll, N.G. Mcelvaney, E.P. Reeves, Dublin, Ireland, p.A2415
- 119 Elastase Complex Formation Immunosorbent Assay (ECFISA) for the Sensitive Measurement of Alpha-1 Antitrypsin Elastase Inhibitory Activity/A.** Weber, A. Engelmaier, Vienna, Austria, p.A2416
- 120 MiR-17-5p Is Involved in the Resolution of Inflammation in the Lungs and Is Temporally Regulated After an Inflammatory Insult/Y.P.A.** Myo, S.V. Camus, B.B. Szomju, M.A.T. Freeberg, T.H. Thatcher, P.J. Sime, Richmond, VA, p.A2417
- 121 Triglyceride-Glucose Index (TyG) and Incident Obstructive Lung Disease: An Analysis of the All of Us Research Program/T.D.** Wu, D.T. Villareal, T.J. Monaco, D. Helmer, N.A. Hanania, Houston, TX, p.A2418

CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B22 EMERGING MANAGEMENT OF FIBROTIC ILDs

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 212-214 (South Building, Level 2)

Poster Viewing

9:30-10:00

Discussion

10:00-11:00

Chairing: J.A. De Andrade, MD, Nashville, TN
W.A. Wuyts, MD, PhD, Leuven, Belgium
A. Oh, MD, Denver, CO

401 Macrophage-Targeted Molecular Imaging in Idiopathic Pulmonary Fibrosis/T. Kulkarni, M. Padma, J. Bartels, S. Lapi, V.J. Thannickal, J. McConathy, Birmingham, AL, p.A2419

402 Elastin Specific Molecular Imaging for Pulmonary Fibrosis/T. Kulkarni, J. Bartels, S. Fernandez, D. Chanda, E. Becker, V.J. Thannickal, J.W. Zmijewski, J. McConathy, S. Lapi, Birmingham, AL, p.A2420

403 In Vivo Evaluation of Microscopic Small Airway Involvement in Early UIP Using Endobronchial Optical Coherence Tomography/S.R. Berigei, R.A. Raphaely, S. Nandy, B.W. Roop, A. Sharma, H.G. Auchincloss, H. Gaissert, C. Morse, M. Lanuti, H.C. Ott, C.D. Wright, A. Muniappan, C.M. Keyes, L.P. Hariri, Boston, MA, p.A2421

404 Computer Aided, High-Throughput Microscopic Assessment of Interstitial Lung Disease Using Deep Learning Based Endobronchial Optical Coherence Tomography/S. Nandy, S.R. Berigei, B.W. Roop, M.J. Suter, M.D. Herrmann, L.P. Hariri, Boston, MA, p.A2422

- 405 Endobronchial Optical Coherence Tomography as a Novel Method for Monitoring of Microscopic Disease Progression in UIP of IPF/S.R. Berigei, B. Flashner, S. Nandy, R.A. Raphaely, A. Sharma, C. Fromson, M. Kone, B.W. Roop, S.C. Halks, K.J. Reyes, K. Schreefer, C.M. Keyes, L.P. Hariri, Boston, MA, p.A2423**
- 406 Polarization Sensitive Endobronchial Optical Coherence Tomography for In Vivo Microscopic Assessment of Pulmonary Fibrosis/S. Nandy, S.R. Berigei, B.W. Roop, A. Sharma, A. Muniappan, M.J. Suter, M. Villiger, L.P. Hariri, Boston, MA, p.A2424**
- 407 Pulmonary Vessel Volume Using a Connected Graph-Based Approach in IPF and Healthy Controls/J. John, A.R. Clark, H. Kumar, K.S. Burrowes, B.J. Bartholmai, D.L. Levin, R. Karworski, C. King, M.L. Wilsher, K. Whyte, D.G. Milne, M.H. Tawhai, Auckland, New Zealand, p.A2425**
- 408 Efficacy and Safety of Nintedanib in Elderly Patients with Progressive Fibrosing Interstitial Lung Diseases (ILDs)/T. Moua, F. Bonella, M. Okamoto, S. Tomassetti, C. Valenzuela, W. Wuyts, C. Miede, D. Lievens, E. Bendstrup, Rochester, MN, p.A2426**
- 409 Effect of Antifibrotic Therapy on Survival in Patients with Idiopathic Pulmonary Fibrosis: Data from the IPF-PRO Registry/J.A. De Andrade, M.L. Neely, A.S. Hellkamp, D.A. Culver, H.J. Kim, T. Liesching, L.J. Lobo, M. Ramaswamy, Z. Safdar, S. Bender, C.S. Conoscenti, S.M. Palmer, L.D. Snyder, Nashville, TN, p.A2427**
- 410 A Real-World Multicenter Retrospective Observational Study on Polish Experience with Nintedanib Therapy in Patients with IPF: The PolExNIB Study/S. Majewski, A.J. Bialas, A.R. Barczyk, H. Batura-Gabryel, M. Buchczyk, A. Doboszynska, K. Górska, L. Grabowska-Szkudlarz, H. Jagielska-Len, A. Jarzemska, E. Jassem, D. Jastrzebski, A. Kania, M. Koprowski, M. Krawczyk, B. Mackiewicz, M. M. Martusewicz-Boros, J. Milanowski, M. Nocen-Piskorowska, A. Nowicka, K. Roszkowski-Sliz, A. Sieminska, K. Sladek, M. Sobiecka, T. Stachura, M. Tomczak, W. Tomkowski, M. Trzaska-Sobczak, D. Ziora5, B. Zolnowska, W. J. Piotrowski; Lodz, Poland, pA2428**
- 411 Real-World Evaluation of the Impact of the Anti-fibrotics in Patients with Idiopathic Pulmonary Fibrosis and Other Fibrotic Lung Diseases/T.M. Dempsey, V. Thao, L. Sangaralingham, A.H. Limper, Travis AFB, CA, p.A2429**
- 412 Combined Assessment of the GAP Index and Body Mass Index at Antifibrotic Therapy Initiation for Prognosis of Idiopathic Pulmonary Fibrosis/Y. Suzuki, K. Mori, M. Kono, H. Hasegawa, K. Yokomura, H. Hozumi, M. Karayama, K. Furuhashi, N. Enomoto, T. Fujisawa, Y. Nakamura, N. Inui, H. Nakamura, T. Suda, Hamamatsu, Japan, p.A2430**
- 413 Search for Host Factors That Predict the Therapeutic Effect of Nintedanib for Idiopathic Pulmonary Fibrosis (IPF). Based on Peripheral Blood Cell Counts and Fractionations/N. Arai, Naka-gun, Japan, p.A2431**
- 414 Impact of Antifibrotic Treatment on Post-Operative Complications in Patients with Interstitial Lung Diseases Underwent Lung Transplantation: A Systematic Review and Meta-Analysis/P.T. Taweeseed, P. Lertjitbanjong, T. Petnak, Corpus Christi, TX, p.A2432**
- 415 Effect of Nintedanib in Patients with Systemic Sclerosis-Associated Interstitial Lung Disease (SSc-ILD) by Composite Physiologic Index (CPI) at Baseline/A.U. Wells, K.B. Highland, S. Gläser, H. Nunes, J.W.W. Song, W.A. Wuyts, C. Stock, M. Alves, M. Padilla, London, United Kingdom, p.A2433**
- 416 Sildenafil Added to Pirfenidone in Patients with Advanced Idiopathic Pulmonary Fibrosis (IPF) and Risk of Pulmonary Hypertension (PH): Results of a Responder Analysis/S. Harari, S.D. Nathan, J. Behr, W.A. Wuyts, K.-U. Kirchgassler, M. Bengus, F. Gilberg, A.U. Wells, Milan, Italy, p.A2434**
- 417 A Single-Center, Randomized, Placebo-Controlled Study to Evaluate the Safety, Tolerability and Preliminary Efficacy of MN-001 (Tipelukast) in Idiopathic Pulmonary Fibrosis /R. Bascom, K. Hitz, A.E.F. Dimmock, M. Makhay, K. Matsuda, Hershey, PA, p.A2435**
- 418 Senolytics in Idiopathic Pulmonary Fibrosis: The First-in-Human Randomized Controlled Trial/T. Kellogg, A.M. Nambiar, J.N. Justice, T. Tchkonja, N. LeBrasseur, M. Goros, J. Gelfond, R. Pascual, L. Prata, M. Masternak, S. Kritchevsky, N. Musi, J. Kirkland, San Antonio, TX, p.A2436**
- 419 PLN-74809, A Dual-Selective Inhibitor of $\alpha_v\beta_6$ and $\alpha_v\beta_1$, Is Well Tolerated in Over 280 Healthy Participants/G.P. Cosgrove, E. Park, J. Bellini, E. Adegbite, F. Cilli, M. Jurek, E. Lefebvre, South San Francisco, CA, p.A2437**
- 420 Clinical Evaluation of Cudatexestat for Safety, Tolerability, Pharmacokinetics, Pharmacodynamics, and Potential Drug-Drug Interactions/D. Mody, W. Yu, J. Lin, P. Ibrahim, South San Francisco, CA, p.A2438**
- 421 Deupirfenidone (LYT-100) Reduces Incidence of Gastrointestinal (GI)-Related Adverse Events (AEs) Compared to Pirfenidone at Comparable Exposure Levels: A Phase 1, Double-Blind, Randomized Crossover Study in Older Healthy Subjects/M. Chen, E. Elenko, C.C. Korth, M.D. Harnett, P. Ford, R. Criscola, H. Paden, J. Krop, Boston, MA, p.A5572**
- 422 Differences in Patient Outcomes Across the PFF Care Center Network/J.S. Lee, R. Boente, E. White, C. Baxter, J.E. Shore, H.R. Collard, Aurora, CO, p.A5573**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B23 THE ICU GRAB BAG: A SESSION OF MUST HAVES

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3009/3011 (West Building, Level 3)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: M.S. Parikh, MD, Boston, MA
D.K. Costa, PhD, RN, Ann Arbor, MI
H.B. Gershengorn, MD, FCCM, ATSF, Miami, FL

901 Revisiting the ROSE Trial - Why Did Participants with ARDS Identified as Hispanic/Latino Have Lower Mortality When Randomized to Receive Early Neuromuscular Blockade?/K. Sullivan, H. Zhuo, K.D. Wick, C. Jones, P. Sinha, C.S. Calfee, N. Thakur, B.T. Thompson, M.A. Matthay, San Francisco, CA, p.A2439

902 Development and Validation of a Parsimonious Model to Predict Persistent Hypoxemic Respiratory Failure/N.A. Sathe, L. Zelnick, C. Mikacenic, E.D. Morrell, P. Bhatraju, C.T. Hough, W.C. Liles, L.B. Ware, A.E. Fohner, M.M. Wurfel, Seattle, WA, p.A2440

903 A Safety Monitoring Framework for Critical Care Trials of Agents with Potential to Lower Blood Pressure/I. Peltan, C.E. Barkauskas, S.S. Mistry, B. Grund, M. Teitelbaum, C.F. Oldmixon, M.A. Matthay, V.L. Kan, A.G. Babiker, N.A. Bickell, E.S. Higgs, A.C. Gelijns, J.D. Lundgren, J.D. Neaton, B.T. Thompson, S.M. Brown, Salt Lake City, UT, p.A2441

904 Differences Between Research Coordinator and Principal Investigator Perspectives on Surrogate Understanding of Critical Care Research/K. Torres, K. Burns, D. Matlock, M.K. Wynia, C. Tietbohl, C. Glaros, S. Katsandres, M. Moss, Aurora, CO, p.A2442

905 Machine Learning Identifies Distinctive Clinical States and Trajectories in Severe SARS-CoV-2 Pneumonia/N. Markov, C. Gao, A. Pawlowski, M. Kang, R.A. Grant, L.V. Rasmussen, P. Nannapaneni, H.K. Donnelly, G.S. Budinger, A.V. Misharin, R.G. Wunderink, Chicago, IL, p.A2443

906 Using a Design Thinking Framework to Create User-Centered ICU-Ward Handoffs from Intensive Care Resident Teams to Academic Hospitalist Teams/D.J. Klarr, L. Santhosh, P. Lyons, J.C. Rojas, Chicago, IL, p.A2444

907 Relationship Among Biomarkers of Inflammation, Astrocyte Activation and Neuronal Injury and Delirium Duration and Mortality/P. Conrad, C. Welch, A. Leiser, S.H. Khan, A. Perkins, S. Gao, B.A. Khan, Indianapolis, IN, p.A2445

908 A Novel Non-Invasive Technology for Hemoglobin Measurement Irrespective of the Skin Color/S. Gokhale, V. Daggubati, Arlington, TX, p.A2446

909 Does Laryngoscope Blade Size Affect Intubation Duration and First Pass Success Among Critically Ill Adults?/K. Landefeld, A.P. Connor, M.W. Semler, C. Barnes, J. Dargin, D.R. Janz, T.W. Rice, D.W. Russell, W.H. Self, D.J. Vonderhaar, J.R. West, J.D. Casey, A. Khan, Portland, OR, p.A2447

910 Transfusion of Fresh Frozen Plasma Containing Mitochondrial DNA Damage Associated Molecular Patterns Adversely Impacts Clinical Outcomes in Moderately Injured Human Patients/G.T. Daly, J. Moore, V. Pastukh, R.J. Langley, E. Hartsell, Y.-L. Lee, J. Simmons, M. Kutcher, M.N. Gillespie, Mobile, AL, p.A2448

911 Natural Language Processing to Computationally Generate Feedback on the Quality of Trainees' Oral Case Presentations in the Intensive Care Unit/A.J. King, D.L. Mowery, G.F. Cooper, J.M. Kahn, Pittsburgh, PA, p.A2449

912 Impact of Flexible versus Restrictive Intensive Care Unit Visitation Hours on Patient Outcomes - Meta-Analysis/R. Reddy, K. Hubel, J. Robinson, S. Gautam, M. Gorneva, A. Maheshwari, M. Enomoto, Y. Zayed, Portland, OR, p.A2450

913 Evaluation of Daily Pre-Laboratory-Based Acute Physiology Score, Version 2 (pre-LAPS2) to Predict In-Hospital and Daily Mortality Among Intensive Care Unit Patients/N.E. Ingraham, R. Kohn, S. Scott, B. Bayes, W. Wang, T. Tran, G.L. Anesi, G.E. Weissman, S.D. Halpern, R.A. Dudley, M.P. Kerlin, Minneapolis, MN, p.A2451

914 What Lurks on Your Ultrasound Probes: Microbial Species Cultured from Point of Care Ultrasound Probes in the Intensive Care Unit/Z. Pinchover, Z. Cawasji, A. Alibhai, A. Wanger, L. Ostrosky, B. Patel, E. Penner, V. Chavez, M. Warner, R. Abrencillo, Houston, TX, p.A2452

915 Epidemiology of Catheter Related Bloodstream Infections-A Descriptive Analysis from National Inpatient Sample/K.J. Raj, U. Bhagat, M.V. Shah, S. Chandna, K. Jyotheeswara Pillai, New Brunswick, NJ, p.A2453

916 The Integrity of Endothelial Glycocalyx in Heart Failure: A Potential Therapeutic Modality/Z.S. Azzam, Y. Knany, S. Kinaneh, E.E. Khoury, G. Berger, Z.A. Abassi, Haifa, Israel, p.A2454

917 Angiotensin II Use and Clinical Outcomes in Patients with Echocardiographic Measures of Systolic Dysfunction/A.R. Tout, A.E. Pawlowski, R.G. Wunderink, M.J. Cuttica, R. Mylvaganam, Chicago, IL, p.A2455

918 Targeted Intervention Model to Optimize Perioperative Blood Management in Cardiothoracic Surgery Patients/S. Fatima, H. Javed, F. Masud, I. Ratnani, Houston, TX, p.A2456

- 919 **Dyspnea Surrogate Observational Score to Predict the Issue of a Spontaneous Breathing Trial: A Prospective Exploratory Study**/M. Decavèle, E. Rozenberg, M.-C. Nierat, J. Mayaux, E. Morawiec, C. Morelot-Panzini, T. Similowski, A. Demoule, M. Dres, Paris, France, p.A2457
- 920 **Trends in Status Epilepticus-Related Mortality in the United States, 2010-2019**/S.D. Saragadam, J. Garza, T. Dang, S. Mahmood, A. Anwar, V.K. Babu, N. Panchagnula, M.K. Sidhu, A. Garcia Fernandez, L. Oud, Odessa, TX, p.A2458
- 921 **Changes in Interhospital Transfers Among Rural Critically Ill Patients in the U.S. from 2011 to 2019**/E. Harlan, S. Venkatesh, H.C. Prescott, M.W. Sjoding, C.R. Cooke, T.J. Iwashyna, T.S. Valley, Ann Arbor, MI, p.A2459
- 922 **Quantifying the Effect of Intra-Operative Variability in Cardiopulmonary Dynamics on Post-Operative Pulmonary Complications (PPCs) in Major Non-Cardiac Surgery**/S. Ranjeva, A. Nagebretsky, A. Gupta, G. Odozynski, A. Fernandez-Bustamante, G. Frendl, J. Sprung, B. Subramaniam, R.M. Ruiz, K. Bartels, J.W. Lee, T. Houle, M.F. Vidal Melo, Boston, MA, p.A2460
- 923 **The Effect of Passive Straight Leg Raise Performed During Cardiopulmonary Resuscitation (CPR) on Cerebral Perfusion as Measured by Near Infrared Spectroscopy (NIRS)**/S. Bihari, S. Lorensini, D. McNeill, N. Spencer, S. Prakash, Bedford Park, Australia, p.A2461
- 924 **Critically Ill Unrepresented Patients Phenotypic Characteristics: A Cohort Study**/B.C. Walsh, A. Nolan, New York, NY, p.A2462
- 925 **Massive External Validation of a Machine Learning Algorithm to Predict Pulmonary Embolism in Hospitalized Patients**/J. Calvert, J. Shen, S. Casie Chetty, S. Shokouhi, Q. Mao, Houston, TX, p.A2463
- 1001 **Cryptic Infections: Case Study of Cryptococemia in a COVID-19 Positive Critical Care Patient**/K. Grush, K. Huber, S. Rhoads, E. Breitbart, Aurora, CO, p.A2464
- 1002 **Pancytopenia in a Patient with COVID-19 Unmasking Acute Promyelocytic Leukemia: A Case Report**/H.N.U.A. Baloch, A. Rothman, New York, NY, p.A2465
- 1003 **Propofol-Associated Priapism in an Adult COVID-19 Acute Respiratory Distress Syndrome Patient**/U. Okoli, B. DePaul, H. Singh, A. Ahmed, C. Jani, M. Barash, Cambridge, MA, p.A2466
- 1004 **Scurvy in a Critically Ill Patient with COVID19 and Epistaxis**/R.E. Sell, N. Leverone, F. Chu, San Diego, CA, p.A2467
- 1005 **Pneumatocele Development in COVID-19 Pneumonia While on High-Flow Nasal Cannula**/E.M. Olson, T.M. Dempsey, Rochester, MN, p.A2468
- 1006 **Prolonged ECMO (118 Days) Followed by Recovery in a Patient with COVID19 ARDS**/A. Jain, R. Manglani, D. Chandy, Valhalla, NY, p.A2469
- 1007 **Defer Thy Diuresis**/S. Randhawa, P. Shah, F. Kan, Honolulu, HI, p.A2470
- 1008 **Unusual Presentation of Neuroendocrine Tumor of Stomach Masquerading as COVID-19 Associated Severe Gastrointestinal Bleeding**/A. Demerdash, J. Pacheco, J.P. Sugunaraj, Danville, PA, p.A2471
- 1009 **A Case of Eosinophilic Pneumonia After Recovering from COVID-19**/J. Pangburn, P.V. Forys, Indianapolis, IN, p.A2472
- 1010 **Kidney Transplantation from an Asymptomatic Covid-19 Deceased Donor**/V. Geedigunta, S. Dosala, Z. Khan, M. Bachan, Bronx, NY, p.A2473
- 1011 **Concomitant Mucormycosis and Candida Albicans Pleural Effusion: A Rare Finding in Severe COVID19 Pneumonia**/W.N. Johnson, J.K. Christopher, M. Kioka, Las Vegas, NV, p.A2474
- 1012 **Dexamethasone and Baricitinib: A Recipe for HSV Reactivation in Covid-19 Treatment**/D. Soldin, W.R. Grier, K. Bowers, T. Wilson, A. Skaanland, C. Chan, Baltimore, MD, p.A2475
- 1013 **Duplicated Inferior Vena Cava Thrombosis Mimicking Acute Pancreatitis in a COVID-19 Patient**/L. Costanzo, B. Karki, B. Soto, C. Page, Brooklyn, NY, p.A2476
- 1014 **Under Pressure: Spontaneous Pneumomediastinum with Resultant Cardiac Tamponade Influencing the Decision to Initiate Extra-Corporeal Membrane Oxygenation**/E. Wittrock, S. Raia, Denver, CO, p.A2477

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B24 REPORTING ON COVID-19 AND ITS COMPLICATIONS

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3016/3018 (West Building, Level 3)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: V.A. McCreddie, BSc, MBChB, PhD, Toronto, Canada
 H.C. Prescott, MD, MSc, Ann Arbor, MI
 B. Rochweg, MD, MSCE, FRCPC, Hamilton, Canada

- 1015 COVID-19-Related Diffuse Leukoencephalopathy Clinical Improvement with Amantadine Therapy/E. Lam, N. Sayedy, N. Dasgupta, J. Akella, J. Iqbal, East Meadow, NY, p.A2478**
- 1016 CYB5R Deficiency Causing Methemoglobinemia: Looking Beyond COVID-19 in the Hypoxic Navajo Patient/A.A. Tandon, N. Sher, N. Habib, T. Ardiles, Phoenix, AZ, p.A2479**
- 1017 Timing of Lung Transplantation for Seemingly Irreversible COVID-19 Lung Disease: A Cautionary Tale/G. Turner, S. Weigt, I. Britton, A. Derhovannessian, V. Gudzenko, A.L. Ramsey, R. Saggar, M.Y. Shino, A. Ardehali, D. Sayah, Los Angeles, CA, p.A2480**
- 1018 Diffuse Alveolar Hemorrhage in Systemic Lupus Erythematosus Patient Complicated by Covid-19 Co-Infection/W. Nawa, I. Ogbu, Y. Nikiforov, A. Sagaslli, Las Vegas, NV, p.A2481**
- 1019 Survival After Receiving Urgent Chemotherapy for COVID-19 Acute Respiratory Distress Syndrome Induced Hemophagocytic Lymphohistiocytosis/D. Aiken, A. Ross, M. Noland, Portland, OR, p.A2482**
- 1020 A Rare Non-Pulmonary Autoimmune Intrathoracic Complication of SARS-CoV-2 Infection/M. Hernandez, X. Morataya, N. Winicki, S. Alvarez, N. Thareja, M. Onaitis, J. Boys, P.A. Thistlethwaite, La Jolla, CA, p.A2483**
- 1021 Cardiac Tamponade in a Young COVID-19 Patient/S. Gulati, G. Sathiyamoorthy, A. Peraino, S. Rivard, Grand Rapids, MI, p.A2484**
- 1022 Post-Intensive Care Syndrome After Severe COVID-19 Infection in an Active Duty Soldier/C. Conlon, A.B. Holley, Bethesda, MD, p.A2485**
- 1023 Post COVID-19 Guillain-Barré Syndrome/N. Aamir, Toms River, NJ, p.A2486**
- 1024 A Case of Disseminated Mucomycosis in a Patient with COVID-19/B. Janssen, D.C. Patel, J. Sohn, Gainesville, FL, p.A2487**
- 1025 Baseline Plasma Viral Antigen Levels Are Associated with Clinical Deterioration in Hospitalized Covid-19: Potential Value for Stratifying Patients for Therapeutic Interventions/K.D. Wick, A. Leligdowicz, A. Willmore, S. Chak, R. Ghale, A. Jauregui, V. Nguyen, D. Lee, R.L. Dewar, K.N. Kangelaris, C.M. Hendrickson, K. Liu, C.S. Calfee, M.A. Matthay, San Francisco, CA, p.A5574**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

B25 ADVANCES IN OCCUPATIONAL LUNG DISEASE

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 207-208 (South Building, Level 2)

Viewing 9:30-10:00

Summaries/Discussion 10:00-11:00

Chairing: C. Carlsten, MD, MPH, Vancouver, Canada
E. Garshick, MD, West Roxbury, MA
L. Paulin, MD, MHS, Lebanon, NH

- 301 Proteomic Analysis of Bronchoalveolar Lavage Cells Identifies Biologically Distinct Modules in Chronic Beryllium Disease/L. Li, B. Vestal, P. Mroz, L. Sucai, K. MacPhail, T. Griffin, I. Yang, M. Lisa, M. Bhargava, Denver, CO, p.A2488**
- 302 Demonstration of a Novel Quantitative Microscopy Technique for Automated Characterization of In Situ Particulate Matter in Coal Miners with Progressive Massive Fibrosis/J.T. Hua, L. Zell-Baran, L. Go, C. Cool, H.A. Lowers, K.S. Alberg, E. Sarver, S.M. Majka, K. Pang, R.A. Cohen, C.S. Rose, Aurora, CO, p.A2489**
- 303 Lung Function and Radiographic Disease Worse Among Former Miners in Central Appalachia Than Other Regions of the United States/K.S. Alberg, L. Go, L. Zell-Baran, D. Weems, Jr., K. Mastel, C.S. Rose, R.A. Cohen, Chicago, IL, p.A2490**
- 304 A Proposed Algorithm for the Identification of Occupational Chronic Obstructive Pulmonary Disease (COPD) in a Cohort of Washington Workers/B. Ronish, C. Whitaker, L. Kurth, B. Doney, M. Cohen, C. Sack, Seattle, WA, p.A2491**
- 305 Increased Silica Burden Is Associated with Pathologic Features of Alveolar Proteinosis, Mature and Immature Silicotic Nodules in US Coal Miners with Progressive Massive Fibrosis (PMF)/R.A. Cohen, C.S. Rose, L. Go, L. Zell-Baran, K.S. Alberg, E. Sarver, H. Lowers, C. Iwaniuk, S. Clingerman, D. Richardson, J.L. Abraham, C. Cool, A. Franko, A. Hubbs, J. Murray, M. Orandle, S. Sanyal, N. Vorajee, E.L. Petsonk, R. Zulfikar, F.H.Y. Green, C, p.A2492**
- 306 Burden of Cardiorespiratory Impairment and Depression in Western Miners/L. Zell-Baran, R. Kraus, K. Pang, E.B. Gottschall, C.S. Rose, Denver/Aurora, CO, p.A2493**

- 307 **Anthrachosis Particulate Matter Causes Metabolic Changes in Macrophage and Airway Cells Culture/D.P. Frias, G. Vieira, J. Smelan, J.P. Lacerda, M. Macchione, Sao Paulo, Brazil, p.A2494**
- 308 **Occupational Asbestos and Its Relation to Lung Cancer Recurrence and Progression in the Boston Lung Cancer Survival Cohort (BLCSC)/S. Lo, D.C. Christiani, Boston, MA, p.A2495**
- 309 **A 22-Year Study on Lung Asbestos Fiber Burden: Amphibole Asbestos Levels on the Decline, a Trend Easy to Digest/K. Killian, T.D. Oury, Pittsburgh, PA, p.A2496**
- 310 **Active Surveillance of Artificial Stone Workers Facilitates Early Identification of Silicosis/S. Gandhi, A. Heinzerling, J. Flattery, A. Alam, K.J. Cummings, R.J. Harrison, San Francisco, CA, p.A2497**
- 311 **Endotoxin Exposure and Cancer Mortality of Shanghai Textile Workers/H. Wang, J.-Q. Hang, F. Zhang, P. Lai, E. Eisen, D.C. Christiani, Boston, MA, p.A2499**
- 312 **Endotoxin Exposure and Chronic Lung Function Decline in Shanghai Textile Workers/H. Wang, J.-Q. Hang, F. Zhang, P. Lai, E. Eisen, D.C. Christiani, Boston, MA, p.A2500**
- 313 **Indoor Exposure in Weavers Households in India: Nasal Microbiota and Bioaerosols/S. Gangamma, H.S. Vaishnavi, A.P. Katti, D.F. Hephzibah, S.K. Varghese, Mangaluru, India, p.A2501**
- 314 **The Relationship Between Cleaning Product Exposure and Respiratory and Skin Symptoms Among Healthcare Workers in a Hospital Setting: A Systematic Review and Meta-Analysis/K. Dang, A.N. Garrido, S.R. Prasad, M. Afanasyeva, J.C. Lipszyc, A. Orchanian-Cheff, S.M. Tarlo, Toronto, Canada, p.A2502**
- 601 **What Is the Risk of Hospitalization for Children with Very Mild Intermittent Asthma?/H.J. Farber, Houston, TX, p.A2503**
- 602 **Transitions Between Alternating Childhood Allergy Sensitization-Asthma States - A Retrospective Cohort Analysis/A. Owora, R.S. Tepper, C.D. Ramsey, W.T.A. Watson, N. Krupp, K.M. Kloefer, A.B. Becker, Bloomington, IN, p.A2504**
- 603 **Preschool Impulse Oscillometry, Respiratory Symptoms, and School-Age Asthma and Lung Function/H. Knihtila, B. Stubbs, V. Carey, N. Laranjo, R.S. Zeiger, G.T. O'Connor, S.T. Weiss, A.A. Litonjua, Palo Alto, CA, p.A2505**
- 604 **The Impact of Lipopolysaccharide Exposure in Infancy on the Development of Lower Respiratory Tract Infections and Childhood Asthma/S. Saxena, T. Gebretsadik, R.S. Peebles, L.J. Anderson, T.V. Hartert, C. Rosas-Salazar, Nashville, TN, p.A2506**
- 605 **Neonatal Rhinorrhea, Heart Rate Variability and Childhood Exercise Induced Wheeze/S. Berger, N. Pini, M. Lucchini, J.D. Nugent, L. Acosta, J. Angal, V.A. Rauh, A.J. Elliott, M.M. Myers, W.P. Fifer, M. Perzanowski, New York, NY, p.A2507**
- 606 **Sabina Jr UK: The Association Between Saba (Short-Acting Beta Agonist) Prescriptions and Frequency of Asthma Exacerbations in a Paediatric Cohort/C. Kallis, A.D. Morgan, E. Maslova, R. van der Valk, T.N. Tran, I. Sinha, G. Roberts, J.K. Quint, London, United Kingdom, p.A2508**
- 607 **Anthropometrics, Metabolic Measures, Nutrients, and T Helper Cell Immune Profiles Make Distinct as Well as Interdependent Contributions to the Pediatric Obese Asthma Endotype/D. Thompson, L.G. Wood, E.J. Williams, R. McLoughlin, D. Rastogi, Washington, DC, p.A2509**
- 608 **Association Between Infant Bronchiolitis Severity and Age 6-Year Lung Function in Children Hospitalized for Bronchiolitis/G. Mehta, A. Arroyo, J. Espinola, P. Costello, K. Hasegawa, J. Mansbach, A. Sullivan, C.A. Camargo, Boston, MA, p.A2510**
- 609 **Encouraging Adherence in Adolescents with Asthma Using Financial Incentives: A Randomized Controlled Trial/H.H. De Keyser, J. Brinton, S. Bothwell, M. Camacho, A. Kempe, S.J. Szeffler, Aurora, CO, p.A2511**
- 610 **A Randomized Controlled Trial Evaluating the Comparative Effectiveness of Virtual-Teach-To-Goal vs. Brief Intervention in Children with Asthma/D. Robolino, N. Kappel, V.G. Press, A. Volerman, Chicago, IL, p.A2512**
- 611 **Uncontrolled Asthma Associated with Physical Activity Limitations Among Black School-Aged Children/I. Sorour, N. Kappel, M. Akel, V.G. Press, A. Volerman, Chicago, IL, p.A2513**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B26 BREATHE IN, BREATHE OUT: INSIGHTS INTO PEDIATRIC ASTHMA

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 2005/2007 (West Building, Level 2)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: J.M. Gaffin, MD, Boston, MA
 M. Federico, MD, Aurora, CO
 H.H. De Keyser, MD, MSCR, Aurora, CO

- 612 External Validation of a Clinical Prediction Model to Decrease Bronchodilator Responsiveness Testing in Children Attending Asthma Clinic/K.S.K. Wong, E. Jacobi, D. Wilson, O. Lindstrom, D. Wensley, S.D. Dell, Vancouver, Canada, p.A5575**
- 613 Obesity-Related Pediatric Asthma: Relationships Between Pulmonary Function and Clinical Outcomes/M. Wysocki, S. Starr, G. Silverstein, J.D. DeLeon, D. Rastogi, J. Feldman, Bronx, NY, p.A5576**
- 614 Leveraging Electronic Health Records for Evidence-Based Asthma Documentation/J.S. Landeo Gutierrez, A. Defante, J. Ryu, K.G. Tantisira, San Diego, CA, p.A5577**
- 615 Clinical Characteristics and Polymorphism of the IL-33 Gene Exome in Children with Varying Degrees of Asthma Control/E. Furman, Y. Alieva, V. Sokolovsky, V. Sheludko, Perm, Russian Federation, p.A5578**
- 616 The Surgical Mask Microbiome Among Children with Asthma/K. Saar, S. Almeida, Y. Zhou, A. Matson, C.L. Carroll, J.P. Hollenbach, Hartford, CT, p.A5579**
- 803 Hypercapnia Impairs Endoplasmic Reticulum Function and Decreases Plasma Membrane Abundance of the Na,K-ATPase in Alveolar Epithelial Cells and Precision-Cut Lung Slices/V. Kryvenko, M. Wessendorf, J.I. Sznajder, W. Seeger, I. Vadász, Giessen, Germany, p.A2516**
- 804 Epidermal Growth Factor Receptor (EGFR) Modulates Apoptosis in Hyperoxia-Induced Lung Injury/Z.M. Harris, Y. Sun, J. Joerns, B. Clark, B. Hu, A. Korde, L. Placek, D. Unutmaz, G.L. Stanley, H.J. Chun, M. Sauler, G. Rajagopalan, X. Zhang, M.-J. Kang, J.L. Koff, New Haven, CT, p.A2517**
- 805 Recent Thymic Emigrants (RTEs) Reduce Influenza Induced Pulmonary Pneumonia and Acute Respiratory Distress Syndrome/D.A. Pociask, New Orleans, LA, p.A2518**
- 806 Regulation of Mesenchymal Cell Fate by Monocyte-Derived Extracellular Vesicles/A. Sarkar, S. Das, I. DeVengencie, H. Bone, J. Prasad, J.C. Horowitz, Columbus, OH, p.A2519**
- 807 Designed Peptide Blocker of Voltage-Gated Proton Channel (Hv1) Protects Against Lipopolysaccharide (LPS)-Induced Acute Lung Injury/R. Zhao, B. Lopez, A. Schwingshackl, S. Goldstein, Irvine, CA, p.A2520**
- 808 A Novel Opremorphin Group of First-in-Class GPR68 Inhibitors Upregulate Endothelial Barrier Function and Rescue Bacterial Pathogens or Acidosis-Induced Inflammation in Lung Endothelium/P. Karki, Y. Ke, C.H. Williams, C.C. Hong, K.G. Birukov, A. Birukova, Baltimore, MD, p.A2521**
- 809 Reprogramming of Bone Marrow Mesenchymal Stem Cells During Viral Lung Infection Is Mediated by Type I Interferon Signaling and Interleukin-11 Axis/M.M. Barroso, A.I. Vazquez, L. Jankauskaite, S. Günther, T. Braun, S. Herold, Giessen, Germany, p.A2522**
- 810 Circulating Monocytes Contribute to the Lung Interstitial Macrophage Population During Homeostasis and Inflammation/E. King, T. Trinh, J. McClendon, A. McCubbrey, P.M. Henson, W.J. Janssen, Aurora, CO, p.A2523**
- 811 Alveolar Epithelial Regeneration Following Acute and Chronic Lung Injury/X. Ma, M.P. Goldklang, N.A. Rai, A. Gerber, J.M. D'Armiento, New York, NY, p.A2524**
- 812 Imatinib Prolongs Survival and Alleviates the Progression of Lung injury in Ventilated Rats/Y. Xin, M. Cereda, N. Yehya, S. Humayun, P. Delvecchio, J. Thompson, K. Martin, H. Hamedani, P. Martorano, I. Duncan, S. Kadlecck, M. Makvandi, J.S. Brenner, R. Rizi, Philadelphia, PA, p.A2525**

BASIC • TRANSLATIONAL

POSTER DISCUSSION SESSION

B27 ACUTE LUNG INJURY AND ARDS: MODELS AND MECHANISMS

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2022/2024 (West Building, Level 2)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: J.A. Englert, MD, Columbus, OH
B.D. Kraft, MD, FCCP, Durham, NC
C.M. Shaver, MD, PhD, Nashville, TN

801 Stretch Induced Activation of Hippo Signaling in Lung Microvascular Endothelial Cells, a Novel Mechanism of Overventilation Induced Pulmonary Fibrosis/R. Turki, W.M. Kübler, A. Kapus, Toronto, Canada, p.A2514

802 Role of NOX4 in Modulating Alveolar Type II (AT2) Epithelial Cell Phenotype and Mitochondrial Dynamics in Hyperoxic Acute Lung Injury/T. Sudhadevi, P. Basa, A. Ha, J. Thomas, A. Jafri, H. Fujioka, P. Fu, R. Ramachandran, V. Natarajan, A. Harijith, Cleveland, OH, p.A2515

- 813 ASK1/p38/JNK: The Cascade of Activation in Hyperoxia/Ventilator-Induced Lung Injury/J.J. Uriarte, S. Dos Santos Valenca, E.M. Gordon, B.E. Dong, C.M. Waters, Lexington, KY, p.A2526**
- 814 Release of Extracellular Superoxide Dismutase into Alveolar Fluid Is Protective Against Neutrophil-Mediated Lung Injury in Staphylococcus Aureus Pneumonia/C.V. Sul, L. Hernandez, N. Burns, C. Lewis, N. Dee, C.U. Vohwinkel, E.P. Schmidt, E. Nozik, Aurora, CO, p.A2527**
- 815 TGF-Beta Signaling in Lung Development and Bronchopulmonary Dysplasia/I.S. Khan, T. Tsukui, X. Ren, D. Sheppard, San Francisco, CA, p.A2528**
- 816 Targeting IL-6 to Prevent Vascular and Bronchial Remodeling in an Experimental Model of BPD/C.M. Bartz, D.V.B. Hirani, J. Selle, C. Vohlen, R. Wilke, C. Kuiper-Makris, C. Nies, V. Wagde, J. Doetsch, M.A. Alejandre Alcazar, Cologne, Germany, p.A2529**
- 817 Cervical Spinal Cord Injury Leads to Injury and Metabolic Dysfunction of the Lung/E. Huffman, B.E. Dong, H.A. Clarke, L.E.A. Young, D.B. Allison, R.C. Sun, C.M. Waters, W.J. Alilain, Lexington, KY, p.A2530**
- 818 Cytochrome P450 (CYP)1B1 Modulates Hyperoxia Responses in Lung by Modulating Protein and Lipid Metabolism/C. Coarfa, S.L. Grimm, R.E. Stading, M.J. Robertson, T. Gandhi, C. Fu, W. Jiang, B. Moorthy, Houston, TX, p.A2531**
- 819 UHRF1 Is Necessary to Maintain Induced Treg Transcriptional Programs/A.M. Joudi, K. Helmin, L. Morales-Nebreda, M.A. Torres Acosta, C.P. Reyes Flores, S.E. Weinberg, B.D. Singer, Chicago, IL, p.A2532**
- 820 A Novel Inhibitor (ARBM-201) Targeting Pendrin, an Anion-Exchanging Membrane Protein, for Acute Respiratory Distress Syndrome (ARDS)/T. Kim, E. Park, S. Choi, C. Jung, D.S. Park, M.S. Park, G. Han, W. Namkung, M.H. Shin, D. Song, J.Y. Choi, W. Im, Seoul, Korea, Republic of, p.A2533**
- 821 Chemoattractant-Receptor Homologous Molecule on Th2 Cells (CRTH2) Regulates Neutrophilic Inflammation in the Lung/E. Jung, R. Howell, A.J. Cohen, D. Tsang, G.L. Chupp, C. Dela Cruz, S. Gautam, R. Brewster, J. Flint, H. Yin, N. Ristic, C. Cosme Jr, New Haven, CT, p.A2534**
- 822 The Role of Aldehyde Dehydrogenase in Lung Injury and Fibrosis/Y. Aschner, K.A. Correll, K.M. Beke, H.M. Roybal, S.P. Sajuthi, P.R. Reynolds, G.P. Downey, Aurora, CO, p.A2535**
- 823 Plasma Neutrophil Extracellular Trap Levels Correlate with Acute Respiratory Distress Syndrome Disease Severity/J. Aoki, F. Denorme, J. Rustad, D. Perry, M. Cody, E.S. Harris, E.A. Middleton, C.C. Yost, Salt Lake City, UT, p.A2536**

- 824 Lung Epithelial Cell-Derived C3 Protects Against Pneumonia-Induced Lung Injury/H.S. Kulkarni, A.N. Ozanturk, S.K. Sahu, D.H. Kulkarni, L. Garnica, L. Dannull, L. Ma, J. McPhatter, J. Kunen, X. Wu, S.L. Brody, J.P. Atkinson, Saint Louis, MO, p.A5580**
- 825 Mobile-CRISPRi Identifies Conditionally Essentially Genes In Pseudomonas Aeruginosa Through Mouse Models Of Lung Infection/M. Yu, M. Kwon, N. Prasad, San Francisco, CA, p.A5581**

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POSTER DISCUSSION SESSION

B28 SEE FOR YOURSELF: EVALUATING LUNG FUNCTION WITH CT AND MRI

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2009/2011 (West Building, Level 2)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: E.A. Hoffman, PhD, ATSF, Iowa City, IA
D. Mummy, PhD, MBA, Durham, NC

- 701 Lobe Segmentation of Regional Ventilation Measurement by X-Ray Velocimetry/O. Stephens, T. Otvos, A. Bisant, O. Farooqui, V. Yang, J.P. Kirkness, T. Siddharthan, A. Fouras, Woodland Hills, CA, p.A2537**
- 702 Detecting Physiologic Alterations Occurring During EVLP Through Serial CT Imaging/R. Baron, J. Snow, F. Amzajerdian, S. Kadlecsek, H. Profka, L. Loza, T.S. Achezkai, I. Duncan, H. Hamedani, Y. Xin, K. Ruppert, R.R. Rizi, Philadelphia, PA, p.A2538**
- 703 Longitudinal Monitoring of Lung Disease Progression and Response to Lumacaftor/Ivacaftor in Young Children with Cystic Fibrosis (CF) Using ¹²⁹Xe MRI/M.E. West, D.J. Roach, M.M. Willmering, E.L. Kramer, Z.I. Cleveland, L.L. Walkup, J.C. Woods, Cincinnati, OH, p.A2539**
- 704 Fractal Dimensions of Airway Surfaces from Computed Tomography in Chronic Obstructive Pulmonary Disease/J. Bartlett, W.-C. Tan, J.C. Hogg, J. Bourbeau, M. Kirby, Toronto, Canada, p.A2540**
- 705 Quantifying Fractional and Out-of-Phase Ventilation Using Dynamic Hyperpolarized Xenon MRI During Free Breathing/H. Hamedani, F. Amzajerdian, S. Kadlecsek, R. Baron, K. Ruppert, I. Duncan, M.K. Ismail, Y. Xin, L. Loza, T.S. Achezkai, R.R. Rizi, Philadelphia, PA, p.A2541**

- 706 Lung Density Distributions in Children with Cystic Fibrosis and Age-Matched Controls/G. Mylavarapu, R.J. Fleck, R.S. Amin, Cincinnati, OH, p.A2542**
- 707 Hyperpolarized ¹²⁹Xe Magnetic Resonance Imaging for the Assessment of Bronchiolitis Obliterans Syndrome (BOS) and Other Late-Onset Non-Infectious Pulmonary Complications (LONIPCs) Following Hematopoietic Stem Cell Transplantation/A. Thakar, P. Nair, K. Lepic, I. Walker, M.L. Duong, S. Svenningsen, J. Turner, Hamilton, Canada, p.A2543**
- 708 Quantitative CT Analysis of Ambient Particulate Matter Exposure-Associated Multiscale Structure and Function Alteration in Asthma, COPD, and IPF Lungs/J. Choi, I.K. Lee, C.-H. Lee, S.M. Choi, S.Y. Ahn, H. Ko, K.-N. Kim, K.-S. Lee, C.-L. Lin, E.A. Hoffman, M. Castro, K.J. Chae, W.J. Kim, E.K. Park, C.H. Lee, Kansas City, KS, p.A2544**
- 709 MRI-Based Predictors of Work of Breathing in Neonates with Tracheomalacia/C.C. Gunatilaka, E.B. Hysinger, A. Schuh, D.B. Gandhi, N.S. Higano, Q. Xiao, R.J. Fleck, J.C. Woods, A.J. Bates, Cincinnati, OH, p.A2545**
- 710 Correlation of Computed Tomographic Patterns with Morphological Tissue Changes in Idiopathic Pulmonary Fibrosis/K. Ikezoe, T.-L. Hackett, S. Peterson, D. Prins, C.J. Hague, D. Murphy, S. LeDoux, F. Chu, F. Xu, J.D. Cooper, N. Tanabe, C.J. Ryerson, P.D. Pare, H.O. Coxson, T.V. Colby, J.C. Hogg, D.M. Vasilescu, Kyoto, Japan, p.A2546**
- 711 Development of an Airway Segmentation Pipeline for Ultrashort Echo Time MRI of Pediatric Cystic Fibrosis Lung Disease/D. Genkin, B. Zanette, P. Grzela, D.E. Tullis, F.A. Ratjen, G. Santyr, M. Kirby, Toronto, Canada, p.A2547**
- 712 Hyperpolarized ¹²⁹Xe MRI in Healthy Control Subjects Reveals Age-Related Changes in Measurements of Ventilation and Red Blood Cell Transfer but Not Interstitial Tissue Barrier/D. Mummy, A. Swaminathan, K. Yarnall, E. Bier, J. Lu, S. Leewiwatwong, J. Korzekwinski, B. Driehuys, Durham, NC, p.A2548**
- 713 Exploring Image Guided Computational Models to Better Classify Asthma Severity and Predict Hospitalization/J.M. Oakes, K. Poorbahrami, K.J. Carey, A. Hahn, S.B. Fain, Boston, MA, p.A2549**
- 714 Evidence of Lung Microstructural Changes in CF Lung Disease Relative to Age Matched Healthy Using Diffusion-Weighted ¹²⁹Xe MRI/A. Bdaiwi, A. Svoboda, M.M. Hossain, M. Willmering, L. Walkup, J.C. Woods, Z.I. Cleveland, Cincinnati, OH, p.A2550**
- 715 Nonlinear Intratidal Aeration During Multi-Frequency Ventilation Quantified Using 5DCT Imaging/J. Herrmann, S.E. Gerard, A. Fonseca da Cruz, E.A. Akor, J.M. Reinhardt, G.E. Christensen, E.A. Hoffman, D.W. Kaczka, Iowa City, IA, p.A2551**
- 716 Dynamic 5DCT Image Reconstruction Reveals Interactions Between Cardiogenic and Respiratory Motion/J. Herrmann, A. Fonseca da Cruz, S.E. Gerard, E.A. Akor, J.M. Reinhardt, G.E. Christensen, E.A. Hoffman, D.W. Kaczka, Iowa City, IA, p.A2552**
- 717 Dynamic Hyperpolarized Xenon-129 Ventilation and Gas Exchange During Free-Breathing/F. Amzajerdian, H. Hamedani, R. Baron, Y. Xin, L. Loza, M.K. Ismail, T.S. Achekezai, S. Kadlecek, K. Ruppert, R.R. Rizi, Philadelphia, PA, p.A2553**
- 718 Prevalence and Clinical Relevance of Ventilation Heterogeneity and Luminal Cellular Inflammation in Lung Cancer Patients Prior to Lung Resection: An Interim Analysis/N. Radadia, M. Jamal, H. Begum, C. Huang, K. Radford, N. Lavigne, T. Farncombe, N.B. Konyer, C. Marriott, M. Noseworthy, E. Priel, P. Nair, Y. Shargall, S. Svenningsen, Hamilton, Canada, p.A2554**
- 719 Repeatability of Hyperpolarized ¹²⁹Xe MRI in Stable Pediatric CF Lung Disease via Quantitative Ventilation Defect Image Analysis from HyPOINT Study/D. Roach, J.W. Plummer, J. Mata, D.K. Froh, G. Santyr, F.A. Ratjen, S. Stanojevic, S.B. Fain, M.J. Rock, L. Walkup, J.C. Woods, Cincinnati, OH, p.A2555**
- 720 Abnormal ¹²⁹Xe Ventilation MRI and Inhaled Corticosteroid Deposition in Severe Asthma/A. Thakar, H. Sadafi, H. Serajeddini, C.P. Venegas, M. Kjarsgaard, N.B. Konyer, B. Lavon, M.B. Dolovich, P. Nair, S. Svenningsen, Hamilton, Canada, p.A2556**
- 721 Visualizing Chronic Rejection in Unilateral Transplant Rats Using Serial Computed Tomography/Y. Xin, X. Jin, R. Baron, M.K. Ismail, K.T. Martin, L. Loza, H. Hamedani, J.-Q. Tao, I. Duncan, S. Kadlecek, M. Cereda, S. Chatterjee, R. Rizi, Philadelphia, PA, p.A2557**
- 722 Regional Ventilation Quantification Using Ultrashort Echo Time (UTE) Lung MRI/F. Tan, P. Larson, San Francisco, CA, p.A5582**
- 723 CT Normalized Joint Count and Progression of Emphysema: Results from the Cancold Study/S. Virdee, W.-C. Tan, J.C. Hogg, J. Bourbeau, C. Hague, J. Leipsic, M. Kirby, Toronto, Canada, p.A5583**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

**B29 EMERGING APPROACHES:
TRANSLATING SLEEP APNEA
ENDOTYPES INTO CLINICAL PRACTICE**9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 303-304 (South Building, Level 3)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: S.S. Redline, MD, MPH, Boston, MA

- 501 Plasma Profiling Reveals a Blood-Based Metabolic Fingerprint of Obstructive Sleep Apnea/L. Pinilla Latorre, I.D. Benítez, F. Santamaria-Martos, A. Targa, A. Moncusí-Moix, M. Dalmases, O. Mínguez, M. Aguilà, M. Jové, J. Sol, R. Pamplona, F. Barbé, M. Sanchez De La Torre, Madrid, Spain, p.A2558**
- 502 Effect of Continuous Positive Airway Pressure on Left Ventricular Ejection Fraction in Patients with Heart Failure and Sleep-disordered Breathing: A Systematic Review and Meta-Analysis/H.A. Hamzah, M.D. Romadhan, P.M. Afladhanti, Palembang, Indonesia, p.A2559**
- 503 Methodology for Nocturnal Cardiac Arrhythmia Detection in Patients with Heart Failure and Sleep-Disordered Breathing: An Ancillary Study of the ADVENT-HF Trial/C.M. Horvath, C. Fisser, D. Bradley, J.S. Floras, S. Sossalla, F. Zeman, F. Rankin, M. Arzt, Toronto, Canada, p.A2560**
- 504 Proteomic Signature of Cardiovascular Risk in Patients with Acute Coronary Syndrome and Obstructive Sleep Apnea: A Post-Hoc Analysis from the ISAACC Study/A. Zapater, I.D. Benítez, G. Torres, A. Sánchez-de-la-Torre, A. Aldoma, O. Mínguez, L. Pascual, A. Cortijo, D. Martínez, F. Barbe, M. Sanchez De La Torre, Madrid, Spain, p.A2561**
- 505 Plasminogen Tissue Activator Inhibitor-1 Antagonism Improves Nitric Oxide Production and Coronary Artery Endothelial Function Under Intermittent Hypoxia Conditions/M. Badran, A. Khalyfa, S.B. Bender, W.P. Fay, D. Gozal, Columbia, MO, p.A2562**
- 506 Long Term Patterns of Sleep Disordered Breathing in Patients with Heart Failure Using CPAP and Relationship with Acute Cardiac Events/J.E. Orr, V. Thurvadi, G. Parra, A. Saha, C.N. Schmickl, S. Manoharan, K. King, R.L. Owens, A. Malhotra, La Jolla, CA, p.A2563**
- 507 Measuring Airflow Velocity in the Upper Airway in Pediatric Patients with Obstructive Sleep Apnea via Phase Contrast MRI of Hyperpolarized Xenon/Q. Xiao, N.J. Stewart, M. Willmering, K. McConnell, H. Wang, R.J. Fleck, J.C. Woods, R.S. Amin, A. Bates, Cincinnati, OH, p.A2564**
- 508 Single-Cell RNAseq Reveals Cell Composition and Gene Expression Patterns in the Peripheral Blood of Pediatric Obstructive Sleep Apnea/R. Cortese, T. Adams, K. Hohensee, N. Kaminski, L.K. Gozal, D. Gozal, Columbia, MO, p.A2565**
- 509 Intermittent Hypoxia (IH) Induces Multi-Organ p16INK4a (p16) Expression Indicative of Increased Senescence in Both Male and Female Mice/A. Khalyfa, R. Cortese, Z. Qiao, K. Hohensee, D. Gozal, Columbia, MO, p.A2566**
- 510 Polysomnographic Endotypes and Atomoxetine-plus-Oxybutynin Efficacy for Obstructive Sleep Apnea/L. Gell, S. Bertisch, J. Collet, L. Hess, N. Calianese, A. Azarbarzin, D. Vena, S. Joosten, G. Hamilton, B.A. Edwards, S.A. Sands, Boston, MA, p.A2568**
- 511 Endotype Targeted, Combination Therapy Resolves Obstructive Sleep Apnea/A. Aishah, B.K.Y. Tong, A. Mohamed Osman, M. Donegan, G. Pitcher, B. Kwan, L. Brown, T. Altree, R. Adams, S. Mukherjee, D.J. Eckert, Randwick, Australia, p.A2569**
- 512 Multi-Modal Rapid Triage Algorithm for Initiating Treatment of Obstructive Sleep Apnea (OSA) in Clinical Trials/D.M. Rapoport, J.T. Guevarra, O.E. Burschtin, D. Binder, R.J. Binder, K. Patel, A. Parekh, I.A. Ayappa, New York, NY, p.A2570**
- 513 Impact of an Extended Telemonitoring and Coaching Program on CPAP Adherence/S.R. Patel, J.P. Bakker, C.J. Stitt, M.S. Aloia, S.M. Nourai, Pittsburgh, PA, p.A2571**
- 514 Time to Intervene: Long-Term Positive Airway Pressure Adherence in Obstructive Sleep Apnea Patients with Comorbidities/K.L. Sterling, A. Benjafeld, K.V. Cole, A. Malik, J. Chen, S. More, C.M. Nunez, P.A. Cistulli, A. Malhotra, J.-L. Pépin, San Diego, CA, p.A2572**
- 515 Mandibular Movement Monitoring During Sleep in Growing Patients Treated with a Functional Orthodontic Mandibular Advancement Appliance/K. Fluger, S. Warunek, A.F. Monegro, T. Al-Jewair, Buffalo, NY, p.A5584**

BEHAVIORAL • CLINICAL

POSTER DISCUSSION SESSION

B30 THE QUEST FOR THE HOLY GRAIL: MODELING AND BIOMARKERS FOR NODULES AND LUNG CANCER

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 203-204 (South Building, Level 2)

Poster Viewing

9:30-10:00

Discussion

10:00-11:00

Chairing: A. Fox, MD, Charleston, SC
E. Ostrin, MD, PhD, Houston, TX

- 201 The Intervention Probability Curve: Modeling the Practical Application of Threshold-Guided Decision Making in Lung Cancer/M.N. Kammer, D. Rowe, S. Deppen, E. Grogan, A. Kaizer, P.P. Massion, A. Baron, F. Maldonado, Nashville, TN, p.A2573**
- 202 A Retrospective External Validation of the Cleveland Clinic Malignancy Probability Prediction Model for Indeterminate Pulmonary Nodules/M. Reid, I. Riestra Guance, R.A. Vierkant, J. Reisenauer, Rochester, MN, p.A2574**
- 203 Assessing the Use of Risk Prediction Model in Pulmonary Nodule Clinic in the Veteran Population/H.M. Abbas, M. An, A. LaRocco, D. Soldin, A.C. Verceles, F. Alghanim, W.R. Grier, J. Deepak, Baltimore, MD, p.A2575**
- 204 Radiologists' Adherence to Protocolized Recommendations for Follow-Up of Pulmonary Nodules Detected Incidentally or by Screening/K. Sankar, B. Creekmur, B.Z. Huang, J.S. Lee, I.-L.A. Liu, E. Shen, M.K. Gould, Los Angeles, CA, p.A2576**
- 205 Non-Invasive Transcutaneous Bioconductance in the Risk-Stratification of Indeterminate Pulmonary Lesions: IONIQ Science's PL-210 Protocol in Evaluation of Continued Advances in the IONIQ Sciences Prolong System/A. Goyal, J. Tamayo, R. Zink, M. Kudulis, J. Cerceo, B. Miller, N. Andreasen, P. Goates, O. Brimhall, M. Garff, R.C.W. Yung, Maywood, IL, p.A2577**
- 206 Nested Cancer-Subtype Models May Improve Diagnostic Accuracy of Radiomics for Pulmonary Nodule Risk Stratification/K.H. Patel, M.N. Kammer, P. Massion, S. Antic, D. Rowe, D.A. Lakhani, A. Balar, S. Mahapatra, B. Landman, S. Deppen, E. Grogan, C. Shah, K.L. Sandler, F. Maldonado, Nashville, TN, p.A2578**
- 207 Preliminary Study on the Prediction of Pathological Grading of High-Risk Pulmonary Nodules \geq 3 cm Based on CT Imaging Deep Learning/L. Weihuan, Z. Haiyu, W. Shaowei, Z. Weijie, X. Daipeng, H. Luyu, L. Guoqing, Y. Lintong, L. Qiakuan, L. Congsen, Z. Hongyuan, Y. Henian, Z. Yubo, L. Lan, Guangzhou, China, p.A2579**
- 208 ALTITUDE Trial Design: A Multicenter, Randomized Controlled Trial, Prospectively Evaluating the Clinical Utility of the Nodify XL2 Proteomic Classifier in Incidentally Discovered Low to Moderate Risk Lung Nodules/M.N. Kammer, S. Springmeyer, G. Silvestri, Nashville, TN, p.A2580**
- 209 Impact of Plasma Proteomics Biomarker on Clinical Management Decision in Lung Nodules/J.P. Uribe, G. Munera, J. Cedeno, H. Patel, R. Abdelghani, A. Magge, M.S. Parikh, A. Majid, F. Kheir, Boston, MA, p.A2581**
- 210 Performance of a Bronchial Genomic Classifier for Intermediate Risk Pulmonary Nodules- a Single Center Experience/H. Ahmad, T.M. Saettele, M.C. Aboudara, Kansas City, MO, p.A2582**
- 211 Field Cancerization of the Peripheral Lung: Decreased Progenitor Function and Immune Activation as Markers of Lung Adenocarcinoma Premalignancy/A.S. Assante, K. Alavi, B.C. Miller, M.L. New, A.B. Frey, D.T. Merrick, R.L. Keith, J. DeGregori, Y.E. Miller, M. Ghosh, Aurora, CO, p.A2583**
- 212 Aid of a Blood Biomarker Panel in Lung Cancer Screening Criteria/M. Borg, S.W.C. Wen, L. Nederby, T.F. Hansen, A. Jakobsen, R.F. Andersen, U.M. Weinreich, O. Hilberg, Aalborg, Denmark, p.A2584**
- 213 When Should C Reactive Protein (CRP) Elevation Be Accepted as an Infection Marker That Will Delay the Chemotherapy Cure in Patients with Lung Cancer?/T. Ozlu, E.S.M. Ayaydin, Trabzon, Turkey, p.A2585**
- 214 Identification of Novel Biomarkers for Malignant Pleural Mesothelioma by Proteomics of Serum Exosomes/Y. Abe, Y. Takeda, Y. Suga, H. Hirata, T. Yokoi, T. Minami, K. Kuribayashi, T. Kijima, A. Kumanogoh, Suita, Japan, p.A2586**
- 215 Discovery of Novel Biomarkers of Small Cell Lung Cancer by Proteomics of Serum Exosomes/Y. Suga, Y. Hanako, N. Izumi, T. Yoshito, K. Atsushi, Suita City, Japan, p.A2587**
- 216 Iloprost Reverses Bronchial Dysplasia by Improving Airway Progenitor Function, Affecting Cell Metabolism and Dampening Inflammation/K. Kincaid, J. Kim, A. Gray, D. Park, D.T. Merrick, R.L. Keith, Y.E. Miller, M. Ghosh, Aurora, CO, p.A2588**

- 217 A Nasal Genomic Classifier for Assessing Risk of Malignancy in Lung Nodules Demonstrates Similar Performance in Patients That Meet Screening Criteria for High Baseline Risk and Those Who Do Not/C.R. Lamb, K. Rieger-Christ, C. Reddy, J. Huang, S. Wu, J. Ding, P.S. Walsh, J. Wilde, S. Borhade, W. Bulman, L. Lofaro, M.M. Wahidi, D.J. Feller-Kopman, A. Spira, G. Kennedy, P.J. Mazzone, Burlington, MA, p.A5585**
- 218 A Novel Materials Science Approach to Lung Cancer Diagnostics by Examining Spectral Signatures of Exosomes/S.S. Oh, S.T. Jonak, B.V. D'Souza, J.A. Schiaffino, Santa Monica, CA, p.A5586**
- 219 Risk-Based Lung Cancer Screening in the Mayo Clinic Lung Screening Program/D.E. Midthun, M.M. Rode, A.-M. Sykes, M.S. Allen, L.A. Ingalls, D.C. Deetz, S.C. Degen, J.N. Glantz, J. Taji, K.L. Swanson, E.A. Jensen, L.C. Pappagallo, M.M. Johnson, B.L. McComb, L.M. Loosbrock, P. Yang, Rochester, MN, p.A5587**
- 220 Radiomics Based Classification of Pulmonary Nodules Into Adeno - and Non-Adenocarcinomas, Virtual Lung Biopsy/F. Al-Ghoula, S. Rajagopalan, R. Clay, B.J. Bartholmai, T. Peikert, Rochester, MN, p.A5588**
- 221 Using Cg05575921 Methylation in Lung Cancer Screening Decision Making: A Racial and Gender Bias Free Precision Epigenetics Approaches for Guiding Low Dose Computerized Tomography (LDCT) Use/R. Philibert, K. Dawes, J. Moody, R. Hoffman, J.C. Sieren, J. Long, Coralville, IA, p.A5589**
- P318 Intravenous Immunoglobulin but Not Dexamethasone Inhibits Neutrophil Pro-Inflammatory Activity While Maintaining Key Antimicrobial Functions/J.A. Masso Silva, G. Sakoulas, J.M. Olay, V. Groysberg, V. Nizet, L.E. Crotty Alexander, A. Meier, La Jolla, CA, p.A2590**
- P319 Neutrophils Display Heterogeneity in Their Response to Pneumococcus/J.C. Gomez, J.R. Martin, H. Dang, C.M. Doerschuk, Chapel Hill, NC, p.A2591**
- P320 Influenza Infection Increases Susceptibility to IPA Through Neutrophil Dysfunction/K.M. Robinson, K. Nickolich, C. Ngeow, Pittsburgh, PA, p.A2592**
- P321 Acute Lung Injury Promotes the Generation of Destructive, Neutrophil-Derived Exosomes/M.C. Madison, C. Margaroli, A. Gaggar, J.E. Blalock, D. Russell, Birmingham, AL, p.A2593**
- P322 Siglec-F of Sessile Alveolar Macrophages Is Immunoprotective in Acute Lung Injury/L. Li, G.A. Gusarova, M.N. Islam, J. Bhattacharya, New York, NY, p.A2594**
- P323 Amelioration of Acute Lung Injury by Peptides Targeting Scavenger Receptor CD36/Y. Ke, Y. Li, A. Bocharov, A. Birukova, K.G. Birukov, Baltimore, MD, p.A2595**
- P324 The Effect of Febuxostat in Murine Model of LPS-Induced Lung Injury/S. Ohta, H. Ikeda, T. Ebato, H. Inoue, T. Homma, S. Suzuki, A. Tanaka, H. Sagara, Tokyo, Japan, p.A2596**
- P325 Pulmonary Thrombosis Promotes Severe Flu in Mice Exposed to Cigarette Smoke/T.W. Kaminski, T. Brzoska, K.M. Robinson, T. Nyunoya, P. Sundd, Pittsburgh, PA, p.A2597**
- P326 Safety and Tolerability of the Toll-Like Receptor (TLR)2/6 Agonist INNA-051 in Healthy Adults/S. White, C. Lemech, R. Hari, N. Kruger, G. McLachlan, C. Demaison, F. Mercuri, Sydney, Australia, p.A2598**
- P327 Association of Gut Microbiome Changes with Chronic Inflammation and Pulmonary Arterial Hypertension in a Nonhuman Primate Model of SIV Infection/S. Qin, A. Fitch, K. Li, R. Tarantelli, F. Schweitzer, W. Rabacal, K. Norris, B. Methe, A. Morris, Pittsburgh, PA, p.A2599**
- P328 Immunoprofile of Patients with Recurrent Lower Respiratory Tract Infections/R.K. Ragatha, M. Anwar, S. Naik, S. Kuckreja, U. Ekeowa, P. Russell, Harlow, United Kingdom, p.A2600**
- P329 Itaconate Is Required for Anti-Inflammation During Rhinovirus Infection/Y. Li, T. Vigil, S. Kuo, A. Goldsmith, J.K. Bentley, R. Mortensen, M.B. Hershenson, Ann Arbor, MI, p.A2601**

BASIC • CLINICAL

THEMATIC POSTER SESSION

B31 IMMUNE CELLS AND INFLAMMATORY PATHWAYS DRIVING LUNG INJURY AND INFECTION - VIEWS FROM THE BENCH

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area E, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P317 Role of Endothelial CXCR2 in Neutrophil Recruitment into Central Nervous System in LPS Induced Septic Encephalopathy/Y. Han, Y. Dong, H. Wang, F. Wu, Bengbu, China, p.A2589**

- P330 Elevated Innate Host Response to Influenza Virus in Brains of Aged Mice/W.** Wu, S.E. Feher, B.R. Cassidy, W. Zhang, L. Tian, D.A. Drevets, J.P. Metcalf, Oklahoma City, OK, p.A2602
- P331 Single-Cell RNA-seq Revealed T Cell Metabolism as a Target to Tissue-Resident Memory T Cell Contraction/H.** Yang, J.K. Kolls, New Orleans, LA, p.A2603
- P332 Red Blood Cells Sequester Microbial DNA/J.E.** McGinniss, J. Dobkin, A.R. Weisman, M. Lam, N.J. Meyer, N.S. Mangalmurti, Philadelphia, PA, p.A2604
- P333 Immunoglobulin Levels in Adult Patients with Excessive Central Airway Collapse and Recurrent Respiratory Infections/J.C.** Cedenó Serna, J. Uribe, K. Swenson, A. Magge, P. Mihir, J. Wilson, S. Gangadharan, K. Fayez, C. Zhang, A. Majid, Boston, MA, p.A2605
- P334 BPIFB1 Requirement for Endotoxin Responsiveness in Primate Airway Epithelium/C.M.** Royer, L.A. Miller, Davis, CA, p.A2606
- P335 Identifying Monoclonal Antibodies for Development of Klebsiella Pneumoniae Therapies/J.E.** McCombs, J.P. Hoffmann, J.K. Kolls, New Orleans, LA, p.A2607
- P336 USP40 Plays an Anti-Inflammatory Role by Deubiquitinating Interleukin-1 Receptor-Associated Kinase 1 in Lung Endothelial Cells/J.** Miao, X. Xi, Y. Zhao, J. Zhao, Columbus, OH, p.A2608
- P337 Characterisation of the Structural Requirements for the Immunomodulatory Surfactant Protein D (SP-D) to Bind to Maltose Based Ligands/J.** Madsen, Y. Ghrabigi, T. Castillo Hernandez, T. Greenhough, A. Shrive, H. Clark, London, United Kingdom, p.A2609
- P338 Spectral Flow Cytometry Can Be Used for Accurate Identification of Immune Cell Subsets in BAL of Critically Ill Patients/M.** Orlov, Z. Franklin, M. Mitchem, A. Garay, E.D. Morrell, M.M. Wurfel, C. Mikacenic, Aurora, CO, p.A2610
- P339 Suppression of Base Excision Repair Enzyme Neil2 Promotes Inflammation During Covid Infection/V.J.** Cardenas, J. Seashore, N. Tapryal, T. Hazra, Galveston, TX, p.A2611
- P340 Characterizing the Role of ABCF1 in TNF- α Induced Proinflammatory Responses in Human Airway Epithelial Cells/Q.C.T.** Cao, M. Ishak, J.A. Hirota, Hamilton, Canada, p.A2612
- P341 Comparison of the Toponomes of Alveolar Macrophages from Wild Type and Surfactant Protein A Knockout Mice and Their Response to Infection/D.S.** Phelps, V.M. Chinchilli, X. Zhang, D. Shearer, J. Floros, Hershey, PA, p.A2613
- P342 Nebulized Bone Marrow Derived Extracellular Vesicles Ameliorate Bacterial Induced Pneumonia In Vivo/H.** González, S.D. McCarthy, C. Masterson, D. Byrnes, R. MacLoughlin, J.G. Laffey, D. O'Toole, Galway, Ireland, p.A2614
- P343 Inhibiting NF- κ B Attenuates H₂O₂-Induced MMP-9 and MMP-12 Expression/M.** Pacurari, K. Komolafe, Jackson, MS, p.A2615
- P344 Differential Responses to Inhibition of Glutamine Metabolism Between Alveolar and Bone Marrow-Derived Macrophages/C.L.** Vigeland, R.T. Moore, H.S. Beggs, H. Dang, C.M. Doerschuk, Chapel Hill, NC, p.A2616
- P345 Activation of Nrf2 Modulates Protective Immunity Against Mycobacterium Tuberculosis Infection in THP1-Derived Macrophages/J.** Zhou, F. Fang, L. Zhang, T. Li, J. Qi, H. Wang, F. Wu, C. Song, T. Wang, Z. Qian, Bengbu, China, p.A2617
- P346 Defining High vs. Low Airway Epithelial Antiviral IFN Type I/III Responses in Infants and Children with History of Severe Viral-Induced Respiratory Illnesses/B.S.** Bera, E. Chorvinsky, K. Salka, S. Gavia, H.M. Aguilar, R. Kahanowitch, G. Gayoso, X. Xu Chen, J. Weinstock, D.K. Pillai, M.A. Arroyo Morr, M.J. Gutierrez, G.R. Nino, Washington, DC, p.A2618
- P347 The Anti-Inflammatory, Pro-Fibrotic Role of Osteopontin in Influenza A Infection/M.P.** Carbajal, Z. Mark, A. Kumar, N. Daphtary, M. Aliyeva, A. Jegga, J.H.T. Bates, V. Anathy, Burlington, VT, p.A2619
- P348 Identifying Alterations in the Pulmonary Immune System from Cases of Fatal COVID-19 versus Recovered and Non-Infected Controls/R.** Misra, J. Java, G. Bandyopadhyay, S. Bhattacharya, C. Poole, H. Huyck, G. Deutsch, T.J. Mariani, G.S. Pryhuber, Rochester, NY, p.A2620
- P349 The Dual-Endothelin1/VEGFsp Receptor (DEspR) - Potential Role in Chronic Respiratory Diseases/S.** Carstensen, J.M. Hohlfeld, N. Ruiz-Opazo, V.L.M.L.M. Herrera, M. Müller, Hannover, Germany, p.A2621
- P350 Peroxidasin Deficiency and Exaggerated Inflammatory Response in the Lung/G.** Cheng, Z. Cao, G. Liu, W.E. Swords, Birmingham, AL, p.A2622
- P351 A Recombinant Fragment of Human Surfactant Protein D (rfhSP-D) Decreases Inflammation in Ventilated Pre-term Lambs/A.** Finkielstein, D. Panichi, T. Castillo-Hernandez, A.S. Watson, A. Schlosser, U. Holmskov, G.L. Sorensen, M. Kemp, J. Madsen, B.W. Kramer, H.C. Clark, London, United Kingdom, p.A2623
- P352 Humanized Pneumococcal Mouse Model Highlights Pathological and Immunological Differences/N.** Scott, C. Orihuela, Birmingham, AL, p.A5590

CLINICAL

THEMATIC POSTER SESSION

B32 CASE REPORTS: ANAPHYLAXIS, ILD, AND COCAINE, OH MY!9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area I, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P713 A Rare Case of Chronic Obstructive Pulmonary Disease Associated with HUVS/V.** Kesarwani, R. Parikh, Farmington, CT, p.A2624
- P714 Successful Use of Casirivimab/Imdevimab in B-Cell Depletion Associated Prolonged (B-DEAP) COVID-19/J.** Choa, J.A. Lasky, C.M. Bojanowski, New Orleans, LA, p.A2625
- P715 An Indication for Monoclonal Antibodies in an Immunosuppressed Hospitalized Patient with COVID-19 Infection/P.** Sridhar, V. Santibanez, P.S. Patrawalla, L. Blackwell, New York, NY, p.A2626
- P716 A Case Report of Aplastic Anemia in a Patient with SLE and COVID-19 Infection/G.** Stevens, D. Egbe, R.G. Patel, Oxford, AL, p.A2627
- P717 Is This Anaphylaxis? ARDS and Shock from Gadolinium Based Contrast/W.** Chua, M. Yaqoob, Los Angeles, CA, p.A2628
- P718 Anaphylaxis Following Rocuronium Administration/S.** Starkel, S. Wilson, R. Plambeck, R. Mertens, M. Malesker, Omaha, NE, p.A2629
- P719 Levamisole-Adulterated Cocaine Leading to Pulmonary Renal Syndrome: A Case Report/C.** Voong, H. Patel, Augusta, GA, p.A2630
- P720 A Diagnosis Less Travelled: Cocaine Induced Angioedema/A.** Hastings, S. Shriber, P. Rath, T. Marshall, L.K. Venkateshaiah, Akron, OH, p.A2631
- P721 A Rare Presentation of Autoallergy Manifesting as Angioedema/I.** Brimah, P.S. Patrawalla, New York, NY, p.A2632
- P722 Diffuse Alveolar Hemorrhage Due to Hydralazine-Induced Lupus/P.** Boshara, E. Calvo Ayala, Royal Oak, MI, p.A2633
- P723 A Case of Necrotizing Sarcoid Granulomatosis/A.** Jain, B. Bass, D. Katzman, Valhalla, NY, p.A2634
- P724 A Shocking Solution to Shock/J.** Kim, W. Leon, A.A. Zeki, Sacramento, CA, p.A2635

- P725 Acute Generalized Exanthematous Pustulosis: An Unexpected Cause of Anaphylactic Shock/M.C.** Perez Mitchell, M. Delgado-Lopez, N. Roman, R. Gonzalez, J. Ramirez, San Juan, PR, p.A2636
- P726 A Case of Rapidly Progressive Interstitial Lung Disease Due to Antisynthetase Syndrome/M.** Hill, A. Egan, Rochester, MN, p.A2637
- P727 It Can Be Anything!!! An Atypical Anti-Synthetase Syndrome Presentation in a 34-Year-Old Male: Case Report/A.E.** Rodriguez Perez, N. Veguilla Rivera, C. Martinez Crespi, N. Deida Perez, J. Aleman Ortiz, Ponce, PR, p.A2638
- P728 Antisynthetase Syndrome Presenting as Isolated Interstitial Lung Disease in a 90-Year-Old Female/F.** Abbas, R. Patel, C.A. Thurm, Jamaica, NY, p.A2639
- P729 Localized Endobronchial Amyloidosis Presenting as a Rare Cause of Hemoptysis/M.** Kramer, N. Rosal, S. Tzarnas, T. Nace, R.R. Patel, Abington, PA, p.A2640
- P730 Eosinophilic Lung Disease Masquerading as Community Acquired Pneumonia/A.R.** Halawa, J. Jacob, L.F. Meza, M. Arif, M. Merrill, J.P. Feldman, Phoenix, AZ, p.A2641
- P731 A Case of Shrinking Lung Syndrome in a 51 Year-Old Female/D.M.** Roelofsz, M. Aboubakr, Kansas City, MO, p.A2642
- P732 A Rare Case of Shrinking Lung Syndrome Masquerading as Recurrent Pleuro-Pericarditis/V.** Kesarwani, S. Thomas, D. Ozimek, Farmington, CT, p.A2643
- P733 Into Thin Air: A Rare Cause of Dyspnea in a Lupus Patient/H.** Rashid, S. Warfield, K. Vendura, C. Robertson, G. Fletcher, T.H. Jayaram, Houston, TX, p.A2644
- P734 From Bad to Worse: Severe Eosinophilic Asthma Complicated by Segmental Airway Collapse/R.** Eggleston, K.G. Lim, Rochester, MN, p.A2645
- P735 Allergic Bronchopulmonary Aspergillosis Complicating Asthma Presenting as Chronic Recurrent Pneumonia and Hemoptysis/S.** Simeone, E. Nadler, Farmington, CT, p.A2646

CLINICAL

THEMATIC POSTER SESSION

B33 CASE REPORTS: IMMUNE CELLS GONE HAYWIRE9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area I, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P737** **Adult-Onset Asthma, FDG-Avid Lung Nodule, and Periorbital Xanthogranulomas Due to IgG4-Related Disease**/B.F. Samhouri, J.H. Ryu, Rochester, MN, p.A2647
- P738** **Frightening and Not So Frightening: Is It Just Immunoglobulin G4-Related Disease (IgG4-RD)? A Case Series**/C.N. Railwah, N. Martinez, Weston, FL, p.A2648
- P739** **Eosinophilic Granulomatosis with Polyangiitis: A Presentation Rarely Seen**/E. Gunn, M.L. Curtiss, Birmingham, AL, p.A2649
- P740** **EGPA with Unique Manifestations**/M. Williams, T. Brown, B. Wilson, Bethesda, MD, p.A2650
- P741** **A Case of Acute Eosinophilic Pneumonia Following Tdap Vaccine**/S. Perinkulam Sathyanarayanan, T. Naim, K. Shewbart, M.O. Baig, S. Helberg, Sioux Falls, SD, p.A2651
- P742** **Eosinophilic Pneumonia Due to Eosinophilic Granulomatosis with Polyangiitis**/G. Ha, S. Randhawa, S.J. Evans, Honolulu, HI, p.A2652
- P743** **Navigating Through a Maze of Biological Agents to Treat Severe Eosinophilic Asthma and Inflammatory Bowel Disease**/A. Go, J. Meland, G. Kamel, C. Boumitri, R.P. Nayak, Saint Louis, MO, p.A2653
- P744** **Pulmonary Manifestations of Inflammatory Bowel Disease**/M. Irandost, R. Alalawi, Phoenix, AZ, p.A2654
- P745** **Mucous Membrane Pemphigoid: Below the Cords**/M. Lannan, M.E. Izquierdo, N. Meier, J. Clinger, J. Jorizzo, L. Strowd, C. Wright, K.W. Thomas, A.B. Chatterjee, Winston Salem, NC, p.A2655
- P746** **Unmasking of Interstitial Lung Disease Associated with Anti-PL 12 Antibody Positive Antisynthetase Syndrome by Inflammatory Challenge from COVID-19 Vaccine**/K. Hamid, S. Perinkulam Sathyanarayanan, J.C. Yu, Sioux Falls, SD, p.A2656
- P747** **A Rare Case of Isolated Diffuse Alveolar Hemorrhage in Anti-Glomerular Basement Membrane Disease Without Renal Involvement**/N. Sheikhan, A. Gheriani, S. Bhatia, Las Vegas, NV, p.A2657
- P748** **Diffuse Alveolar Hemorrhage as a Rare Complication of Cryoglobulinemic Vasculitis**/M. Ballenberger, B. Birnbaum, Z. Kattih, S. Zajac, J.A. Moore, B.A. Mina, New York, NY, p.A2658
- P749** **The Root Canal Red Herring: Tubulo-Interstitial Nephritis as an Atypical Pathologic Diagnosis of Microscopic Polyangiitis**/S. Abujaber, J. Tasch, A. Wasim, M. Manjunath, J. Tedrow, Brighton, MA, p.A2659
- P750** **A Rare Case of Autoimmune Alveolar Proteinosis During Treatment of Temporal Arteritis**/Y. Nei, N. Hagino, M. Ishida, T. Saraya, H. Isii, Ichihara, Japan, p.A2660
- P751** **A Difficult Diagnosis of Antineutrophil Cytoplasmic Antibody Associated Vasculitis with Sequential Organ Involvement**/M. Rahim, A. Omar, T. Varughese, L. Qingying, Hackensack, NJ, p.A2661
- P752** **A Case of Recurrent Flare of PR3-ANCA-Negative Granulomatosis with Polyangiitis Complicated by ARDS and Fungal Pneumonia**/R. Chadha, S. Dorobisz, A. Rosinski, Bridgeport, CT, p.A2662
- P753** **A Rare Case of Lymphocytic Interstitial Pneumonia in Limited Scleroderma**/A. Dursun, B. Giri, Roanoke, VA, p.A2663
- P754** **Chronic Granulomatous Disease in a Young Adult Complicated by Hemophagocytic Lymphohistiocytosis and Hypoglycemic Bradycardic Arrest - A Case Report**/A. Tarnasky, D. Mitchell, J. Radder, A. Reinherz, Pittsburgh, PA, p.A2664
- P755** **A Rare Case of Concurrent Post-Transplant Lymphoproliferative Disease and Pseudomonas Pneumonia**/M. Arif, R. Mendez, A.R. Halawa, J. Jacob, L.F. Meza, J. Ho, A.I. Saeed, Phoenix, AZ, p.A2665
- P756** **Common Variable Immunodeficiency Presenting as Persistent Pneumonia with Pulmonary Mass**/P. Shin, Round Rock, TX, p.A2666

BEHAVIORAL • CLINICAL

THEMATIC POSTER SESSION

B34 GLOBAL IMPACT OF THE COVID-19 PANDEMIC

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P771** **Utilization of Advance Directives Among Patients Diagnosed with COVID-19**/A.R. Schwartz, J.P. Tate, A.C. Justice, L.S. Lehmann, J.T. King Jr., K. Harris, W. Levin, S. Feder, K.M. Akgun, West Haven, CT, p.A2667
- P772** **Cost-Benefit Analysis of a Private COVID-19 Vaccination Center**/R. Dunn, D.L. Caruana, S. Dhuper, A.M. Szema, Stony Brook, NY, p.A2668
- P773** **Healthcare Resource Utilization (HCRU) and Costs Associated with COVID-19 Among Hospitalized Patients in the United States - A Population Study**/D. Gibbons, A. Marijam, J.M. Symons, M. Bracher, Y. Asukai, H. Birch, X. Han, Brentford, United Kingdom, p.A2669

- P774 Pandemic Changes to a Community Respiratory Service/M.C. Apps, L. Ateli, K.-A. Keeling, H. Hill, T. Gisby, S. Lorenzani, Billerica, United Kingdom, p.A2670**
- P775 Ventilators: An Investigation into Changes in Reported Rates of Adverse Events During the COVID-19 Pandemic/E. Zhou, S.K. Bhatia, Cincinnati, OH, p.A2671**
- P776 Stakeholder Engagement with the Pima County Stock Inhaler for Schools Program: Implementation and Sustainability During the COVID-19 Pandemic/A.A. Lowe, N. Mottern, K. Ivich, C. Flores, L.B. Gerald, Tucson, AZ, p.A2672**
- P777 Clinical Research During COVID-19 in a Community ICU/A. Scholes, W. Dechert, B. Reeve, C. France, K. Matic, B. Longo, S. Davis, L. Salam White, P. Fabi, D.J. Cook, Kingston, Canada, p.A2673**
- P778 Treatment Outcomes of COVID19 Viral Pneumonia: Experiences from a Community Hospital/S. Poudel, P. Saha, J. Patel, A. Ahmed, V.S. Patthipati, R.K. Kartan, M.A. Bautista, Warren, OH, p.A2674**
- P779 Providing Safe Spirometry Services During the Covid-19 Pandemic: Experience from Lagos Nigeria/N.K. Ani-Ugwu, M.G. Dania, T. Abiodun, A. Ogundare, U. Ozoh, O.A. Ekeke, F. Animasha, Surulere, Nigeria, p.A2675**
- P780 SOBIstat-F (S-F), a Unique, Metered Dose Inhaler (MDI)-Based, Exhalation-Filtered Cardiopulmonary Resuscitation O2 Mask (CPROM) That Very Rapidly Initiates O2 and Bronchodilator Aerosol Therapy (Tx) While Protecting First Responders (FR) from COVID-19/M.T. Newhouse, P.H. Goldman, Hamilton, Canada, p.A2676**
- P781 Impact of COVID-19 Pandemic on the Health Services Provided by a Tertiary Cardiothoracic Hospital in Egypt/A. Abdelaziz, S. Rabea Shehata, E. Abdelghany, Minia, Egypt, p.A2677**
- P782 Mandate-Associated Demand for COVID-19 Vaccine Skin Testing/D. Li, A.M. Szema, South Setauket, NY, p.A2678**
- P783 Addressing Barriers to Immunization Against Acute Respiratory Infections: A Qualitative Synthesis/ K.M.P.P.D. Mendonca, T.Z.M. Santos, T.A. Santino, B. Silva, J.C. Alchieri, C.M. Patino, G. Chaves, S. Leite, K.G. Luz, R.O. Guerra, A.C.J.S. Silva, M.A.G. Silva, T.H.S. Penha, G.R. Silva, K.S. Monteiro, Natal, Brazil, p.A2679**
- P784 Correlations of Depression, Anxiety and Global Distress with Pulmonary Hypertension Patients' Perceived Symptoms and Impact During COVID-19 Pandemic/E. Tannouz, B. Theodory, B. Yaghmour, Irvine, CA, p.A2680**
- P785 Coping of Pulmonary Hypertension Patients During COVID-19: Giving up and Venting May Worsen Illness Perception/E. Tannouz, B. Theodory, B. Yaghmour, Irvine, CA, p.A2681**
- P786 Subjective Anxiety in a High Risk Outpatient Pulmonary Clinic During Early COVID-19 Pandemic/J. De Vera, C.F. Luceno, A. Alismail, N. Daher, L.D. Laren, Loma Linda, CA, p.A2682**
- P787 The Effect of the COVID-19 Pandemic on Risk Behaviours in ZZ Alpha-1 Antitrypsin Deficient Individuals/D. Fraughen, K. McGoldrick, T. Carroll, M. Herron, L. Alhaddah, M. Casey, M. Murphy, O. McElvaney, G. Kelly, O. McElvaney, H. Ronan, N.G. McElvaney, Dublin, Ireland, p.A2683**
- P788 Breakthrough COVID Infections: Prevalence of Critical COVID-19 Disease Among Post-Vaccinated Patients in a Tertiary Hospital in the Philippines/R.M. Legaspi, E. Tampig, B. Dizon, R.M. Divinagracia, Taguig City, Philippines, p.A2684**
- P789 Impact of the COVID-19 Pandemic on Chronic Obstructive Pulmonary Disease (COPD) Exacerbations in the United States: A Population-Based Study/K. Rothnie, X. Han, L. Bengtson, M. Bogart, S. Gelwicks, T. Bancroft, A. Cole, A. Ismaila, D. Leather, C. Compton, H. Birch, London, United Kingdom, p.A2685**
- P790 Severity of COVID-19 in Patients on Biologics for Allergic Disease: A Retrospective Study of Two Tertiary Healthcare Systems/C. Pathak, S. Jiang, S. Cao, W. Collins, L. Eggert, R.S. Chinthrajah, P. Akuthota, San Diego, CA, p.A2687**
- P791 OXygen Status Following hospitalization with cORonavirus Disease 2019 (OXFORD)/Y.J. Kim, L. Ziauddin, J.A. Delisa, J.A. Krishnan, S. Alvi, Y.-C. Chung, M. Kaul, A. Taylor, S.L. Labeledz, Chicago, IL, p.A2688**
- P792 Association of Discharge Location and Post-Traumatic Stress Disorder in Family Members of ICU Survivors of COVID-19/P.O. Collier, H. Cruse, T. Amass, Aurora, CO, p.A2689**
- P793 Risk Factors for Hospital-Readmission After Treatment for COVID-19 Infection: A Retrospective Case-Control Study/W. Khan, L. Smith, P. Benson, T. Cross, J. Smock, Toms River, NJ, p.A2690**
- P794 Evaluation of the Rectus Femoris Characteristics in Post COVID-19 Patients with Reduced Exercise Capacity/S. Pini, A. Saji, C. Jelinek, S. Melloy, S. O'Connell, H. Shaikh, E.G. Collins, F. Laghi, Maywood, IL, p.A2691**
- P795 Post-COVID Dyspnea Related to Small Airway Disease/B. Chinai, K. Khan, S. Hong, I. El Hussein, T. Santiago, S. Hussain, New Brunswick, NJ, p.A2692**

- P796 Change in Lung Function and Health Related Quality of Life in Post-COVID-19 Infection: A Provincial, 3-Month Follow-Up Study in Canada/M. Smith, S. Moitra, D.P. Fuhr, D. Befus, J. Chen, R.W. Damant, G. Ferrara, C. Laratta, A. Lau, J. Liu, R. Lim, L. Sorril, M.K. Stickland, J. Weatherald, R. Varughese, E.Y. Wong, G.Y. Lam, Edmonton, Canada, p.A2693**
- P797 Post-Acute COVID-19 Symptoms in Patients with Asthma: A Natural Language Processing-Based Study/D. Foer, L. Wang, E.W. Karlson, D.W. Bates, L. Zhou, Boston, MA, p.A2694**
- P798 mHealth Telemonitoring of Long COVID-19: A Mixed Methods Study on Challenges, Technology Acceptance and Perceived Added value/J. Korel, L. Michaelis-Braun, Q.N.N. Hong, M. Bönsch, R. Gloeckl, A.R.R. Kocuzalla, D. Balsler, J. Friedrich, B.S. Müller, S. Kuhn, K. Deutsch, M. Dreher, G. Rohde, C.F. Vogelmeier, N. Dauletbaev, Marburg, Germany, p.A2695**
- P799 Characteristics and Inpatient Outcomes of Hospitalized Patients with COVID-19 - A Population Study/D. Gibbons, A. Marijam, J.M. Symons, M. Bracher, Y. Asukai, H. Birch, X. Han, Brentford, United Kingdom, p.A2696**
- P800 Covid-19 Risk Perception and Vaccine Willingness Among Healthcare Workers in Specialized Lung Clinics in Germany/M.A. Presotto, R.A. Jörres, W. Gesierich, J. Bullwinkel, K.F. Rabe, K. Schultz, F. Kaestner, D. Harzheim, M. Kreuter, F.J. Herth, F.C. Trudzinski, Heidelberg, Germany, p.A2697**
- P801 Face Mask Showed No Effect On Oxygen Saturation In Work Environment During Covid-19 Era/I. Mukhayer, K. Holloway, O. Valencia, A. Ashry, B. Madden, London, United Kingdom, p.A2698**
- P802 Impact of the COVID-19 Pandemic on Dispensing of Respiratory Therapies Among Patients with Asthma in the United States: A Population-Based Study/M. Bogart, T. Bancroft, K. Rothnie, S. Gelwicks, L. Bengtson, A. Cole, A. Ismaila, H. Birch, N. Swamy, D. Leather, C. Compton, X. Han, Research Triangle Park, NC, p.A2699**
- P803 Impact of the COVID-19 Pandemic on Dispensing of Respiratory Therapies Among Patients with Chronic Obstructive Pulmonary Disease (COPD) in the United States: A Population-Based Study/M. Bogart, L. Bengtson, K. Rothnie, S. Gelwicks, T. Bancroft, A. Cole, A. Ismaila, H. Birch, D. Leather, C. Compton, X. Han, Research Triangle Park, NC, p.A2700**
- P804 Differences in Post-Acute Care Healthcare Expenditures After Hospitalization Due to Influenza or Covid-19 Infection/J. Bailey, S. Alexandria, B. Hu, L.F. Wolfe, L. Welty, J.M. Kruser, R. Kalhan, Chicago, IL, p.A5591**
- P805 Use of Telehealth Visits for Patients During the Covid-19 Pandemic in an Allergy/Immunology Network/S. Tovar, A. Osheim, E. Schultz, Austin, TX, p.A5592**

BEHAVIORAL • CLINICAL

THEMATIC POSTER SESSION

B35 SLEEP RELATED HEALTH SERVICES RESEARCH

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P1 Evaluating the User Experience of a Novel Positive Airway Pressure Therapy Device for Treating Obstructive Sleep Apnea in the Home Environment/S.M. Herath, A. Middleton, X. Zhu, R. Deas, J. Armitstead, Sydney, Australia, p.A2701**
- P2 Sleep Quality Health-Related Quality Asthmatics/O.O. Akinwalere, O.F. Awopeju, B.O. Adeniyi, G.E. Erhabor, Owo, Nigeria, p.A2702**
- P3 Machine Learning Prediction of Obstructive Sleep Apnea Based on 3D Craniofacial Geometric Morphometric Scans/R. Ben Messaoud, F. Monna, N. Navarro, S. Baillieul, C. Liodice, R. Tamisier, M. Joyeux-Faure, J.-L. Pépin, Isère, France, p.A2703**
- P4 Clinical Benefits Associated with Duration of Usage Per Night in Patients with Long-Term PAP- Therapy in Real Clinical Settings/E. Elfimova, O. Mikhailova, N. Khachatryan, A. Litvin, I. Chazova, Mocsow, Russian Federation, p.A2704**
- P5 The Effects of Telehealth versus Routine Care Consultation in Obstructive Sleep Apnea Patients in an Academic Medical Center/M. Rosenthal, S. Pasha, Lexington, KY, p.A2705**
- P6 Sleep Evaluation Center Questionnaire to Predict Positive Airway Pressure Use/V. Badami, E. Rojas, S.F.Z. Naqvi, S. Aryal, J. Easterling, R.C. Stansbury, S. Sharma, Morgantown, WV, p.A2706**
- P7 Sleep Quality, Daytime Sleepiness, Depressive and Anxiety Symptoms and Attitudes Toward Study in Health Sciences College Students in Bogotá, Colombia During the COVID-19 Pandemic/A.R. Waich, N. Londoño, L. Gallego, J. Barahona, A. Ruiz, P. Hidalgo, M. Rondon, M. Rondon, I.D.S. Moreno, Bogotá, Colombia, p.A2707**
- P8 Relationship Between Quality and Duration Sleep with the Incidence of Hypertension in a Northeastern Colombian Population/L.R. Marín Hernandez, L.M. Vera-Cala, B.E. Vesga-Angarita, B.C.-. Arias-Rojas, M.S. Marín-Hernández, Bucaramanga, Colombia, p.A2708**

- P9** **The Association of Body Mass Index and Other Adiposity-Estimating Equations with Measures of Obstructive Sleep Apnea Severity/D.** Wadden, G. Chandy, S.D. Aaron, Z. Gao, J. Farrell, T. Kendzerska, Ottawa, Canada, p.A2709
- P10** **Retrospective Analysis of Patients with Obstructive Sleep Apnea Syndrome Receiving Mandibular Advancement Devices/E.** Livingston, J. Main, C. Livingston, Glasgow, United Kingdom, p.A2710
- P11** **Use of Machine Learning to Develop a Anthropometry Based Screening Model for Obstructive Sleep Apnea/I.** Aiyer, A. Sheta, P.T. Taweeseedt, S.R. Surani, Blairstown, NJ, p.A2711

CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B36 SPECTRUM OF FIBROTIC INTERSTITIAL LUNG DISEASES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P417** **Discordance in Actual Versus Perceived Access to Palliative Care Services for Pulmonary Fibrosis Foundation Care Centers/R.**A. Gersten, B. Seth, K.O. Lindell, S.K. Danoff, Baltimore, MD, p.A2712
- P418** **Registry for Better Understanding of ILD (RE-BUILD) Mobile Application/L.** Glenn, D. Jackson, B. Tefay, A.E. Holland, N. Goh, L.K. Troy, J. Rhodes, A.J. Hey-Cunningham, M. Brooke, I. Glaspole, T.J. Corte, Sydney, Australia, p.A2713
- P419** **Approach to Adult Patient with Diffuse Parenchymal Lung Disease in the Developing Country/L.** Nguyen-Ho, K. Bril, V. Le-Thuong, Ho Chi Minh, Viet Nam, p.A2714
- P420** **Perceptions of Patients in a Mindfulness Group for Pulmonary Fibrosis/G.**P.A.D.A. Pires, A. Leal, E. Viana Mancuzo, S. Miranda, S. Paiva, Belo Horizonte, Brazil, p.A2715
- P421** **Role of a Virtual Multi Center Multidisciplinary Discussion in the Diagnosis of Interstitial Lung Disease/L.** Seluk, M.J. Segel, M. Lidar, E. Marom, M. Perlman, E. Ofek, A. Onn, L. Levy, Ramat Gan, Israel, p.A2716

- P422** **Baseline Characteristics and Clinical Outcomes in Patients with Idiopathic Pulmonary Fibrosis (IPF) by Autoantibody Status: An Exploratory Analysis from the ASCEND Study/T.** Kulkarni, C. Newton, S. Gupta, J. Ko, K. Samara, E.J. Bernstein, Birmingham, AL, p.A2717
- P423** **Prognosis of Hypersensitivity Pneumonitis with Autoimmune Features/P.**M. Cavalcante Neto, M.R. Soares, E. Viana Mancuzo, A.C.L. Resende, R.C.C. Tibana, P.S. Gomes, A.B. Botelho, R.B. Martins, A. Gimenez, C.A.D.C. Pereira, Sao Paulo, Brazil, p.A2718
- P424** **Preclinical Evaluation of Cudatexestat for Potential Drug-Drug Interactions/W.** Yu, R. Rajagopalan, J. Lin, P. Ibrahim, South San Francisco, CA, p.A2719
- P425** **Nutrition and Gastrointestinal Adverse Events Related to Antifibrotic Drugs: Are Physicians Understanding Patients?/J.**I. Enghelmayer, V.I. Barcos, Buenos Aires, Argentina, p.A2720
- P426** **The Differences in Efficacy and Tolerability of Nintedanib Based on the Severity of Idiopathic Pulmonary Fibrosis/M.** Kato, S. Soma, Y. Arai, S. Nakazawa, H. Motomura, Y. Ochi, J. Watanabe, I. Sumiyoshi, H. Ihara, K. Kadoya, S. Togo, S. Sasaki, K. Takahashi, Tokyo, Japan, p.A2721
- P427** **The Clinical Efficacy of a Mixture of Ivy Leaf Extract and Coptidis Rhizome in Patients with Idiopathic Pulmonary Fibrosis/J.**H. Lee, Busan, Korea, Republic of, p.A2723
- P428** **Efficacy of Antifibrotic Treatments in Patients with Progressive Fibrosing Interstitial Lung Disease/K.** Sugino, H. Ono, M. Saito, M. Ando, E. Tsuboi, Koriyama, Japan, p.A2724
- P429** **Spectrum of Interstitial Lung Diseases at Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia/T.**H. Gebremariam, A. Bitew, E. Kebede, N.W. Schluger, C.B. Sherman, Addis Ababa, Ethiopia, p.A2725
- P430** **Incidence of Progressive Phenotype in Fibrosing Interstitial Lung Disease (PF-ILD) in a Tertiary Healthcare Center/M.**G. Macmurdo, X. Ji, P. Pimple, A. Olson, A. Milinovich, B. Martyn-Dow, J. Bauman, S. Bender, C.S. Conoscenti, D. Sugano, M. Kattan, D.A. Culver, Cleveland, OH, p.A2726
- P431** **Difference in Clinical Features and Prognosis of Patients Diagnosed with Idiopathic Pleuroparenchymal Fibroelastosis by Subtype Using New Japanese Clinical Diagnostic Criteria/H.** Motomura, M. Kato, T. Ohni, Y. Ochi, E. Hayakawa, S. Soma, T. Akimoto, Y. Arai, I. Sumiyoshi, J. Watanabe, H. Ihara, K. Kadoya, S. Togo, S. Sasaki, K. Takahashi, Bunkyo-ku, Japan, p.A2727

- P432 A Retrospective Study on the Protective Effect of Influenza Vaccination from Developing Idiopathic Pulmonary Fibrosis/S. Jacob, X. Jiang, Z. Pinchover, B. Patel, R. Abrencillo, Houston, TX, p.A2728**
- P433 Risk Factors for Emergency Department Encounters in Patients with Interstitial Lung Disease and Previous Hospitalization/K. Selvan, C.T. Lee, A.O. Adegunsoye, V.G. Press, M.E. Streck, Chicago, IL, p.A2729**
- P434 Factors Associated with Outpatient Follow Up in Hospitalized Patients with Interstitial Lung Disease/J.M. Martinez Manzano, K. Bryan Lo, S. Jarrett, B. Chiang, Z. Azmaiparashvili, S. Benzaquen, Philadelphia, PA, p.A2730**
- P435 Minimal Clinically Important Difference (MCID) for Visual Assessment of Pulmonary Fibrosis on Chest High Resolution Computed Tomography Scan (HRCT)/T. Magri, A. Comes, L. Richeldi, G. Scgalla, Rome, Italy, p.A2731**
- P436 Lung Shape in IPF Is Different from Healthy Controls, and Is Associated with Extent of Fibrosis/J. John, A.R. Clark, H. Kumar, K.S. Burrowes, B.J. Bartholmai, R. Karwowski, D.L. Levin, C. King, M.L. Wilsher, K. Whyte, D.G. Milne, M.H. Tawhai, Auckland, New Zealand, p.A2732**
- P437 Six-Minute Walk Test Distance as a Simple Non-Invasive Risk Stratification Tool for Prediction of Pulmonary Hypertension in Idiopathic Pulmonary Fibrosis/A. Chandel, A. Pellegrini, B. Tehrani, A.C. Collins, S. Chakravorty, V. Khangoora, S. Aryal, A. Singhal, A. Nyquist, O.A. Shlobin, C.S. King, S.D. Nathan, Bethesda, MD, p.A2733**
- P438 Lung Cancer in Patients with Idiopathic Pulmonary Fibrosis: A Retrospective Multicenter Study in Europe/T. Karampitsakos, P. Spagnolo, N. Mogulkoc, W.A. Wuyts, S. Tomassetti, E. Bendstrup, M. Molina Molina, E. Manali, O.S. Unat, N. Kahn, L. Kolilekas, E. Rosi, L. Gori, C. Ravaglia, Z. Daniil, T.S. Prior, I.C. Papanikolaou, S. Aso, S. Tryfon, D. Papakosta, E, p.A2734**
- P439 Clinical Predictors of Nontuberculous Mycobacteria in Interstitial Lung Disease/H. Deshwal, J. Klapholz, A. Lehr, D.J. Addrizzo-Harris, R. Condos, New York, NY, p.A2735**
- P440 Low Cardiac Index as an Under Recognized Manifestation of Idiopathic Pulmonary Fibrosis/A. Chandel, A. Pellegrini, B. Tehrani, A.C. Collins, S. Chakravorty, V. Khangoora, S. Aryal, A. Singhal, A.S. Nyquist, O.A. Shlobin, C.S. King, S.D. Nathan, Bethesda, MD, p.A2736**
- P441 Review Analysis of Clinical Characteristics in 185 Interstitial Lung Disease Patients Accompanied with Lung Cancer (ILD-LC)/Y. Hu, T. Ma, Q. Zhang, Changchun, China, p.A2737**
- P442 Prognostic Role of Anti-Cyclic Citrullinated Peptide Antibody in Idiopathic Pulmonary Fibrosis from Korea IPF Cohort (KICO) Study/B.S. Kwon, J.S. Park, Seongnam-si, Korea, Republic of, p.A2738**
- P443 Blood KL-6 Predicts Disease Progression in IPF Patients Receiving Antifibrotic Therapy/M.G. Choi, J.W. Song, Seoul, Korea, Republic of, p.A2739**
- P444 Prevalence and Radiographic Patterns of Rheumatoid Arthritis Associated Interstitial Lung Disease: A Systematic Review and Meta-Analysis/G.M. Joy, C.K. Wong, S.D. Lok, N. Adderley, K.M. Dobosz, O.A. Arbiv, K.A. Johannson, C.J. Ryerson, Vancouver, Canada, p.A2740**
- P445 A Systematic Review and Meta-Analysis of Anti-Ro52 Antibodies in Interstitial Lung Disease Associated with Connective Tissue Disease/J.A. Huapaya, M. Zhao, K. Long, S.K. Danoff, Bethesda, MD, p.A2741**
- P446 Progressive Fibrotic Interstitial Lung Disease in Autoimmune Inflammatory Myopathy/S. Kamoun, N. Khalil, K.A. Johannson, V. Marcoux, M.R.J. Kolb, J.H. Fisher, H. Manganas, C.J. Ryerson, D. Assayag, Montreal, Canada, p.A2742**
- P447 Prevalence and Radiologic Patterns of Interstitial Lung Disease in Sjogren Syndrome: A Systematic Review and Meta-Analysis/O.A. Arbiv, G.M. Joy, N.A. Adderley, K.M. Dobosz, S.D. Lok, C.K. Wong, K.A.M. Johannson, C.J. Ryerson, Vancouver, Canada, p.A2743**
- P448 Psoriatic Pulmonary Syndrome as a Risk Factor for Respiratory Failure/K. Tanimura, S.M. Nourai, T. Nyunoya, Pittsburgh, PA, p.A2744**
- P449 Patients with Anti-Synthetase Syndrome Requiring Supplemental Oxygen at Diagnosis Benefit from Immunosuppression/J. Freitas, L.H. Lancaster, E.M. Wilfong, Nashville, TN, p.A2745**
- P450 Distinguishing Features in Systemic Sclerosis Patients with Non-Specific Interstitial Pneumonia and Idiopathic Pulmonary Fibrosis/R.G. Carbone, E. Barisione, R. Filiberti, G. Cittadini, F. Puppo, Genova, Italy, p.A2746**
- P451 Examining Clinical Characteristics of Patients with Systemic Sclerosis Associated Interstitial Lung Disease (SSc-ILD) and Myositis Antibodies: A Retrospective Case Series/K. Pandya, M. Raddawi, K.M. D'Silva, S.B. Montesi, Boston, MA, p.A2747**
- P452 ANA Pattern and Clinical Features in Patients with Scleroderma-Related Pulmonary Disease/D. Pandya, K.Z. Khan, J.L. Simonson, A. Talwar, Staten Island, NY, p.A2748**
- P453 The Long-Term Changes in KL-6 and Their Correlation with Forced Vital Capacity in Patients with Systemic Sclerosis-Associated Interstitial Lung Disease/R. Takei, Y. Yamano, H. Sasano, K. Kataoka, T. Yokoyama, T. Matsuda, T. Kimura, J. Fukuoka, T. Johkoh, Y. Kondoh, Seto, Japan, p.A2749**

- P454 Barriers to Management and Treatment of Autoimmune Featured Interstitial Lung Disease in a New York City Hospital System/U. Dhamrah, K. Johnson, R.J. Durrance, B. Ireifej, S. Ricker, N. Batool, A.J. Astua, Elmhurst, NY, p.A2750**
- P455 Outcomes of Acute Exacerbation in Idiopathic Pulmonary Fibrosis and Connective Tissue Disease-Related Interstitial Lung Disease Treated with Systemic Corticosteroids Alone vs Systemic Corticosteroids with Immunosuppressive Therapy: A Systematic Review and/S. Duangkham, P. Mekraksakit, C.A. Childs, K.M. Nugent, K. Ussavarungsi, Lubbock, TX, p.A5593**
- P456 High Incidence of Polypharmacy, Multimorbidity, and Impaired Quality of Life in Older Patients Diagnosed with Connective Tissue Related Interstitial Lung Disease (CTD-ILD)/A. Suen, L. Witt, A. Kotwal, R. Sudore, E.D. Farrand, San Francisco, CA, p.A5594**

CLINICAL

THEMATIC POSTER SESSION

B37 CASE REPORTS: RARE LUNG DISEASES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area B, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P87 Extrapulmonary Presentation in Asymptomatic Male of Lymphangioleiomyomatosis/C. Quiles-Cruz, K.C. Padilla Rodriguez, D. Font-Rivera, J. Torrens Olan, R. Fernandez, M.A. Echevarria-Quintana, S. Galarza-Vargas, San Juan, PR, p.A2751**
- P88 Birt-Hogg-Dubé Syndrome Presenting as Incidental Spontaneous Pneumothorax and Diffuse Lung Cysts/C. Ramasamy, Y. Singh, Y. Goldman, Worcester, MA, p.A2752**
- P89 How Many Cysts Are Too Many? Lymphoid Interstitial Pneumonia from Secondary Sjögren Syndrome/R. Tipernehi, R.P. Padappayil, H.A. Fichadiya, S.M. Weiner, Long Branch, NJ, p.A2753**
- P90 A Rare Case of Pulmonary Lymphangioleiomyomatosis Diagnosed After Incidental Chest Imaging Findings/S. Khatib, K. Abdalla, M. Aboubakr, S. Kulkarni, S. Dubin, Kansas City, MO, p.A2754**
- P91 Pulmonary Hyalinizing Granuloma: An Unusual Case of a Cavitory Lung Lesion/S.O. Okoli, J.A. Lasky, C. Bojanowski, New Orleans, LA, p.A2755**
- P92 Successful Use of Mepolizumab for Steroid-Dependent Chronic Eosinophilic Pneumonia/P. Cyca, B.L. Walker, P. Mitchell, J. Weatherald, Calgary, Canada, p.A2756**
- P93 A Case of Tropical Pulmonary Eosinophilia with Refractory Symptoms That Resolved After Dupilumab/Y.X. Teo, S. Sasidharan, K.B. Martin, Worcester, MA, p.A2757**
- P94 A Case of Acute Fibrinous Organizing Pneumonia and Diffuse Alveolar Hemorrhage: Diagnostic and Therapeutic Challenges/B. Min, C. Liak, M. Clements-Baker, A.H. Boag, C.L. D'Arsigny, M.D. Lougheed, Kingston, Canada, p.A2758**
- P95 A Case of the Mysterious Fleeting Pneumonia/J. Ramirez-Marquez, W. Rodriguez, R.E. Vazquez Nieves, San Juan, PR, p.A2759**
- P96 Cryptogenic Organizing Pneumonia Due to Mycoplasma/S. Chandna, M.V. Shah, S. Bhasin, New Brunswick, NJ, p.A2760**
- P97 Not So Beautiful: A Case of a Beautician with Organizing Pneumonia/K. Waybill, I. Qawi, Boston, MA, p.A2761**
- P98 Atypical Presentation of Cryptogenic Organizing Pneumonia with Associated Pneumatoceles/E. Cortinas, A. Garbarino, Cincinnati, OH, p.A2762**
- P99 Too Little, Too Dilated: A Case of Mounier-Kuhn Syndrome and Post-Operative Respiratory Failure/L. Kao, A. Menon, S. Kumar, L. Van Elden, A. Dulu, New York, NY, p.A2763**
- P100 A Rare Case of Airway Involvement of Bullous Pemphigoid/N. Kika, N. Patel, A.G. Saleh, Brooklyn, NY, p.A2764**
- P101 On Pulmonary Amyloidosis as the Presenting Feature of Multiple Myeloma/J. Gadrey, A. Abdul Hameed, S. Askar, K. Thavarajah, A. Abu Sayf, Detroit, MI, p.A2765**
- P102 New Pulmonary Nodules in a Patient with Granulomatous and Lymphocytic Interstitial Lung Disease (GLILD)/D.C. Gonzalez, A.M. Kawassaki, Sao Paulo, Brazil, p.A2766**
- P103 Giant Cell Interstitial Pneumonia: A Case Report/A. Malik, H. Minhas, D. Kurtz, A.A. Alratroot, A. Shiari, C.R. Jinjvadia, Detroit, MI, p.A2767**
- P104 A Rare Case of Pulmonary Nodules: Diffuse Pulmonary Meningotheliomatosis/L. Saa, S. Assaf, Albuquerque, NM, p.A2768**
- P105 Intravascular Large B-cell Lymphomawith Diffuse Ground Glass Lesion on ChestComputed Tomography Diagnosed Using Transbronchial Lung Cryobiopsy/D. Zhu, L. Zhao, Shanghai, China, p.A2769**
- P106 A 59 Year Old Female with Fever and Lung Nodules/R.P. Manglani, Valhalla, NY, p.A2770**

- P107 Disappearing Act: A Case of Pulmonary Alveolar Proteinosis Spontaneous Remission/K. Zabelny, S.G. Adams, San Antonio, TX, p.A2771**
- P108 Hermansky-Pudlak Syndrome: A Constellation of Findings Leads to Confident Diagnosis/K.M. Capaccione, B. Braumuller, M. Salvatore, New York, NY, p.A2772**
- P109 Hermansky Pudlak Syndrome: Radiographic Changes Before and After COVID-19/W. De Jesus-Rojas, C. Delgado, R. Roman, San Juan, PR, p.A2773**
- P110 Common Pulmonary Findings, Uncommon Cause: A Rare Case of Erdheim-Chester Disease with Pulmonary Manifestations/K.M. Capaccione, B. Braumuller, M. Salvatore, New York, NY, p.A2774**
- P111 Tracheobronchopathia Osteochondro-What? A Rare Disorder of the Airway/L.T. Thornton, W.A. Marinelli, Minneapolis, MN, p.A2775**
- P112 Neutrophilic Alveolitis in Sweet's Syndrome/A.A. Bukiej, S. Kambhatla, Chicago, IL, p.A2776**
- P113 Pulmonary Langerhans Cell Histiocytosis Presenting as Diffuse Parenchymal Lung Disease/C.G. Gmehlin, J.S. Kurman, B.S. Benn, Wauwatosa, WI, p.A2777**
- P114 A Confusing Case of Cavitation/B.K. Nance, J. Sam, S. Khalid, S. Azad, K. McNeil, A. Borrelli, Y. Lafazan, Olympia Fields, IL, p.A2778**
- P460 How Discharge Planning and Follow Up Affect Chronic Obstructive Pulmonary Disease (COPD) 30-Day Readmission/T. Swartz, M. Honda, P. Arora, B. Bemiss, Maywood, IL, p.A2781**
- P461 Clinical Outcomes in Hospitalized COVID-19 Patients Suffering from COPD/W. Toppen, P. Ya, D. Markovic, J. Fulcher, C. Shover, R. Buhr, D.P. Tashkin, I. Barjaktarevic, Santa Monica, CA, p.A2782**
- P462 Differences of Exacerbation and Medical Utilization by Medical Possession Rate (MPR) in Patients with Chronic Obstructive Pulmonary Disease (COPD) from a Real-World Study/Y. Kim, K. Kim, H. Lee, J.-Y. Moon, Seoul, Korea, Republic of, p.A2783**
- P463 Disease Burden in Individuals with Symptomatic Undiagnosed Asthma or Chronic Obstructive Pulmonary Disease/F.F. AL-Habeeb, G.A. Whitmore, K. Vandemheen, M. Fitzgerald, C. Bergeron, C. Lemiere, L.-P. Boulet, S.K. Field, E.D. Penz, A. McIvor, S. Gupta, I. Mayers, M. Bhutani, P. Hernandez, D. Loughheed, C. Liscskai, T. Azher, M. Ainslie, I.M. Fraser, M. Mahdavian, , p.A2784**
- P464 Using Oxygen Wristbands to Improve Prescribing in an NHS District General Hospital/D. Hazelton, G. Fitzgerald, S. Patel, Warrington, United Kingdom, p.A2785**
- P465 Effect of Peak Inspiratory Flow Data on Physician Prescribing Practices of Dry Powder Inhalers for COPD Patients/N. Desai, T. Earnest, S.K. Bellam, Evanston, IL, p.A2786**
- P466 COPD Patients Can Achieve High Levels of Engagement and Satisfaction with a Digital Care Program When Supported by a Specialized Care Coordinator/B. Boyd, S. Coughlin, H. Parrott, K. Hanges, Boston, MA, p.A2787**
- P467 Are Fatigue and Pain Overlooked in Subjects with Stable Chronic Obstructive Pulmonary Disease?/K. Nishimura, R. Sanda, M. Mori, A. Shibayama, M. Kusunose, Obu, Japan, p.A2788**
- P468 Prescribing Patterns for Long-Acting Inhaled Bronchodilators Among Patients with Chronic Obstructive Pulmonary Disease in a Rural Hospital Network/N. Siddiqui, W. Brunner, M. Scribani, N. Krupa, E.P. Riesenfeld, Plymouth, MA, p.A2789**
- P469 Comprehensive Approach to Reduce Readmission of Chronic Obstructive Pulmonary Disease (CARR)/V. Halani, A. Prishchepova, B. Barakoti, M.L. Auton, D. De, D. Tazbaz, St. Louis, MO, p.A5595**
- P470 Does Compliance with Home Non-Invasive Ventilation Therapy Affect PaCO₂ Reduction and Readmission to Hospital in Chronic Obstructive Pulmonary Disease (COPD) Patients?/E. Livingston, J. Kennedy, C. Livingston, L. Stewart, Glasgow, United Kingdom, p.A5596**

BEHAVIORAL • CLINICAL

THEMATIC POSTER SESSION

B38 IMPROVING QUALITY OF CARE IN COPD

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P458 Utilization Characteristics for COPD Inhaled Medication Users in the Sentinel Distributed Database/R. Busch, T. Zhang, I. Dashevsky, Y. Li, M. Bradley, J. Chen, S. Chin, E. Eworuke, J.C. Maro, Y. Ren, R. Zhang, C. Sahajwalla, S. Seymour, K. Quinto, C.A. Panozzo, Silver Spring, MD, p.A2779**
- P459 Adverse Outcomes Post-Initiation of Systemic Corticosteroids in Patients with Chronic Obstructive Pulmonary Disease: A Long-Term Observational UK-Based Study/D.B. Price, M. Bafadhel, A. Papi, V. Carter, G. Tse, C. Ariti, J. Zhou, D. Skinner, X. Xu, H. Müllerová, B. Emmanuel, Aberdeen, United Kingdom, p.A2780**

P471 **Inhaled Medication Use in Ever Smokers With and Without a COPD Diagnosis in Primary Care: An Analysis of Prescribing Patterns in Electronic Medical Records**/B.E. Miller, G. Gaona-Villareal, A. Ratigan, C. Crim, C.B. Pasquale, M.B. Drummond, R.A. Wise, J.A. Krishnan, J.M. Rommes, W.D. Pace, R. Tal-Singer, Miami, FL, p.A5597

CLINICAL

THEMATIC POSTER SESSION

B39 COPD MANAGEMENT: FROM PHARMACOLOGIC TREATMENT TO NOVEL THERAPIES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P473 **Mono-Bronchodilator Therapy versus Dual Bronchodilator Therapy in Symptomatic COPD Patients: The Korea COPD Subgroup Study Team Cohort**/H.-J. Shin, T.-O. Kim, Y.-S. Kwon, Donggu, Korea, Republic of, p.A2790

P474 **Comparative Efficacy of UMEC/VI Versus Other Bronchodilators for the Treatment of COPD: A Systematic Literature Review and Network Meta-Analysis**/A.S. Ismaila, A. Czira, K. Haeussler, V. Tongbram, M. Malmenäs, J. Agarwal, M. Nassim, M. Zivkovic-Gojovic, Y. Shen, M. Duarte, C. Compton, Collegeville, PA, p.A2791

P475 **Investigational Microbiome Therapeutic SER-109 Reduces Recurrence of Clostridioides Difficile Infection (CDI) Compared to Placebo, Regardless of Presence or Absence of Comorbidities Including Chronic Obstructive Disease (COPD) and Asthma**/B.H. McGovern, T. Louie, S. Cohen, M. Sims, E. Wang, H. Wu, K. Brady, L. von Moltke, Cambridge, MA, p.A2792

P476 **Eligibility for COPD Clinical Trials of Inhaled Triple Therapy: Analysis of the Subpopulations and Intermediate Outcomes in COPD Study (SPIROMICS)**/A.A. Lambert, L. Gravens-Mueller, L. Bateman, I. Barjaktarevic, R. Paine, N. Putcha, N.N. Hansel, J.A. Krishnan, M.T. Dransfield, S.L. Rogers, A. Shaikh, P. Woodruff, D. Couper, M.B. Drummond, Spokane, WA, p.A2793

P477 **Clinical Features of and Treatment Strategy for Chronic Obstructive Pulmonary Disease with Asthma-Like Features**/K. Koda, M. Toyoshima, Y. Kamiya, T. Suda, Hamamatsu, Japan, p.A2794

P478 **Comparative Efficacy of Fluticasone Furoate/Umeclidinium/Vilanterol (FF/UMEC/VI) Versus Other Triple Therapies for the Treatment of Chronic Obstructive Pulmonary Disease (COPD): A Systematic Literature Review and Network Meta-Analysis**/A.S. Ismaila, K. Haeussler, A. Czira, J.-H. Youn, M. Malmenäs, N. Risebrough, J. Agarwal, M. Nassim, R. Sharma, C. Compton, C.F. Vogelmeier, D.M.G. Halpin, Collegeville, PA, p.A2795

P479 **Hospitalization Rates After Treatment of Pre-Identified COPD Exacerbations in Patients Utilizing Remote Patient Monitoring**/N. Moraveji, M. Polsky, San Francisco, MD, p.A2796

P480 **Pilot Study of O2asis: A Novel, Closed-System Heated Humidification Device for Individuals with COPD Requiring Supplemental Oxygen at Home**/R.A. Sandhaus, C. Strange, K.E. Holm, Denver, CO, p.A2797

P481 **Reducing Environmental Impact of Pressurised Metered Dose Inhalers: Relative Bioavailability of Budesonide/Glycopyrronium/Formoterol with Novel Propellant Formulations in Healthy Subjects**/M. Aurivillius, L. Dunsire, A. Bednarczyk, M. Kokot, J. Madriaga, J. Mei, K. Collison, R. Surujbally, M. Gillen, Molndal, Sweden, p.A2798

P482 **Prognostic Efficacy of Non-invasive Ventilation in Patients with Overlap Syndrome: Chronic Obstructive Pulmonary Disease and Obstructive Sleep Apnea**/J. Xie, Z. Fan, Beijing, China, p.A2799

P483 **A Meta-Analysis of Zephyr Endobronchial Valves for Management of Persistent Air Leaks**/D.K. Hogarth, A. Wagh, A.K. Mahajan, B. Armstrong, N.S. Shargill, J.M. Travaline, G.J. Criner, Chicago, IL, p.A2800

P484 **Impact of Oscillatory Positive Expiratory Pressure (OPEP) Therapy on Objectively Determined Cough and Sleep Disturbance in COPD: A Sub-Study from the O-COPD Trial**/S.M. Alghamdi, A.M. Alasmari, A.S. Alsulayyim, K.E. Philip, S.S. Birring, M.I. Polkey, N.S. Hopkinson, London, United Kingdom, p.A2801

P485 **Bronchial Rheoplasty for Chronic Bronchitis: 2 Year Results from a Us Feasibility Study with Rheox[®]**/F.C. Sciruba, A.P. Comellas, A. Majid, D.K. Hogarth, N. Marchetti, V. Kim, M.T. Dransfield, Pittsburgh, PA, p.A5598

P486 **A Pilot Trial of Belimumab for Atherosclerosis Associated Autoimmunity in COPD Patients**/T. Mkorombindo, R.C. Wade, K. Yuan, S.W. Robison, A.E. Christenson, J.M. Wells, M.T. Dransfield, S.R. Duncan, Birmingham, AL, p.A5599

- P487** **Benefits of Initiating Single-Inhaler Triple Therapy (SITT) with Fluticasone Furoate/Umeclidinium/Vilanterol (FF/UMEC/VI) Versus Multiple-Inhaler Triple Therapy (MITT) Among Medicare Advantage with Part D Beneficiaries with Chronic Obstructive Pulmonary D/M.** Bogart, S.H. Bunner, M.G. Johnson, L.G.S. Bengtson, Research Triangle Park, NC, p.A5600
- P488** **Presence of Collateral of Ventilation in Candidates for Bronchoscopic Lung Volume Reduction with Endobronchial Valves and Fissure Integrity 80%/G.J.** Criner, J. Thomas, N. Patlakh, N. Marchetti, Philadelphia, PA, p.A5601
- P489** **Final Treatment Assignment of Patients with Severe Emphysema Referred for Bronchoscopic Lung Volume Reduction/G.J.** Criner, J. Thomas, N. Patlakh, N. Marchetti, Philadelphia, PA, p.A5602
- P490** **Relationship of Increase in FEV₁ to Reduction in RV Post Bronchoscopic Lung Volume Reduction/N.** Marchetti, N. Patlakh, J. Thomas, G.J. Criner, Philadelphia, PA, p.A5603
- P491** **An Open Label, Multicentre, Observational, Real World, Postmarketing Study to Monitor the Safety and Effectiveness of Umeclidinium/Vilanterol in Korean Patients with Chronic Obstructive Pulmonary Disease/C.** Eun Yeong, J.-E. Cho, E.-B. Lee, S.S. Yoo, J.H. Chang, Seoul, Korea, Republic of, p.A5604
- P492** **The Dual Phosphodiesterase (PDE) 3 and 4 Inhibitor Ensifentrine Does Not Prolong QT Interval in Healthy Volunteers/K.** Rickard, B. Darpo, H. Xue, T. Bengtsson, T. Rheault, Raleigh, NC, p.A5605
- P493** **Effect of Bronchoscopic Lung Volume Reduction with Endobronchial Valves on Ipsilateral Non-Treated Lung Structure in Patients with Advanced Emphysema/T.** Sinha, B.H. Lashari, N. Van Der Rijst, S.U. Pettigrew, N. Marchetti, G.J. Criner, Philadelphia, PA, p.A5606
- P494** **Impact of Bronchoscopic Lung Volume Reduction with Total Lobar Occlusion on Body Mass Index/N.** Marchetti, P. Nicole, J. Thomas, G.J. Criner, Philadelphia, PA, p.A5607
- P496** **Multimarker Approach for Diagnosing Acute Heart Failure in Elderly Patients Admitted to the Emergency Department with Acute Dyspnoea/O.** Taheri, F. Mauny, P. Ray, M. Puyraveau, A.-E. Dubart, C. Chenevier-Gobeaux, M.-F. Seronde, A. Mebazaa, B. Martin, J.-B. Pretalli, T. Desmettre, Besançon, France, p.A2802
- P497** **Bronchoalveolar Lavage Fluid Cytology of Deployed Military Personnel with Chronic Respiratory Symptoms from the STAMPEDE III Study/J.** Boster, B. Barber, J. Anderson, R. Walter, M. Morris, Fort Sam Houston, TX, p.A2803
- P498** **Careful Long-Term Opioid Prescription May Safely Relieve Chronic Breathlessness/X.** Chen, T. Moran, M. Thompson, N.E. Smallwood, Melbourne, Australia, p.A2804
- P499** **Asthma Symptom Perception in Individuals with Respiratory Symptoms and Normal Spirometry/B.** Min, M.-E. Boulay, A. Cote, J.M. Fitzgerald, C. Bergeron, C. Lemiere, P. Norman, A. Day, K. Vandemheen, S.D. Aaron, L.-P. Boulet, M.D. Loughheed, Kingston, Canada, p.A2805
- P500** **Descriptive Analysis of Patients with Persistent Dyspnea Following Virologic Recovery from Acute COVID-19 Illness /B.** Bass, S. Ziatabar, Y. Leigh, M. Fenster, N. Schluger, Valhalla, NY, p.A2806
- P501** **Oxygenation Adequacy and Outcomes in Hypoxic Patients/S.S.** Patil, Dhule, India, p.A2807
- P502** **Accuracy Validation of Cough Counting AI Algorithm Using a Smartphone App in Patients with Asthma Exacerbation/S.M.** Lee, B.-K. Kim, M.-H. Kim, S.-H. Kim, C. Song, J.-W. Kwon, J.-S. Shim, S.-Y. Kang, M.-S. Yang, S.-Y. Kang, S.-P. Lee, H.-K. Park, K.M. Ahn, H.-W. Park, A. Lee, J.-H. Kim, Incheon, Korea, Republic of, p.A2808
- P503** **Refractory Chronic Cough Patients Are Indiscriminately Hyper-Responsive to Inhaled Tussive Irritants/Agents/J.** King, B. Al-Shekhly, J. Wingfield Digby, S. Sen, J. Mitchell, P.A. Marsden, J. Smith, Manchester, United Kingdom, p.A2809
- P504** **Association Between Episodic Cough and Wheeze and Health Care Utilization in Adults with Sickle Cell Disease/A.** Agawu, N. Nortey, C. Jacobs, A. Zebrowski, M. Lin, J. Glassberg, Philadelphia, PA, p.A2810
- P505** **The Sensations Provoking Cough: The ToPiC Questionnaire/L.** Kousar, N. Aden, J. King, J. Wingfield Digby, K. Holt, J. Yorke, J. Smith, Manchester, United Kingdom, p.A2811
- P506** **Cough Frequency in Chronic Obstructive Pulmonary Disease (COPD) with Frequent Sputum Production/S.M.** Alghamdi, K.E. Philip, A.S. Alsulayyim, A.M. Alasmari, S.C. Buttery, S.S. Birring, M.I. Polkey, N.S. Hopkinson, London, United Kingdom, p.A2812

CLINICAL

THEMATIC POSTER SESSION

B40 ASSESSMENT AND TREATMENT OF COUGH AND DYSPNEA

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P507 A Phase 3b Trial to Evaluate the Efficacy and Safety of Gefapixant in Adults with Recent-Onset Chronic Cough/L. Mcgarvey, M.R. Sher, A. Sadaf Afzal, C. La Rosa, D. Muccino, A. Martin Nguyen, J. Schelfhout, W.-C. Wu, P. Xu, Belfast, United Kingdom, p.A2813**
- P508 Association of Streptococcal Upper Respiratory Tract Infection with Acute Urticaria; A Prospective Case Control Study/A.B. Pant, B. Subedi, L. Lama, B.M. Meher Kayastha, Bhaktapur, Nepal, p.A2814**
- P509 Improvements in Cough Severity and Quality of Life in SOOTHE, A Phase 2b, Dose Finding Trial of BLU-5937 in Refractory Chronic Cough/S.S. Birring, J. Smith, A.H. Morice, L. Mcgarvey, M.R. Sher, A.B. Goldsobel, S. Lanouette, L. Harvey, R. Yang, M. Garin, C.M. Bonuccelli, London, United Kingdom, p.A5608**
- P510 Cough Acoustics in Covid-19 Patients/O.A. Caguana Vélez, C. Davidson, M. Lozano, M. Arita, L. Estrada, I. Ferrer, Y. Castillo, R. Jané, J.G. Gea, Barcelona, Spain, p.A5609**
- P511 Responders Analyses in Objective 24H Cough Frequency in Soothe, A Phase 2b Trial of a Selective P2x3 Antagonist in Refractory Chronic Cough/A.H. Morice, J. Smith, S.S. Birring, L. Mcgarvey, J.H. Hull, M. Blaiss, S. Lanouette, L. Harvey, R. Yang, M. Garin, C.M. Bonuccelli, Cottingham, United Kingdom, p.A5610**

- P119 Bronchiectasis Associated with Bardet-Biedl Syndrome: A Rare Entity/H. Li, M. Baqir, Rochester, MN, p.A2819**
- P120 A Rare Case of Pulmonary Sequestration in an Adult/S. Shireen Kanamgode, Z.G. Hussain, F. Ahmad, E. Silverman, Worcester, MA, p.A2820**
- P121 CFTR Modulator Therapy in an Adult Patient with Concurrent Cystic Fibrosis and Cerebral Palsy/J. Bailey, D.J. Conrad, La Jolla, CA, p.A2821**
- P122 A Rare Case of Bronchopulmonary Sequestration/N. Kika, R. Hopson, N. Patel, L. Gross, Brooklyn, NY, p.A2822**
- P123 Distal Intestinal Obstruction Syndrome in a Pregnant Woman with Cystic Fibrosis/S. Rhoads, M.F. Blundin, D. Banerjee, Aurora, CO, p.A2823**
- P124 Neurofibroma Found in the Most Unexpected Site/L.O. Gerena-Montano, V. Vando-Rivera, P.J. Baez, W. Rodriguez, E.J. Adorno, San Juan, PR, p.A2824**
- P125 Intrapulmonary Sequestration in a 21-Year Old: A Case Report/J.P. Villamizar, K. Deidrick, A. De Diego, F. Hernandez, Fort Lauderdale, FL, p.A2825**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

CLINICAL

THEMATIC POSTER SESSION

B41 CASE REPORTS IN AIRWAY DISEASE, CYSTIC FIBROSIS, AND NON-CF BRONCHIECTASIS

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area B, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P116 A Case Series of Triple-Combination CFTR Modulator Therapy Revealing Underlying Gilbert's Syndrome/A. Pham, N. Patel, J.C. Olson, R.F. Brown, D. Polineni, Kansas City, KS, p.A2816**
- P117 Chronic Bronchitis Induced by Immunosuppression from Betalacept/K. Psalms, B. Silverman, Lewistown, PA, p.A2817**
- P118 Rare Form of Congenital Cystic Bronchiectasis in a Filipino Adult/A.P. Calleja, J. Fabricante, A.A.G. Tanque, Quezon City, Philippines, p.A2818**

B42 CARDIAC AND PULMONARY CASES

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P527 Hemophagocytic Lymphohistiocytosis-Associated Stress Cardiomyopathy/J. Yabut, M. De Jesus, M. Kumar, Farmington, CT, p.A2826**
- P528 Intercostal Artery Damage Secondary to Chest Compression: A Lethal Cardiopulmonary Resuscitation Complication/T.P. Meehan, H.H. Desai, K. Pendleton, Minneapolis, MN, p.A2827**
- P529 McConnell's Sign in the Setting of Pulmonary Contusion/C.J. Van Hook, R. Shapiro, B. Warner, Longmont, CO, p.A2828**
- P530 Successful Catheter Directed Thrombolysis for Massive Pulmonary Embolism on Extracorporeal Membrane Oxygenation/M.Z. Khan Suheb, F. Naaz, R. Bhatheja, Orlando, FL, p.A2829**
- P531 Splenic Laceration After Cardiopulmonary Resuscitation: A Rare Complication/T. Cook, Y. Fahmawi, K. Hamid, P. Almalouf, Mobile, AL, p.A2830**

- P532 Acute Right Heart Failure with Cardiac Tamponade in a Patient with Mediastinal Mass/M.** Yabumoto, D. Chan, B. Yagmour, Orange, CA, p.A2831
- P533 A Case of Positional Obstructive Shock Due to Cardiac Compression from a Lung Mass/J.** Jordan, A. Can, J. Kingsley, K. Lee, S. Lipshutz, Philadelphia, PA, p.A2832
- P534 Complex Cardiopulmonary Management of Advanced Carcinoid Heart Disease with Intra-Cardiac Shunt/R.B.** Steinhauer, A. Terlow, H.W. Farber, N.F. Ruopp, Boston, MA, p.A2833
- P535 Cannon Ball Lesions: Not Always Malignancy/F.** Kan, K. Benavente, S.J. Evans, Honolulu, HI, p.A2834
- P536 Uncommon Complications of CPR-Epicardial NOT Pericardial Tamponade/S.** Lakshman, E. Stevenson, Providence, RI, p.A2835
- P537 A Case of Occult Granulation Tissue Beneath an Endotracheal Tube Causing Recurrent Airway Obstruction on the Intensive Care Unit /J.** Kent Bramer, B. Madden, London, United Kingdom, p.A2836
- P538 Double Defibrillation for Sudden Cardiac Death/M.C.** Canizares-Otero, R. Cabrera, M.A. Silberstein, D.P. High, M. Danckers, S. Kathuria, Aventura, FL, p.A2837
- P539 A Case of a Diffuse B Cell Lymphoma Inducing Cardiac Tamponade in a Young Female/R.** Yendamuri, D. Gonzalez, N. Barve, H.I. Bashir, Akron, OH, p.A2838
- P540 “Maternal Heart”- An Uncommon Case of Peripartum Cardiomyopathy Presenting with Pulmonary Embolism/A.** Nieves-Ortiz, V. Fonseca Ferrer, K. Hernandez-Moya, M. Delgado-Lopez, J.M. Garcia Puebla, T. Rucabado-Bruno, San Juan, PR, p.A2839
- P541 Cardiac Arrest After Valsalva from an Occlusive Primary Cardiac Synovial Sarcoma in the Right Atrium/D.H.** Oza, S.C. Liu, M.D. Bernens, Norfolk, VA, p.A2840
- P542 A Unique Case of ST Elevation with Hypoxemia/V.** Geedigunta, Z. Khan, M. Bachan, S. Dosala, Bronx, NY, p.A2841
- P543 Renal Cell Carcinoma Complicated by Metastatic Thrombus to the Right Ventricle/S.** Mannem, D. Vaz, Greenville, SC, p.A2842
- P544 An Unusual Thoracic Complication of a Newly Placed Pacing Wire/N.** Thareja, M. Hernandez, T. Pollema, P.A. Thistlethwaite, La Jolla, CA, p.A2843
- P545 Heartbreaking Presentation of Polycystic Ovarian Disease/N.K.** Randhawa, S. Randhawa, Olympia Fields, IL, p.A2844
- P546 A Case of Allergic Bronchopulmonary Aspergillosis with Infiltrating Eosinophilic Cardiomyopathy/N.** Randhawa, K. Creed, S. Siddiqui, V. Test, Olympia Fields, IL, p.A2845
- P547 A Case of Post-Operative Residual Curarization (PORC) After Intra-Procedural Ventricular Fibrillation Arrest/A.** Mehta, M. Abdallah, J. Thomas, Rancho Mirage, CA, p.A2846
- P548 Tension Pneumoperitoneum: A Rare Presentation of Ventilator Induced Lung Injury/T.** Cook, Y. Fahmawi, K. Hamid, P. Almalouf, Mobile, AL, p.A2847
- P549 Flash Pulmonary Edema After Status Epilepticus Reveals Takotsubo’s Cardiomyopathy: Considerations for Intensive Monitoring Post Grand Mal Seizure/L.** Sakr, A. Lavina, J.P. Mehta, Weston, FL, p.A2848
- P550 No Past Medical History - A Heavy Cost on the Healthcare System/T.** Nagar, V. Khanam, P. Giri, S. Chaudhry, A. Khan, A. Jerome, V. Patel, Rochester, MI, p.A2849
- P551 Non-Invasive Transcutaneous Carbon Dioxide Monitoring for Management of Complex Hypercapnia in a Patient Diagnosed with Chronic Lung Allograft Dysfunction Listed for Re-Lung Transplantation/S.E.** Morgan, K.R. Jendral, K.C. Russell, P. Hernandez, C.A. Serdiuk, R. Bag, R.P. Jablonski, Chicago, IL, p.A2850
- P552 Aortic Root Pseudoaneurysm: A Rare Cause of Cardiac Ischemia/H.** Faisal, A. Elkhapery, C. Iyer, S. Thabet, L.K.T. Boppana, G. Gacoch, Rochester, NY, p.A2851
- P553 Altered Mental Status and Abdominal Pain: A Rare Presentation of Acute Aortic Dissection/M.** Pignato, K. Benavidez, C. Smith, H. Craft, S. Ahmed, Albuquerque, NM, p.A2852
- P554 Atrial Esophageal Fistula: A Rare and Lethal Complication Following Catheter Ablation of Atrial Fibrillation/L.A.** Harrington, G.L. Stanley, A. Khosla, C.J. Britto-Leon, New Haven, CT, p.A2853
- P555 Mitral Valve Dehiscence: A Catastrophic Outcome/M.V.** Shah, S. Chandna, K. Patel, New Brunswick, NJ, p.A2854
- P556 A Case of an Adult Presentation of Coarctation of the Aorta/M.Z.** Siddiqui, J. Adams, A. Bhan, N. Hristakos, A.M. Bonaguro, M. Asghar, I. Siddiqui, M.G. Earing, Oak Lawn, IL, p.A2855
- P557 Successful Treatment of Refractory Status Asthmaticus with Inhaled Anesthetics/K.** Lybeck, B. Al-Abid, Grand Forks, ND, p.A2856
- P558 Rare Case of Hepatocellular Carcinoma (HCC) with an Extensive Tumor Thrombus From the Inferior Vena Cava (IVC) to the Right Cardiac Atrial Junction, Causing Supraventricular Tachycardia (SVT) in a 66-Year-Old African American Male/P.** Ababio, F. Wireko, A. Ali, N. Azinge, Washington, DC, p.A2857

- P559 Management of New Onset Atrial Fibrillation with Rapid Ventricular Response in Pregnancy/A.** De Diego, M. Tellez, Y. Moreno, S. Koseifi, Fort Lauderdale, FL, p.A2858
- P560 A Rare Case of Botulinum Induced Acute Respiratory Failure/J.** Beier, B. Chaucer, S. Harabaglia, M. Abadier, K. Aylor-Lee, M.J. Junqueira, Pueblo, CO, p.A2859
- P561 Unusual Presentation of Aortic Dissection with Right Calf Pain/V.** Khanam, M. Dickow, P. Giri, S. Kumar, Rochester, MI, p.A2860
- P562 Not All ST Elevations Are Alike/T.** Knudson-Fitzpatrick, K. Doo, Oakland, CA, p.A2861
- P563 Anabolic Androgenic Steroid-Induced Cardiomyopathy and Cardiogenic Shock/J.** Yabut, G. Lima, P. Grover, Farmington, CT, p.A2862
- P564 Discouraged Hopes for a Lung Re-Transplantation/J.** Kim, J. Yeo, K. Miyazaki, J. Yip, K. Vierkoetter, Honolulu, HI, p.A2863
- P565 From Inferior Vena Cava to Right Atrium: A Rare Case of a Unique Large Burden Thrombus in a Patient with Antiphospholipid Syndrome/J.M.** Alam, H. Ahmed, A. Tahir, A. Srinivasan, M. Bear, B.C. Wilson, A. Hasan, M. Monk, Z. Shakir, S.T. Sarva, Kingwood, TX, p.A2864
- P566 A Rare Cause of Pulmonary Edema And Acute Respiratory Failure in A Young Critically Ill Patient/S.** Shrivastava, A. Bui, G. Seda, San Diego, CA, p.A2865
- P567 Thrombis-in-Transit: Unexpected Finding Post-Cardiac Arrest/M.** Abdalla, W. Mohamed, M. Abdalla, H. Singh, M. Forson, C. Jani, D. Bajaj, Wauwatosha, WI, p.A2866
- P568 Anticoagulation Resumption in a Patient with SDH and Mechanical Aortic Valve: A Case Report/H.** Torres, A.M. Choudhry, A. Mheir, M. Faya, R. Abdelmaseih, R. Prashad, Ocala, FL, p.A2867
- P569 High Risk Pulmonary Embolism Complicated by Systemic Thrombosis Requiring Systemic Thrombolysis and Multiple Endovascular Procedures/S.** Simeone, E. Nadler, Farmington, CT, p.A2868
- P570 Cardiogenic Shock Secondary to Stress Induced Cardiomyopathy Precipitated by Severe Diabetic Ketoacidosis/R.A.** Gurreri, P. Poommipanit, M. Yamamuro, A. Alghamdi, Parma, OH, p.A2869
- P571 Undifferentiated Shock: A Case of Idiopathic Capillary Leak Syndrome/S.** Sutchu, A. Ataya, J. Kaur, Gainesville, FL, p.A2870
- P572 IV Epinephrine Induced Coronary Vasospasm/I.** Kirti, T. Singh, A.S. Bath, S. Alsafwah, Kalamazoo, MI, p.A2871
- P573 Point of Care Ultrasound in a Rapidly Deteriorating Post-Operative Patient/V.** Hoytfox, J. Kilcup, Spokane, WA, p.A2872
- P574 Can Sex Kill?: Sexual Intercourse and Aortic Dissection/E.-H.** Hassanin, S. Iskander, Tyler, TX, p.A2873
- P575 Spontaneous Rupture of Inferior Vena Cava/H.** Boricha, M. Nawal, J.H. Yoon, M. Fitzpatrick, T. Bartholow, Pittsburgh, PA, p.A2874
- P576 Tamponade Physiology Unmasked by Intubation/J.** Nuschke, Hershey, PA, p.A2875
- P577 The Stress of a Broken Heart: Cardiac Arrest After Ambulatory Inguinal Hernia Repair/J.** Michalik, M. Michael, D. Cucu, Bridgeport, CT, p.A2876
- P578 Lets FOCUS on the POCUS: Rapid Assessment of Acute Clinical Respiratory Decompensation with the Use of POCUS/A.** Omar, M. Rahim, H. Elmariah, S. Lim, New York, NY, p.A2877
- P579 Pneumomediastinum: An Uncommon Complication of Tracheostomy/S.** Khanal, M.Z. Khansuheb, O. Okorie, Orlando, FL, p.A2878
- P580 Anticoagulation Management in a Patient with ICH and Mechanical Mitral Valve: A Case Report/A.M.** Choudhry, A. Mheir, H. Torres, R. Abdelmaseih, R. Prashad, Ocala, FL, p.A2879

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B43 ICU MANAGEMENT

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P582 A Simple Critical Care Provider Education Program Reduces Blood Product Use/I.A. Martinez Avalos, S.P. Malkoski, M.J. Descoteaux, Spokane, WA, p.A2880

P583 Implementation of a Multimodal Medical Student MICU Curriculum/W.E. Thinnes, C. Chiang, A.P. Trivedi, Chicago, IL, p.A2881

P584 Use of a Cardiopulmonary Resuscitation (CPR) Video as an Intervention Tool to Assist ICU Trainees-Patient Code Status Discussions/N. Punal, T.T. Pham, J. Mbae, I.A. Acosta Sanchez, S. Kashyap, M. Colamonici, G. Marrero-Rivera, S. Kalra, M. Panlilio, D. Heyland, T.M. Ferrer Marrero, Chicago, IL, p.A2882

P585 An Asynchronous Approach: Teaching Internal Medicine Residents Ultrasound Guided Peripheral Intravenous Access/R. Pace, M. Gorgone, J. Chiarchiaro, Pittsburgh, PA, p.A2883

- P586** **The Educational Effect of a Supplemental Online Education as Compared to a Standard Lecture-Based Curriculum Alone on Resident Performance in the MICU/G.** Schroeder, E. Arnold, M.C. McGregor, St. Louis, MO, p.A2884
- P587** **The Association of Critical Care Training Pathways with Barriers to Employment in a Desired Setting/G.J.** Eisinger, P. Sylvester, D. Duggineni, D. Way, J.W. Mccallister, M.C. Exline, Columbus, OH, p.A2885
- P588** **Baseline Assessment of Point of Care Ultrasound Comfort in Pulmonary/Critical Care Fellows/M.** Gorgone, J.W. Kreit, P.E. Lamberty, S. Maximous, Pittsburgh, PA, p.A2886
- P589** **Gaps in Documented Assessments at the Time of Intensive Care Unit Admission/A.** Montgomery, Y. Dong, A.S. Niven, O. Gajic, Rochester, MN, p.A2887
- P590** **A Fast Return to the Intensive Care Unit: Readmissions Within 24 Hours at an Academic Tertiary Care Hospital/D.** Yee, B. Osler, E. Daingerfield, D. Gookin, D. Jang, Q.-L. Dao, J.M. Aliotta, Providence, RI, p.A2888
- P591** **Common Methods of Identifying Hypercapnic Respiratory Failure Produce Meaningfully Different Cohorts/B.W.** Locke, K.M. Sundar, J.P. Brown, R. Gouripeddi, Salt Lake City, UT, p.A2889
- P592** **Does Cuff Design Change Insertion Force of Tracheostomy Tubes?/U.** Borg, Boulder, CO, p.A2890
- P593** **Development of an Integration Index for Withdrawal from Mechanical Ventilation/F.A.** Varon, L. Giraldo-Cadavid, A. Uribe, A. Rincon, L. Cucunubo, L. Ordoñez, M. Poveda, S. Crevoiser, J. Palacios, N. Boada, J. Rincon, P. Monedero, Bogota, Colombia, p.A2891
- P594** **Limitations of High Flow Nasal Cannula at End of Life/J.K.** Graham, M. Quillin-Mcewan, K. Wood, C. Kelley, Chula Vista, CA, p.A2892
- P595** **Relationship Between Angiotensin- Converting Enzyme Inhibitor/Angiotensin Receptor Blocker Prescription and Delirium in Critically Ill Patients/C.A.** Welch, M. Mulkey, A.J. Perkins, S. Gao, S.H. Khan, S. Wang, N. Campbell, B.A. Khan, Indianapolis, IN, p.A5611
- P596** **Barbiturates Versus Benzodiazepine for the Treatment of Severe Alcohol Withdrawal Syndrome: A Systematic Review and Meta-Analysis of Clinical Trials/B.** Asllanaj, E. Chang, H. Maha, Y. McWhorter, Las Vegas, NV, p.A5612
- P597** **Long Term Outcomes of Patients with Hematologic Malignancies and Critical Illness: A National Prospective Cohort Study/L.** Munshi, B. Rochweg, M.E. Detsky, F. Shoukat, S. Mehta, Toronto, Canada, p.A5613
- P598** **Early Removal of Central Lines and Foley Catheters Utilizing a Time of Transfer Antimicrobial Plan When Transferring Out of the ICU/B.** Temte, M. Block, S. Itzhakov, A. Paluso, B. Footer, D.L. Hotchkin, N. Stucky, B. Kendall, Portland, OR, p.A5614
- P599** **Machine Learning Driven Prediction of Hypotension Using Real World Multigranular Data/J.H.** Yoon, S. Malakouti, M. Hauskrecht, M.R. Pinsky, G. Clermont, Pittsburgh, PA, p.A5615

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
B44 GENERAL CRITICAL CARE
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area G, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P601** **Case-Control Investigation of Critically Ill Patients with Newly Diagnosed Diabetes: Clinical Characteristics, Glucose Metrics and Outcomes/Y.** Wang, J. Bahgat, J.S. Krinsley, Stamford, CT, p.A2893
- P602** **The Role of Serum Bilirubin to Albumin Ratio as a Prognostic Index in Critically Ill Children/Y.M.** Kang, G.E. Kim, M.R. Park, J.H. Jung, S.Y. Kim, M.J. Kim, Y.H. Kim, K.W. Kim, M.H. Sohn, Seoul, Korea, Republic of, p.A2894
- P603** **Intensive Care Unit Delirium: Knowledge and Assessment Practices Among Physician Trainees and Intensive Care Unit Nurses in Howard University Hospital/F.W.** Wireko, A.O. Laiyemo, A. Mehari, Washington, DC, p.A2895
- P604** **A Novel Communication Approach to Provide Written Updates to Surrogates of Patients at Long Term Acute Care Hospitals (LTACHs)/N.** Schwartz, D.N. Teed, C.M. Glover, S. Basapur, C. Blodgett, C. Giesing, G. Lawm, G. Podzimek, R. Reeter, L. Schorfheide, S. Swiderski, J.A. Greenberg, Chicago, IL, p.A2896
- P605** **A Comparison of Extravasation Events Related to the Administration of Vasoactive Medications via a Peripheral Intravenous Line Prior to and Following Implementation of an Institutional Protocol/A.** Fabick, J. Hawn, E. Weeda, A.J. Goodwin, C. Magee Bell, Charleston, SC, p.A2897

- P606 Introduction of a Blood Transfusion Guideline for Extracorporeal Membrane Oxygenation Patients - A Pilot Study/M. Portz, A. Phillips, V. Rusanov, S.C. Bellot, E.J. Orozco-Hernandez, S.K. McElwee, T. Lewis, T. Marshall, M.S. Blood, E. Gongora, K.M. Wille, Birmingham, AL, p.A2898**
- P607 Comparison of Propofol Related Injection Pain After Lignocaine versus Ondansetron Pretreatment/B. Subedi, A.B. Pant, Kavre, Nepal, p.A2899**
- P608 Phenotypes of Intensive Care Unit Admission of Critically Ill Sickle Cell Patients in Brazil: An Unsupervised Machine-Learning Approach/E. Padrao, B. Bustos, A. Mahesh, G. Fonseca, L.U. Taniguchi, Farmington, CT, p.A2900**
- P609 Retrospective Study of Midodrine as a Method of Decreasing Length of Vasopressor Support in the ICU/N. Gowda, N. Patel, S. Swamy, S. Vellanki, M. Notis, C. Shincovich, C. Paul, K. Hawkins, Washington, DC, p.A2901**
- P610 Epidemiology and Outcomes of Malnutrition in Critically Ill Patients with Multiple Sclerosis/A. Anwar, J. Garza, V.K. Babu, S. Mahmood, T. Dang, N. Panchagnula, C.F. Matute Martinez, M.K. Sidhu, P. Rojas, A. Garcia Fernandez, L. Oud, Odessa, TX, p.A2902**
- P611 Methamphetamine and Procalcitonin: An Unrecognized Confounder?/B. Kennis, A. Ali, D.A. Sweeney, D. Lasoff, G. Wardi, San Diego, CA, p.A2903**
- P612 Characteristics of Acute Respiratory Failure in Patients with Type 1 Hepatorenal Syndrome (HRS-1) Treated with Terlipressin and Albumin in an Adult General ICU in the UK/J.H. Cranshaw, P.L. Wilkins, Bournemouth, United Kingdom, p.A2904**
- P613 Performance of Lactate to Albumin Ratio as a Predictor of In-Hospital Mortality as Compared to Lactate Alone in Critically-Ill Patients with Septic Shock: A Retrospective Cohort Study in a Large US Hospital System/E. Bengé, B. Aslanaj, G. Dhillion, U. Hewapathirana, F. Rahman, C. Valdez, P. Shah, Las Vegas, NV, p.A2905**
- P614 Comorbidity and Mortality of Pasteurella Disease in a Safety Net Hospital/F. Khalid, R. Tonelli, I. Kourouni, Cleveland, OH, p.A2906**
- P615 Empiric Antibiotics in Diabetic Ketoacidosis Patients Who Present with Bacteremia Do Not Improve Clinical Outcomes/S. Perinkulam Sathyanarayanan, V. Gorgiev, H. Chaudhry, T. Oliver, H.M. Abdullah, Sioux Falls, SD, p.A2907**
- P616 Propofol Infusions, Triglyceride Monitoring, and the Risk of Pancreatitis/C. Kearney, J.M. Rucci, N.A. Bosch, A.J. Walkey, Boston, MA, p.A2908**
- P617 Lactate Levels Require Context/L. Ramadan, J. Kaidbey, J. Bakker, Baltimore, MD, p.A2909**
- P618 Photolytic Measurement of Tissue S-Nitrosothiols In Vivo/N. Marozkina, N. Neidigh, D. Cater, A.R. Alexander, P.V. Emmerik, A. Higgs, L. Plack, C. Clem, B. Gaston, Indianapolis, IN, p.A2910**
- P619 Tracheal Intubation and Mechanical Ventilation for Critically Ill Patients with Salicylate Poisoning: A Case Series/B.A. McDonald, M. Conlon, A. Ulici, J. Cole, T. Olives, R.R. Kempainen, M.E. Prekker, Minneapolis, MN, p.A2911**
- P620 Assessing the Appropriateness of Blood Cultures in the Intensive Care Unit/A. Siev, E. Levy, I. Gendlina, R. Bernardo, J.-T. Chen, M.N. Gong, A. Moskowitz, Bronx, NY, p.A2912**
- P621 Serial Body Composition Analysis for Risk Stratification in Patients with Severe Pneumonia/W.-F. Fang, K.-Y. Hung, Y.-H. Tsai, Y.-C. Chang, M.-Y. Tsai, K.-T. Huang, C.-C. Tseng, H. Yeh, Y.-T. Chang, Y.-H. Wang, M.-C. Lin, Kaohsiung, Taiwan, p.A2913**
- P622 Does Early Initiation of Targeted Temperature Management in Out-Of-Hospital Cardiac Arrests Improve Survival? A Post Hoc Analysis/A. Aijaz, M. Riasat, L. Miyakawa, Y.I. Lee, Washington, DC, p.A2914**
- P623 Nurse-Led Protocol for Early Initiation of Enteral Feeding/M. Quillin, J. Olivar, J.K. Graham, C. Kelley, San Diego, CA, p.A2915**
- P624 Effect of Constipation on Mechanically Ventilated Patients: A Retrospective Cohort Study/R. Curtis, H. Ali, M. Sahebazamani, Greenville, NC, p.A5616**
- P625 Should Lactate Be Included in Assessing Risk for Acute Pulmonary Embolism - A Single Center Retrospective Analysis/B. Korb, A. Tang, A. DeLuna, U. Barvalia, San Jose, CA, p.A5617**
- P626 Inability to Stand at Intensive Care Unit Discharge Is Associated with Readmission: A Historical Cohort Study/M. Brosseau, J. Shahin, E. Fan, A. Amaral, H.T. Wang, Montreal, Canada, p.A5618**
- P627 Discharge CBC Parameters Are Associated with 90-Day Mortality and Rehospitalization in Sepsis Survivors/S.J. Denstaedt, J. Cano, X.Q. Wang, J.P. Donnelly, S. Seelye, H.C. Prescott, Ann Arbor, MI, p.A5619**
- P628 Sulbactam-Durlobactam Treatment Is Associated with Lower Mortality from Index Acinetobacter Infections in the Attack Phase 3 Registrational Trial/D. Altarac, A.B. Shapiro, K. Rana, D. Lewis, Waltham, MA, p.A5620**

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THEMATIC POSTER SESSION

B45 PREDICTING COVID SEVERITY AND OUTCOMES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P807 D-Dimers and Severity of Lung Disease in Critically Ill COVID-19 Patients/Y. Heniche, M. Bellemare, A. Noel, M. Albert, K. Serri, F. Bernard, D. Williamson, Y.A. Cavayas, Sherbrooke, Canada, p.A2916**
- P808 Mathematical Modeling to Understand Heterogenous Pathophysiology and Clinical Course in COVID-19 ARDS/C.C. Hardin, S. Subudhi, C. Voutouri, M. Nikmaneshi, A. Patel, A. Verma, M. Khandekar, S. Dutta, T. Stylianopoulos, R. Jain, L. Munn, Boston, MA, p.A2917**
- P809 Development and Implementation of an Extracorporeal Membrane Oxygenation (ECMO) Program During the COVID-19 Pandemic: A Single-Center Experience/M.M. Farooqi, F. Amin, J. Owen, C. Ainsworth, E. Belley-Cote, S. Sharma, J.E. Centofanti, A. Menkis, P. Power, M. Plaunt, D. Bedini, P. Hunter, A. Dooley, P. Engels, A. Lamy, Hamilton, Canada, p.A2918**
- P810 Impact of Visceral Fat on the Prognosis of Coronavirus Disease 2019/H. Ogata, M. Mori, Y. Jingushi, H. Matsuzaki, K. Katahira, A. Ishimatsu, A. Enokizu-Ogawa, K. Taguchi, A. Moriwaki, M. Yoshida, Fukuoka, Japan, p.A2919**
- P811 Creation and Evaluation of a Mixed Service Intermediate Care Unit with Obligate Critical Care Consultation to Improve ICU Capacity/E.A. Kistler, J. Yang, P. West, K. Baker, J. Barsamian, J.A. Fitzgerald, S. Hickox, E. Leahy, S. Rollins, M.N. Cocchi, M.M. Hayes, Boston, MA, p.A2920**
- P812 Use of Volatile Anesthetics for Sedation in the ICU After the COVID-19 Pandemic: A National Survey in France/M. Jabaudon, A. Balde, T. Godet, D. Morand, J.-M. Constantin, C. Lambert, R. Blondonnet, Clermont-Ferrand, France, p.A2921**
- P813 Inhaled Epoprostenol Effects on SpO₂/FiO₂ Ratios and Survival in COVID-19 and Non-COVID-19 Acute Respiratory Distress Syndrome/S. Hon, C. HonShideler, R. Simmons-Beck, M. Moll, H.W. Farber, C.L. Campbell Reardon, E.D. Abston, Boston, MA, p.A2922**
- P814 The Age-Neutrophil to Lymphocyte Ratio-C Reactive Protein (ARC) Score: Predicting Mortality in Patients with COVID-19 Infection Receiving Dexamethasone Therapy/C.-H. Lu, B. Sines, K. Jakharia, L. Appleton, J.R. Mock, M.B. Drummond, Chapel Hill, NC, p.A2923**
- P815 ICU Strain Is Associated with ICU Outcome in COVID-19 Patients - a Multicenter Retrospective Observational Study Comparing the First and Second Wave of the Pandemic/A. Demoule, M. Fartoukh, G. Louis, E. Azoulay, S. Nemlaghi, E. Jullien, C. Desnos, S. Clerc, E. Yvin, N. Mellati, C. Charron, G. Voiriot, Y. Picard, A. Vieillard-Baron, M. Darmon, Paris, France, p.A2924**
- P816 Predictive Values of Quantitative CT Lung (QCT) COVID Scores in Rapid Progression and Associations with Other COVID-Related Clinical and Laboratory Markers/G.H.J. Kim, D.H. Kang, S.-I. Lee, M. Brown, F. Abtin, M. McNitt-Gray, J.S. Lee, J.G. Goldin, Los Angeles, CA, p.A2925**
- P817 "Long-COVID": Pulmonary Function and Post-Intensive Care Syndrome in Survivors of Severe COVID-19/A. Leiser, C.A. Welch, P.A. Conrad, S.A. Seyffert, S.H. Khan, B.A. Khan, Indianapolis, IN, p.A2926**
- P818 Circulating, Cell-Free Mitochondrial DNA Marks Disease Severity in COVID-19/A.J. Leonard, M. Rolfsen, J. Ix, M.F. Odish, N. Coufal, M. Lam, R.G. Spragg, M. Alotaibi, M. Hepokoski, La Jolla, CA, p.A2927**
- P819 COVID-19 Waves: A Comparison of the First and Second Surges at Northwestern Memorial Hospital/C. Gao, A. Pawlowski, P. Nannapaneni, M. Kang, M.J. Cuttica, S.B. Smith, G.S. Budinger, B.D. Singer, R.G. Wunderink, Chicago, IL, p.A2928**
- P820 Longitudinal Changes in Characteristics and Outcomes of Patients Admitted with COVID-19 in a Multi-Hospital Health System/W. Ali, I. Barbash, F.A. Shah, K.L. Quinn, O.C. Marroquin, M.T. Gladwin, R. Sackrowitz, A. Morris, McKeesport, PA, p.A2929**
- P821 A Study of COVID-19 Pneumonia Diagnosis, Severity, Prognosis and Recovery Assessment with Bedside Thoracic Ultrasound During the First Wave of COVID (SARS-CoV-2) Pandemic in a District General Hospital, Northern Ireland, UK/S. Morgan, M. Harkin, N. McNaughton, M. McDowell, I.N. Masih, Belfast, United Kingdom, p.A2930**
- P822 Performance of RESP Score to Predict Survival in Patients with COVID-19 ARDS managed with VV-ECMO/E.H. Pratt, C. Rackley, Durham, NC, p.A2931**
- P823 Differential Impact of Static Lung Compliance on Need for Reintubation in Mechanically Ventilated COVID-19 Positive and Negative Patients/L.A. Abplanalp, F. Ionescu, O.R. Gomez Rojas, E. Castillo, G.B. Nair, Royal Oak, MI, p.A2932**

- P824 Comparison of Clinical Factors and Outcomes of Extracorporeal Membrane Oxygenation During the First and Second Wave of Coronavirus Disease 2019/D.** Greenberg, H. Yaqoob, T. Henson, D. Peneyra, L. Huang, A. Pitaktong, O. Epelbaum, D. Chandy, Valhalla, NY, p.A2933
- P825 Inhaled Nitric Oxide (iNO) for Critically Ill Covid-19 Patients/M.** Bellemare, Y. Heniche, A. Noel, M. Albert, K. Serri, F. Bernard, D. Williamson, F.-M. Carrier, Y.A. Cavayas, Montreal, Canada, p.A2934
- P826 Post-COVID Recovery: Outcomes of Chronically Critically Ill Patients Admitted to a Regional Weaning Center/M.S.** Hassenpflug, D.R. Nelson, J. Steckart, Los Angeles, CA, p.A2935
- P827 mSOFA Scores Associated with the Development of Pneumothorax, Pneumomediastinum and Subcutaneous Emphysema in Critically Ill Covid-19 Patient/H.** Abdulla, M.D. Hashmi, A.V. Sharma, N. Nasiri, D. Alaouie, A.M. Shadid, I.O. Murskyj, A. Abu Sayf, B.A. Kelly, D.R. Ouellette, Detroit, MI, p.A5621
- P828 Prolonged Use of HFNC in Young Patients Increases Mortality in Covid+ Mechanically Ventilated Patients/K.** Barker, T. Ganoë, L. Clevenger, C. Visco, J.M. Gibson, R. karimi, N.N. Naderi, B. Lam, M. Stepanova, L. Henry, A. Kasarabada, Falls Church, VA, p.A5622
- P633 Persistent Left Superior Vena Cava in an Adult Diagnosed Incidentally After Left Internal Jugular Central Venous Catheter Placement/V.** Ahluwalia, H.A.H. Albitar, V.N. Iyer, S.M. Caples, Rochester, MN, p.A2939
- P634 Air Rises: A Unique Case of Pneumocephalus Secondary to Intrapleural Fibrinolytic Therapy/S.** Patel, T.J. Ellis, R.H. Dougherty, San Francisco, CA, p.A2940
- P635 A Rare Cause of Acute Extrinsic Airway Obstruction: Isolated Atraumatic Innominate Artery Rupture/L.E.** Leys, Y.I. Lee, B. Kim, New York, NY, p.A2941
- P636 Central Venous Catheter Misplacement into Left Internal Mammary Vein: A Case Report/A.** Kohli, M. Hayrabadian, O. Abdulfattah, Springfield, IL, p.A2942
- P637 Contralateral Hemothorax Caused by Extracranial Vertebral Artery Aneurysm Rupture in a Patient with Neurofibromatosis Type 1/M.I.** Abdalla, N.T. Hodgeman, B.E. Stephens, J.A. Melo, San Antonio, TX, p.A2943
- P638 Where's My Line?/L.** Sesemann, X. Fonseca Fuentes, J. Quinn, Oak Lawn, IL, p.A2944
- P639 The Weary Road and Risks It Carries; Perforation of the Superior Vena Cava After Right Internal Jugular Vein Catheterization/H.M.S.** Qurashi, T. Saleem, B. Ravichander, L. Sangha, R. Pathak, Q. Uddin, Harrisburg, PA, p.A2945
- P640 A Rare Case of Leriche Syndrome in a Patient with Colon Cancer: Case Report and Literature Review/A.** Refai, M. Goel, D. Taheri Abkouh, H. Tahanulqiwa, M. Fityan, Rochester, MI, p.A2946
- P641 Vasodilatory Shock Due to an Elevated Spinal Block in a Parturient/L.** Phan, P. Kuan, D. Giannaris, M. Gujral, N. Cemalovic, New York, NY, p.A2947
- P642 Could Invasive Pressure Monitoring Serve as an Alternative to Doppler Interrogation of Femoral Vein Pulsatility?/H.A.** Matos Casano, N. Rasool, K. Singh, Bowling Green, KY, p.A2948
- P643 Carotid-Jugular Fistula with Steal Syndrome Causing Acute Encephalopathy/S.** Hanna, I. Milojevic, H. Patel, Washington, DC, p.A2949
- P644 Pulmonary Torsion Following Lobectomy for Bronchopulmonary Sequestration: A Rare Complication That Should Not Be Missed/A.** Bommakanti, A. Haidar, B. Akkanti, R. Hussain, I. Salas de Armas, M. Patel, I. Gregoric, Houston, TX, p.A2950

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
B46 VASCULAR, PROCEDURAL, AND POST PROCEDURAL COMPLICATIONS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area G, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P630 Discovery of Collateral Venous Drainage During Central Venous Catheterization in a Patient with Stenotic Left Brachiocephalic Vein/H.** Irfan, M. Hassan, P.K. Sinha, Southfield, MI, p.A2936
- P631 Catheter-Directed Thrombolysis: Treatment of Acute Portal Vein Thrombosis/L.G.** Muzangwa, K. Lien, V. Rana, M. Groth, A. Iftikhar, Port Jefferson, NY, p.A2937
- P632 A Case of Atraumatic Spontaneous Subcapsular Renal Hematoma Treated via Arterial Embolization/K.** Nanigrani, A. Azhar, J. Chung, I. Zahedi, A. Kumari, J.P. Zeibeq, J. Orsini, Brooklyn, NY, p.A2938

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B47 COVID MANAGEMENT AND OUTCOMES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P830 Impact of the Pandemic: Screening for Social Determinants of Health in the ICU Setting/D. Ge, J.S. Watson, T. Andrews, A. Regunathan, D. Nesbitt, S. Hussain, Piscataway, NJ, p.A2951**
- P831 In-Hospital Delirium Is Associated with Increased Mortality Risk in Patients with Admitted with COVID-19 and a History of Alcohol Misuse/S.E. Jolley, M. Wilson, K. Hills-Evans, K. Erlandson, E.L. Burnham, Aurora, CO, p.A2952**
- P832 Scanning the Medical Phenome to Identify New Medical Diagnoses After Recovery from COVID-19 in a US Cohort/V.E. Kerchberger, L.B. Ware, J.A. Bastarache, J.F. Peterson, W.-Q. Wei, Nashville, TN, p.A2953**
- P833 Association of Hypercapnia with Reduced Ventilator-Free Days and Increased Mortality in Mechanically Ventilated Patients with SARS-CoV-2 Pneumonia/P.H.S. Sporn, A. Mahmoud, M. Kang, A. Pawlowski, S.M. Casalino-Matsuda, R. Kalhan, B.D. Singer, G.S.R.S. Budinger, R.G. Wunderink, Chicago, IL, p.A2954**
- P834 Intensity of Anticoagulant Dosing in Hospitalized Patients with COVID-19/M.K. Gould, S. Xu, A. Chen, J. Greene, B. Creekmur, K. Bruxvoort, G. Escobar, J. Adams, A. Langer-Gould, V. Liu, L.C. Myers, Pasadena, CA, p.A2955**
- P835 Higher Frequency of Comorbidities in Fully Vaccinated Patients Admitted to ICU Due to Severe COVID-19/A. Motos, A. Lopez-Gavin, J. Riera, A. Ceccato, L. Fernandez-Barat, A. Torres, Barcelona, Spain, p.A2956**
- P836 Comparisons of TEG Versus Standard Heparin Monitoring Assays in Covid Positive VV ECMO/R.K. Stradleigh, D. Emerson, J. Yaung, P. Catarino, A. Chan, D. Dragomer, O. Friedman, E.A. Granflor, K. Infantado, D. Megna, M. Nurok, O. Volod, Los Angeles, CA, p.A2957**
- P837 The Impact of Malnutrition on Mortality and Clinical Outcomes in Patients Hospitalized with COVID-19/J. Ponce, M. Timmerman, M. Jackson, A. Anzalone, K.L. Bailey, H. Sayles, C. Hanson, Omaha, NE, p.A2958**
- P838 Clinical Features and Mortality of COVID-19-Associated Mucormycosis: A Systematic Review and Meta-Analysis/A. Watanabe, M. So, M. Iwagami, H. Mitaka, H. Takagi, T. Kuno, Tsukuba-shi, Ibaraki, Japan, p.A2959**
- P839 Environmental and Social Determinants of Fever in COVID-19/S. Bhavani, N. Edathara, P.G. Lyons, Y. Luo, Z. Wiley, C. Mao, A. Bewley, C. Robichaux, P.A. Verhoef, C. Coopersmith, Atlanta, GA, p.A2960**
- P840 Pre-Covid Accessibility of Critical Care Intensivists to the Medicare Population 2012-2019: A State-by-State Analysis/M.Z. Arif, D. Afzal, S. Fatima, A. Khurana, Phoenix, AZ, p.A2961**
- P841 Impact of Placenta-Derived Mesenchymal Stem Cells on Patients with Severe Lung Injury Caused by COVID-19 Pneumonia: Clinical, Serum Cytokine and Immune Aspect/M.C. Chen, K.S.-L. Lai, K.-L. Chien, S.-T. Teng, Y.-J. Lin, W. Chao, M.-J. Lee, P.-L. Wei, Y.-H. Huang, H.-P. Kuo, C.-M. Weng, C.-L. Chou, Taipei, Taiwan, p.A2962**
- P842 "Role of Radiological Phenotypes" in Diagnosis, Treatment and Assessment of Covid-19 Pneumonia: Multicentric Study of 6000 Cases in Tertiary Care Setting in India/S.V. Patil, R. Patil, G. Gondhali, Latur, India, p.A2963**
- P843 Pre-Hospital Aspirin Use and Patient Outcomes in Covid-19: Results from the International Viral Infection and Respiratory Illness Universal Study (Virus)/A. Lal, J.P. Domecq Garces, A. Tekin, V. Bansal, A. Khanna, M. Warner, R. Kashyap, O. Gajic, Rochester, MN, p.A2964**
- P844 Is Gamma (P.1) Variant Associated with a Higher Severity in ICU Patients with SARS-CoV-2 Infection/M. Vera, J. Angulo, R. Medina, M. Ferres, A. Bruhn, R. Castro, C. Pardo-Roa, Santiago, Chile, p.A2965**
- P845 Incidence and Clinical Outcomes of Patients with SARS-CoV-2 Complicated by Pneumothorax and Pneumomediastinum/A. Azeem, M. Carrig, D.N. Butt, B.J. Krajicek, C. Destache, M. Velagapudi, Omaha, NE, p.A2966**
- P846 Impact of Comorbid Conditions on Mortality in COVID-19 Related Critical Illness: a Retrospective, Single Center, Observational Study/A. Liaquat, Q. Gulzar, M. Mason, P. Patak, D. Dahale, S. Tosto, D. Pau, R. Swamiappan, Dothan, AL, p.A2967**
- P847 Is RDW and Pro-BNP Useful Predictor in COVID-19 Pandemic?/V. Rana, A. Kewalramani, M. Cheema, A. Iftikhar, Port Jefferson, NY, p.A2968**
- P848 Early Administration of Remdesivir and Dexamethasone Is Associated with Good Outcomes for Patients with Covid-19/A.S. Sadigov, Baku, Azerbaijan, p.A2969**

- P849** **Characterization of Pediatric ICU Admissions from COVID-19 in a Large Metropolitan Children's Hospital/J.C. Schroeder, M.P. Sharron, K. Wai, D.K. Pillai, D. Rastogi, Washington, DC, p.A2970**
- P850** **Clinical Attributes and Risk Factors for Mechanical Ventilation and In-Hospital Mortality Among Hispanic Patients with Covid-19 in a Community Hospital Setting: A Propensity Matched Analysis/L. Duka, M. Parvez, K. Seetharam, P. Tafreshi, K. Kumar, J. Elumeze, K. Vargas, P. Bhat, N. Sajid, E. Toribio, P. Patel, L. Santana, F. Basilides, P. Gargiulo, J. Pham, V. Pennisi, L. Santiago, U. Manveer, M. Orris, P. Chawla, A. Tejpal, D. Asti, P. Hejmadi, G. Punukollu, T. Mir, J. Shah, T. Del Rio, L. Irrizzary, Brooklyn, NY, p.A2971**
- P851** **The Association Between Common Comorbidities, Antimicrobial Consumption, and Mortality in Critically Ill COVID-19 Patients A Retrospective Observational Study of the Eastern Health Cluster of Saudi Arabia/N. Alqadheeb, S. Albadrani, M. Alomar, H. AlMubayedh, A. Salam, A. AlAswad, M. Almualim, Z. AL Qamariat,, R. Alhubail, Dammam, Saudi Arabia, p.A2972**
- P852** **Examining the Unintended Consequences of Steroid Use in Severe COVID-19 Disease: A Retrospective Observational Analysis/E. Wittrock, S. Raia, A. Khatiwada, M. Strand, G.C. Lockhart, Denver, CO, p.A2973**
- P853** **An Alabama Cohort of Early 2020 Critically Ill Covid Patients Managed with Supportive Care and Their 90-Day Outcomes/J.W. Chiles, C.M. Colon, J.G. Barrios, W.R. Maddox, M.-L.N. McDonald, Y.-I. Kim, D.W. Russell, S. Gandotra, Birmingham, AL, p.A2974**
- P854** **Retrospective Study of Cohort of COVID-19 ICU Patients Requiring Prolonged Ventilation: Was It Their Lungs or Something Else?/M. Joshi, A.R. Moore, A. Pacheco-Navarro, J. Roque, C. O'Donnell, S. Pienkos, W. Collins, A. Jonas, A. Rogers, Palo Alto, CA, p.A2975**
- P855** **Clinical Significance of Barotrauma Secondary to Invasive Mechanical Ventilation in Covid-19 Patients/T. Kabuto, R. Seo, C. Miyakoshi, R. Hirabayashi, K. Tomii, Y. Shimizu, Y. Shima, D. Yamashita, S. Hara, M. Takayama, K. Tetsumoto, M. Saito, H. Hamakawa, Y. Takahashi, Kobe, Japan, p.A5623**
- P856** **Inflammatory and Endothelial Plasma Biomarkers in Patients with Acute Respiratory Distress Syndrome Due to Covid-19 Treated with Systemic Steroids/G.A. Alba, J. Alladina, F. Giacona, E. Abe, K. Brait, B.D. Medoff, B. Maron, B.T. Thompson, Boston, MA, p.A5624**
- P857** **Association Between Availability of ECMO and Mortality in COVID-19 Patients Eligible for ECMO: A Natural Experiment/W. Gannon, J.W. Stokes, S.A. Francois, Y.J. Patel, M.E. Pugh, C. Benson, T.W. Rice, M. Bacchetta, M.W. Semler, J.D. Casey, Nashville, TN, p.A5625**

- P858** **Novel EHR-Derived SARS-CoV-2 Pneumonia Subphenotypes Show Divergent Clinical Outcomes with Differential Responses to Corticosteroids/P.G. Lyons, A.F. Bewley, C.S. Calfee, P. Sinha, St. Louis, MO, p.A5626**
- P859** **The Utility of Estimating the Shunt Fraction of Critical Patints with Covid-19 in Determining the Outcome of High Flow Nasal Cannula at Lung Center of the Philippines: A Pilot Study/S.G. Ganangan, M.C. Gabitan, D.C. Teo, N.D.R. Nacpil, Quezon City, Philippines, p.A5627**

CLINICAL

THEMATIC POSTER SESSION

B48 OCCUPATIONAL AND EXPOSURE-RELATED CASE REPORTS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area B, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators..

- P127** **A Case of Vaping Associated Pneumomediastinum/M.Z. Siddiqui, N. Hristakos, L. Sesemann, A. Shah, Oak Lawn, IL, p.A2976**
- P128** **An Elusive Case of E-Cigarette, or Vaping, Product Use Associated Lung Injury (EVALI) Lacking Respiratory Symptoms/H. Shanmugavel Geetha, S. Shah, D.H. Markowitz, Worcester, MA, p.A2977**
- P129** **A Case of Occupational Exposure to Air Cooling Unit Cleaner Chemicals and Organic Material Resulting in Hypersensitivity Pneumonitis in an Immunocompromised Host/T. Czech, Honolulu, HI, p.A2978**
- P130** **Crack Lung: A Clinical Diagnosis/B. Ohiokpehai, V. Poddar, A. Mehari, Washington, DC, p.A2979**
- P131** **A Case of the Forgotten Crack Pipe/E.L. Amaechi, M. Gujral, Bronx, NY, p.A2980**
- P132** **A Case of Probable Hypersensitivity Pneumonitis on a Fish Worker/G.J. Hernandez Romero, C. Rosenzvit, S.D. Spivack, New York, NY, p.A2981**
- P133** **I'm so Not Fancy: A Case of Hypersensitivity Pneumonitis in Pigeon Fancier's Lung/A.L. Haag, C. Ledgerwood, M. Young, J. Esposito, Pittsburgh, PA, p.A2982**
- P134** **New Onset Asthma in a Nuclear Submariner Following Prolonged Exposure to Poor Air Quality/R. Kraus, C.S. Rose, R.T. Meehan, Denver, CO, p.A2983**

- P135** **Improvement in ECAC After Tracheoplasty in a “War on Terror” Veteran Following Afghanistan Deployment/S.D. Kreffit, R.A. Meguid, C.S. Rose, Aurora, CO, p.A2984**
- P136** **A Case of Progressive Massive Fibrosis/M. Thakur, S. Kavish, S. Sharma, P. Zhou, Brooklyn, NY, p.A2985**
- P137** **Acute Interstitial Pneumonia and Acute Respiratory Distress Syndrome (ARDS) from a Forgotten Plant/T. McCann, C. Hayner, N. Patel, Cincinnati, OH, p.A2986**
- P138** **Supraventricular Arrhythmias Induced by Aconite Poisoning/M.A. Riego, P. Kim, J. Salonia, New York, NY, p.A2987**
- P139** **Over-the-Counter Pre-Workout Supplement Involvement in Methemoglobinemia and Sulfhemoglobinemia/N. Haghshenas, B. Taylor, F.J. Fuentes, A.L. Loschner, E.R. Rubio, Roanoke, VA, p.A2988**
- P140** **A Previously Healthy 21-Year Old Female Presenting with Baclofen Toxicity/T.T. Donenfeld, E. Ibeson, I. Nwosu, A. Bernstein, M. Marcelin, Y. Kupfer, Brooklyn, NY, p.A2989**
- P141** **Supplement-Induced Thyrotoxicosis Presenting as New Onset Tachycardia/B. Ascherman, J. Schwartz, Z. Khan, M. Bachan, New York, NY, p.A2990**
- P142** **Caffeine Overdose: More Than Just the Jitters/A. Chajkowski, W. Khan, Toms River, NJ, p.A2991**
- P15** **Orthostatic and Ventilatory Challenges Reveal Biomarkers for Neurocognition in Pediatric Congenital Central Hypoventilation Syndrome/S.M. Slattery, F.A. Zelko, E.L. Vu, E.C. Dunne, A. Bradley, A. Zhou, M.S. Carroll, C.M. Rand, I. Khaytin, K.M. Brady, T.M. Stewart, D.E. Weese-Mayer, Chicago, IL, p.A2994**
- P16** **Polysomnographic Titration of Diaphragm Pacer in Children with Congenital Central Hypoventilation Syndrome/R.A. Morgan, R.M. Leu, M. Taylor, A.S. Kasi, Atlanta, GA, p.A2995**
- P17** **The Effect of Intermittent Hypoxia on Human Embryonic Stem Cells Derived Cardiomyocytes. In-Vitro Cellular Model for Obstructive Sleep Apnea/A. Goldbart, D. Regev, H. Haddad, J. Gopas, Beer Sheva, Israel, p.A2996**
- P18** **Positive Airway Pressure Therapy Initiation in Hospitalized Children with Obstructive Sleep Apnea/M. Ishizuka, M.S. Xanthopoulos, J. Maniaci, I.E. Tapia, D. Stefanovski, S.E. Beck, O. Afolabi-Brown, Philadelphia, PA, p.A2997**
- P19** **An Innovative, Highly Sensitive and Transferrable Tool for Neurocognitive Monitoring in Congenital Central Hypoventilation Syndrome (CCHS): The NIH Toolbox®/R.Z. Welbel, C.M. Rand, A. Zhou, A. Fadl-Alla, D.E. Weese-Mayer, F.A. Zelko, Chicago, IL, p.A2998**
- P20** **Accuracy and Acceptability of Level II Home Sleep Apnea Testing Compared to In-Lab Polysomnography in Children/C.M. Cielo, D. Stefanovski, M. Ward, J. Falvo, M.A. Cornaglia, I. Tapia, Philadelphia, PA, p.A2999**
- P21** **Is Loss of REM Atonia a Biomarker of Epilepsy in Children?/G. Gupta, L.M. O'Brien, L.T. Dang, F. Hassan, R.A. Shellhaas, Ann Arbor, MI, p.A3000**
- P22** **The Utility of Polysomnography in Hospitalized Children at a Single Tertiary Care Center/K. Sunkonkit, M. Alzaid, L. Xiao, C. Massicotte, S. Al-Saleh, R. Amin, Toronto, Canada, p.A3001**
- P23** **The Presence of 14 and 6 Hz Spike Wave Activity in Children with Prader Willi Syndrome/M. Alzaid, K. Sunkonkit, C. Massicote, H. Otsubo, S.A.O. Al-Saleh, R. Amin, Riyadh, Saudi Arabia, p.A3002**
- P24** **Improved Respiratory Outcomes for X-Linked Myotubular Myopathy (XLTM) with Gene Replacement Therapy, Resamirigene Bilparvovec (ASPIRO): Preliminary Results from ASPIRO, a Phase 1/2/3 Study/G.F. Perez, P. Shieh, N. Kuntz, J.J. Dowling, W. Müller-Felber, A. Blaschek, C. Bönemann, A.R. Foley, D. Saade, A.M.S. Seferian, L. Servais, M. Lawlor, V. MacBean, J. Coats, C. Han, J. Lee, M. Noursalehi, S. Prasad, S. Rico, W. Miller, R.J. Graham, Buffa, p.A3003**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B49 SLEEP, CHEST WALL, AND NEUROMUSCULAR - OH MY!

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P13** **The Clinical Utility of the Oxygen Desaturation Index to Predict Sleep-Disordered Breathing in Children/K. Sunkonkit, M. Alzaid, S. Al-Saleh, R. Amin, Toronto, Canada, p.A2992**
- P14** **Differential Effects of Circulating Exosomes from Children with OSA With and Without Neurocognitive Deficits on a Blood Brain Barrier (BBB) Microfluidics-Based 3D Platform/A. Khalyfa, Z. Qiao, D. Gozal, L. Kheirandish-Gozal, Columbia, MO, p.A2993**

- P25** **New Possibilities for Home E-monitoring of Pulmonary Function in Patients with Duchenne Muscular Dystrophy - ePULMoDMD Project**/E. Wasilewska, M. Solinski, D. Sabiniewicz, L. Koltowski, E. Jassem, Gdansk, Poland, p.A3004
- P26** **Factors Associated with Declined Forced Vital Capacity in Children and Adults with Duchenne Muscular Dystrophy Prescribed Non-Invasive Ventilation: A Multicenter Analysis**/K. Sunkonkit, M.S. Hurvitz, A. Defante, J.E. Orr, A. Chakraborty, R. Amin, R. Bhattacharjee, Toronto, Canada, p.A3005
- P27** **Polysomnography Findings in Treated Children with Spinal Muscular Atrophy**/C. Leon Astudillo, M.H. Wagner, J. Lammers, S. Salabarría, J. Berthy, B. Byrne, B.K. Smith, Gainesville, FL, p.A3006
- P28** **Cardiopulmonary Stress Testing in Children with Pectus Carinatum Chest Deformity**/R. Mohamed, A. Abushahin, A. Abdelwahab, P. Guy, A. Muhyimana, M. Abuhasan, Doha, Qatar, p.A3007
- P29** **Changes in Thoracic Shape After Surgical Correction of Thoracic Lordosis in Children**/G.J. Redding, V. Bompadre, S. Varakitsomboon, K. White, Seattle, WA, p.A3008
- P30** **Utility of Oxygen Uptake Efficiency Slope in Evaluating Cardiopulmonary Limitations in Children with Pectus Excavatum**/R. Ramanathan, A.A. Sabati, M. Temkit, D. Notrica, L. McMahon, R. Bhatia, Phoenix, AZ, p.A5628
- P34** **Novel Pulmonary Function Measures for Diagnosis of Bronchiolitis Obliterans Syndrome Following Hematopoietic Stem-Cell Transplantation in Children**/M.A. Al Nuaimi, T. Schechter, M. Ali, B. Zanette, S. Braganza, D. Li, S. Munidasa, D. Manson, F.A. Ratjen, G. Santyr, J. Krueger, Toronto, Canada, p.A3011
- P35** **Some Polymorphisms of Genes of Signaling Molecules of Immunity and Chronic Diseases of the Respiratory System in Children**/S.V. Suprun, E. Suprun, E. Nagovicina, S. Pichugina, G. Evseeva, O. Lebed'ko, E. Knizhnikova, Khabarovsk, Russian Federation, p.A3012
- P36** **Manifestations of Pediatric Granulomatosis with Polyangiitis (GPA) in the Respiratory Tract: A 12 Year Experience from a Tertiary Care Facility**/S. Sridhar, S. Akoghlanian, K. Krivchenia, Columbus, OH, p.A3013
- P37** **Polymorphism of the Gene Enzyme of the Superoxide Dismutase 1 (SOD1 G7958A) in Children with Chronic Nonspecific Lung Diseases with Pneumofibrosis**/E. Knizhnikova, G. Evseeva, E. Nagovitsyna, O. Lebed'ko, Khabarovsk, Russian Federation, p.A3014
- P38** **Anxiety and Depression in Patients with Childhood Interstitial Lung Disease**/L. Beville, M. Rose, A. Hammond, R. Gordon, L. Abel, D. Dimakis, M.P. Fishman, A.M.H. Casey, C. Snell, K. Krone, Boston, MA, p.A3015
- P39** **The Activating NKG2D Receptor Mediates Neonatal Lung Injury Induced by Chronic Exposure to Bacterial Endotoxin: Implications for Bronchopulmonary Dysplasia**/T.X. Cui, Y.-J. Zhang, C. Anderson, A. Popova, Ann Arbor, MI, p.A3016
- P40** **Respiratory Syncytial Virus Enhances Hyaluronan Accumulation and TSG-6 Expression in Primary Airway Epithelial Cell and Lung Fibroblast Cocultures**/S.R. Reeves, L.M. Rich, M.P. White, E.R. Vanderwall, C.W. Frevert, T.N. Wight, J.S. Debley, Seattle, WA, p.A3017
- P41** **Developing EPR Tools for Preclinical Interrogation of Redox Regulation Mechanisms Contributing to Acute Lung Injury**/H.B. Elajaili, N. Dee, L. Woodcock, S. DeGraw, S. Dikalov, J. Kao, S.S. Eaton, G.R. Eaton, E.S. Nozik, Aurora, CO, p.A3018
- P42** **Role of Genetic Modifiers on Pulmonary Consequences of Cancer Therapy in Children**/S.C. Leftin Dobkin, Philadelphia, PA, p.A3019
- P43** **Pediatric Surgical Lung Biopsy Mortality in Ontario, Canada from 2002 to 2019**/W.B. Wee, S.D. Dell, T. To, S. Shapera, P. Chiu, J.H. Fisher, Toronto, Canada, p.A5629
- P44** **Predictors of Prolonged Recovery in Pediatric Influenza-Associated Critical Illness**/S. Byler, D. Zurakowski, M. Newhams, A.G. Randolph, Boston, MA, p.A5630

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B50 **DIFFUSE LUNG DISEASE AND ACUTE LUNG INJURY**

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P32** **FEV1-Z-Scores and Relative Percentage Change for Detection of Pulmonary Complications in Children Following Bone Marrow Transplantation - 1 Year vs 2 Years Post-transplant, a Retrospective Review**/A. Wannes Daou, C. Towe, K. Myers, L. Walkup, Cincinnati, OH, p.A3009
- P33** **Acute Chest Syndrome Is Associated with Obstructive Airway Pattern in Children with Sickle Cell Disease**/A.S. Alishlash, J. Wolford, V. Tarn, P.A. Nourani, Birmingham, AL, p.A3010

P45 Modified Assessment of Competency in Thoracic Sonography (ACTS) Scale in Pediatric and Neonatal Critical Care/R. Dasani, V. Bhargava, B. Chan, C. Hamilton, J. Seekins, D. Chen, C.D. Reddy, S.L. Hilgenberg, B. Haileselassie, S.K. Bhombal, Palo Alto, CA, p.A5631

BEHAVIORAL

THEMATIC POSTER SESSION

B51 SUNSET: GROUP 3 PULMONARY HYPERTENSION

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area C, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

P159 Hypoxic Pulmonary Hypertension Results in Expansion of Right Ventricular CCR2+ Macrophages/S. Gu, C. Mickael, L. Sanders, D. Swindle, D. Irwin, R. Vagnozzi, P.M. Henson, K.R. Stenmark, Aurora, CO, p.A3020

P160 Cigarette Smoke Increases the Expression of Amyloid Precursor Protein in Pulmonary Artery Smooth Muscle Cells/V. Karoor, M.J. Wick, T. Sullivan, D.J. Klemm, C.D. Cool, E.C. Dempsey, Aurora, CO, p.A3021

P161 Breathing Inefficiency Is Associated with Reduced Right Ventricular Function During Exercise/N. Morris, H. Seale, A. Lin, J.F. Feenstra, M. Trotter, C. Aitken, R. Riley, A. Trotter, W. Strugnell, Gold Coast, Australia, p.A3022

P162 Hemodynamic Response to Inhaled Nitric Oxide in Patients with Pulmonary Hypertension and Chronic Kidney Disease: A Retrospective Cohort Study/K. Del Valle, M.J. Krowka, C.A. Schinstock, K.A. Nath, C.D. Burger, Y.N. Reddy, R.P. Frantz, Y.S. Prakash, H.M. Dubrock, Rochester, MN, p.A3023

P163 The Performance of Echocardiography in the Diagnosis of Pulmonary Hypertension in Patients with Chronic Obstructive Pulmonary Disease/M. Younis, N. Al-Antary, R. Dalbah, A. Qarajeh, A. Khanfar, S.S. Kalra, B.N. Alzghoul, Gainesville, FL, p.A3024

P164 Diminishing Efficacy of Inhaled Nitric Oxide with Late Application in Evolving Lung Injury/Y. Xin, K. Martin, T. Kim, A. Lenart, L. Staelin, J. Shen, M. Petrov, K. Rozenberg, S. Gerard, J. Herrmann, S. Humayun, P. Shah, U. Sidhu, S. Bathula, K. Reutlinger, M. Staley, P. Delvecchio, J. Barakat, S. Sarfaraz-Khan, I. Duncan, R. Rizzi, L. Berra, M. Cereda; Boston, MA, p.A3025

P165 Estimation of Stroke Volume Augmentation During Cardiopulmonary Exercise Testing in Patients with Unexplained Dyspnea: Validation by Exercise Right Heart Catheterization/W.C. Mcguire, J. Yang, M. Alotaibi, T.M. Fernandes, T.A. Morris, La Jolla, CA, p.A3026

P166 Pulmonary Vasodilator Therapy Improves NTpro-BNP and Pulmonary Hemodynamics in Patients with Pulmonary Hypertension Due to Interstitial Lung Disease/K. Selvan, K. Teerapuncharoen, M. Funk, R. Bag, Chicago, IL, p.A3027

P167 Using PAH-SYMPACT to Assess Quality of Life in Patients with Pulmonary Hypertension Associated with Chronic Lung Disease/M. Bailey, L. Durst, G. Park, H.R. Cajigas, G.C. Kane, M.J. Krowka, S. Kushwaha, R. McCully, J. Murphy, Y. Reddy, R.P. Frantz, H.M. Dubrock, Rochester, MN, p.A3028

P168 Chronic Obstructive Pulmonary Disease Is Associated with Increased Mortality in Systemic Sclerosis-Related Pulmonary Hypertension/J. Vakhshoorzadeh, J.K. Lui, R. Sangani, M.A. Trojanowski, E.S. Klings, Boston, MA, p.A3029

P169 Obstructive Sleep Apnea in Patients with Pulmonary Hypertension Secondary to Progressive Systemic Sclerosis and Associated Outcomes/Z.I. Seckin, C.D. Burger, E. Festic, Jacksonville, FL, p.A3030

P170 Recreational Marijuana Use and Secondary Pulmonary Hypertension in Hospitalized Young Adults: A Nationwide Inpatient Analysis/B. Rizvi, A. Jain, N. Ghadge, F. Nunez Guzman, M.C. Buhl Leon, L. Sanchez Tamarez, R. Desai, Fresno, CA, p.A3031

P171 A Warning Call: Impact of CKD in Patients Admitted with Obesity Hypoventilation Syndrome (OHS): A National Inpatient Sample Study/V. Reyes Pinzon, C.-Y. Kang, P. Khamooshi, N. Haghani Rad, H. Shaka, Chicago, IL, p.A3032

P172 Heterogeneity of Group 3 Pulmonary Hypertension Physiology in Veterans treated with Off-Label Therapy with Implications for Treatment Outcomes/S.W. Johnson, E.S. Klings, B. Maron, R.S. Wiener, Boston, MA, p.A3033

P173 Pulmonary Hypertension Predicts Higher Mortality in Patients Admitted with Severe Covid-19 Infection/R. Minkin, J.A. Weingarten, K. Ramasubbu, R. Hopson, Brooklyn, NY, p.A3034

P174 Pulmonary Hypertension and Covid-19: Estimated Pulmonary Artery Systolic Pressure (ePASP) as an Independent Prognostic Indicator in Covid-19/R. Ali, A. Patel, N. Mehta, J. Slim, R.A. Miller, Newark, NJ, p.A3035

P175 The Effect of Borderline Pulmonary Hypertension on Survival in Chronic Lung Disease/L. Piccari, J. Wort, F. Meloni, M. Rizzo, L.C. Price, L. Martino, E. Salvatera, L. Scelsi, M. López-Meseguer, I. Blanco, A. Callari, V. Pérez-González, F. Tuzzolino, C. McCabe, D.A. Rodríguez-Chiaradía, P. Vitulo, Barcelona, Spain, p.A5632

P176 **Meta-Analysis of the Use of Inhaled Trepostinil in Patients with Group 3 Pulmonary Hypertension; What Is the Evidence?**/M.M.G. Mohamed, S. Shaikh, J.K. Mwangi, S. Patolia, Saint Louis, MO, p.A5633

CLINICAL

THEMATIC POSTER SESSION

B52 GOLDEN GATE PARK: CLINICAL CARE OF THE PH PATIENT

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area C, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

P178 **Incidence and Predictors of Catheter-Related Adverse Events Among Medicare Adult Patients with Pulmonary Arterial Hypertension Using Intravenous Prostacyclin Therapy**/M.M. Chakinala, K. Morland, S. Steinbis, B. Wu, S.C. Grabich, D. Chopra, T. Thenappan, St. Louis, MO, p.A3036

P179 **Characteristics, Treatment Approaches, and Outcomes in Patients with Pulmonary Arterial Hypertension Hospitalized for Sepsis**/S. Flynn, R. Kerbel, S. Gupta, S. Jasuja, R. Saggar, R.N. Channick, A. Sherman, Los Angeles, CA, p.A3037

P180 **Cloth Masks Do Not Affect 6 Minute Walk Test Results in Healthy Subjects**/J.R. Woytanowski, S. Gillenwater, A. Daya, F. Rahaghi, J. Mehta, Weston, FL, p.A3038

P181 **Remote Six-Minute Walk Tests in Pulmonary Hypertension**/T. Lapatra, G.L. Baird, R. Goodman, D. Pinder, R. DiGregorio, B. Normandin, J.R. Klinger, H.I. Palevsky, J.S. Fritz, C.J. Mullin, S. Pugliese, A. Smith, J.A. Mazurek, M.E. Whittenhall, N. Al-Naamani, S.M. Kawut, C.E. Ventetuolo, Philadelphia, PA, p.A3039

P182 **CT Findings of Enlarged Pulmonary Arteries and Increased Pulmonary Artery to Ascending Aorta Ratios Are Common in an Emergency Department Cohort**/B. Scarpato, J. Bledsoe, D.B. Knox, K.E. Conner, M.W. Dodson, C.G.G. Elliott, Salt Lake City, UT, p.A3040

P183 **A Circadian Reason for Severity of Pulmonary Hypertension**/E. Ebrahimi, C. Fu, A. Pham, A.C. Oliveira, A. Nguyen, L. Mukhsinova, M.A. Gutierrez Monreal, M. Alves, K. Esser, A.J. Bryant, Gainesville, FL, p.A3041

P184 **Midodrine as a Novel Tool to Optimize Pulmonary Arterial Hypertension Therapies**/N.I. Rao, C. Tanabe, S. Sahay, Z. Safdar, Houston, TX, p.A3042

P185 **Pulmonary Arterial Hypertension in Adult-Onset Still's Disease**/A. Boucly, S. Mitrovic, L. Savale, X. Jais, D. Montani, E. Lazaro, N. Schleinitz, C. Bloch-Queyrat, C. Christides, J. Pouchot, M. Humbert, B. Fautrel, O. Sitbon, Le Kremlin Bicêtre, France, p.A3043

P186 **Phenotypic Heterogeneity in WSPH Group 1 PAH Is Explained by Differences in Peripheral Oxygen Extraction**/M. Insel, C. Umland, S. Stroud, F.P. Rischard, Tucson, AZ, p.A3044

P187 **Oxygen Utilization as a Primary Mediator of Age-Related Functional Decline in Pulmonary Arterial Hypertension**/C. Umland, M. Insel, S.C. Stroud, S. Kubba, F.P. Rischard, Tucson, AZ, p.A3045

P188 **Risk Factor for Cerebral Complications in Patients with Pulmonary Arteriovenous Malformation**/H.-J. Shin, Y.-O. Na, T.-O. Kim, Y.-S. Kwon, Donggu, Korea, Republic of, p.A3046

P189 **Patients with Acute Intracranial Hemorrhage and Pulmonary Embolism: A Real-World Data from 2017 to 2021**/Q. Cai, C. Hu, D. Chen, H. Chen, Chongqing, China, p.A5634

P190 **Outcome of Chronic Thromboembolic Pulmonary Hypertension Patients: Experience from a Tertiary Referral Center in the United Arab Emirates**/K.M. Saleh, N. Khan, K. Dougherty, A. Ghorab, S. Abdalla, H. Sabbour, Abudhabi, United Arab Emirates, p.A5635

P191 **Concomitant Medication Use in Treatment Journey of Pulmonary Arterial Hypertension Patient: A Canadian Retrospective Claims Analysis**/E. Ibrahim, A. Al-Akabawi, M. Dawodu, J. Ling, I. Wang, B. Millson, Toronto, Canada, p.A5636

P192 **Real-World Drug Retention and Initiation of Combination Drug Therapy for Patients with Pulmonary Arterial Hypertension in Canada: A Retrospective Prescription Claims Database Study**/E. Ibrahim, A. Al-Akabawi, M. Dawodu, J. Ling, J. Murray, B. Millson, Toronto, Canada, p.A5637

CLINICAL

THEMATIC POSTER SESSION

B53 MARINA: LEARNING FROM PH REGISTRIES AND CLINICAL TRIALS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area C, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P194 Terminal Digit Preference in Endpoints of Pulmonary Arterial Hypertension (PAH) and Chronic Thromboembolic Pulmonary Hypertension (CTEPH)/J. Minhas, G. Baird, D. Appleby, R. McClelland, J. Min, J.A. Mazurek, C.E. Ventetuolo, N. Al-Naamani, S.M. Kawut, Philadelphia, PA, p.A3047**
- P195 CT Vascular Findings in Schistosomiasis and Portopulmonary Hypertension: A Comparison/F.N. Rahaghi, R. San Jose Estepar, J. Hilton, R.A. Correa, C. Loureiro, J.S.O. Arakaki, C. Verrastro, R.L.B. Lima, M.H. Lee, C. Mickael, P. Nardelli, D.M. Systrom, A.B. Waxman, G.R. Washko, B.B. Graham, R. Oliveira, Boston, MA, p.A3048**
- P196 Longitudinal Effects of Initiation of Parenteral Prostanoid Therapy for the Treatment of Pulmonary Arterial Hypertension, The Pulmonary Hypertension Association Registry/H.-M. Pan, R.G. Argula, D.B. Badesch, T. De Marco, J.M. Elwing, D. Grinnan, M.R. Lammi, S. Mazimba, A.A. Raval, J.J. Ryan, O.A. Shlobin, T. Thenappan, S.C. Mathai, P.J. Leary, N. Al-Naamani, Philadelphia, PA, p.A3049**
- P197 Pulmonary Arterial Hypertension Treatment Patterns and Patient Health-Related Quality of Life: Findings from a Multinational Real-World Database/J. Mao, A. Bennett, J. Harley, M. Small, V.R. Nadipelli, J. Butler, H. Phatak, Cambridge, MA, p.A3050**
- P198 Rationale and Design of the RiOciguAt UseRs (ROAR) Registry/R. Sulica, S.A. Mandras, C.E. Miller, R.J. White, N.H. Kim, S. Bansilal, V. Poon, D. Johnson, V. Carvajal, M.M. Chakinala, New York, NY, p.A3051**
- P199 The Effectiveness of Selexipag in Pulmonary Arterial Hypertension with and Without Associated Connective Tissue Disease Comorbidity in United States/Y. Tsang, S. Verma, R. Singh, S. Punjabi, Titusville, NJ, p.A3052**
- P200 Long Term Follow-Up of Pulmonary Arterial Hypertension Patients Managed with Oral Treprostinil/C.S. King, J. Saini, V. Khangoora, S. Aryal, A.L. Singhal, A.S. Nyquist, K. Ahmad, A.W. Brown, J. Kennedy, M. Psotka, S.D. Nathan, O.A. Shlobin, Falls Church, VA, p.A3053**
- P201 Add-On Sequential Triple Combination Therapy for Pulmonary Arterial Hypertension Not at Goal/H. Deshwal, T. Weinstein, J. Klapholz, F. Cefali, R. Fenton, E. Bondarsky, R. Sulica, New York, NY, p.A3054**
- P202 Comparison of Pharmacokinetics of 3 Doses of Treprostinil Inhalation Powder (Tyvaso DPI) and 3 Doses of Tyvaso in Healthy Normal Volunteers/K. El-Kersh, R. Restrepo Jaramillo, J. Joly, N. Pearce, C. Deng, M. Miceli, Omaha, NE, p.A3055**
- P203 Rapid Titration of Parenteral Treprostinil to EXPEDITE Dosing of Oral Treprostinil/V. Balasubramanian, V. Franco, R. Zolty, J.F. Kingrey, R.J. Oudiz, J.M. Elwing, J.H. Huston, L. Melendres-Groves, J. Tarver, A. Ravichandran, E. Shen, M. Broderick, C.E. Miller, Fresno, CA, p.A3056**
- P204 Multicompartment Modeling for Pulmonary Pharmacokinetics of Liposomal Treprostinil (L606) in Adults/P. Kan, K.-J. Chen, Taipei, Taiwan, p.A3057**
- P205 Strategies to EXPEDITE the Time to Effective Dosing of Oral Treprostinil in Patients with Pulmonary Arterial Hypertension/C.E. Miller, V. Franco, R. Zolty, J.F. Kingrey, R.J. Oudiz, J.M. Elwing, J.H. Huston, L. Melendres-Groves, J. Tarver, A. Ravichandran, E. Shen, M. Broderick, V. Balasubramanian, Atlanta, GA, p.A3058**
- P206 Kidney Transplant Outcomes in Patients with Echocardiographic Evidence of Pre-Transplant Pulmonary Hypertension/E.M. Vlachos, S.H. Friedman, R.J. Tedford, J. Sorrels, A.L. Grady, A. Raspberry, A. Smith, K. Phlegar, K. Soliman, R. Campbell, V. Rohan, D. Taber, R.G. Argula, Charleston, SC, p.A5638**

CLINICAL

THEMATIC POSTER SESSION

B54 PACIFIC HEIGHTS: BIOMARKERS AND QUALITY OF LIFE IN PULMONARY HYPERTENSION

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area C, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P208 Heart Rate Variability as a Novel Biomarker of Treatment Response in Pulmonary Arterial Hypertension/A. Jose, F.X. McCormack, J.M. Elwing, Cincinnati, OH, p.A3059

P209 Thyroid-Stimulating Hormone and Mortality in Pulmonary Arterial Hypertension/H. Pi, S.G. Rayner, D.D. Ralph, S. Nolley, L.M. Barros, Z.L. Steinberg, P.J. Leary, Seattle, WA, p.A3060

P210 Pulmonary Arterial Hypertension: Prognosis Associated with Pericardial Effusion Before and After Initiation of Parenteral Prostacyclin Therapy/M. Abu-Rmaleh, S. Bartolome, A. Chuah, E. Hardin, P. Manthena, T.G. Shah, C. Patel, F. Torres, K.M. Chin, Dallas, TX, p.A3061

- P211 BMI and Functional Class in Heritable and Idiopathic PAH. Possible Association with Estrogen Metabolism/** M.R. MacLean, S. Graf, D. Pandya, E.M. Swietlik, N. Denver, N.W. Morrell, Glasgow, United Kingdom, p.A3062
- P212 Clinical Implications of Frailty in Pulmonary Arterial Hypertension (PAH) Patients Initiated on Pharmacotherapy/** N. Sharif, J.T. Granton, A. Lokhandwala, J. Moric, H.J. Man, M. de Perrot, L.G. Singer, D. Rozenberg, Karachi, Pakistan, p.A3063
- P213 Low Physical Activity Is Associated with More Visceral Fat in Pulmonary Arterial Hypertension/** J. Hsieh, R. Goodman, J.A. Mazurek, A. Smith, H.I. Palevsky, J.S. Fritz, S. Pugliese, C.L. Archer-Chicko, C. Provine, S.M. Kawut, N. Al-Naamani, Philadelphia, PA, p.A3064
- P214 Gender Differences in Cytokines in a Pulmonary Arterial Hypertensive Model/** J.L. Hewes, A. Bhadra, C. Zhou, J.Y. Lee, N.N. Bauer, Mobile, AL, p.A3065
- P215 Elevated Myristic Acid as a Risk Factor for Idiopathic Pulmonary Arterial Hypertension/** Y.-Y. Sun, Q.-H. Zhao, J. Liu, P. Yuan, Shanghai, China, p.A3066
- P216 Circulating Androgens Are Lower in PAH Patients Compared to Controls and Stable Over Time/** K.W. Malloy, S. Hart, K. Burke, E. Brittain, A. Hemnes, E.D. Austin, Nashville, TN, p.A3067
- P217 Analysis of the Health-Related Quality of Life and WHO Functional Class Data of Pulmonary Hypertension Patients During the COVID-19 Pandemic: Using the EmPHasis-10 Questionnaire/** S. Ashok, N. Bascon, B. Madden, London, United Kingdom, p.A3068
- P218 Examining the Role of Social Determinants of Health on Quality of Life in Urban Pulmonary Hypertension Patients/** C. Humpal, R.H. Anguiano, D.R. Fraidenburg, Chicago, IL, p.A3069
- P219 Spatial Distribution of Small Vascular Volume in Chronic Thrombo-Embolic Pulmonary Hypertension/** I. Ahmad, P. Nardelli, J. Ross, R.S.J. Estépar, A. Hunsaker, A.B. Waxman, G.R. Washko, R.S.J. Estépar, F.N. Rahaghi, Salem, MA, p.A5639
- P220 Six-Minute Walk Distance Predicts Outcomes in a Cohort of Liver Transplant Candidates/** K. Cox-Flaherty, J. Moutchia, M.J. Krowka, N. Al-Naamani, M.B. Fallon, S.M. Kawut, C.E. Ventetuolo, Providence, RI, p.A5640

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B55 NONTUBERCULOUS MYCOBACTERIA

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area E, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P354 Intermittent Dosing of Imipenem, Cilastatin, Relebactam, and Amoxicillin for Refractory Pulmonary Mycobacterium Abscessus/** E.L. Mcquire, K. Olivier, D.J. Addrizzo-Harris, New York, NY, p.A3070
- P355 Nontuberculous Mycobacterial Infection Presenting as a Classic Right Upper Lobe Cavitory Lesion in a Lung Transplant Recipient/** M.T. Olson, R. Wallia, B. Buddhdev, A. Arjuna, Phoenix, AZ, p.A3071
- P356 Incidental Finding of an Intraluminal Mass Due to Mycobacterium Avium Complex in a Healthy Toddler/** C. Fernandez Elviro, Vancouver, Canada, p.A3072
- P357 NTM Times Two in a Patient with Cavitory Lung Disease/** A. Vojtek, Y. Khaskia, B. Civic, Allentown, PA, p.A3073
- P358 Cough and Popliteal Aneurysm - Is There a Connection?/** C.R. Silvestre, A. Quintas, F. Nogueira, M.C. Gomes, Torres Vedras, Portugal, p.A3074
- P359 Mycobacterium Avium Intracellulare Complex Infection Mimicking Endobronchial Tumor/** T.M.A. Khan, Y. Ansari, S. Ansari, M. Arabiat, M. Ahmed, N. Kazimuddin, I. Waheed, Bowling Green, KY, p.A3075
- P360 Non-Tuberculosis Mycobacterium Co-Infection Presenting as a Thoracic Mass/** N. Agrawal, D. Gekhman, E.S. Guy, P.M. Alapat, Houston, TX, p.A3076
- P361 A Rare Case of Mycobacterium Chimaera in an Immunocompetent Patient/** O. Walsh, S. Jones-Perrott, J. Panayi, Shrewsbury, United Kingdom, p.A3077
- P362 Diffuse Nodular Densities on Chest Computerized Tomography. Potential Pitfall of Pattern Recognition. A Case of Granulomatous Inflammation Misdiagnosed as Lung Metastasis/** I. Nwachukwu, M. Fernandes, O.T. Aroyewun, Brooklyn, NY, p.A3078
- P363 Diving Deep for a Diagnosis: A Case of Mycobacterium Marinum/** O. Walsh, S. Jones-Perrott, J. Panayi, Shrewsbury, United Kingdom, p.A3079

- P364 Mycobacterium Abscessus Pneumonia in Immunocompetent/S.** Thapa, S. Acharya, Y. Medina, S.M. Anwar, A. Glaser, Kathmandu, Nepal, p.A3080
- P365 A Curious Case of Non-Tuberculous Cavitory Lung Lesion in an AIDS Patient/M.** Patel, L.N. Danso, I. Rabinovitz, G. Osorio, V. Gandhi, New York, NY, p.A3081
- P366 Application of Human Apical-Out Airway Organoids to Study Nontuberculous Mycobacterial Epithelial Cell Infections/J.R.** Honda, S.N. Dawrs, Denver, CO, p.A3082
- P367 Female Reproductive Factors and Incidence of NTM Pulmonary Disease Among Postmenopausal Women in Korea/S.H.** Kim, H. Choi, S. Dong Wook, H. Kyung-Do, T.S. Park, D.W. Park, S.-H. Kim, T.-H. Kim, J.W. Sohn, H.J. Yoon, H. Lee, Seoul, Korea, Republic of, p.A3083
- P368 Use of Anti-Glycopeptidolipid-Core Antibodies Serology for Diagnosis and Monitoring of Mycobacterium Avium Complex Pulmonary Disease in the United States/A.G.** Hernandez, A. Brunton, M. Ato, K. Morimoto, S. Machida, E. Henkle, K.L. Winthrop, Portland, OR, p.A3084
- P369 Survival of Lung Transplant Patients Receiving Treatment for Non-Tuberculous Mycobacteria/B.H.** Lashari, N. Van Der Rijst, N. Sullivan, K. Shenoy, Philadelphia, PA, p.A3085
- P370 Application of Deep Convolutional Neural Networks in Determining Chronicity of Pulmonary Nodules in Patients with Nontuberculous Mycobacterial Lung Infection/A.C.** Lancaster, M.E. Cardin, J.A. Nguyen, K.A. Cohen, C.T. Lin, Baltimore, MD, p.A3086
- P371 Antimicrobial Efficacy of Decamethoxin (DMT) Against Drug-Resistant Mycobacterium Abscessus Clinical Isolates/P.** Faasumalie, S. Gupta, K.N. Olivier, Bethesda, MD, p.A3087
- P372 One Center's Experience with Omadacycline for the Treatment of Mycobacterium Abscessus Infections/C.M.** Mingora, W. Bullington, S.E. Dorman, P.A. Flume, Charleston, SC, p.A3088
- P373 Never Too Late to Begin Airway Clearance: Radiographic Outcomes in Patients with Primary Ciliary Dyskinesia/F.** Alvarado, J. Melendez Montañez, W. De Jesus-Rojas, San Juan, PR, p.A3089
- P374 Patient Characteristics, Healthcare Resource Utilization and Outcomes Among Non-Cystic Fibrosis Bronchiectasis Patients with High Frequency Chest Wall Oscillation (HFCWO) Therapy/M.** Dekoven, K. Mandia, N. DeFabis, J. Chen, A. Ruscio, Falls Church, VA, p.A3090
- P375 Atypical Bacterial Pneumonia with Co-Infection Due to Non-Tuberculous Mycobacteria in an Immunocompetent Patient/J.I.** Juarez Ramirez, C. Montes Castellanos, Tlalnepantal de Baz, Mexico, p.A3091
- P376 Non-Tuberculosis Mycobacteria - Trends and Mapping in the State of Israel/S.** Enghelberg, S.H. Perl, N.M. Natif, M.H. Shihab, E. Rorman, Z. Dveyrin, H. Keidar- Shwartz, B.D. Fox, Be'er Ya'akov, Israel, p.A3092
- P377 A Retrospective Analysis to Assess the Effect of Targeted Clinical Interventions on the Discontinuation Rate of Amikacin Liposome Inhalation Suspension Therapy Among Patients Treated for Refractory Mycobacterium Avium Complex Lung Disease/S.** Hebble, M. Puc, P. Koerner, B. Barry, R. Faris, G.J. Vanscoy, Pittsburgh, PA, p.A3093
- P378 Real-World Data of Clofazimine Drug Repurposing for the Potential Treatment of Nontuberculous Mycobacterial Infection/M.** Gravelin, J.Z. Sexton, M. Davies, K.S. Gregg, K.J. Weatherwax, Ann Arbor, MI, p.A5641

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B56 WHAT'S UP IN THE PNEUMONIA WORLD?

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area E, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P380 Impact of the 2019 Community Acquired Pneumonia Guideline on Use of Antibiotics Among Critically Ill Patients with Community Acquired Pneumonia/T.** Ohnuma, S. Chihara, K. Raghunathan, V. Krishnamoorthy, Durham, NC, p.A3094
- P381 Elevated Procalcitonin Levels Are Associated with Severity of Acute Lower Respiratory Tract Infections in Sri Lanka/S.** Vanderburg, T. Sheng, C. Bodinayake, V. Devasiri, A. Nagahawatte, G. Wijayarathne, R. Kurukulasooriya, S. Kanchana, T. Wickramasinghe, B. Dilshan, D. De Silva, J.G. Anderson, B. Nicholson, C.W. Woods, L.G. Tillekeratne, San Francisco, CA, p.A3095
- P382 Effects of a Pneumonia Care Bundle on 30-Day Hospital Readmissions/M.E.** Kendra, C. Decotiis, C. Mackwell, E. Malloy, D. Tonzola, N. Reyes, L. Landry, S. Welsh, K. Scannell, R. Mansukhani, M. Farrell, S. Chiu, D. Zimmerman, D. Granata, F. Cerrone, Morristown, NJ, p.A3096
- P383 Use of a Rigorous Definition of Bacterial Pneumonia to Describe the Incidence and Clinical Characteristics of Enterococcal Detection in Mechanically Ventilated Patients with Suspected Pneumonia/E.E.** Rabin, M. Kang, C. Gao, C. Qi, B.D. Singer, R.G. Wunderink, C. Pickens, J.M. Walter, Chicago, IL, p.A3097

- P384 Prognostic Validity of SMART-COP, PSI, and CURB-65 Scores in Hospitalized Patients with Melioidosis Pneumonia/L.** Nguyen-Ho, H.-L. Hoang-Thi, T.-T. Tran-Thi, Ho Chi Minh, Viet Nam, p.A3098
- P385 Development of a Patient-Driven Education and Risk Prevention Tracking Tool to Reduce Hospital Acquired Pneumonia/J.C.-S. Chang, N.H. Tran, J. Nickleberry, R.V. Desai, T.F. Shaw, L.V. Virk, Oakland, CA, p.A3099**
- P386 NHO Network Group Multi-Center Study on Features of Health-Care Associated Pneumonia (HCAP) in Japan/S.** Teramoto, Hachioji-shi, Japan, p.A3100
- P387 Angiopulmonography with Nitroglycerine Test for Differential Diagnostics Between Severe Pneumonia and Lung Gangrene/S.** Yermashkevich, V. Petukhov, V. Derkach, M. Kuntsevich, Vitebsk, Belarus, p.A3101
- P388 Impact of Diabetes Mellitus on the Development and Postoperative Outcomes in Patients with Severe Pulmonary Infection/S.** Yermashkevich, V. Petukhov, M. Kuntsevich, Vitebsk, Belarus, p.A3102
- P389 Factors Affecting Outcome of Adult Patient with Methicillin Resistant Staphylococcus Aureus (MRSA) and Non Methicillin Resistant Staphylococcus Aureus (Non MRSA) Pneumonia: A Retrospective, Cross Sectional Cohort Study/M.V. Yap, F.J.R. Obillo, K.P. Manongas, Quezon City, Philippines, p.A3103**
- P390 The Relationship Between Pneumococcal Vaccination and Pneumonia in Hospitalized Older Adult Patients in Japan/N.** Fukuda, W. Keisuke, H. Nobuyuki, H. Yuu, K. Nobuaki, K. Takeshi, Yokohama, Japan, p.A3104
- P391 Impact of Adherence to a Procalcitonin Antibiotic Prescribing Guideline/B.E. Malley, J.G. Yabes, E. Gimbel, C.-C.H. Chang, D.M. Yealy, M.J. Fine, D.C. Angus, D.T. Huang, Pittsburgh, PA, p.A3105**
- P392 Unravelling Complicated Pneumonia - the Need to Scale Up Lung Ultrasound Skills in Resource Poor Settings/A.C. Ayuk, C.I. Ndukwu, N.R. Mbanefo, O.I. Odetunde, Enugu, Nigeria, p.A3106**
- P393 Community Acquired Methicillin-Resistant Staphylococcus Aureus Pneumonia in a Previously Healthy 12-Year-Old Male/N.F. Tubeo, Cebu, Philippines, p.A3107**
- P394 Morbidity and Mortality Following Melioidosis Pneumonia: Results from a Multicenter Cohort Study/T.D. Coston, R. Phunpang, A. Yarasai, A. Dulsuk, T. Yimthin, E. Thiansukhon, S. Chaisuksant, K. Tanwisaid, S. Chuananont, C. Morakot, N. Sangsa, S. Chayangsu, W. Silakun, N. Buasi, P. Chetchothisakd, N.P.J. Day, G. Lertmemongkolchai, N. Chantratita, T. E. West. Seattle, WA, p.A3108**
- P395 Non-COVID Viral Pneumonia in the COVID-19 Era: A Severe Case of Human Parainfluenza Virus Infection/R.P.** Padappayil, R. Tiperneni, B. Li, Long Branch, NJ, p.A3109
- P396 A Study to Assess the Impact of Airway Virus on Asthma Control in Non Exacerbating Patients/L.** Walsh, A. O'Sullivan, J. MacSharry, D.M. Murphy, Cork, Ireland, p.A3110
- P397 Antimicrobial Resistance Mechanisms, Molecular Epidemiology and Virulence Factors in Pseudomonas Aeruginosa Strains Associated to Patients with Bronchiectasis/R.** Cabrera, L. Fernández-Barat, N. Vázquez, V. Alcaraz, R. López-Aladid, L. Bueno, R. Amaro, P. Oscanoa, L. Muñoz, J. Vila, A. Torres, Barcelona, Spain, p.A3111
- P398 In Cystic Fibrosis, Oropharyngeal and Sputum Cultures Share Genetically Similar Strains of Staphylococcus Aureus/C.** Zirbes, N. Pitcher, A.J. Pamatmat, V.L. Reeb, A.L. Thurman, A.J. Fischer, Iowa City, IA, p.A3112
- P399 Efficacy and Safety of Baloxavir Marboxil for the Treatment of Influenza Virus Infection in Patients with Chronic Lung Disease: A Subgroup Analysis of CAPSTONE-2/S.** Cagas, S. Gupta, J. Han, M. McIntosh, C. Collins, C. Sun, K. Kuhlbusch, South San Francisco, CA, p.A3113
- P400 Combating Hyperinflammation and Ensuing Damage in Acute Antibiotic Resistant Klebsiella spp. Pneumonia Using Primed Human Bone Marrow Mesenchymal Stromal Cells/C.H. Masterson, D. Byrnes, H. González, S.D. McCarthy, D.P. O'Toole, J.G. Laffey, Galway, Ireland, p.A3114**
- P401 Filamentous Bacteriophage in Patients with Primary Ciliary Dyskinesia and Chronic Pseudomonas Aeruginosa Endobronchial Infection/E.B. Burgener, J.M. Spano, P.L. Bollyky, C.E. Milla, Stanford, CA, p.A3115**
- P402 Systemic and Epithelial Cell Production of Thymic Stromal Lymphopoietin (TSLP) During SARS-CoV-2 Infection/L.** Gerla, S. Moitra, D. Pink, M. Duchesne, E. Reklow, A. Haarsma, A. Hillaby, L. Melenka, T. Hobman, I. Mayers, P. Lacy, Edmonton, Canada, p.A3116
- P403 Capsular Polysaccharide Thickness Is an Essential Factor for the Antibiotic Response in Bacteremic Pneumococcal Pneumonia/F.** Sanz, L.A. Ruiz Iturriaga, M.M. García Clemente, P.P. España, L. Serrano, N. Carrión Collado, J. Herrero Huertas, E. Fernández-Fabrellas, R. Zalacain, Valencia, Spain, p.A3117
- P404 A First-in-Kind Knockout Rat Reveals a Lung- and Brain-Protective Role for Gamma Secretase Activating Protein/M.S. Gwin, A. Geurts, C. Zhou, M. Lin, S.B. Voth, M. Alexeyev, V. Pastukh, J.Y. Lee, R. Balczon, T. Stevens, Mobile, AL, p.A3118**

- P405 Broad-Spectrum Antibiotics and Mortality in Community-Acquired Pneumonia Patients with Low-Risk for Drug-Resistant Pathogens/H.** Kobayasi, Y. Shindo, D. Kobayashi, T. Sakakibara, Y. Murakami, M. Yagi, A. Matsuura, K. Sato, Y. Goto, S. Matsui, T. Yagi, H. Saka, Y. Hasegawa, Nagoya, Japan, p.A3119
- P406 Co-Infection of SARS CoV-2 and RSV Infections in Mice Expressing Human ACE2 Receptor/M.** Gebara, R. Brown, R. Blair, Z. Chen, C. Midkiff, S. Paredes, A. Das, C. Dugas, C. Thompson, K. Chandler, T. Bavaret, A. Birnbaum, R. Sato, V. Traina-Dorge, X. Qin, G. Piedimonte, New Orleans, LA, p.A3120
- P407 Licensed Umbilical Cord Mesenchymal Stromal Cells Enhanced the Restoration of Local and Systemic Immune Homeostasis in a Transitional Phase Model of Pneumonia Induced Sepsis/D.** Byrnes, C.H. Masterson, H. González, S.D. McCarthy, D. O'Toole, J.G. Laffey, Galway, Ireland, p.A3121
- P408 OC43 Coronavirus Infections in Mice Elicit Lung Resident Memory T Cells/N.** Sanders, A.T. Shenoy, D.-Y. Chen, D. Bean, M. Sagar, M. Saeed, J.P. Mizgerd, Boston, MA, p.A3122
- P409 Poly I:C Mimics the Inflammatory Response to Ex Vivo Influenza A Virus Infection in Mouse Precision Cut Lung Slices/J.E.** Bourke, J. Chitty, C. Burnie, P. Bardin, B. Thomas, Clayton, Australia, p.A3123
- P410 Development of a Novel Two-Hit Murine Model of Chronic Pulmonary Infection with Pseudomonas Aeruginosa/R.** Amison, C. Gustafsson, S. Pitchford, London, United Kingdom, p.A3124
- P411 Role of Pseudomonas PA2794 nanA Sialidase-Like Protein on Lung Infection Pathogenesis and Cystic Fibrosis/R.** Siew, R. Zurich, A. Varki, V. Nizet, San Diego, CA, p.A3125
- P412 3D Culture Model to Characterize RSV Infection in the Peripheral Nervous System/S.** Medearis, R. Brown, K. Pollard, A. Bosak, C. Dugas, A. Das, R. Sato, V. Traina-Dorge, M. Moore, G. Piedimonte, New Orleans, LA, p.A3126
- P413 Profile of Patients with Post-Tuberculosis Bronchiectasis in a Tertiary Care Hospital in Brazil/E.** Okuno, M.M.G. Canan, V. Loureiro Dias, G.R. Dainez de Sant'Ana, J.V. Miranda, Curitiba, Brazil, p.A5642
- P414 Discovering the Prevalence of Antimicrobial Resistance Through Creation of an Antibiogram in a Rural Kenyan Hospital/I.** Drobish, G. Otieno, J. Mihango, V.D. Barnette, G. Njoroge Waceke, S.K. Thuo, K.S. Belknap, K. Linley, A. McLain Shirk, S.T. McClanahan, E. Irungu, F. Lelei, I.K. Barasa, B.J. Brotherton, San Diego, CA, p.A5643

- P415 Risks of Tuberculosis in Children from Families with Multidrug-Resistant and Drug-Susceptible Tuberculosis/L.** Gorbach, Minsk, Belarus, p.A5644
- P416 Treatment Outcomes of Anti-Tubercular Therapy in Chronic Smokers/S.S.** Patil, Dhule, India, p.A5645

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B57 CUTTING EDGE COVID RESEARCH

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P861 DEFINE - a Randomized, Open-Label Trial of the Inhaled Galectin-3 Inhibitor GB0139 in Hospitalized Patients with Moderate-to-Severe COVID-19/E.** Gaughan, T. Sethi, T. Quinn, N. Hirnani, A. Mills, A.M. Bruce, A. Mackinnon, V. Aslanis, F. Li, R. O'Connor, J. Dear, A.R. Akram, O. Koch, J. Wang-Jairaj, R.J. Slack, L. Gravelle, B. Lindmark, K. Dhaliwal, Edinburgh, United Kingdom, p.A3127
- P862 Failure of Non-Invasive Respiratory Support in COVID-19 Patients and Associated Trajectories of Systemic Markers of Injury and Inflammation/C.M.** Drohan, M. Lu, W. Bain, F.A. Shah, C. Schaefer, M. Bittner, B. Methe, H. Gentry, S. Qin, X. Wang, Y. Zhang, S.M. Nouraie, C.J. Kessinger, B. Macatangay, C. Klamar Blain, J. Lee, A. Morris, B.J. Mcverry, G.D. Kitsios, Pittsburgh, PA, p.A3128
- P863 Personal Protective Equipment Does Not Sufficiently Protect Against Virus Aerosol Unless Combined with Air Purification/S.** Joosten, S. Landry, D. Subedi, J. Barr, M.I. Macdonald, S. Dix, D.M. Kutey, D. Mansfield, G. Hamilton, B.A. Edwards, Clayton, Australia, p.A3129
- P864 Immunogenicity and Antibody Titers After BNT162b2 mRNA COVID-19 Vaccine, Breakthrough Infection and Booster/J.** Houry, R. Najjar-Debbiny, A. Hanna, A. Jabbour, Y. Abu Ahmad, A. Saffuri, M. Abu-Sinni, R. Shkeiri, A. Elemetry, F. Hakim, New Haven, CT, p.A3130
- P865 Plasma Microbial Cell-Free DNA Is Associated with Respiratory Tract Microbial Burden, Systemic Host Responses and Survival in Hospitalized Patients with COVID-19 Pneumonia at Risk for Secondary Infections/G.** Lisius, R. Dutttagupta, A.A. Ahmed, M. Hensley, N. Al-Yousif, M. Lu, W. Bain, F. Shah, C. Schaefer, S. Qin, X. Wang, H. Gentry, Y. Zhang, B. Methe, B.J. Mcverry, A. Morris, G. Kitsios, Pittsburgh, PA, p.A3131

- P866 Trends in COVID-19 Incidence Among Patients with Chronic Obstructive Pulmonary Disease (COPD) in 2020: A Population-Based Study in the United States/K.** Rothnie, T. Bancroft, M. Bogart, S. Gelwicks, L. Bengtson, A. Cole, A. Ismaila, H. Birch, D. Leather, C. Compton, X. Han, London, United Kingdom, p.A3132
- P867 Sequential Whole Blood Transcriptional Analysis in Patients Recovered from COVID-19/S.M. Kanth, S. Gairhe, J.A. Huapaya, S.C. Ramelli, C.Y. Demirkale, P. Torabi-Parizi, A.F. Suffredini, Bethesda, MD, p.A3133**
- P868 A Trial of MK2 Inhibitor ATI-450 in Patients with Moderate-Severe Novel Coronavirus Disease 2019 (COVID-19)/C. Streiler, M. Postigo Jasahui, U. Nazir, M.B. Jandali, K. Lovell, E. Fruhauf, A. Brown, J. He, H. Hope, J. Monahan, D. Gordon, M. Castro, D. Polineni, G. Gan, Kansas City, KS, p.A3134**
- P869 The Impact of COVID-19 Infection on Respiratory Function Screening in a Heavily Affected Italian Urban Center/G.** Levi, C. Rocchetti, L. Pedroni, S. Uccelli, D. Bottone, R. Magri, F. Quadri, M. Novali, R. Chiappini, G. Piccioni, D. Fornari, L. Pini, M. Davoudi, M. Bezzi, Brescia, Italy, p.A3135
- P870 Role of CTPA in Predicting Morbidity and Mortality in Patients with COVID-19/S. Waring, O. Taylor, A. D'Souza, S. Kumar, H. Jeffrey, Y. Narayan, G. Gamkitsulashvili, S. Jiwani, G. Collins, K. Patrick, A. Sethuraman, S. Naik, S. Kuckreja, M. Anwar, U. Ekeowa, R.K. Ragatha, P. Russell, Harlow, United Kingdom, p.A3136**
- P871 Safety of Tocilizumab in Patients Treated for Covid-19 in a London Hospital/C. Nimmo, A. Read, R. Priyadarshi, A. Parry, A. Boyd, K. Woods, London, United Kingdom, p.A3137**
- P872 Use of Hyperpolarized ¹²⁹Xe MRI for the Lung Damage Assessment in COVID-19 Survivors/T.K. Ranota, M. S. Fox, D.G. McCormack, G. Parraga, A.V. Ouriadov, London, Canada, p.A3138**
- P873 Impact of Time to Intubation on Mortality and Pulmonary Sequelae in Critically Ill COVID-19 Patients: A Prospective Cohort/J. Gonzalez, I.D. Benítez, D. de Gonzalo-Calvo, G. Torres, J. de Batlle, S. Gómez, A. Moncusí-Moix, P.M. Carmona Arias, S. Santiesteve, A. Monge, C. Gort-Paniello, M. Zuil, R. Cabo-Gambín, C. Manzano Senra, J.J. Vengoechea Aragoncillo, R. Vaca, O. Minguez, p.A3139**
- P874 Cardiac Safety of Imatinib for the Treatment of Covid-19: Results from a Randomized, Double Blind, Placebo-Controlled Trial/E. Duijvelaar, A. Vanhove, J.R. Schippers, P.J. Smeele, F.S. de Man, Y.M. Pinto, H.J. Bogaard, Amsterdam, Netherlands, p.A3140**
- P875 Mucociliary Dysfunction in Severe COVID-19: The Other End of the Spectrum/K. Vijaykumar, C. Prieto Granada, V. Lin, M. Mazur, S.M. Rowe, Birmingham, AL, p.A3141**
- P876 Efficacy of Fluvoxamine versus Placebo for Outpatients with COVID-19: A Systematic Review and Meta-Analysis/S. Bhuta, N.J. Patel, W. Khokher, N. Kesireddy, M. Patel, C. Burmeister, S. Ghazaleh, R. Assaly, Toledo, OH, p.A3142**
- P877 Breath Analysis of Patients Diagnosed with COVID-19 Pneumonia Using Infrared Spectroscopy/M.L. Duong, R. Cusack, G.M. Gauvreau, T. Ho, R. Kruisselbrink, T. O'Shea, E. Scheme, A. Phinyomark, R. Larracy, S. Graham, S. Podolsky, G. Beydaghyan, Hamilton, Canada, p.A3143**
- P878 SARS-CoV-2 Viremia Is Associated with Lower Respiratory Tract Viral Load and Plasma Markers of Epithelial Injury and Thrombin Generation in Critically Ill Patients/M.J. Bittner, J.L. Jacobs, A. Naqvi, M.P. Meyer, B. Methe, B.J. Mcverry, M.D. Neal, F.A. Shah, J. Lee, J.W. Mellors, A. Morris, J. Seheult, G. Kitsios, W. Bain, Pittsburgh, PA, p.A3144**
- P879 The Impact of Pandemic on Influenza and Respiratory Syncytial Virus Profile/P. Mondal, A. Sinharoy, S. Gope, Hershey, PA, p.A3145**
- P880 Multi-Omics Identify Key Molecules and Pathogenesis of Severe COVID-19/T. Kawasaki, Y. Takeda, R. Edahiro, M.N. Itoh, A. Kumanogoh, Suita, Japan, p.A3146**
- P881 The Effects of Pre-admission Metformin Use on Mechanical Ventilation and Mortality in COVID-19 Patients with Type 2 Diabetes Mellitus in a Community Hospital Setting/K. Kumar, K. Vargas, J. Elmueze, T. Parsa, K. Seetharam, F. Poonam, E. Toribio, L. Santana, E. Santana, J. Pham, N. Sajid, P. Bhat, J. Fuentes, M. Orris, T. Mir, K. Ngozi, P. Bhat, G. Punokollu, D. Asti, P. Chawla, A. Tejpal, P. Hejmadi, U. Bhatt, P. Mir, O. Badem, J. Shah; Brooklyn, NY, p.A3147**
- P882 Delays in First Remdesivir Administration Associated with Higher Risk of Death from COVID-19/M.T. Freedman, K.A. Hess, M.G. Kashiouris, Y.R. Sedhai, M. L'Heureux, M.M. Churpek, C.N. Sessler, M. Stevens, Richmond, VA, p.A3148**
- P883 Trending Ferritin Levels Do Not Predict Mortality and Ventilator Days in Patients with Coronavirus Disease 2019 Infection/D. Shakaroun, J.C. Horowitz, M.H. Lazar, J. Jennings, Detroit, MI, p.A3149**
- P884 Clinical Characteristics and Outcomes of COVID-19 Among Pregnant and Non-Pregnant Women: A Retrospective Study from Ethiopia/D.K. Huluka, A. Bekele, E.K. Etissa, Y. Gebreegziabher, B. Dawit, H. Araya, B. Kassa, T. Gebreyes, N. Mohammed, T. Soboka, A. Mohammedamin, T. Zergaw, H.Y. Ahmed, T.H. Gebremariam, D.A. Haisch, C.B. Sherman, N. Schluger, Addis Ababa, Ethiopia, p.A3150**

- P885 Predictors of Symptom-Persistence and Antibody Seroconversion in a COVID-19 Recovering Cohort/C.D.** Onofrei, V.P. Guntur, B.D. Modena, S.-Y. Liao, I. Petrache, N. Goldstein, Denver, CO, p.A3151
- P886 High Interleukin-6 Levels on Admission Predicts In-Hospital Mortality in Overweight and Obese COVID-19 Patients/D.C. Fleitas Sosa, N. Van Der Rijst, T.-A.A. Ho, X. Lu, H. Zhao, S. Peterson, V. Kim, K.V. Shenoy, Philadelphia, PA, p.A3152**
- P887 Pulmonary Function Tests in Patients Post-Infection by Coronavirus Disease-2019 (COVID-19)/H. Yaqoob, R.P. Manglani, J. Mathew, M. Fenster, N.W. Schluger, Valhalla, NY, p.A3153**
- P888 Comparison of Clinical Profile and Management of COVID Related Pulmonary Thrombosis Between the First and Second Waves at a Community Hospital/A. Jain, N. Kagita, R.M. Rashid, I. Ahmed, H.S. Sreemantula, D. Patel, K. Amakye, E. Green, Darby, PA, p.A3154**
- P889 Improving Antibiotic Stewardship in COVID-19: A Quality Improvement Initiative/M. Fernandes, R. Jammal, O. Aroyewun, I. Nwachukwu, Brooklyn, NY, p.A3155**
- P890 Admission Neutrophil to Lymphocyte Ratio Is an Independent Risk Factor for Mortality in COVID-19 Patients in a Low-Income Caribbean Country/D.-M. Wisdom, T. Thompson, L.-A. Fisher, Kingston, Jamaica, p.A3156**
- P891 Insulin Use in Type II Diabetic Patients: A Predictive of Mortality in Covid-19 Infection/M. Assaad, N. Hekmat-Joo, J. Hosry, L. Dahabra, A. Kassem, A. Itani, A. Abou Yassine, J. Zaidan, D. El Sayegh, Staten Island, NY, p.A3157**
- P892 Covid-19 and In-Hospital Cardiac Arrest (IHCA) in a Community Hospital Setting in Newark/A. Patel, R. Ali, N. Mehta, J. Slim, H. Sharma, Newark, NJ, p.A3158**
- P893 Predicting Low Oxygen Saturation of COVID-19 Patients Using a Random Forest Classifier/S. Liaqat, T. Falk, T. To, N. Andany, N. Patel, R. Wu, A.S. Gershon, A. Mariakakis, E. de Lara, D. Liaqat, Toronto, Canada, p.A3159**
- P894 Trends in COVID-19 Incidence Among Patients with Asthma in 2020: A Population-Based Study in the United States/K. Rothnie, T. Bancroft, M. Bogart, S. Gelwicks, L. Bengtson, A. Cole, A. Ismaila, H. Birch, N. Swamy, D. Leather, C. Compton, X. Han, London, United Kingdom, p.A3160**
- P895 Safety of Remdesivir for Elderly (Over 80 Years of Age) Patients with Coronavirus Disease 2019 (COVID-19)/O. Kanai, K. Fujita, K. Nanba, N. Esaka, H. Hata, K. Seta, A. Yasodas, T. Odagaki, T. Mio, Kyoto, Japan, p.A3161**
- P896 Secondary Infections in Critically Ill Patients During the First Wave of COVID19: Comparison with a Critically Ill Influenza Cohort/A. Beliaevsky, B. Johnson, R. Kaul, J.T. Granton, Kingston, Canada, p.A3162**
- P897 Association of Pulmonary and Cognitive Symptoms in Patients with Post-Acute Sequelae of COVID-19/C. Perrotta, S.M. Nouraie, C.J. Kessinger, S.B. Blacka, M.G. Risbano, V. Petraglia, F.C. Sciarba, C.R. Kliment, D.G. Dunlap, A. Morris, Pittsburgh, PA, p.A3163**
- P898 Neutrophil-to-Lymphocyte Ratio in Associated with Severity of Radiographic Edema on Chest X-Ray in Patients with COVID-19/D. Kotok, J. Rivera, C. Girard, A.I. Kim, S. Shettigar, A. Lavina, S. Gillenwater, A. Hadeh, Weston, FL, p.A3164**
- P899 COVID-19 Effects on Lung Extracellular Matrix Remodeling, Wound Healing, and Neutrophil Activity: A Proof-of-Concept Biomarker Study/H.W. Breisnes, D.J. Leeming, A. Fazleen, J.M.B. Sand, Herlev, Denmark, p.A3165**
- P900 Yoga Practice Exhibit Protective Effect Against COVID-19 Symptomatic Presentation and Severe Disease in People Living with HIV on Antiretroviral Therapy/D. Pedroza, L. Ibarra-Arriaga, N. Cabral-Hipolito, B. Molina-Ramirez, I. Castillo-Maldonado, D. Delgadillo-Guzmán, A. Ramirez-Moreno, R. Meza-Velázquez, J. Haro-Santa Cruz, Torreón, Mexico, p.A3166**
- P901 New Domiciliary Supplemental Oxygen Therapy After COVID-19 Related Hospitalization in U.S. Military Veterans in Metropolitan Chicago/M. Kaul, P. Gupta, I. Rubinstein, Chicago, IL, p.A3167**
- P902 A Semi-Quantitative Evaluation of the Filtration Efficiency of a Breathing Circuit Filter in a Model of Profuse Coughing/B. Demers, R. Potter, Carmichael, CA, p.A3168**
- P903 Trends in Oxygen Level During Acute COVID-19 Infection in Patients Quarantining at Home/A.S. Gershon, N. Patel, R. Wu, S. Liaqat, D. Liaqat, E. de Lara, A. Mariakakis, A. Simor, P. Lam, S. Masood, N. Andany, N. Daneman, A. Chan, T. To, T.H. Falk, Toronto, Canada, p.A3169**
- P904 Symptom Burden in Patients of Different Ages with Acute COVID-19 Infection Quarantining at Home/A.S. Gershon, N. Patel, S. Liaqat, D. Liaqat, E. de Lara, T. To, N. Andany, T. Falk, R. Wu, Toronto, Canada, p.A3170**
- P905 Cross-Validation of a Global Machine Learning Model to Predict COVID-19 Mortality/H. Minhas, A. Malik, D. Kurtz, Z.-U.-A. Fatiwala, F. Ahmed, F. Irfan, S. Lee, Z. Esber, Detroit, MI, p.A3171**

- P906 Antibiotic Administration and Outcomes in Hospitalized Covid-19 Patients/R. Mendpara, P. Yang, R. Kempker, P. Rebolledo, F. Rollin, S. Gurbani, M. Schechter, D. Wilhoite, S. Bogard, A. Duggal, N. John, M. Kapuria, C. Terry, G. Dale, A. Mora, J. Preslar, K. Sandor, Y.F. Wang, M. Woodworth, J. Kempker, A.M. Esper, Gainesville, G, p.A3172**
- P907 Initial Presentation of COVID-19 with Pneumothorax: A Systematic Review of Case Reports/A. Pattupara, J. Bahk, D.J. Shah, M.A. Riego, C.M. Lo Cascio, J.M. Ghassibi, New York, NY, p.A3173**
- P908 Marijuana Consumption Is Associated with Lower COVID-19 Severity Among Hospitalized Patients/P. Yan, C. Shover, N.J. Jackson, R. Buhr, R. Nguyen, D.P. Tashkin, I. Barjaktarevic, Los Angeles, CA, p.A3174**
- P909 Lung Function Among Patients with Persistent CT Abnormalities After Virological Recovery from Covid-19 Compared to Those with Normal CT Imaging/R.P. Manglani, M. Fenster, T. Henson, A. Jain, N. Schluger, Valhalla, NY, p.A3175**

CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
B58 PULMONARY REHABILITATION: NEW HORIZONS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area F, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P514 Analysis of Respiratory Pattern and Pulmonary Function in Post COVID19 Patients: A Case Report Study/J. Silva, I. Amorim, A. Brito, V. Mastroianni, A. Xavier, F. Silva, M. Falcao, L. Burle, J. Silva, C. Oliveira, G. Maia, M. Evaristo, H. Leitao, A.F. Dornelas de Andrade, D.C. Brandao, S. Campos, Recife, Brazil, p.A3176**
- P515 Do Exercise Intervention Studies for Hospitalized Individuals with an Acute Exacerbation of Chronic Obstructive Pulmonary Disease Adequately Report the Principles of Exercise Training?/D.M. Petry Moecke, P. Camp, Vancouver, Canada, p.A3177**
- P516 Characteristics of Virtual Care Used by Indigenous Peoples: A Scoping Review/D.M. Petry Moecke, M. Girt, A. Winter, M. Beckett, P. Pettitsyna, S. Chopra, I. Kamurasi, T. Holyk, P. Camp, Vancouver, Canada, p.A3181**
- P517 Determining the Most Discriminatory Perceived Activity and Weakness Score (PAWS) for Predicting Muscle Strength, Endurance, and Adverse Outcomes in Hospitalized Patients/D. Faradji, J. Ferris, R. Dhand, Memphis, TN, p.A3178**

- P518 Perceived Activity and Weakness Score (PAWS): A Subjective Screening Tool for Patient's Ability to Use Dry Powder Inhalers?/D. Faradji, M. Valdes, J. Ferris, G. Kumar, R. Dhand, Memphis, TN, p.A3180**
- P519 Skeletal Muscle Size and Fat Infiltration of the Limb Muscles in Idiopathic Pulmonary Fibrosis/D. Rozenberg, M. Sussman, R.G.L. Koh, S. Nourouzpour, L. Wickerson, L.G. Singer, S. Shapera, J.H. Fisher, M. Fukushi, T. Martinu, A. Naraghi, M. de Perrot, J. Batt, S. Mathur, D. Kumbhare, Toronto, Canada, p.A3179**
- P520 Respiratory Functional Compromise After COVID-19 in Patients Admitted to a Pulmonary Rehabilitation Program/L.K. Vargas Ramirez, V.M. Herrera, L.K. Rodriguez Corredor, J. Chacon, Bucaramanga, Colombia, p.A3182**
- P521 Functional Limitations, Anxiety and Depression Post-COVID in Colombian Adults/L.K. Vargas Ramirez, L.K. Rodriguez Corredor, Bucaramanga, Colombia, p.A3183**
- P522 Role of Pulmonary Rehabilitation Programs in Weaning Process of a Readmitted Patient with Oxygen Dependency in Severe Pulmonary Fibrosis After COVID-19 Infection/S.C. Widjanantie, L. Dwiyani, Rawamangun, Indonesia, p.A3184**
- P523 Association Between Days of Start Rehabilitation and Development of ICU-Acquired Weakness in Critical Ill Patients with COVID-19/H. Francelin, D.P. Santos, A.C. Lunardi, C.N. Peso, D.S. Schujmann, C. Fu, Sao Paulo, Brazil, p.A3186**
- P524 Stepwise Validation Program for Developing the Algorithm for Chronic Cough with Remote e-stethoscope Platform RESP/M. Glass, J. Kroh, T. Nguyen, D. Piao, S. Cannon-Bailey, Philadelphia, PA, p.A3187**
- P525 Innovative Program of Physical and Cardiopulmonary Conditioning in Patients After the Diagnosis of Covid-19 in a Health Institution/L. Dulcey, J.S. Theran, R.G. Parales, J.S. Esparza, H.A. Moreno, J.A. Pineda, R. Caltagirone, M. Aguas, Bucaramanga, Colombia, p.A5646**

BASIC • TRANSLATIONAL
THEMATIC POSTER SESSION
B59 ACUTE LUNG INJURY AND ARDS: CELLS, TISSUES, AND ANIMAL MODELS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area K, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P911 Ascorbic Acid Attenuates Alveolar-Capillary Barrier Permeability in the Ex Vivo Human Lung/C.M. Shaver, E.A. Weddle, T. Tomasek, J. Jesse, J.B. McNeil, N.E. Wickersham, J.E. Meegan, J.A. Bastarache, L.B. Ware, Nashville, TN, p.A3188**
- P912 ABO, a Small Molecule Inhibitor of Integrin $\beta 4$, Attenuates Endothelial Cell Permeability and Murine Acute Lung Injury Induced by MRSA/W. Chen, Y. Epshtein, J.R. Jacobson, Chicago, IL, p.A3189**
- P913 FPA96F: A Validated Assay to Determine Fibrinolytic Activity and to Personalize Fibrinolytic Therapy for Empyema/R. Emerine, K. Sarva, R. Girard, G. Florova, C.J. De Vera, C. Huckestein, S. Idell, A. Komissarov, Tyler, TX, p.A3190**
- P914 Pseudomonas Aeruginosa Flagellin Augments Macrophage Piezo1 Cation Channel Activity/E.M. Orsini, S. Abraham, Y. Liu, L.M. Grove, A. Reinhardt, B.D. Southern, M.A. Olman, R.G. Scheraga, Cleveland, OH, p.A3191**
- P915 The Pro-Fibrotic and Senescence Phenotype of Old Lung Fibroblasts Is Reversed by Genetic and Pharmacologic Manipulation of SLC7A11 Expression/J. Ritzenthaler, E. Torres-Gonzalez, Y. Zheng, R. Summer, W.H. Watson, J. Roman, Philadelphia, PA, p.A3192**
- P916 Non-Invasive Systemic Biomarker Assessment of Patients with E-cigarette or Vaping Use-Associated Lung Injury (EVALI)/G. Kaur, S. Podguski, T. Muthumalage, M.D. Mcgraw, I. Rahman, Rochester, NY, p.A3193**
- P917 Uptake of Cell-Free Hemoglobin into Macrophages Is Dependent on Extracellular Calcium/C.M. Shaver, S.R. Landstreet, L.B. Ware, J.A. Bastarache, Nashville, TN, p.A3194**
- P918 Activation of Yes-Associated Protein (YAP) Is Dependent on the Degree of Injury in Cell Culture Models of Acute Lung Injury/J. Odackal, E. Lee, H. Roybal, K. Correll, K. Beke, D.W.H. Riches, J.P. Bridges, Y. Aschner, M. Koenigshoff, G.P. Downey, Aurora, CO, p.A3195**
- P919 Stretch-Induced Senescence of Lung Epithelial Cells/P. Martín, C. López-Martínez, L. Amado-Rodríguez, R. Rodríguez-García, I. Crespo, M. Fernández-Rodríguez, G.M. Albaiceta, I. Lopez-Alonso, Oviedo, Spain, p.A3196**
- P920 SARS-CoV-2 Spike Protein Binds WWOX and Increases Endothelial Permeability/W. Chen, T. Hussain, J. Chen, J.R. Jacobson, S.M. Dudek, C..M. Aldaz, S. Singla, Chicago, IL, p.A3197**
- P921 The Critical Role of Meflin-Positive Fibroblasts Against Acute Lung Injury/N. Hashimoto, K. Sakamoto, Y. Nakahara, N. Omote, A. Ando, M. Inoue, A. Suzuki, J. Fukihara, M. Kusaka, K. Wakahara, A. Enomoto, Nagoya, Japan, p.A3198**
- P922 Caveolin-1/Akt Pathway Regulates Glycolysis and Matrix Production in Fibrotic Lung Fibroblasts/A. Kumar, L. Fan, D. Korir, S. Shetty, Tyler, TX, p.A3199**
- P923 Disruption of Muc5b Sialylation and Siglec-F Signaling Prevents Bleomycin-Induced Lung Fibrosis/N. Liu, S. Rangarajan, W.J. Janssen, C.M. Evans, Aurora, CO, p.A3200**
- P924 Lithium Chloride Attenuates Lung Endothelial Cell Permeability via Increased Claudin-5/M. Colamonici, Y. Epshtein, W. Chen, J.R. Jacobson, Chicago, IL, p.A3201**
- P925 Role of Oxidative Stress in Pulmonary Injury Induced by Nitrogen Mustard/R. Malaviya, V. Sunil, A. Venosa, J. Andres, C. Jiang, E. Abramova, K. Vayas, J. Laskin, D. Laskin, Piscataway, NJ, p.A3202**
- P926 I-DOT 2.0 as a Tool to Accelerate Developing Novel Point of Care Test (POCT) for Empyema/R. Emerine, K. Sarva, G. Florova, S. Idell, A. Komissarov, Tyler, TX, p.A3203**
- P927 Nicotine Promotes Cellular Metabolic Reprogramming in Lung Fibroblasts via $\alpha 7$ Nicotinic Acetylcholine Receptors/J. Ritzenthaler, H. Shaghghi, R. Summer, E. Torres-Gonzalez, W.H. Watson, J. Roman, Philadelphia, PA, p.A3204**
- P928 Lung Histopathology in the Subacute Phase After Gut Ischemia-Reperfusion/F. Seto, Q. Meng, T. Hiruma, T. Totsu, K. Uchida, Bunkyo-ku, Japan, p.A3205**
- P929 Histone-Induced Endothelial Barrier Dysfunction and Inflammation Are Mediated via Toll-Like Receptor 4 in Human Lung Endothelial Cells/P. Karki, C. Zhang, Y. Li, K. Promnares, K.G. Birukov, A. Birukova, Baltimore, MD, p.A3206**
- P930 Serum from Rats Subjected to Traumatic Brain Injury and Hemorrhagic Shock Induces Profound Endothelial Barrier Dysfunction/Y. Ke, J. Proctor, J. Medina, C. Miller, J. Kim, T. Grissom, A. Birukova, G. Fiskum, K.G. Birukov, Baltimore, MD, p.A3207**
- P931 Activation of Large Conductance K^+ Channels Protects Pulmonary Endothelial Cells Against TNF- α -Induced Inflammation Through MAPK Pathways/T. Zyrianova, B. Lopez, C. Gu, K. Zou, A. Schwingshackl, Los Angeles, CA, p.A3208**
- P932 Endotoxin-Induced m6A Methylation in Human Endothelial Cells/A. Feng, J. Wu, T. Robinson, S. Black, T. Wang, Port St. Lucie, FL, p.A3209**
- P933 Altered Pathways of Hypoxia in Lung Fibroblasts and Their Relationship with the Development of Idiopathic Pulmonary Fibrosis/A. Aquino-Galvez, R. Velázquez-Cruz, Y.I. Balderas-Martínez, Y. Romero, M. Castillejos-López, I. Herrera, V.-M. Vargas-Morales, A. Camarena Olvera, P. Sierra, L.M. Torres-Espíndola, M.O. Garcia-Martin, V. Ruiz, Ciudad de México, Mexico, p.A3210**

- P934 The Ubiquitin E3 Ligase Subunit F-Box Only Protein 24 is Regulated by Endotoxin and Suppresses Inflammation**/B. Johnson, J.D. Londino, J.S. Bednash, D. Farkas, J.A. Adair, A. Elhance, F.J. Johns, L.N. Chafin, R.K. Mallampalli, Columbus, OH, p.A3211
- P935 Pulmonary Surfactant Activity and Surfactant Protein SP-B Levels in COVID-19-Related Acute Respiratory Distress Syndrome**/P. Losada-Oliva, D. Sanchez-Ortiz, A. Mingote, R. Castejon, G. Hernandez, G. Diaz, M. Echaide, C. Salas, J.A. Vargas, J. Pérez-Gil, C. Autilio, Madrid, Spain, p.A3212
- P936 In Vitro and In Vivo Characterization of the Novel Cathepsin C Inhibitor BI 1291583**/S. Kreideweiss, G. Schaenzle, G. Schnapp, V. Vintonyak, M. Grundl, Biberach, Germany, p.A3213
- P937 Chronic Ethanol Feeding to Hepatic Alcohol Dehydrogenase Deficient Deer Mice Causes Fibro-Inflammatory Disease of the Lung**/L. Kaphalia, M.P. Srinivasan, B.S. Kaphalia, W.J. Calhoun, Galveston, TX, p.A3214
- P938 Microbiome Diversity Predicts Respiratory Status in a Clinically Diverse Cohort**/J. Radder, K. Li, J. Clader, A. Patel, A. Fitch, P. Swamy, B. Methe, A. Morris, Pittsburgh, PA, p.A3215
- P939 Cell-Free Mitochondrial DNA Is a Mediator of IL-6 Release During Sepsis**/N. Samandari, A. Leonard, M.M. Fuster, P. Singh, J. Ix, M. Hepokoski, San Diego, CA, p.A3216
- P940 Lungs of Mice with Peritoneal Sepsis Are in LPS-tolerant State**/Q. Meng, F. Seto, T. Hiruma, T. Totsu, K. Uchida, Bunkyo-ku, Japan, p.A3217
- P941 Role of Glycosylation on the Interaction of SP-BN with Pulmonary Surfactant Components. Functional Implications**/M. Isasi, L. García-Ortega, J. Pérez-Gil, Madrid, Spain, p.A3218
- P942 Novel Lung Targeting Cell Penetrating Peptides as Vectors for Delivery of Therapeutics**/M. Zahid, K. Mccandless, S. Mishra, J. Stillner, K. Feldman, H. Yagi, R. Yurko, K. Islam, J. Brown, R. Frizzell, Pittsburgh, PA, p.A3219
- P943 Influenza A Virus Exhibits Enhanced Replication and Cytotoxicity in Murine Macrophages Compared to Lung Epithelial Cells**/O. Shamaa, P.S. Woods, A.Y. Meliton, K. Sun, R. Cetin-Atalay, R.B. Hamanaka, G.M. Mutlu, Chicago, IL, p.A3220
- P944 Novel Method for Fast Decellularization of Lung Slices**/I. Almendros, M.L. Narciso, A. Ulldemolins, C. Júnior, J. Otero, D. Navajas, R. Farre, N. Gavara, Barcelona, Spain, p.A3221
- P945 MicroID: A Novel Biotin Ligase Enables Rapid Proximity Ligation Proteomics**/J.D. Londino, L. Chafin, J. Adair, D. Farkas, A. Elhance, B. Johnson, Columbus, OH, p.A3222
- P946 RNA Sequencing Identifies a Potential Effect of Semaphorin 5a on Murine Alveolar Macrophages in Endotoxin-Induced Acute Lung Injury**/S.M. Kanth, S. Gairhe, A. Suffredini, P. Torabi-Parizi, Bethesda, MD, p.A5647
- P947 Oxidized Phospholipid Neutralizing Antibody Ameliorates Hyperoxia-Induced Lung Injury**/E. Sajti, W. Tang, X. Sun, J. Witztum, C. Glass, San Diego, CA, p.A5648
- P948 Ly6C^{hi} Monocytes Enhance the Lung Injury Response in Murine Sepsis Survivors**/S.J. Denstaedt, B.H. Singer, M. Newstead, T.J. Standiford, B.B. Moore, R.L. Zemans, Ann Arbor, MI, p.A5649
- P949 Persistent Changes in the Gut Microbiome of Covid-19 Survivors**/V. Upadhyay, P. Tasoff, Y. Hswen, R. Suryawanshi, R. Kumar, J. Babbord, M. Spitzer, V. Murray, C. Noecker, J.E. Bisanz, S. Lynch, M. Ott, S. Lee, P.J. Turnbaugh, San Francisco, CA, p.A5650
- P950 Serum miR-1 Level as a Biomarker of Severity in Bacterial Pneumonia**/P. Pednekar, A. Korde, C. Dela Cruz, S. Takyar, Bridgeport, CT, p.A5651

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B60 ASTHMA AND ALLERGIC RESPONSES: CELLS, TISSUES, AND ANIMAL MODELS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P952 Knocking Out MUC5AC Prevents Mucus Adhesion and Restores Mucociliary Transport in IL-13 Treated Primary Human Airway Cell Cultures/Y. Wang, G. Radicioni, B. Reidel, J. Carpenter, J. MacDonald, M. Markovetz, D. Hill, M. Kesimer, Chapel Hill, NC, p.A3223

P953 Plant Protease Inhibitors Had an Effect on Controlling Lung Inflammation, Remodeling and Oxidative Stress in Mice with ASTHMA-COPD Overlap: Comparison with Corticosteroid/R.F. Righetti, J.M.L.G. Joao, J.A.S. Barbosa, L.L.S.D. Silva, S. Fukuzaki, L.D.N. Camargo, B.M. Saraiva-Romanholo, S.K.M. Bezerra, C.M. Prado, F.D.T.Q.S. Lopes, M.L.V. Oliva, E.A. Leick, I.F.L.C. Tibério, Sao Paulo, Brazil, p.A3224

- P954 Asthmatic Bronchial Smooth Muscle Decreases Epithelial Response to Rhinovirus Infection Through a CCL20-EIF2AK2 Dependent Pathway/P.** Esteves, B. Allard, A. Celle, I. Dupin, E. Maurat, O. Ousova, M. Thumerel, J.-W. Dupuy, L.-L. Thierry, R. Marthan, P.-O. Girodet, P. Berger, T. Trian, Bordeaux, France, p.A3225
- P955 Succinate Accumulation Induces HIF-1 α Expression in Airway Epithelial Cells/A.** Hudler, F. Holguin, T. Yifru, T. Matlock, D.E. Winnica, Aurora, CO, p.A3227
- P956 Differential Expression of Linear and Circular Noncoding RNAs in Mild/Moderate Versus Severe House Dust Mite (HDM) Mouse Models of Asthma/W.T.** Gerthoffer, S.C. Ramelli, Reno, NV, p.A3228
- P957 Regulation of β_2 -Adrenergic Receptor Expression by S-Nitrosylation/Z.** Grimmer, J.S. Stamler, Cleveland, OH, p.A3229
- P958 Anti-IL-17 Treatment Modulates Pulmonary Responses in Model of Asthma-COPD Overlap/L.** Camargo, T.M.D. Santos, S. Fukuzaki, N.A.B. Martins, F.M.D. Almeida, J. Lourenço, S.K.M. Bezerra, B.M. Saraiva-Romanholo, C.M. Prado, F.D.T.Q.D.S. Lopes, E.A. Leick, R.F. Righetti, I.D.F.L.C. Tibério, Sao Paulo, Brazil, p.A3230
- P959 Untargeted Lipidomics of Lung Tissue-Derived Extracellular Vesicles in Mouse Model of Allergic Asthma/I.K.** Sundar, A. Srinivasan, S.K. Duraisamy, M. Castro, Kansas City, KS, p.A3231
- P960 Transcriptional Profiling of Airway Epithelial Cells Overexpressing MicroRNA-223-3p/L.** Victoria, A. Shim, A. Gupta, N. Li, X. Yan, A. Wang, J.L. Gomez, New Haven, CT, p.A3232
- P961 Mechanisms of Cysteine-Mediated Polymerization and Secretion of Muc5ac/A.M.** Jaramillo, N. Hara, A.Q. Harder, J.C. Needell, E.K. Vladar, C.M. Evans, Aurora, CO, p.A3233
- P962 Different Effects of Inhaled Corticosteroids on Infiltrating Mast Cells in Type 2 High and Type 2 Low Asthma/M.** Hvidtfeldt, A. Sverrild, A. Pulga, L. Frossing, A. Silberbrandt, M. Hostrup, M. Thomassen, C. Sandén, O.B. Nielsen, C.-M. Clausson, D. Bornesund, J. Erjefalt, C. Porsbjerg, Copenhagen, Denmark, p.A3234
- P963 Variation in the Biological State of the Airway Epithelia Across Childhood Asthmatics Directs Transcriptional Responses to Air Pollution Fine Particulate Matter/B.J.M.** Williams, N.D. Jackson, C.M. Moore, S.P. Sajuthi, M.T. Montgomery, S.-H. Cho, J.L. Everman, C.L. Rios, K.C. Goldfarbmuren, C. Eng, V. Medina, S. Salazar, J.R. Rodriguez-Santana, E.G. Burchard, M.A. Seibold, Denver, CO, p.A3235
- P964 A Role for MMP-19 in Mediating the Effects of Vertical Sleeve Gastrectomy in Chronically Allergen-Challenged Obese Mice/M.D.** Ihrle, V.L. Mcquade, J.T. Womble, J.M. Daly, R.M. Tighe, L.G. Que, J.L. Ingram, Durham, NC, p.A3236
- P965 Restoration of Nitric Oxide Bioavailability Decreases Parkin Expression in Airway Epithelial Cells/T.** Yifru, T. Matlock, A. Hudler, S. Ye, F. Holguin, D.E. Winnica, Aurora, CO, p.A3237
- P966 Does Treatment with a Plant Proteinase Inhibitor, Enterobium Contortisiliquum Contribute to the Control of Inflammation, Remodeling and Oxidative Stress in Mice with Asthma-COPD Overlap (ACO)?/L.** Camargo, J.A.S. Barbosa, L.L.S.D. Silva, J.M.L.G. Joao, H.T.D. Santos, B.M. Saraiva-Romanholo, S. Fukuzaki, S.K.M. Bezerra, C.M. Prado, F.D.T.Q.D.S. Lopes, M.L.V. Oliva, R.F. Righetti, E.A. Leick, I.D.F.L.C. Tibério, Sao Paulo, Brazil, p.A3238
- P967 IL-18 Modulates Excitation Contraction Coupling in Human Airway Smooth Muscle Cells/J.** Woo, R.A. Panettieri, J.A. Jude, New Brunswick, NJ, p.A3239
- P968 Airway Epithelial Paraoxonase 2 in Obese Asthma/D.E.** Winnica, A. Monzon, S. Ye, E.K. Vladar, M. Saal, R. Conney, F. Holguin, Aurora, CO, p.A3240
- P969 Dose Response and Mechanistic Studies of a Novel Rapid Acting Bronchodilator (S1226) in a Rat Model of Acute Chronic Allergic Asthma/F.H.** Green, D.E. Nelson, T.Y. El Mays, A. Chiu, G. Lalli, G. Shrestha, R.N. Githumbi, C. Pieron, J. Dennis, Calgary, Canada, p.A3241
- P970 Crosstalk Between T Helper Cells and Airway Smooth Muscle Cells in Obesity-Related Asthma/C.** Yon, D. Thompson, J. Jude, R. Panettieri, D. Rastogi, Washington, DC, p.A3242
- P971 Role of Nuclear Factor- κ B in the Regulation of κ B-kinase-e and Interferon Regulatory Factor-1 Gene Expression in Human Pulmonary Epithelial Cells/A.** Necker-Brown, A. Thorne, A. Bansal, M.M. Mostafa, R. Newton, Calgary, Canada, p.A3243
- P972 DNA Sequencing Analysis of Cystic Fibrosis Transmembrane Regulator Gene Identifies Cystic Fibrosis-Associated Variants in the Severe Asthma Research Program/M.E.** Izquierdo, C.R. Marion, W.C. Moore, K. Raraigh, G.R. Cutting, E. Ampleford, G.A. Hawkins, M. Castro, L.C. Denlinger, S.C. Erzurum, J.V. Fahy, E. Israel, N.N. Jarjour, D. Mauger, B.D. Levy, S.E. Wenzel, P. Woodruff, E.R. Bleecker, D.A. Meyers, V. E. Ortega Winston Salem, NC, p.A3244
- P973 Early-life RSV Infection Alters Nasal Airway Epithelial Cell Development/D.C.** Newcomb, J.Y. Cephus, K. McKernan, T. Gebretsadik, C. Rosas-Salazar, T.V. Hartert, S. Berdnikovs, Nashville, TN, p.A3245

- P974 Inhibition of Glycolysis Attenuates Excitation-Contraction Coupling in Human Airway Smooth Muscle/S. Xu, N. Karmacharya, G. Cao, R.A. Panettieri, J. Jude, New Brunswick, NJ, p.A3246**
- P975 SFRP-1 Alters Macrophage Polarization and Allergic Airway Inflammation/N.A. Rai, E. Arteaga-Solis, X. Ma, M.P. Goldklang, J.M. D'Armiento, New York, NY, p.A3247**
- P976 Integrative Omics Study Identifies Epigenetic Markers Associated with Bronchodilator Drug Response in Pediatric Asthma/J. Pérez García, E. Herrera-Luis, A. Li, A.C.Y. Mak, S. Hunstman, S.S. Oh, J. Elhawary, C. Eng, K.B. Beckman, D. Hu, M. Lenoir, J. Rodriguez-Santana, N. Zaitlen, J. Villar, L. Borrell, E. Burchard, M. Pino-Yanes, San Cristóbal de La Laguna, Spain, p.A3248**
- P977 Discovery and Characterization of the First Biased Beta-Agonist That Favors Gs-Coupling vs Beta-Arrestin Mediated Desensitization: A New Class of Structurally Distinct Beta-Agonists for Treating Obstructive Lung Diseases/S.B. Liggett, D. Kim, A. Tokmakova, M. Giulianotti, S. An, W. Goddard, Tampa, FL, p.A3249**
- P978 Mast Cell Dependent Bronchoconstriction in Mouse Model of Early Asthmatic Response Inhibited by Beta-Agonist and Anticholinergic Bronchodilators/J.E. Phillips, A. Gomez, X. Zhang, Thousand Oaks, CA, p.A3250**
- P979 Mucociliary Phenotypes in MUC5B and MUC5AC-Deficient Human Airway Epithelial Models/D. Song, E. Iverson, M. Scull, G. Duncan, College Park, MD, p.A3251**
- P980 In Human Airway Epithelial Cells, Mechanical Compression Induces Release of Tenascin C-Positive Extracellular Vesicles/C. Mwase, M.J. O'Sullivan, J. Mitchel, T.-K. Phung, M. De Marzio, A. Kilic, S.T. Weiss, J.J. Fredberg, J.-A. Park, Boston, MA, p.A3252**
- P981 Measurement of Mitochondrial Structure and Function in Human Airway Smooth Muscle Cells/S. Mahadev Bhat, J.Q. Yap, O.A. Ramirez Ramirez, P. Delmotte, G.C. Sieck, Rochester, MN, p.A5652**
- P982 Mucin Expression in Human Precision-Cut Lung Slices/O.N. Hoang, J.B. Hales, H. Karmouty-Quintana, M.J. Tuvim, B.F. Dickey, R.C. Kurten, Houston, TX, p.A5653**
- P983 Syntaxin-3 Mediates Baseline and Stimulated Airway Mucin Secretion/B. Wharton, J.R. Flores Gonzalez, O.N. Hoang, M.J. Tuvim, B.F. Dickey, Houston, TX, p.A5654**
- P984 Differential Gene Expression in Immune Activation and Inflammatory Pathways in HIV-Infected Persons Are Associated with DLco Abnormalities/M. Zhang, D. Smith, E. Zacco, K. Gardner, L. Huang, P. Hunt, J. Lin, San Francisco, CA, p.A5655**

- P985 Countering Drug Shortages: Is There Life Beyond Expiration?/R. Kuty, M. Bevry, P. Hofmann, E.A. Abourashed, Batesville, AR, p.A5656**

BASIC • TRANSLATIONAL
THEMATIC POSTER SESSION
B61 MOLECULAR AND CELLULAR MECHANISMS IN LUNG EPITHELIAL CELLS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area K, Hall F (North Building, Exhibition Level)

- Viewing:** Posters will be on display for entire session **11:15-1:15**
- Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.
- P987 Primary Human Airway Epithelial Cells Maintained in Air-Liquid Interface Culture Coordinate Molecular Circadian Rhythms/W.T. Powell, M.P. White, E.R. Vanderwall, L.M. Rich, J.S. Debley, Seattle, WA, p.A3253**
- P988 A Repurposed Drug Screen for Compounds Regulating Aquaporin 5 Stability in Lung Epithelial Cells/J. Evankovich, J. Villandre, V. White, T. Lear, Y. Chen, F. Tuncer, K. Lockwood, D. Camarco, Y. Liu, B. Chen, Pittsburgh, PA, p.A3254**
- P989 Calcium/Calmodulin-Dependent Protein Kinase II (CaMKII) Mediates Adenosine Triphosphate (ATP) Release Following Hypotonic Stimulation of Airway Epithelial Cells/R. Stinson, S. Atkinson, A.H. Morice, L. Sadofsky, Hull, United Kingdom, p.A3255**
- P990 Lung Derived Hydrogels as Substrate for Subculturing Primary Alveolar Type II Epithelial Cells/E. Marhuenda, A. Villarino, M.L. Narciso, N. Gavara, R. Farre, I. Almendros, J. Otero, Barcelona, Spain, p.A3256**
- P991 Effects of Nanoparticle Exposure on Autophagy Kinetics in Lung Adenocarcinoma (A549) Cells/A. Sipos, K.-J. Kim, E.D. Crandall, Los Angeles, CA, p.A3257**
- P992 The Effect of the HIV Protein Tat and the RNA Binding Protein HuR on Human Airway Epithelial Cell Proliferation/R.F. Foronjy, A.J. Dabo, M.A. Salathe, N. Baumlin, M. Kim, Brooklyn, NY, p.A3258**
- P993 Nitrogen Mustard Exposure Is Associated with Impaired Bioenergetics and Activation of Cell Death Pathways in Type II Alveolar Epithelial Cells/V. Sunil, K. Vayas, E. Abramova, R. Malaviya, J. Laskin, D. Laskin, Piscataway, NJ, p.A3259**

- P994** **CRISPR/Cas9-Mediated Gene Knockout Reveals the Mucin Regulating Function of CC16 in Human Distal Airway Epithelial Cells**/H. Kimura, D. Francisco, M. Conway, A. Molzahn, N. Schaunaman, H.W. Chu, M. Kraft, Tucson, AZ, p.A3260
- P995** **Epithelial Differentiation and the Proximal-Distal Axis Are Disrupted in Mesenchyme Bmpr1a Knockout Fetal Lungs**/Y. Luo, H. Chen, J. Chiu, W. Shi, Los Angeles, CA, p.A3261
- P996** **Human Airway Epithelial Cell Temporal Kinase Signaling Dynamics: Connecting Cellular Metabolism, Inflammation, and Kinase Biology**/N. Decuzzi, D. Murphy, A. Ram, K. Chmiel, M. Pargett, N. Kosaisawe, A.A. Zeki, J. Albeck, Davis, CA, p.A3262
- P997** **Developing a 384-Well Plate Format Screening Method for Human Primary Airway Epithelial Cell Proliferation**/J.C. Orr, Y. Ishii, D.R. Bairros De Pilger, N.O. Carragher, R. Ketteler, S.M. Janes, R.E. Hynds, London, United Kingdom, p.A5657
- P998** **Deletion of Synaptotagmin 2 Blocks Stimulated Mucin Secretion in a Mouse Cystic Fibrosis Model**/V. Oren, Houston, TX, p.A5658
- P999** **Integrin Beta 4 Overexpression in Human Airway Epithelial Cells Prevents Diacetyl-Induced Anoikis**/S.-Y. Kim, M.D. McGraw, Rochester, NY, p.A5659
- P1000** **Opposed Activation/Deactivation of Myosin Light-Chain 2 (MLC2) with Altered CO₂ in Cultured Pulmonary Epithelial Versus Endothelial Cell Lines**/M.J. Emery, E. Swenson, E. Wijelath, Seattle, WA, p.A5819
- P1002** **A Robotic System for Real-Time Analysis of Inhaled Sub-Micron and Microparticles**/K. Hajipouran Benam, A. Kaiser, C. Salem, B. Alvarenga, A. Pagliaro, K. Smith, Pittsburgh, PA, p.A3264
- P1003** **Impact of Popular E Cigarette Pods on Human Alveolar Epithelial Type 2 Cells: Implications for Long Term Use**/K.D. Wick, X. Fang, C. Simoneau, M. Maishan, S. Matsumoto, N. Spottiswoode, C. Langelier, C.S. Calfee, J.E. Gotts, M. Ott, M.A. Matthay, San Francisco, CA, p.A3265
- P1004** **Effect of Dual IQOS and Cigarette Smoke Exposure on Airway Epithelial Cell Stress Pathways and Inflammation: Implications for Lung Health and Respiratory Disease Pathogenesis**/P. Saha, I. Mukherjee, S. Jain, A.A. Zeki, V.G.M. Naidu, P. Sharma, Kamrup Rural, India, p.A3266
- P1005** **Electronic Cigarettes Smoking Induces Ferroptosis in a Pre-Clinical Model of COPD**/X. Ji, Atlanta, GA, p.A3267
- P1006** **Prediction of Electronic Nicotine Delivery Systems Use in COPD Gene Using Multi-Omic Biomarkers**/A. Gregory, Z. Xu, K. Pratte, S. Berman, N. Lichtblau, R. Lu, R. Chase, J. Yun, A. Saferali, E. Silverman, C. Hersh, R. Bowler, A. Boueiz, P. Castaldi, Boston, MA, p.A3268
- P1007** **Pathologic Alterations in Both the Microbiome and Immunomodulatory Phenotype of the Oropharynx in Healthy Electronic Cigarette Users**/A. Mittal, E. Lin, A. Patel, A. Moshensky, J. Shin, L.E. Crotty Alexander, San Diego, CA, p.A3269
- P1008** **Investigating the Effect of TGF- β Induced by HIV and Cigarette Smoke as a Suppressor of the Antimicrobial Agent Lactoperoxidase (LPO) in the Lungs**/M.J. Santiago, S. Chinnapaiyan, R.K. Dutta, H.J. Unwalla, Miami, FL, p.A3270
- P1009** **Beneficial Effects of Quercetin in HIV-Infected Primary Human Bronchial Epithelial Cells**/S. Chinnapaiyan, M.J. Santiago, H.J. Unwalla, Miami, FL, p.A3271
- P1010** **Immunomodulatory LASI lncRNA Regulates Cigarette Smoke Exacerbated SARS-CoV-2 Infectivity in COPD Airway Epithelial Cells**/D. Devadoss, A. Acharya, M. Manevski, M. Cioffi, K. Pandey, M. Nair, P. Chapagain, S. Byrareddy, H.S. Chand, Miami, FL, p.A3272
- P1011** **Impact of Influenza Virus and E-cigarette Vaping Pre-Exposures on Outcomes of SARS-CoV-2 Infection in Hamster**/K. Schweitzer, C. Cornell, N. Egersdorf, A. Bosco-Lauth, S.M. Majka, S.D. Groshong, H.W. Chu, J.P. Bridges, R. Bowen, G.P. Downey, I. Petrache, Denver, CO, p.A5660

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

B62 E-CIGARETTES AND VAPING: ANIMAL AND CELL CULTURE MODELS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P1001** **Not Just Smoke: The Cytotoxicity and Adverse Consequences of E-Liquid Flavors on Human Induced Pluripotent Stem Cell-Derived Lung Epithelium and Cardiomyocytes**/M. Ho, M. Ho, C. Librach, Toronto, Canada, p.A3263

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

**B63 FROM AIRWAYS TO ALVEOLI:
MECHANISTIC AND CLINICAL STUDIES**

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P1013 Geographic Distribution of Implicated Primary Ciliary Dyskinesia Genes in Puerto Rico**/J. Muñoz, J. Meléndez Montañez, F. Alvarado Huertas, W. De Jesus-Rojas, Cayey, PR, p.A3273
- P1014 Piezo Channels Modulate Stretch-Induced Remodeling and Calcium Regulation in Developing Human Airway Smooth Muscle**/B. Kelley, A. Koenig-Kappes, M. Schiliro, N. Wells, C.M. Pabelick, Y.S. Prakash, E.R. Vogel, Rochester, MN, p.A3274
- P1015 Oxidized Phosphatidylcholine Impairs β 2-Adrenoceptor Mediated Relaxation of Murine Airways**/J.M. Vaghasiya, A. Sikarwar, A. Dalvand, S. Basu, A.J. Halayko, Winnipeg, Canada, p.A3275
- P1016 Inhaled Terbutaline Increases High Density Lipoprotein Cholesterol**/A. Van As, P. Hooper, Morristown, NJ, p.A3276
- P1017 Anti-Interleukin-5 Therapy in Patients with Asthma and Chronic Obstructive Pulmonary Disease Overlap: A Single-Center Review**/M.D. Saint-Pierre, S. Mavromatis, Ottawa, Canada, p.A3277
- P1018 Mechanisms of Cellular Senescence in Asthmatic Human Airway Mesenchymal Cells**/A. Aghali, M.L. Koloko Ngassie, L.Y. Drake, C.M. Pabelick, J.F. Passos, Y.S. Prakash, Rochester, MN, p.A3278
- P1019 A Chronic Colonization by Pseudomonas Aeruginosa Increases Ciliary Dyskinesia in Cystic Fibrosis Patients**/R. Bonhiver, N. Bricmont, M. Pirotte, M.-A. Wuidart, J. Pirson, H. Boboli, R. Louis, M.-C. Seghayé, C. Kempeneers, Liège, Belgium, p.A3279
- P1020 Inhibition of ABCC1 Decreases cAMP Egress and Promotes Human Airway Smooth Muscle Cell Relaxation**/G. Cao, H. Lam, J. Jude, N. Karmacharya, M. Kan, W. Jester, C.J. Koziol-White, B.E. Himes, G.L. Chupp, S.S. An, R.A. Panettieri, New Brunswick, NJ, p.A3280
- P1021 IL-25 Alters Human Airway Smooth Muscle Responsiveness to Isoproterenol**/D. Xiong, L.H. Kachmar, G. Ijpmá, A.-M. Lauzon, Montreal, Canada, p.A3281
- P1022 Role of Eosinophils in Purinergic Receptor P2X₃ Expression in Mouse Sensory Neurons**/E.J. Mize, Portland, OR, p.A3282
- P1023 Chemically Defined Basement Membrane Mimetic Hydrogels for the Culture of Type 2 Pneumocytes**/A.S. McCall, B.J. O'Grady, E.S. Lippman, C.L. Calvi, J.J. Gokey, T.S. Blackwell, J. Kropski, Nashville, TN, p.A3283
- P1024 Inflammatory Mediators Modulate Contraction of Human Airway Smooth Muscle via the Unfolded Protein Response (UPR) Pathway**/E. Gebiski, J. Featherston, S. Pradhan, C.J. Koziol-White, R.A. Panettieri, New Brunswick, NJ, p.A3284
- P1025 Impact of Diet-Induced Obesity and Chemerin Deficiency on Ozone-Induced Lung Injury and Lung Inflammation**/R.A. Johnston, M. Takahashi, Y. Takahashi, A.W. Pilkington, IV, Morgantown, WV, p.A3285
- P1026 Lung Development in a Murine Model of CF-Like Lung Disease**/S. Blaskovic, P. Anagnostopoulou, D. Schittny, E. Borisova, Z. Zhou-Suckow, M.A. Mall, C.M. Schlepütz, M. Stampanoni, J.C. Schittny, Bern, Switzerland, p.A3286
- P1027 Orphan G-Protein Coupled Receptor GPRC5B Regulates Intracellular Calcium in Human Airway Smooth Muscle**/S. Varadharajan, P. Balraj, P. Banerjee, C.M. Pabelick, Y.S. Prakash, S. Venkatachalem, Fargo, ND, p.A3287
- P1028 Asthmatic Lung Fibroblasts Produce Increased Levels of TSLP Upon TNF α Stimulation via the ER Stress Response Pathway**/L.Y. Drake, B. Roos, C.M. Pabelick, Y.S. Prakash, Rochester, MN, p.A3288
- P1029 Ezrin and AKAP12 Regulate Compartmentalized Signaling of PKA Substrate HSP20 in ASM Cells**/E. Javed, I.M. Dewes, A.H. Cohen, F. Graumuller, A.P. Nayak, D.A. Deshpande, R.B. Penn, Philadelphia, PA, p.A3289
- P1030 In Vitro - In Silico Characterization of Lung Deposition for Nebulizers Used in Methacholine Challenge Testing**/C.A. Ruzyski, D. Pawluski, E.Y. Wong, W.H. Finlay, A.R. Martin, Edmonton, Canada, p.A3290
- P1031 Impacts of Air Pollution on the Pulmonary Morbidity of Cystic Fibrosis: An Experimental Study**/M. Blayac, E. Al Marj, M. Cazaunau, A. Bergé, R. Souktani, P. Coll, S. Lanone, Créteil, France, p.A3291
- P1032 Association of Flow Limitation and Obesity on Methacholine Testing**/D. Baram, B.J. DelPrete, C. Costanian, K.K.H. Wong, K.J. Diab, Washington, DC, p.A3292
- P1033 CD38 Plays an Age-Related Role in Cholinergic Deregulation of Airway Smooth Muscle Contractility**/Y. Bai, A.G. Guedes, R. Krishnan, X. Ai, Boston, MA, p.A3293

- P1034** **Bronchiectasis in Patients with Bronchiolitis Obliterans Syndrome After Hematopoietic Stem Cell Transplantation: A Distinct Phenotype?**/I. Berger, L. Bondeelle, G. Archer, C. De Margerie-Mellon, S. Cassonet, R. Peffault de Latour, D. Michonneau, S. Chevret, A. Bergeron, Paris, France, p.A3294
- P1035** **Ciliary Videomicroscopy Performed at Room Temperature Lacks Sensitivity and Specificity for PCD Diagnosis**/N. Bricmont, R. Bonhiver, L. Benchimol, M. Pirotte, F. Guissard, C. Moermans, A.-L. Poirrier, P. Lefebvre, R. Louis, M.-C. Seghaye, C. Kempeneers, Liège, Belgium, p.A3295
- P1036** **Remodilins - a New Class of Small Molecules That Blunt Human Airway Smooth Muscle Contractile Protein Accumulation and Allergen-Induced Airway Hyperresponsiveness in Mice**/B. Chen, C.Y. Park, D. Luci, J. Wang, R. Eleanor B, R. Krishnan, V. Gurvich J., S.R. Byrn, D. Maloney, A.I. Sperling, Y. Fang, D. Wu, G.M. Mutlu, R.B. Hamanaka, S.R. White, S. Kales, D. Tao, A. Simeonov, M. Muzzio, R. Moellering, J. Huang, J.J. Fredberg, D. L. McCormick, N. O. Dulin, J. Solway, Chicago, IL, p.A3296
- P1037** **The Role of EGFR in Airway Dysfunction in Mice Following Chlorine Exposure**/K. Makita, Y. Ishii, R. Sun, J.G. Martin, Montreal, Canada, p.A3297
- P1038** **Within Minutes, Budesonide Stimulation Decreases Organic Cation Transporter 3 Activity in Human Airway Smooth Muscle Cells and Enhances β Agonist-Induced Relaxation**/B.T. Deeney, S. Orfanos, G. Cao, R.A. Panettieri, New Brunswick, NJ, p.A3298
- P1039** **Differential Effects of IL-17A Neutralization on Severe Allergic Airway Inflammation**/L. Moore, B.W. Lewis, S. Amici, M.L. Ford, J. Walum, M.H. Grayson, M. Guerau-De-Arellano, R.D. Britt, Columbus, OH, p.A3299
- P1040** **Intravenous Delivery of Liposomes Can Target Drugs to Alveolar Epithelial Cells**/E.-O. Essien, M. Zamora, A. Murthy, J.S. Brenner, Philadelphia, PA, p.A3300
- P1041** **In Silico and In Vitro Analyses of Cortactin-MLCK Interaction**/M. Bandela, Y. Epshtein, P. Belvitch, S.M. Dudek, Chicago, IL, p.A3301
- P1042** **MZB1 Protein Abundance Is Regulated by Cigarette Smoke Dependent Ubiquitination in Lung Epithelial Cells**/Y. Lai, T. Nyunoya, P. Suresh, O. Eickelberg, Pittsburgh, PA, p.A3302
- P1043** **Microbial Dysbiosis and Epithelial Dysfunction in Vitamin A-Deficient Lungs**/K. Quiles, W.E. Johnson, F. Chen, Boston, MA, p.A3303
- P1044** **The Matricellular Protein Periostin Is Produced by Pericytes and Contributes to Airway Wall Remodelling in Allergic Airway Disease**/J.R. Johnson, R.E. Bignold, Birmingham, United Kingdom, p.A3304
- P1045** **Functional Effects of Cholesterol on Surfactant-Related Phospholipid Monolayers**/S.B. Hall, B.A. Brandner, Portland, OR, p.A3305
- P1046** **Pulmonary System Elastance Increases in Murine Model of Down Syndrome**/K. Boncella, D. Goodman, J. Bilodeaux, H. Farooqi, J. Harral, K. Colvin, B. Smith, M. Yeager, Aurora, CO, p.A3306
- P1047** **Diacylglycerol Kinase Inhibition Mitigates Mitogen-Induced Airway Smooth Muscle Cell Proliferation**/M.A. Hernandez, S.K. Yadav, S. Shah, D.A. Deshpande, Philadelphia, PA, p.A3307
- P1048** **Nonlinear Lung Mechanics and Its Contribution to the Frequency Dependence of Resistance of the Respiratory System**/A. Tahir, G.N. Maksym, Halifax, Canada, p.A3308
- P1049** **In-Vitro Validation of a Novel Handeld Oscillometry Device**/D. Bizzotto, P.P. Pompilio, A. Gobbi, R.L. Dellaca', Milano, Italy, p.A5661
- P1050** **Conscious Swine Model of Phosgene-Induced Acute Respiratory Distress Syndrome (ARDS)**/W. Holmes, D. Zimmerman, E. Nealley, A. Lewis, K. Whitten, E. Hill, D. Anderson, Aberdeen Proving Ground, MD, p.A5662
- P1051** **Respiratory-Related Evoked Potentials in COPD**/I. Epiu, Sydney, Australia, p.A5663

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B64 NEW INSIGHTS FROM LUNG IMAGING

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators

P1053 **Hyperpolarized ^{129}Xe Ventilation and Gas Exchange Imaging in a Single, Clinically Feasible Breath-Hold**/P.J. Niedbalski, R. Rawlings, C. Hall, M. Castro, Kansas City, KS, p.A3309

P1054 **Dysanapsis of the Upper and Lower Airways Among Older Adults: The Multi-Ethnic Study of Atherosclerosis (MESA) Lung, Sleep and Atrial Fibrillation Studies**/B.M. Smith, A. Wiemken, E.A. Hoffman, B. Keenan, N. Allen, A. Bertoni, D. Jacobs, E. Michos, K. Watson, S.S. Redline, R.J. Schwab, R.G. Barr, S.R. Heckbert, Montreal / New York, Canada, p.A3310

- P1055 Assessment of Unilateral Lung Transplant in a Rat Model Using Dynamic CT Imaging/M.K. Ismail, X. Jin, R. Baron, Y. Xin, L. Loza, F. Amzajerdian, S. Kadlecsek, R. Rizi, Philadelphia, PA, p.A3311**
- P1056 Ultrasonographic Evaluation of Subglottic Stenoses: A Preliminary Analysis/C. Rocchetti, G. Marchetti, M. Bezzi, M. Novali, F. Quadri, R. Magri, D. Bottone, G. Levi, S. Uccelli, J. Giordani, C. Tantucci, L. Pini, Brescia, Italy, p.A3312**
- P1057 Comparison of Discrete Acquisition Techniques for Measuring Fractional Ventilation Using Hyperpolarized ¹²⁹Xe MRI/L. Loza, T.S. Achezkai, S. Kadlecsek, H. Hamedani, I. Duncan, R.R. Rizi, Philadelphia, PA, p.A3313**
- P1058 Effects of Linear Deformations on the 3D Alveolar Shape/A.M. Reimelt, D.M. Vasilescu, R. Beare, L. Knudsen, R. Grothausmann, Hannover, Germany, p.A3314**
- P1059 Emphysema Progression Quantification with Joint Volume, Noise and Bias (VNB) Deconvolution of Density Histograms/G. Vegas-Sanchez-Ferrero, R. San Jose Estepar, Boston, MA, p.A3315**
- P1060 Initial Assessment of Gas Exchange with Hyperpolarized Xenon-129 MRI in Lung Transplant Recipients/F. Amzajerdian, H. Hamedani, R. Baron, Y. Xin, L. Loza, M.K. Ismail, T.S. Achezkai, I. Duncan, S. Kadlecsek, K. Ruppert, R.R. Rizi, Philadelphia, PA, p.A3316**
- P1061 Automated Assessment of Vertebral Fractures from Chest CT Scans Using Deep Learning/S.A. Nadeem, A.P. Comellas, I. Guha, E.A. Hoffman, E.A. Regan, P.K. Saha, Iowa City, IA, p.A3317**
- P1062 Refining Selectivity of XTC Saturation Pulse Parameters Through Spectroscopic Analysis/T.S. Achezkai, L. Loza, K. Ruppert, F. Amzajerdian, R.R. Rizi, S. Kadlecsek, Philadelphia, PA, p.A3318**
- P1063 Quantitative Volumetric Derived Tidal Volume from Non-Invasive Functional Lung Imaging Using X-ray Velocimetry/T. Ötvös, J.P. Kirkness, A.D. Bisant, A. Fouras, S.A. Arias, N.M. Punjabi, T. Siddharthan, Woodland Hills, CA, p.A3319**
- P1064 Introducing a Correction Method for TP and RBC Separation in XTC Imaging/T.S. Achezkai, K. Ruppert, L. Loza, F. Amzajerdian, S. Kadlecsek, R.R. Rizi, Philadelphia, PA, p.A3320**
- P1065 Species-Dependent Variations in the Hyperpolarized Xenon-129 Dissolved-Phase Resonance Frequencies/K. Ruppert, T.S. Achezkai, L. Loza, F. Amzajerdian, Y. Xin, H. Hamedani, R. Baron, I. Duncan, M.K. Ismail, S. Kadlecsek, A. Barba, B. Sinder, P. Cahill, T. Schaer, R.R. Rizi, Philadelphia, PA, p.A3321**

- P1066 Quantitative Analysis of Perfused Pulmonary Blood Flow in Healthy and Injured Lungs Using a Two Compartment Model/T. Kim, Y. Xin, H. Song, K. Martin, A. Lenart, S. Gerard, M. Petrov, J. Shen, K. Rozenberg, J. Herrmann, L. Staelin, S. Humayun, P. Shah, U. Sidhu, S. Bathula, K. Reutlinger, M. Staley, P. Delvecchio, J. Barakat, S. Sarfaraz-Khan, I. Duncan, L. Berra, R. , p.A3322**
- P1067 Functional Lumen Imaging: A Novel Assessment of Tracheomalacia/E. Hysinger, C. Towe, J. Racadio, C. Wallace, J. Hales, A. Cummins, N. Hilvert, M. Sketch, C. Doering, A. Kaul, Cincinnati, OH, p.A5664**

CLINICAL

THEMATIC POSTER SESSION

B65 CAN'T RUN, CAN'T HIDE: THE UBIQUITOUS IMPACT OF SLEEP RELATED BREATHING DISORDERS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P47 Above the Rest: Sleep Related Breathing Disorders and Down Syndrome at Higher Elevation/T.A. Curry, K. Wolter-Warmerdam, F. Hickey, B.H. Hughes, S. Hawkins, E.M. Deboer, Aurora, CO, p.A3323**
- P48 Hemodilution in Chronic Mountain Sickness Worsens Nocturnal Oxygenation and Sleep Apnea Severity/A. Sanchez Azofra, F.C. Villafuerte, P.N. DeYoung, D. Gilbertson, G. Vizcardo-Galindo, R. Figueroa-Mujica, C. Anza-Ramirez, J.L. Macarlupú, W. Gu, E.A. Moya, L.V. Pham, P.D. Wagner, A. Malhotra, T.S. Simonson, O.A. Mesarwi, La Jolla, CA, p.A3324**
- P49 Sleep Disorders in Breast Cancer Patients on Hormonal Therapy Based on Polysomnographic Data/C. Poongkunran, B.A. Jaumally, A.S. Knox, G.N. Pacheco, D. Balachandran, L. Bashoura, S.A. Faiz, Houston, TX, p.A3325**
- P50 Impact of Sleep Disorders on Daytime Function and Quality of Life in Patients with Spinal Cord Injury/A.N. Badr, N. Aljundi, M. Kelly, S. Zeineddine, A. Salloum, N. Pandya, M. Mitchell, S. Chowdhuri, A. Sankari, M.S. Badr, J.L. Martin, Detroit, MI, p.A3326**
- P51 Sleep Disordered Breathing in Community Elderly Population, a Preliminary Report/N.-H. Chen, G.-H. Liu, L.-P. Chuang, S.-W. Lin, J.-T. Fang, TaoYuan, Taiwan, p.A3327**

- P52** **Impact of Positive Airway Pressure Therapy on Clinical Outcomes in Older Veterans with Chronic Obstructive Pulmonary Disease and Comorbid Obstructive Sleep Apnea/S.** Chowdhuri, A. Uzzaman, S. Khan, D. Greig, J. Bansal, A. Lazar, R. Rastogi, L. Zhao, P. Mishra, C. Kushida, B. Axelrod, Detroit, MI, p.A3328
- P53** **Comorbidities in a Large Cohort of Patients with Severe Obstructive Sleep Apnea/H.H.** Al-Jahdali, A. AL-Harbi, A. Almuttari, M. AL-Gamedi, S.M. Alyami, A. Khan, Riyadh, Saudi Arabia, p.A3329
- P54** **Effects of APAP and CPAP Therapy on Nocturnal Blood Pressure Fluctuations in Patients with OSA Combined with Hypertension/H.** Zhongming, Q. Zhang, X. Jiang, J. Shi, M. Li, M. Han, D. Chen, S. Ma, P. Da, F. Han, T. Penzel, Karamay, China, p.A5665
- P55** **Lung Inflammation Before and After CPAP Therapy in OSA Patients: A PET/MRI Study/B.** Cengiz, O. Cohen, A. Jacobi, V. Mani, M. Suarez Farinas, A. Sheikh, N.A. Shah, New York, NY, p.A5666
- P60** **Age, Sex, Comorbid Conditions, and Positive Airway Pressure (PAP) Usage in the First 90 Days for Users of a Fully Remote Obstructive Sleep Apnea (OSA) Diagnosis and Management Program/E.N.** Rudie, S.S. Sullivan, A. Benjafield, F. Sert Kuniyoshi, S. Kumar, South San Francisco, CA, p.A3333
- P61** **Retrospective Analysis of CPAP Adherence in Patients with Obstructive Sleep Apnoea (OSA) During COVID-19 Pandemic Using Telemonitoring/C.** Davidson, M. De Chavez, T. Nisar, A. Jayadev, Slough, United Kingdom, p.A3334
- P62** **Does the Therapy Duration of Continuous Positive Airway Pressure Effect the Benefit of Cognition Improvement in Obstructive Sleep Apnea?/Y.** Zhang, Changsha, China, p.A3335
- P63** **Association Between Objectively-Measured Lung Function and Sleep Disorder Symptoms in a Community-Based Multi-Site Cohort Study/R.** Mazzola, S. Aaron, K. Vandemheen, M. Chin, S. Mulpuru, J.M. FitzGerald, C. Bergeron, C. Lemièrre, L.-P. Boulet, S.K. Field, E. Penz, R.A. McIvor, S. Gupta, I. Mayers, M. Bhutani, P. Hernandez, M.D. Loughheed, C.J. Liciskai, T. Azher, M. Ainslie, I. Fraser, M. Mahdavian, T. Kendzerska. Barrie, ON, Canada, p.A3336
- P64** **Neck Ultrasound Can Be Helpful in Diagnosing and Assessing Severity of OSA/A.** Hussein, R.A. Sedeek, M. Higazi, A.O. Abdelaziz, Minia, Egypt, p.A3337
- P65** **Risk of Obstructive Sleep Apnea in Neurological Diseases in Older Adults: A Canadian Longitudinal Study of Aging/M.** Kaminska, T. Gomes, D. Rizzo, M.A. Baltzan, N. Gosselin, R. Postuma, A. Benedetti, R.J. Kimoff, Montreal, Canada, p.A3338
- P66** **Sensitivity and Specificity of Screening Tools for the Detection of Obstructive Sleep Apnea in People Living with HIV/N.-O.A.** Bosomptra, R. Brena, P.N. DeYoung, D. Gilbertson, A. Malhotra, J.E. Orr, C.N. Schmickl, J. Velazquez, M. Young Karris, R.L. Owens, La Jolla, CA, p.A3339
- P67** **Prevalence of Central Sleep Apnea in Veterans and Response to PAP Treatment/S.W.** Carroll, A. Aldwaikat, M.S. Badr, A. Sankari, O. Lasisi, S.A. Maresh, Detroit, MI, p.A3340
- P68** **Evaluation of the Diagnostic Process of Narcolepsy and Patient's Response to Sodium Oxybate in Stobhill Hospital, Glasgow/E.** Livingston, A.B. Decruz, M.F. Docherty, Glasgow, United Kingdom, p.A3341
- P69** **FSI Simulation of OSAHS and UPPP Virtual Surgery/M.** Behnia, M. Hejazi, S. Mehrabi, H. Sedaghat, G. Ahmadi, O. Abouali, Apopka, FL, p.A5667

CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
B66 AN ALL-INCLUSIVE SRN EXPERIENCE: DIAGNOSIS, CONSEQUENCES, AND MANAGEMENT OF SLEEP DISORDERS
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area A, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P57** **Role of Ultrasonography of Neck in Patients with Obstructive Sleep Apnea/B.** Mohan Lal, S. Vyas, S. Agarwal, A. Ray, R. Kumar, R. Pandey, S. Sinha, New Delhi, India, p.A3330
- P58** **Development of Delphi Consensus Statements on the Differential Diagnosis and Management of Excessive Daytime Sleepiness in Obstructive Sleep Apnea/J.** Steier, R. Bogan, I. Cano Pumarega, J. Fleetham, G. Insalaco, C. Lal, J.-L. Pépin, W. Randerath, S. Redline, A. Malhotra, London, United Kingdom, p.A3331
- P59** **Metabolic Effects of Sustained Hypoxia Are Not Mediated by Hepatocyte HIF-1/J.J.** Reeves, E. Lawrence, E.A. Moya, A. Sanchez Azofra, M. Zhang, L. Barnes, O.A. Mesarwi, La Jolla, CA, p.A3332

- P70 Neck Circumference - Height Ratio Cut-Off as a Predictor of Obstructive Sleep Apnea Severity Among Adult Patients Diagnosed with Obstructive Sleep Apnea at the Lung Center of the Philippines/R.M. Denopol, M.C.I. Jocson, Quezon City, Philippines, p.A5668**
- P71 Double-Layer Electrical Impedance Tomography Can Identify Upper Airway Obstruction Site During Sleep/S.-W. Kim, T. Zhang, H. An, J. Mok, O.I. Kwon, M. Lee, T.I. Oh, Jinju, Korea, Republic of, p.A5669**

BEHAVIORAL • CLINICAL
THEMATIC POSTER SESSION
B67 YIN AND YANG: LUNG CANCER TREATMENT AND TOXICITY
9:30 a.m. - 3:45 p.m. MOSCONE CENTER
Area D, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P229 The Importance of a Multidisciplinary Approach to Lung Cancer Patients in the Era of Immuno-Oncology - A Case Report of Multi-Organ Toxicity with Checkpoint Inhibitor Treatment/S. Weintraub, J. Newman, R. Thomas, N. Seetharamu, Manhasset, NY, p.A3342**
- P230 A Case of Pembrolizumab-Induced Myasthenia Gravis in a Patient with Squamous Cell Lung Carcinoma/C.N. Nemeh, C. Wayant, A. Padgett, Houston, TX, p.A3343**
- P231 Extrapleural Pneumonectomy After Immunotherapy-Induced Pneumonitis in Patient with Refractory Malignant Pleural Mesothelioma/D. Hsu, K. Banks, M.J. Chaudhary, C.M. Mooney, J.B. Velotta, Oakland, CA, p.A3344**
- P232 Osimertinib Induced Cardiotoxicity-Two Case Reports/K.N. Parmar, D. Pawar, G. Del Rio-Pertuz, N. Nair, S. Rehman, Lubbock, TX, p.A3345**
- P233 Use of a New Stapling Device in General Thoracic Surgery/A. Dutly, K. Katona, A. Has, J. Grups, P.J. Leskow, St. Gallen, Switzerland, p.A3346**
- P234 Improving the Management of Post-Operative Nausea and Vomiting to Improve Cardiothoracic Surgical Outcomes, Especially After Awake Video Assisted Thoracic Surgery/A. Klijian, B. Mohedin, San Diego, CA, p.A3347**
- P235 VA-ECMO Assisted Tumor Resection of Pulmonary Adenocarcinoma : A Case Report/M.C. Gabitan, M.A.G. Donguines, Quezon City, Philippines, p.A3348**

- P236 Photodynamic Therapy as Curative Intent for Carcinoid Tumor: A Case Report/E.C. Santillana, E.A. Celis, Tampa, FL, p.A3349**
- P237 Risk Stratification of Pulmonary Nodules Using Longitudinal Risk Scores from the Lung Cancer Prediction Convolutional Neural Network (LCP CNN)/R. Paez, M.N. Kammer, A. Balar, D.A. Lakhani, S. Antic, K.L. Sandler, B. Landman, S. Deppen, E. Grogan, F. Maldonado, Nashville, TN, p.A3350**
- P238 Isolated ACTH Deficiency Probably Induced by Camrelizumab in Lung Cancer Patient/C. Wang, Y. Long, M. Tao, Z. Wang, Q. Zhou, Chongqing, China, p.A3351**
- P239 Lobectomy with a Twist: A Case Report of Post-Lobectomy Airway Stenosis Managed Bronchoscopically/B. Louie, C.L. McBride, D.R. Lazarus, L. Cornwell, V.D.D. Bandi, Houston, TX, p.A3352**
- P240 A Case of ALK Positive Adenocarcinoma of Unknown Primary with Good Response to Alectinib/V.L. Kankanala, S.K. Mukkamalla, Albuquerque, NM, p.A3353**
- P241 A Case of Metastatic Lung Squamous Cell Carcinoma with EGFR Mutation and Excellent Response to Osimertinib/H.K. Gharib, A. Singh, T. Bazzi, Z. Kafri, Detroit, MI, p.A3354**
- P242 An Unusual Case of Hypercalcemia in Spontaneous Tumor Lysis Syndrome/B.N. Nguyen, M. Sidhu, N. Ramesh, Harrisburg, PA, p.A3355**
- P243 Lung Cancer Screening in Individuals With and Without Lung-Related Comorbidity/E.M. Metwally, M.P. Rivera, D.D. Durham, L. Lane, P. Perera, D. Lamb, L.M. Henderson, Chapel Hill, NC, p.A5670**

BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
B68 CURIOUS PRESENTATIONS: CANCERS AND MIMICKERS
9:30 a.m. - 3:45 p.m. MOSCONE CENTER
Area D, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P245 Lung Metastasis from Uterine Leiomyosarcoma, an Asymptomatic Presentation for a Rare Tumor with Underlying Covid-19/J. Pham, K. Seetharam, J. Reyes, D. Anez, P. Bhat, T. Mir, J. Shah, P. Mir, New York, NY, p.A3356**

- P246** **Reflux as Presenting Symptom of Small Cell Lung Carcinoma**/M. Matthews, P. Jain, K. Carroll, Dayton, OH, p.A3357
- P247** **Post Transplant Lymphoproliferative Disorder Masquerading as a Lung Mass After Lung Transplantation**/M. Hajmurad, D. Matthews, N. Barron, Greenville, SC, p.A3358
- P248** **Small Cell Carcinoma of Prostate: Rare Form of Extra Pulmonary High-Grade Neuroendocrine Carcinoma**/A. Iflikhar, A. Hayder, H. Chykyda, M. Groth, Port Jefferson, NY, p.A3359
- P249** **When Chest Pain Is Not Chest Pain: An Unusual Presentation of an Uncommon Tumor**/J. Schwartz, S. Sham, S. Machnicki, A.E. Tilley, New York, NY, p.A3360
- P250** **Thoracic Schwannoma Arising from an Intercostal Nerve in the Setting of COVID-19: A Rare Presentation**/P. Modi, B. Tuppekar, S. Patel, G. Nair, A. Uppe, Navi Mumbai, India, p.A3361
- P251** **An Unusual Presentation of Pulmonary Neuroendocrine Hyperplasia in a Patient with Mycobacterium**/J. Patel, I. Makki, G. Cumbo-Nacheli, G. Lam, Grand Rapids, MI, p.A3362
- P252** **Air in the Neck**/E.J. Pacheco, K. Calero, Tampa, FL, p.A3363
- P253** **Unusual Presentation of Pneumonic-Type Lung Adenocarcinoma and Diffuse Air-Space Consolidation**/E.S. Randhawa, J. Randhawa, N. Mills, Philadelphia, PA, p.A3364
- P254** **Non Resolving Pneumonia: An Uncommon Presentation of Lung Adenocarcinoma**/E.M. Castro, F.G. Ayuyao, Quezon City, Philippines, p.A3365
- P255** **Primary Lung Adenocarcinoma Misdiagnosed as Pneumonia: Case Report of Unusual Presentation**/S. Khatib, S. Kulkarni, K. Abdalla, M. Aboubakr, S. Dubin, Kansas City, MO, p.A3366
- P256** **Pulmonary Angiosarcoma: The Great Mimicker**/D.K. Mathew, J. George, K. Van Nostrand, Tampa, FL, p.A3367
- P257** **Hypercalcemia-Leukocytosis Syndrome: A Case Report**/K.N. Parmar, U. Sharma, A. Deb, K.M. Nugent, N. Mittal, Lubbock, TX, p.A3368
- P258** **Hypertrophic Osteoarthropathy Treatment with Octreotide for Patient with Unresectable Pulmonary Adenocarcinoma**/E. Yi, C. Lopez, N. Seetharamu, New Hyde Park, NY, p.A3369
- P259** **Pituitary Metastasis from Primary Lung Adenocarcinoma Presenting as a Pituitary Macroadenoma with Hyperprolactinaemia**/R.K. Ragatha, L. Carmona, T. Horey, E. Shaji, J. Fernandes, S. Kuckreja, M. Anwar, U. Ekeowa, P. Russell, Harlow, United Kingdom, p.A3370
- P260** **Adrenal Hemorrhage Secondary to Lung Cancer Metastasis**/S. Bademian, B. Morshedi, A. Mills, I. Arora, Norfolk, VA, p.A3371
- P261** **An Unexpected Encounter: Primary Ewing's Sarcoma of the Lung**/N. Sharma, M. Bhagat, T.M. Dudney, K. Gardner, Knoxville, TN, p.A3372
- P262** **Non-Langerhans Cell Histiocytosis Mimicking Pulmonary Tuberculosis: A Case Report**/J.D. Botero Bahamon, C.A. Celis-Preciado, D. Patiño, Bogota, Colombia, p.A3373
- P263** **"Cheerio" as the First Manifestation of Metastatic Pancreatic Adenocarcinoma**/Y. Sarda, B. Young, S.K. Avasarala, W. Mneimneh, T. Panchabhai, Cleveland, OH, p.A3374
- P264** **Extramedullary Extension: A Parenchymal Pulmonary Plasmacytoma**/A. Kelkar, C. Chou, J. Mailman, New York, NY, p.A3375
- P265** **Cancer Masquerading as a Distant Abscess**/R. Sharma, S. Arjun, N. Brnilovich, J. Iqbal, J. Akella, East Meadow, NY, p.A3376
- P266** **The Morphologic Mimicry of Pulmonary Hepatoid Adenocarcinoma**/C. Siriphand, A. Benchakroun, Atlantis, FL, p.A3377
- P267** **Primary Cardiac Angiosarcoma: A Rare Cause of Dyspnea**/S. Farooq, A.W. Ertel, Washington, DC, p.A3378
- P268** **A Rare Presentation of Metastatic Melanoma Mimicking an Interstitial Lung Disease Exacerbation**/T.M.A. Khan, Y. Ansari, S. Ansari, S. Qadir, M. Ahmed, N. Kazimuddin, I. Waheed, Bowling Green, KY, p.A3379
- P269** **Bacterial Colonization in Lung Cancer Patients**/W.T. Kirana, G.A. Desianti, Jakarta Timur, Indonesia, p.A3380
- P270** **Three Simultaneous Primary Cancers: A Medical Curiosity**/S. Tasnim, M.A. Amjad, J.V. Miller, A. Patel, P.O. Ochieng, Scranton, PA, p.A3381

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
B69 RARE CASES IN THORACIC ONCOLOGY
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area D, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P272** **Atypical Pulmonary Manifestations of Neurofibromatosis Type 1**/D. Caesario, J.E. Casino, S. Jesmajian, New Rochelle, NY, p.A3382

- P273 A Case of Angiosarcoma in Neurofibromatosis Type 1 Causing Mechanical Right Ventricular Compression/C.** Von Gizycki, R. Jedlinski, S.Z. Ahmad, H.J. Kim, Morristown, NJ, p.A3383
- P274 A Rare Case of Rosai-Dorfman Disease Involving Pulmonary Artery/P.** Huh, T. Vasu, Gaithersburg, MD, p.A3384
- P275 A Rare Case of Giant Cell Pleomorphic Carcinoma of the Lung Presenting as a Voluminous Cavitary Lesion/M.A.** Bouanzoul, A. Ketfi, Rouiba, Algeria, p.A3385
- P276 Slow Growing Lung Mass in a Patient with Multiple Endocrine Neoplasia Type 1: Consider Carcinoid Tumor/R.** Talebi, N.R. Evans III, G.C. Kane, Philadelphia, PA, p.A3386
- P277 An Unusual Case of Metastatic Adenocarcinoma of Lung Origin with No Identifiable Lung Mass/E.L.** Amaechi, Y. Mubarak, S. Murthy, Bronx, NY, p.A3387
- P278 A Rare Case of Ectopic Adrenocorticotrophic Hormone Syndrome Causing Severe Hypokalemia and Metabolic Alkalosis in Small Cell Lung Cancer/S.** Mahapatra, A. Lavina, A. Bello, J.P. Mehta, Weston, FL, p.A3388
- P279 A Tale of Two Cavitary Lung Lesions: The Dual Diagnosis of Invasive Pulmonary Aspergillosis and Primary Lung Malignancy/L.A.** Hightower, G. Senyei, V. Ramnath, M. Nobari, R. Miller, G. Cheng, La Jolla, CA, p.A3389
- P280 Cancer Care Delay and Disruption Due to Delta Wave Coronavirus Pandemic: A Case of Large-Cell Neuroendocrine Carcinoma/M.A.** Bouanzoul, A. Ketfi, Rouiba, Algeria, p.A3390
- P281 Necrotizing Pneumonia to Mucinous Adenocarcinoma/J.** Noh, C. Triggs, S. Kody, L. Studemeister, Santa Barbara, CA, p.A3391
- P282 Carcinoma of Unknown Primary in the Lung : A Tumor with an Identity Crisis!/R.P.** Padappayil, R. Tiperneni, A. Rajamohan, A. Al-Alwan, S.M. Weiner, Long Branch, NJ, p.A3392
- P283 A Look into Clinical Characteristics and Incidental Findings of Diffuse Idiopathic Pulmonary Neuroendocrine Cell Hyperplasia, a Case Series/J.** Wang, H. Ogbuagu, K. Nguyen, Gainesville, GA, p.A3393
- P284 Survival Without Treatment: An Unusual Case of Low Grade Fibromyxoid Sarcoma/A.K.** Rahman, A. Tahir, S. Longo, C.L. Dostal, Bethlehem, PA, p.A3394
- P285 Penis in the Lung: A Rare Presentation of Extramammary Paget's Disease/J.** Yeo, C. Kanitsoraphan, T. Nagamine, S.J. Evans, Honolulu, HI, p.A3395
- P286 A Rare Case of Primary Pulmonary Angiosarcoma/R.** Kumar, S. Harabaglia, C. Shapiro, Pueblo, CO, p.A3396
- P287 Synovial Sarcomas: Arising in Unique Locations/P.** Gutta, Shreveport, LA, p.A3397
- P288 An Unusual Case of Squamous Cell Carcinoma Presenting After a 20 Year History of Pulmonary Tuberculosis Treatment/B.W.** Haile, C.B. Sherman, R.A. Kebede, H.Y. Ahmed, Addis Ababa, Ethiopia, p.A3398
- P289 A Curious Case of Cavitary Lung Lesions/S.Z.** Ahmad, M. Zaman, M. Younan, E.A. Dimitry, Morristown, NJ, p.A3399
- P290 SOS in SLOS - First Reported Case of Squamous Cell Lung Cancer in Young Patient with Smith Lemli Opitz Syndrome/R.** Kunadharaju, S. Bhura, V. Pai, N.M. Ivanick, Buffalo, NY, p.A3400
- P291 Primary Synovial Sarcoma of the Lung- a Rare Diagnosis in a 93-Year-Old Male/M.** Kramer, A. Estepa, T. Nace, S. Tzarnas, P. Edmonds, R. Kunwor, C. Fidler, R.R. Patel, Abington, PA, p.A3401
- P292 A Rare Case of Primary Pulmonary Extraskelatal Osteosarcoma/P.** Rath, S. Shriber, A. Hastings, J. Lane, Akron, OH, p.A3402
- P293 A Quiet Place: A Rare Case of a Sarcoma Hiding in the Hemithorax/A.** Van, J.D. Rivera Robles, S. Afraz, C.N. Railwah, Weston, FL, p.A3403
- P294 The Curious Case of Pulmonary Amyloidoma/S.S.** Aleem, T. Uchel, K.J. Admire, M.R. Cossio, A.N. Mahendra, S. Poursahid, Roanoke, VA, p.A3404
- P295 Primary Choriocarcinoma of Lung/M.** Hamid, A. Kainat, J. Shah, J. Patel, Milwaukee, WI, p.A3405
- P296 A Clinical Dilemma: Distinguishing Multifocal Versus Metastatic Paraganglioma/B.** Hance, M.S. Crosser, Kansas City, KS, p.A3406
- P297 When Cancer Isn't the Answer: A Rare Case of Elastofibroma Dorsi/M.** Abdullah, K. Ebeid, R. Frants, Johnson City, NY, p.A3407
- P298 Metastatic Pulmonary Epithelioid Hemangioendothelioma: A Case Report/O.A.** Perez, A. Bhardwaj, K.N. Qaiser, Z. Khan, A.C. Mehta, Cleveland, OH, p.A3408
- P299 An Interesting Etiology of Lung Nodule: Pulmonary Amyloidosis/T.** Bazzi, A. Singh, H. Hakim, Detroit, MI, p.A3409
- P300 Pulmonary Lymphangiomyomatosis Presenting as Innumerable Enlarging Lung Nodules on Chest Tomography/T.** Stone, J. Gao, Springfield, IL, p.A3410
- P301 Typical Carcinoid Tumor: A Case Report/K.** Acibal, J.R. Gonong, Quezon City, Philippines, p.A3411

ATS 2022

INTERNATIONAL CONFERENCE

San Francisco, CA



Monday Mid-day, May 17

[Click Here to Access the Program Itinerary and Add Monday Sessions and Presentations to Your Calendar](#)

11:45 a.m. - 1:15 p.m.

ATS WOMEN'S FORUM

San Francisco Marriott Marquis
Yerba Buena Ballroom Salon 1 (Lower B2 Level)



The annual ATS Women's Forum recognizes the achievements and supports the advancement of women in pulmonary, critical care, and sleep medicine and research. The forum provides a valuable opportunity for women to find value in the inspirational messages and career insights the speakers share. This year's speaker is **Patricia Finn, MD**. Dr. Patricia W. Finn is an Earl M. Bane professor, associate dean for strategic initiative, head of the Department of Medicine, and an associate program director for the Medical Scientist Training Program at the University of Illinois at Chicago. She is a physician scientist focusing on the microbiome and immune mediated pulmonary diseases, including sarcoidosis, transplantation, lung injury, and asthma.

We will also recognize and hear remarks from the 2022 recipient of the Elizabeth A. Rich Award. The Elizabeth Rich Award is presented to an outstanding woman in ATS who has made significant contributions in the fields of pulmonary, critical care and sleep medicine.

The forum is organized and presented by the ATS Membership Committee, and its chair **Clement Ren MD, MBA, ATSF** and vice chair **Meshell Johnson, MD**.

The Women's Forum is generously sponsored by United Therapeutics.

Registration Fee: \$30 (includes lunch)
Seating is limited. Pre-registration is required. Please register through online general registration by clicking the Register Now button above

ADULT CLINICAL CORE CURRICULUM

CME Credits Available: 1.5

MOC Points Available: 1.5

CC2 PULMONARY CLINICAL CORE CURRICULUM

Education Committee

11:30 a.m. - 1:00 p.m.

MOSCONE CENTER

Hall E (North Building, Exhibition Level)

Target Audience

Practicing internists, subspecialists, registered nurses and advanced practice providers in pulmonary, critical care, and sleep medicine who work in a clinical setting and are currently engaged in maintenance of certification.

Objectives

At the conclusion of this session, the participant will be able to:

- identify a diagnostic approach to interstitial lung diseases including granulomatous diseases and IPF;
- characterize pulmonary manifestations of autoimmune disorders;
- describe therapeutic options for progressive fibrotic lung disease.

The goal of the core is to support clinicians who are engaged in maintenance of certification activities by providing updates on subjects that are not only included in recertification requirements, but also are timely and relevant to clinical practice in 2022. The ATS Clinical Core Curriculum Symposia focus on key topics in the areas of Pulmonary, Critical Care, and Sleep Medicine. The topics are aligned with corresponding MOC Medical Knowledge modules. This symposium is intended to help clinicians stay up to date with important information relevant to their medical practices, and to provide an opportunity for clinicians to evaluate their individual knowledge and skills while earning MOC Medical Knowledge points.

Chairing: G.W. Garrison, MD, Burlington, VT
J.L. Cho, MD, Iowa City, IA

11:30 Diagnostic Approach to Interstitial Lung Disease
E.D. Farrand, MD, San Francisco, CA

12:00 Granulomatous Lung Diseases
B. Collins, MD, Seattle, WA

12:30 Pulmonary Manifestations of Autoimmune Disease
L. Kawano-Dourado, MD, Sao Paulo, Brazil

This session and the International Conference are supported by independent medical educational grants from Boehringer Ingelheim Pharmaceuticals, Inc., Genentech, Inc.

All CME sessions have been planned and implemented in accordance with the Accreditation Criteria of the Accreditation Council for Continuing Medical Education (ACCME®) and are free of the control of ineligible companies (formerly commercial interests).

PEDIATRIC CLINICAL CORE CURRICULUM

CME Credits Available: 1.5

MOC Points Available: 1.5

PCC2 PEDIATRIC CLINICAL CORE CURRICULUM

Education Committee

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

Pediatric pulmonary and critical care physicians who work in a clinical setting and are currently engaged in maintenance of certification

Objectives

At the conclusion of this session, the participant will be able to:

- identify diagnostic and management strategies, including pulmonary function testing and appropriate ventilation strategies, for pediatric neuromuscular diseases;
- describe new and evolving treatments for pediatric neuromuscular diseases;
- characterize the use of palliative care consultation to guide physicians, patients, and families through challenging care decisions that occur in pediatric neuromuscular disease cases.

The goal of the core is to support clinicians who are engaged in maintenance of certification activities by providing updates on subjects included in recertification requirements. The Pediatric Core Curriculum symposia promote lifelong learning and the enhancement of the clinical judgment and skills essential for practicing pediatrician.

Chairing: J.E. Gross, MD, PhD, Denver, CO
C. Okorie, MD, MPH, Palo Alto, CA
M. Mccown, DO, Takoma Park, MD

12:00 New and Evolving Therapeutics in Neuromuscular Disease Management

M.K. Elmallah, MD, MS, Durham, NC

12:30 Ventilation Strategies for Acute and Long-Term Management of Neuromuscular Disease

M.Y. Prero, MD, Cleveland, OH

DIVISION FOR ENVIRONMENTAL HEALTH SCIENCE AND PRACTICE; CDC**L11 ASTHMA, LEGIONNAIRES' DISEASE, AND OTHER RESPIRATORY DISEASES IN THE CONTEXT OF ENVIRONMENTAL JUSTICE, HEALTH EQUITY AND CLIMATE HEALTH**

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 3014 (West Building, Level 3)

Target Audience

Healthcare professionals serving environmental justice communities, as well as those serving children with asthma, those interested in impact of Covid-19 and climate health on increased cases of respiratory diseases

Objectives

At the conclusion of this session, the participant will be able to:

- better identify patients at risk of respiratory health outcomes, climate related exposures based on demographic and community characteristic and apply precision medicine diagnostics and risk identification;
- define new strategies to manage the care of children with asthma and integrate/incorporate new guidelines into current practice;
- define new strategies to identify, diagnose and treat those with Legionnaire's disease and integrate/incorporate new guidelines into current practice.

Four talks will highlight the application of current environmental public health data to pulmonary medicine. From a clinical learner's perspective, this collection of talks will empower the attendee to use environmental public health data in their clinical decisions with the goal of improving patient care within their practice. From an academic or public health perspective, this collection of talks will empower the attendee to use environmental public health data to better understand the observed clinical patterns of environmental lung health outcomes within their local jurisdictions so that they can then work to empower locally-relevant interventions.

Chairing: E.R. Svendsen, PhD, Atlanta, GA

12:00 Climate Health Driven Changes in Pulmonary Health Outcomes

A. Vaidyanathan, PhD, Atlanta, GA

12:15 Environmental Public Health Tracking: A Resource for Data-Driven Public Health Action

A. Werner, PhD, Atlanta, GA

12:30 Still Waters Run Deep: New Frontiers in Legionnaires' Disease Epidemiology, Diagnosis and Prevention

S. Salandy, PhD, MPH, Atlanta, GA

12:37 Still Waters Run Deep: New Frontiers in Legionnaires' Disease Epidemiology, Diagnosis and Prevention

A. Barskey, MPH, Atlanta, GA

12:45 Cross State Analyses of Emerging Benefits, Challenges, and Technical Assistance Needs for Asthma Quality Improvement Initiatives

A. Perkins, PhD, Atlanta, GA

**DEPARTMENT OF VETERANS AFFAIRS OFFICE
OF RESEARCH AND DEVELOPMENT**

**L12 LUNG PRECISION ONCOLOGY PROGRAM
IN VA: RISK PREDICTION MODELS AND
BIOMARKERS FOR SCREENING**

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Target Audience

Those interested in lung cancer and lung cancer screening; those interested in learning about ongoing lung cancer screening trials planned for VA's LPOP network, their generalizability, and their potential impact on health policy.

Objectives

At the conclusion of this session, the participant will be able to:

- gain a better idea of current and future research opportunities and collaborative approaches being taken to use VA data to work for Veterans;
- gain understanding of career opportunities in the VA for those with an interest in lung cancer care and research;
- learn how to select patients for entry into lung cancer screening programs.

In 2020, the VA embarked on the Lung Precision Oncology Program to enhance care and research related to lung cancer, focusing on early detection through screening and improved treatments using precision oncology. The session will begin with a general update on clinical and investigative activities under way within the program. Also, an ongoing multi-site trial will be described testing the feasibility of implementing risk-based selection for screening. The third speaker will focus on efforts to identify promising circulating biomarkers with the goal of using them to refine the screening selection process and improve decision-making in the management of indeterminate nodules.

Chairing: J.K. Brown, MD, San Francisco, CA
K. Myrie, PhD, Washington, DC
C.G. Slatore, MD, Portland, OR

12:00 Tackling Lung Cancer in LPOP

R. Ramoni, DMD, ScD, Washington, DC

12:20 Implementing Risk-Based Patient Selection for Screening in LPOP

N.T. Tanner, MD, MSCR, Charleston, SC

12:40 Testing the Most Promising Blood-Based Biomarkers in Lung Cancer Screening Programs Across LPOP

S.M. Dubinett, MD, Los Angeles, CA

**AMERICAN LUNG ASSOCIATION, NATIONAL INSTITUTES
OF HEALTH, ATS FOUNDATION, PALLIATIVE CARE
ORGANIZATIONS, AMERICAN CANCER SOCIETY
SOCIETY; PRIVATE/PUBLIC FOUNDATIONS**

L13 OPPORTUNITIES FOR RESEARCH FUNDING

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Target Audience

This session will benefit attendees with clinical, academic, research, and/or funding responsibilities. Information provided by presenting organizations could also enhance career development strategies for students and early career professionals.

Objectives

At the conclusion of this session, the participant will be able to:

- Describe the research priorities of each funding agency represented on the panel.
- Identify specific criteria required and mechanisms of funding from each agency on the panel.
- Identify a funding agency that is most closely aligned with the attendee's interest and program of research.

This session will introduce programs and research funding opportunities offered from various government and non-government agencies and foundations. Speakers will present current research priorities and mechanisms of funding available within respective agencies. Funded researchers will discuss effective strategies for successful funding. Time will be provided for audience members to ask questions of the panel of speakers.

Chairing: L.A. Matura, PhD, RN, Philadelphia, PA
S.J. Crowder, PhD, RN, ATSF, Indianapolis, IN

12:00 Introductions
S.J. Crowder, PhD, Indianapolis, IN

12:10 Research Funding through the American Lung Association
D.P. Brown, MS, Wilmington, DE

12:17 Obtaining Research Funding through Federal Agencies
L.L. Chlan, PhD, RN, ATSF, Rochester, MN

12:24 Fostering Successful Grant Applications
J.L. Larson, PhD, RN, Ann Arbor, MI

- 12:31 Research Funding through Federal Agencies, Foundations, and Professional Organizations**
K.O. Lindell, PhD, RN, ATSF, Charleston, SC
- 12:38 The Money Makes a Difference: Impact of Funding on Your Research Career**
Carter Morris, PhD, ATSN, ANP-BC, RN, New York, NY
- 12:45 Questions and Answers**
L.A. Matura, PhD, RN, Philadelphia, PA

NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

L14 SARS-COV-2 AND ATOPY: RESULTS FROM NIAID-SPONSORED STUDIES

12:00 p.m. - 1:00 p.m. **MOSCONE CENTER**

Room 2001/2003 (West Building, Level 2)

Target Audience

Providers of lung health, clinical and epidemiological researchers

Objectives

At the conclusion of this session, the participant will be able to:

- describe novel study designs relevant for conducting rigorous clinical research during a global pandemic;
- describe new findings and risk factors related to SARS-CoV-2 infection, household transmission, and severity of illness;
- better understand the relationship between pre-existing allergic diagnoses or Type 2 inflammation of risks of SARS-CoV-2 infection and disease severity, and risks associated with SARS-CoV-2 mRNA vaccines.

This session will describe results from three NIAID-sponsored studies developed to address public health issues during the COVID-19 pandemic, with topics of relevance to patients with asthma and allergic diseases.

Chairing: P.M. Becker, MD, Bethesda, MD

- 12:00 Risk Factors for SARS-CoV-2 Infection and Household Transmission in Allergic and Non-Allergic Individuals: The HEROS Study**
T.V. Hartert, MD, MPH, ATSF, Nashville, TN
- 12:20 mRNA Vaccines in Highly Allergic Individuals**
J. Baker, MD, Ann Arbor, MI
- 12:40 Type 2 Endotype and Severity of Illness in the IMPACC COVID-19 Cohort**
M.C. Altman, MD, MPhil, Seattle, WA

AMERICAN LUNG ASSOCIATION AIRWAYS CLINICAL RESEARCH CENTERS

L15 UPDATE ON AMERICAN LUNG ASSOCIATION AIRWAYS CLINICAL RESEARCH CENTERS NETWORK'S STUDIES

12:00 p.m. - 1:00 p.m. **MOSCONE CENTER**

Room 2014/2016 (West Building, Level 2)

Target Audience

Physicians, clinical scientists, nurses, paraprofessionals, educators, health care providers

Objectives

At the conclusion of this session, the participant will be able to:

- describe the effect of losartan on progression of emphysema and prevention of COPD exacerbations;
- understand and learn whether roflumilast induces weight loss in obese asthmatics and whether this improves asthma control or prevents exacerbations;
- learn how COVID-19 restrictions affected patients with COPD in terms of psychological effects and knowledge and actions needed to cope with the pandemic.

The purpose of the session is to discuss ongoing research initiatives within the American Lung Association Airways Clinical Research Centers network. Over the past several years, the network has completed important clinical trials including Losartan for preventing Progression of Emphysema (LEEP), Roflumilast for treatment of obese asthmatics (TRIM), and an observational study of the impact of COVID-19 restrictions on patients with COPD. We plan to present the final outcome data from these studies. Moreover we are starting a cohort study of young adults to understand the underpinnings of lung health in young adults.

Chairing: L.J. Smith, MD, Chicago, IL
R.A. Wise, MD, Baltimore, MD

- 12:00 Introduction**
L.J. Smith, MD, Chicago, IL
- 12:05 Trial of Roflumilast in the Management of Poorly Controlled Asthma in People With Obesity**
A.E. Dixon, MA, BM BCH, ATSF, Burlington, VT
- 12:17 Losartan Effects on Emphysema Progression**
R.A. Wise, MD, Baltimore, MD
- 12:29 "It's a Cause I Can Believe In:" Determinants of Research Participation in the Lung Health Cohort Study**
K. Menson, DO, Burlington, VT
- 12:41 LEEP COVID-19 Study Results and Findings**
W.Z. Zhang, MD, New York, NY
- 12:53 ALA-ACRC Question and Answer Session**
R.A. Wise, MD, Baltimore, MD

DIVISION OF LUNG DISEASES, NHLBI/NIH
L16 NHLBI PREVENTION AND EARLY TREATMENT OF ACUTE LUNG INJURY (PETAL) NETWORK
12:00 p.m. - 1:00 p.m. MOSCONE CENTER
Room 3005/3007 (West Building, Level 3)
Target Audience

Practicing critical care and emergency medicine clinicians and clinical researchers

Objectives

At the conclusion of this session, the participant will be able to:

- understand the goals and structure of the PETAL network;
- gain understanding the questions being addressed in PETAL network studies;
- gain new findings and results of PETAL network studies.

This session will provide an update on the NHLBI Prevention and Early Treatment of Acute Lung Injury (PETAL) clinical trials network. The session will describe the structure and goals of the PETAL network, an overview of progress in ongoing studies, and results of studies to date.

Chairing: L. Reineck, MD, MS, Bethesda, MD
R.G. Brower, MD, Baltimore, MD

12:00 PETAL Overview

R.G. Brower, MD, Baltimore, MD

12:07 Update on the ACTIV 4a Platform

J. Wilson, MD, MS, Stanford, CA

12:14 Update on the ACTIV 4 Host Tissue Platform

K. Gibbs, MD, Winston-Salem, NC

12:21 Update on the ACTIV 3 Platform

A.A. Ginde, MD, MPH, Aurora, CO

12:28 Update on the ACTIV 3b Platform

S.M. Brown, MD, MS, Murray, UT

12:35 Update on the CORAL Studies

C.T. Hough, MD, MSc, Portland, OR

12:42 Update on the CLOVERS Trial

I.S. Douglas, MD, FRCP, Denver, CO

12:49 Update on the ASTER Trial

M.A. Matthay, MD, San Francisco, CA

12:56 Q&A

L. Reineck, MD, MS, Bethesda, MD

DIVISION OF LUNG DISEASES, NHLBI/NIH
L17 UPDATES FROM THE COPDGENE STUDY
12:00 p.m. - 1:00 p.m.
MOSCONE CENTER
Room 3006/3008 (West Building, Level 3)
Target Audience

Researchers, medical trainees, those with an interest in COPD pathogenesis

Objectives

At the conclusion of this session, the participant will be able to:

- learn about imaging in the COPDGene study;
- gain understanding of subtypes identified by the COPDGene study;
- learn about longitudinal follow-up in the COPDGene study.

Chronic obstructive pulmonary disease (COPD), the fourth leading cause of death in the United States, is a heterologous syndrome. The COPDGene study has created the largest cohort of well-characterized current and former smokers for respiratory disease research. The primary goals of COPDGene are: 1) to identify new genetic loci that influence the development of COPD and COPD-related phenotypes and 2) to reclassify COPD into subtypes that can ultimately be used to develop effective therapies. In this session, presenters will discuss new results from the COPDGene study, including new ways to diagnose the disease, deep learning approaches to imaging data, genetics, epigenetics, transcriptomics, proteomics, and an integrative Omics approach.

Chairing: L. Postow, PhD, Bethesda, MD
J.D. Crapo, MD, Denver, CO

12:00 Assessing COPD Progression

A. Khatiwada, PhD, Denver, CO

12:12 Disease Trajectories in COPD

J. Ross, PhD, Boston, MA

12:24 Advances in COPD Imaging

S.P. Bhatt, MD, MSPH, Birmingham, AL

12:36 COVID-19 in COPDGene

J. Bon, MD, MS, ATSF, Pittsburgh, PA

12:48 Proteomics in COPD

R.P. Bowler, MD, PhD, Denver, CO

DIVISION OF LUNG DISEASES, NHLBI/NIH

L18 ASTHMA EMPOWERMENT COLLABORATIONS TO REDUCE CHILDHOOD ASTHMA DISPARITIES: BASELINE DATA FOR THREE COMMUNITIES

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 3010/3012 (West Building, Level 3)

Target Audience

Researchers or clinicians interested in pediatric asthma management in the community setting

Objectives

At the conclusion of this session, the participant will be able to:

- better understand the barriers to providing children with evidence based asthma care;
- recognize when children with asthma need additional care;
- gain understanding about how integrated models of care can be provided to underserved children with asthma.

In 2017, NHLBI funded investigators to conduct multi-level clinical trials to provide comprehensive asthma care in specific communities where the interventions were selected based on a community needs assessment. Within each community, investigators identified the children at high risk for poor asthma outcomes, providing a benchmark measurement for those most likely to experience disparities in their asthma outcomes. Having completed trial enrollment, researchers will share how they identified their population of interest and the baseline characteristics of each cohort. In so doing, a cross sectional examination of asthma care in each of the communities will be provided.

Chairing: M.M. Freemer, MD, MPH, Bethesda, MD

12:00 Asthma Among Dine Children Living on the Navajo Nation

B.G. Bender, PhD, Denver, CO

12:15 Asthma Among West Philadelphia Asthma Care Collaborative Participants

T. Bryant-Stephens, MD, Philadelphia, PA

12:30 Asthma Among Participants in the Rhode Island Asthma Integrated Response Program (RI-AIR)


D. Koinis-Mitchell, PhD, Providence, RI

12:45 Panel Discussion

MEDICAL EDUCATION SEMINAR

CME Credits Available: 1.5

ME102 ADVOCACY ACROSS THE SPECTRUM: HARNESSING OUR INFLUENCE AND EXPERTISE TO PROMOTE INDIVIDUAL HEALTH AND COMMUNITY WELL-BEING

 Pre-registration and additional fees required. Attendance is limited.

Member: \$100

LMIC Member: \$70

Assembly on Behavioral and Health Services Research

12:15 p.m. - 1:15 p.m.

MOSCONE CENTER

Room 101-102 (South Building, Street Level)

Target Audience

Clinicians (physicians, nurses, fellows, residents), researchers, administrators, and policymakers

Objectives

At the conclusion of this session, the participant will be able to:

- define what advocacy means;
- illustrate examples of advocacy at different levels: representation; community development; activism and social policy reform;
- apply and integrate one of the advocacy forms into one's own practice or program.

Attendees will learn Carlisle's theoretical model on health promotion, advocacy, and health disparities to frame the session. A panel of expert advocates will then give real-world examples of their advocacy work in each of the four quadrants: (1) Representation (2) Community Development, (3) Community Activism, and (4) Social Policy Reform. This will be followed by an interactive workshop of small-group facilitated discussions around practical methods of engagement which will then be shared with the larger group. Participants will leave with access to resources and tools to bring back to their home institutions, training programs, and communities.


Faculty: M.M. Lee, MD, ATSF, Los Angeles, CA

K. Doo, MD, MEd, Oakland, CA

S. Gause, MD, Portland, OR

MEET THE EXPERTS

CME Credits Available: 1

 Pre-registration and additional fees required. Attendance is limited.
Member: \$100 LMIC Member: \$70.

12:15 p.m. - 1:15 p.m. MOSCONE CENTER

ME24 HYPERINFLAMMATORY AND IMMUNOSUPPRESSIVE SUBPHENOTYPES IN CRITICAL ILLNESS: TWO SIDES OF THE SAME COIN?

E.D. Morrell, MD, MA, Seattle, WA

C. Mikacenic, MD, Seattle, WA

Room 50/62 (South Building, Lower Mezzanine)

ME25 NEUROLOGIC DISASTERS IN THE ICU

T.P. Bleck, MD, ATSF, Chicago, IL

Room 52/54/56 (South Building, Lower Mezzanine)

ME26 FINE PARTICLES IN OUR AIR: THEIR TOXICITY AND ROLE IN VIRUS TRANSMISSION

G.D. Thurston, DSc, New York, NY

Room 58/60 (South Building, Lower Mezzanine)

ME27 OPIOID USE DISORDER, SLEEP DEFICIENCY, VENTILATORY CONTROL AND TREATMENT IMPLICATIONS

H.K. Yaggi, MD, New Haven, CT

Room 70/72 (South Building, Lower Mezzanine)

ME28 HOW DO I TEACH EBUS TBNA BRONCHOSCOPY?

J. Diaz-Mendoza, MD, Detroit, MI

C.R. Lamb, MD, Burlington, MA

A. Majid, MD, Boston, MA

Room 74/76 (South Building, Lower Mezzanine)

SECTION MEMBERSHIP MEETINGS

12:00-2:00 PM

SECTION ON TERRORISM AND INHALATION DISASTERS

MARRIOTT MARQUIS

Room: Yerba Buena Ballroom, Salon 10 (Lower B2 Level)

1:15-2:15 PM

SECTION ON MEDICAL EDUCATION

MARRIOTT MARQUIS

Room: Yerba Buena Ballroom, Salon 11-13 (Lower B2 Level)

 **ATS 2022**

INTERNATIONAL CONFERENCE

San Francisco, CA

Monday Afternoon, May 16

[Click Here to Access the Program Itinerary and Add Monday Sessions and Presentations to Your Calendar](#)

2:15 p.m. - 3:45 p.m.

PRESENTATION OF THE RECOGNITION AWARDS FOR SCIENTIFIC ACCOMPLISHMENTS

MOSCONE CENTER,

Room 3001/3003 (West Building, Level 3).

As part of the ATS Respiratory Health Awards, the Recognition Awards for Scientific Accomplishments recognizes outstanding scientific contributions in basic or clinical arenas to enhance the understanding, prevention and treatment of respiratory disease, critical illness, or sleep disorders and recognizes exemplary professionalism, collegiality and citizenship through mentorship and scientific involvement in the ATS community. Awardees are selected based on contributions made throughout their careers or for major contributions made at a particular point in their careers. Awardees will make a 20-minute presentation on their research.

Chairing: Zea Borok, MD, ATSF, Los Angeles, CA
Juan C. Celedon, MD, DrPH, ATSF, Pittsburgh, PA

Awardees:

2:15 Molecular Phenotyping of ARDS: Moving Towards Precision Critical Care

Carolyn S. Calfee, MD, MSCR, San Francisco, CA

2:35 The Antifibrotic Benefit of the Null Hypothesis

Erica L. Herzog, MD, PhD, New Haven, CT

2:55 Broken Wings: Impaired Regeneration in Chronic Lung Disease

Melanie Koenigshoff, MD, PhD, ATSF, Pittsburgh, PA

3:15 Smoking, Vaping, and the Lung: Stress to Disease

Irfan Rahman, PhD, ATSF, Rochester, NY

1:15 p.m. - 2:15 p.m.

VISIT THE EXHIBIT HALL

Take this opportunity between sessions to visit the Exhibit Hall to gain practical knowledge to advance care and research. Exhibitors will be on hand to provide information on pharmaceutical products, medical equipment, publications and research services.

ADULT CLINICAL CORE CURRICULUM

CME Credits Available: 1.5

MOC Points Available: 1.5

CC3 CRITICAL CARE CLINICAL CORE CURRICULUM

Education Committee

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Hall E (North Building, Exhibition Level)

Target Audience

Practicing internists, subspecialists, registered nurses and advanced practice providers in pulmonary, critical care, and sleep medicine who work in a clinical setting and are currently engaged in maintenance of certification.

Objectives

At the conclusion of this session, the participant will be able to:

- describe diagnosis and management of ICU Delirium;
- identify long term sequelae of critical illness including cognitive impairments and critical illness myopathy;
- define the diagnosis of Post Intensive Care Unit Syndrome and describe management strategies including the use of Post ICU Clinics.

The goal of the core is to support clinicians who are engaged in maintenance of certification activities by providing updates on subjects that are not only included in recertification requirements, but also are timely and relevant to clinical practice in 2022. The ATS Clinical Core Curriculum Symposia focus on key topics in the areas of Pulmonary, Critical Care, and Sleep Medicine. The topics are aligned with corresponding MOC Medical Knowledge modules. This symposium is intended to help clinicians stay up to date with important information relevant to their medical practices, and to provide an opportunity for clinicians to evaluate their individual knowledge and skills while earning MOC Medical Knowledge points.

Chairing: S. Ahmed, MBBS, FCCP, Albuquerque, NM
D. Kelm, MD, ATSF, Rochester, MN

2:15 Diagnosis and Management of Patients and Families with Post Intensive Care Unit Syndrome
H. Carmona, MD, Seattle, WA

2:45 Post ICU Clinics: Who Are They For? How Do They Help?

A. Parker, MD, Baltimore, MD

3:15 Discussion

A. Placeholder, MD, New York, NY

BASIC • CLINICAL • TRANSLATIONAL

YEAR IN REVIEW

CME Credits Available: 1.5

B81 THE PEDIATRIC YEAR IN REVIEW

Assemblies on Pediatrics; Behavioral and Health Services Research; Clinical Problems; Sleep and Respiratory Neurobiology

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

Any provider of lung health for children, clinical and translational researchers who study pediatric respiratory problems.

Objectives

At the conclusion of this session, the participant will be able to:

- gain understanding of new clinical findings and scientific developments in the field of pediatric sleep medicine;
- identify strategies to improve our recruitment and retention of pediatric pulmonologists by learning about the current status of the pediatric pulmonology workforce;

This session will provide up-to-date and state-of-the-art information on the four topics: pediatric sleep medicine; status of the pediatric pulmonology workforce; impact of COVID-19 on the pediatric population, and disparities in pediatric respiratory disease.

Chairing: T.A. Laguna, MD, MSci, Chicago, IL
B.T. Kopp, MD, MPH, ATSF, Columbus, OH

2:15 Update on Pediatric Sleep Medicine
O. Afolabi-Brown, MD, Philadelphia, PA

2:37 Update on the Status of the Pediatric Pulmonology Workforce
J. Rama, MD, MEd, Houston, TX

2:59 The Impact of COVID-19 on the Pediatric Population
L. Yonker, MD, Boston, MA

3:22 Disparities in Pediatric Respiratory Disease
B.J. Sheares, MD, MS, New Haven, CT

CLINICAL • TRANSLATIONAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

B82 CRITICAL CHALLENGES AND COMPELLING QUESTIONS FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Assemblies on Clinical Problems; Respiratory Cell and Molecular Biology

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3-4 (South Building, Exhibition Level)

Target Audience

Pulmonologists, fellows, residents, nurses

Objectives

At the conclusion of this session, the participant will be able to:

- learn and understand novel concepts in disease pathogenesis, health disparities, and therapeutic strategies;
- identify critical areas of future COPD research priorities in the upcoming decade;
- gain understanding of the critical challenges for optimal implementation of this research of COPD on improving treatment outcomes at a local and national level.

Chronic Obstructive Pulmonary Disease (COPD) is the third leading cause of death in the United States. Despite its significant impact on the world's population, much about the disease remains poorly understood. Further research is crucial to inform healthcare providers about pathogenesis, risk factors, and better therapeutic approaches. This session will identify gaps in our current knowledge base, describe recent progress in the field of COPD research, and outline strategies to help answer compelling unanswered questions relevant to this disease.

Chairing: V. Kim, MD, ATSF, Philadelphia, PA
J. Bon, MD, MS, ATSF, Pittsburgh, PA
J.K. Quint, FRCP, MSc, PhD, London, United Kingdom

2:15 Introduction

V. Kim, MD, ATSF, Philadelphia, PA

2:18 COPD Prevention: Role of Emerging Exposures and Risk Factors on COPD Development

R. Kalhan, MD, MS, Chicago, IL

2:32 Health Disparities in COPD: Understanding Environmental and Social Determinants

M.B. Drummond, MHS, MD, ATSF, Chapel Hill, NC

2:46 Current and Emerging Concepts in Early Disease Pathogenesis

C.M. Freeman, PhD, Ann Arbor, MI

3:00 The Future of Regenerative Therapies for COPD

S. Krick, MD, PhD, Birmingham, AL

3:14 Translation to Clinical Practice: Implementation of the COPD National Action Plan

L. Postow, PhD, Bethesda, MD

3:28 Question and Answer Session

J. Bon, MD, MS, ATSF, Pittsburgh, PA

CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

B83 BEYOND FIBROSIS: PATIENT CENTERED TREATMENT AND OUTCOMES IN SARCOIDOSIS

Assembly on Clinical Problems

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 7-8 (South Building, Exhibition Level)

Target Audience

Clinicians and researchers involved in the care of patients with sarcoidosis.

Objectives

At the conclusion of this session, the participant will be able to:

- incorporate patient-reported outcomes and dynamic functional assessments into routine practice of the care of patients with pulmonary sarcoidosis;
- improve the quality of life of sarcoidosis patients by understanding the societal factors that impact quality of life, and identifying and utilizing available resources to help alleviate these factors;
- define new strategies for the management of patients with sarcoidosis involving newer agents to minimize toxicity and improve quality of life.

A substantial number of sarcoidosis patients have disabling symptoms. Progressive pulmonary disease is the most frequent cause of sarcoidosis related mortality. Yet, other disease manifestations may contribute more to impaired quality of life. We will review the challenges of living with sarcoidosis, and the disparities in outcomes. Faculty will presentations will include contemporary assessment tools, including the limitations of PFTs and the potential role of patient reported outcome measures. We will also discuss the emerging treatments such as nicotine, JAK inhibitors and others, and the benefits of regular exercise, support groups and community engagement.

Chairing: M. Bhargava, MD, PhD, Minneapolis, MN
M.L. Ribeiro Neto, MD, Cleveland, OH
A. Gerke, MD, MS, Iowa City, IA

2:15 A Patient's Perspective

R. Stanfel, Chicago, IL

2:20 Introduction to the Session: High-Risk Sarcoidosis Phenotypes

D.M. Perlman, MD, Minneapolis, MN

2:25 Phenotype Outcomes and Implications for Precision Care in Sarcoidosis

L.A. Maier, MSPH, MD, ATSF, Denver, CO

2:45 Beyond PFTs: How to Assess Complaints and Limitations due to Sarcoidosis

M. Drent, MD, PhD, Nieuwegein, Netherlands

3:05 Into the Future: Novel Therapeutic Options in Sarcoidosis

E.D. Crouser, MD, Columbus, OH

3:25 Outside the Clinic Door: Addressing Disparities in Sarcoidosis

Y. Cozier, DSc, MPH, Boston, MA

This session and the International Conference are supported by independent medical educational grants from

Boehringer Ingelheim Pharmaceuticals, Inc., Genentech, Inc.

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BEHAVIORAL • CLINICAL

CRITICAL CARE TRACK

CME Credits Available: 1.5

B84 DELIVERING EQUITABLE CARE IN STRAINED INTENSIVE CARE UNITS

Assemblies on Critical Care; Behavioral and Health Services Research

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3020/3022/3024 (West Building, Level 3)

Target Audience

Clinicians practicing in critical care settings, and health disparities researchers

Objectives

At the conclusion of this session, the participant will be able to:

- identify common health-system and clinical care processes under capacity strain and how they may contribute to inequitable care for minority patients with severe acute illness;
- gain strategies that other health centers have used that are designed to ensure equity in healthcare delivery under conditions of increased capacity strain.

When clinicians and health systems are under strain, implicit biases tend to become magnified and health outcomes for minoritized groups worsen. This session will focus on understanding capacity strain in the ICU, including lessons learned from the COVID-19 pandemic, and how capacity strain may contribute to inequities in the care of critically ill patients. Importantly, time will be devoted on discussion about strategies that can be implemented by clinicians and health systems to mitigate the impact of capacity strain on critical care for the explicit purpose of reducing disparities in critical care.

Chairing: D.C. Ashana, MD, MBA, MS, Durham, NC

C.F. Chesley, MD, Philadelphia, PA

J.C. Ferreira, MD, PhD, ATSF, Sao Paulo, Brazil

2:15 Health Disparities Research Methods

D.C. Ashana, MD, MBA, MS, Durham, NC

2:27 How Surges in Demand for Critical Care Magnify Inequities in ICU Care

G.L. Anesi, MD, MSCE, Philadelphia, PA

2:39 Capacity Strain and What It Means For Equitable Care For The Severely Ill

C.F. Chesley, MD, Philadelphia, PA

2:51 Capacity Strain, Regional Variation, and Equity

T.S. Valley, MD, MSc, Ann Arbor, MI

3:03 Perspective on Strained Hospital Systems and Equity in Kenya

W. Siika, MD, Nairobi, Kenya

3:15 Envisioning Equitable Critical Care Operations

T.J. Iwashyna, MD, PhD, Ann Arbor, MI

3:30 Panel Discussion/Conclusion

J.C. Ferreira, MD, PhD, ATSF, Sao Paulo, Brazil

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B85 CAN OLD CELLS LEARN NEW TRICKS: SENEESCENCE AND LUNG DISEASE

Assemblies on Respiratory Structure and Function; Allergy, Immunology and Inflammation; Clinical Problems; Critical Care; Nursing; Pulmonary Circulation; Pulmonary Infections and Tuberculosis; Respiratory Cell and Molecular Biology; Thoracic Oncology

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Target Audience

Practicing clinicians, trainees and those involved in research on aging. Given the fact that healthcare is focused on an aging population, this symposium should be of interest to a broad audience.

Objectives

At the conclusion of this session, the participant will be able to:

- describe new findings about cellular senescence and other mechanisms of aging;
- apply the knowledge of cellular senescence to better understand diseases such as IPF and COPD in the elderly;
- better diagnose lung disease in the elderly through an awareness of susceptibility to accelerated aging.

There is intense interest in the biology of aging, given the growing elderly population. This session will help the learner understand cellular mechanisms that occur with aging and how the lung is particularly susceptible to damage associated with these processes. Cellular senescence, mitochondrial dysfunction and altered intercellular communication are among the mechanisms to be discussed. Insight into immunological and physiological pulmonary changes that accompany aging will enhance the learner's experience. The session will highlight lung diseases linked to acceleration of the aging process such as IPF and COPD, and will explore the therapeutic potential of targeting senescent cells.

Chairing: P. Lee, MD, Durham, NC
G.C. Sieck, PhD, Rochester, MN

- 2:15 Overview of Senescence and the Lung**
Y.S. Prakash, MD, PhD, Rochester, MN
- 2:35 The Senescent Smoker: Accelerated Lung Aging and COPD**
R. Gosens, PhD, Groningen, Netherlands
- 2:55 Senescence and IPF: Prototype of an Aging-Related Lung Disease**
V.J. Thannickal, MD, New Orleans, LA
- 3:15 Senotherapy: Is Anti-aging a Possibility?**
P. Lee, MD, Durham, NC
- 3:35 Panel Discussion: Q&A**

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B86 DEBUNKING MYCOBACTERIAL MYTHS: NONTUBERCULOUS MEANS NOT TUBERCULOSIS

Assemblies on Pulmonary Infections and Tuberculosis

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 205-206 (South Building, Level 2)

Target Audience

Pulmonary and infectious disease physicians; primary care physicians; medical residents and students; pulmonary and infectious disease fellows; nurses and nurse practitioners

Objectives

At the conclusion of this session, the participant will be able to:

- understand host vulnerability of NTM, its scientific and clinical relevance, and clinical implications;
- learn the differences in virulence and pathogenicity between NTM and TB, including their scientific and clinical relevance;

- improve health status of NTM patients by incorporating new guidelines into clinical practice, with a focus on patient needs that are distinct from TB management.

Now the dominant mycobacterial pathogen in the United States, nontuberculous mycobacteria (NTM) remain poorly understood from both a scientific and clinical standpoint. Mechanistic understanding of NTM host susceptibility, pathogen virulence and clinical management have been hindered by frequent comparisons to tuberculosis (TB). This session will debunk mycobacterial myths, and highlight key mechanistic and clinically relevant differences between these two challenging infections.

Chairing: K.A. Cohen, MD, Baltimore, MD
T.R. Aksamit, MD, Rochester, MN
S.E. Dorman, MD, Charleston, SC
M. Farhat, CM, MD, MSc, Boston, MA

- 2:15 Something Old and Something New: An Historic Overview of TB and NTM Disease**
D.E. Griffith, MD, ATSF, Denver, CO
- 2:30 Eeny Meeny Miney Moe: Understanding Host Vulnerability to NTM Disease**
K.N. Olivier, MD, MPH, ATSF, Bethesda, MD
- 2:45 Earth, Wind and Fire (Lava): Mycobacterial Virulence and the Environment**
J.R. Honda, PhD, Denver, CO
- 3:00 Something Borrowed and Something Blue: NTM Treatment Paradigms That Originate from TB**
C.L. Daley, MD, Denver, CO
- 3:15 Specialized Warfare Required: Unique Aspects to Clinical Management of NTM**
R. Thomson, MBBS, PhD, FRACP, Greenslopes, Australia
- 3:30 Questions and Answers**

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BEHAVIORAL • CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B87 CAREGIVERS OF ADULTS WITH CHRONIC OR CRITICAL ILLNESS: CHALLENGES AND OPPORTUNITIES

Assemblies on Nursing; Behavioral and Health Services Research; Critical Care

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3014 (West Building, Level 3)

Target Audience

Clinicians, researchers, educators

Objectives

At the conclusion of this session, the participant will be able to:

- describe family caregiving from a theoretical and practical standpoint;
- apply information on the needs of caregivers when planning and delivering care to families with varied care contexts including life transitions, acute and chronic illnesses, underserved or vulnerable populations;
- describe opportunities and initiatives for caregiving research and policy at both the public and private levels.

Almost 48 million American adults are in need of unpaid informal caregiving from a family member or friend. Families represent the largest source of caregiving for persons with acute illness, chronic disorders, disabilities, and aging-related conditions. Although many caregivers share some experiences, the context of care and social determinants of health of the care recipient and the caregiver contribute to variability in caregiving experiences. This session will describe the concerns, and needs of caregivers as well as context and transitions in care. This session will address theoretical perspectives of caregiving, opportunities for caregiving research, and policy initiatives related to caregiving.

Chairing: J. Tate, PhD, RN, ATSF, Columbus, OH

- 2:15 A Patient's Perspective**
K. Page, Smithton, MO
- 2:20 Theoretical Perspectives of Caregiving**
N.S. Mcandrew, PhD, RN, ACNS-BC, CCRN, Milwaukee, WI
- 2:34 Family Caregiving and Transitions in Care: The Emerging Adult with Chronic Illness**
W.M. Gibson-Scipio, PhD, FNP-BC, ATSF, Detroit, MI
- 2:48 ICU Family Engagement**
J. Choi, PhD, RN, ATSF, Seoul, Korea, Republic of
- 3:03 Family Caregiving in Chronic Critical Illness, Palliative Care and End-of-Life Decision Making**
J.B. Seaman, PhD, RN, CHPN, Pittsburgh, PA
- 3:17 Opportunities for Caregiving Research**
J. Tate, PhD, RN, ATSF, Columbus, OH
- 3:31 Public Policy and Caregiving: New Initiatives**
S.J. Crowder, PhD, RN, ATSF, Indianapolis, IN

BEHAVIORAL • CLINICAL

PUBLIC ADVISORY ROUNDTABLE SYMPOSIUM

CME Credits Available: 1.5

B88 INCLUDING ALL FOR RESPIRATORY HEALTH

ATS Public Advisory Roundtable

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3000/3002/3004 (West Building, Level 3)

Target Audience

Pulmonary health professionals at all levels interested in addressing healthcare disparities and achieving health equity for under-represented and under-served patient communities

Objectives

At the conclusion of this session, the participant will be able to:

- define new strategies to identify and openly address inherent bias in the clinical setting;
- better communicate with patients from underrepresented communities on the importance of equitable representation in clinical trials and data collection initiatives;
- improve the quality of life of all patients by addressing the need to advocate for international clean air policies.

This session will focus on identifying health inequities in the pulmonary healthcare setting and providing strategies to achieve a more equitable environment for underrepresented and underserved respiratory patients.

Chairing: J.M. Beck, MD, ATSF, Denver, CO
M. Manion, BS, Minneapolis, MN

- 2:15 Welcome and Introduction**
M. Manion, BS, Minneapolis, MN
- 2:20 Welcome from ATS Past-President**
J.M. Beck, MD, ATSF, Denver, CO
- 2:25 A Patient's Perspective**
J. Hanley, Manhattan Beach, CA
- 2:29 All Should Breathe Clean Air**
M.B. Rice, MD, MPH, Boston, MA
- 2:48 Improving Representation in Clinical Studies**
N. Thakur, MD, MPH, San Francisco, CA
- 3:07 The Role of Genetics in Addressing Disparities and Creating More Equitable Care**
V.E. Ortega, MD, PhD, ATSF, Scottsdale, AZ
- 3:26 Successfully Addressing Disparities: The Puerto Rican Experience**
J. Roman Rodriguez, MD, Philadelphia, PA

BASIC • TRANSLATIONAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

B89 PATHWAYS TOWARDS PERSONALIZED SLEEP MEDICINE: INTEGRATING ENDOTYPES, MEDICAL INFORMATICS, AND MULTI-OMICS

Assemblies on Sleep and Respiratory Neurobiology

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2014/2016 (West Building, Level 2)

Target Audience

This symposium will be of interest to practitioners and researchers who are interested in understanding disease heterogeneity in Obstructive Sleep Apnea (OSA) and learning about novel tools for risk stratification and personalized patient management.

Objectives

At the conclusion of this session, the participant will be able to:

- describe new findings about alternative polysomnographic measures of risk stratification for patients with sleep-disordered breathing;
- recognize and describe genomic and sex-specific factors as drivers of sleep-disordered breathing subtyping and risk stratification;
- describe new findings about the current state of biomarker research of sleep disorders. This will improve medical knowledge and utilization of informatics.

Precision Medicine improves personalized patient management and care by considering physiological and molecular features intrinsic to each patient. In sleep medicine, decades of basic and clinical research generated a corpus of information and methodologies that can be translated into clinical practice. Patients with different sleep disorder endotypes may present with different risks and strategies for treatment, despite similar clinical measures such as the apnea-hypopnea index. This session will provide an update on the latest developments in this field, exposing the attendees to novel informatics, clinical, and laboratory approaches. Current applications and future directions of personalized patient management will be discussed.

Chairing: R. Cortese, PhD, Columbia, MO
M. Sanchez De La Torre, PhD, Lleida, Spain
D. Vena, PhD, Boston, MA

2:15 Aiming at the Target: Identification of Cardiovascular Risk Endotypes in Sleep Apnea

M. Sanchez De La Torre, PhD, Lleida, Spain

2:25 Integrating New Signals in Sleep Apnea for Stratification of Cardiovascular Risk: Beyond the Apnea-Hypopnea Index

R. Heinzer, MD, Lausanne, Switzerland

2:45 Sleep-Disordered Breathing Genomic and Sex-Specific Factors: Targets for Subtyping and Risk Stratification
B.E. Cade, PhD, Boston, MA

3:05 The Emerging Field of Epigenomics in Sleep Disorders
R. Cortese, PhD, Columbia, MO

3:25 Designing New RCTs in Cardiovascular Prevention in OSA: Putting All the Pieces Together
N.A. Shah, MD, MPH, MSci, New York, NY

CLINICAL • TRANSLATIONAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

B90 FACILITATING PARTICIPATION IN PULMONARY REHABILITATION AMONG PEOPLE WITH MULTIPLE MEDICAL AND PSYCHOSOCIAL COMPLEXITIES

Assemblies on Pulmonary Rehabilitation

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 215-216 (South Building, Level 2)

Target Audience

Physicians, nurses, allied health professionals, trainees and clinical researchers

Objectives

At the conclusion of this session, the participant will be able to:

- develop further understanding around the effect of PR among people with multiple complexities to encourage health professionals to facilitate participation of PR among this population;
- identify opportunities and challenges in relation to provision of PR for people with multiple complexities;
- apply novel strategies used internationally to address some of the challenges in facilitating participation of PR among people with multiple complexities.

While pulmonary rehabilitation (PR) is a highly efficacious intervention in management of chronic respiratory diseases, many current models of PR exclude people with multiple complexities due to limitation in the funding and delivery models. Presence of co-morbidities such as obesity, complex cardiac history and cognitive impairments often deter people from participating in PR, resulting in missed opportunity for this population. In addition, people from ethnic minorities groups are often do not participate in PR. In this symposium, speakers will explore the effect of PR for people with multiple complexities and novel ways to facilitate participation among this group.

Chairing: P. Camp, PT, PhD, Vancouver, Canada
F. Franssen, MD, PhD, Horn, Netherlands

- 2:15** **Managing Complexities Among People with Chronic Respiratory Disease in PR**
P. Camp, PT, PhD, Vancouver, Canada
- 2:27** **Cognitive Impairment and Pulmonary Rehabilitation in COPD**
N.J. Greening, MBBS, PhD, MRCP(UK), BMedSci, Leicester, United Kingdom
- 2:42** **Managing People with Moderate to Severe Cardiovascular Diseases in Pulmonary Rehabilitation**
S.J. Singh, PhD, Leicester, United Kingdom
- 2:59** **Facilitating Physical Activity Among Overweight and Obese Patients with Chronic Respiratory Diseases**
F. Pitta, PT, PhD, Londrina, Brazil
- 3:16** **Frailty Among People with Chronic Respiratory Disease**
M. Maddocks, PhD, London, United Kingdom
- 3:31** **Engaging People From Culturally and Linguistically Diverse Populations in Self-Management Practices**
C.Y. Tang, DPT, Penrith, Australia

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B91 PUBLISHING THE BEST: THE COMPREHENSIVE SPECTRUM PROVIDED BY THE ATS FAMILY OF JOURNALS

Assemblies on Allergy, Immunology and Inflammation; Behavioral and Health Services Research; Clinical Problems; Critical Care; Environmental, Occupational and Population Health; Nursing; Pediatrics; Pulmonary Circulation; Pulmonary Infections and Tuberculosis; Pulmonary

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3010/3012 (West Building, Level 3)

Target Audience

Providers of clinical care to patients with broadly defined respiratory disorders as well as investigators and educators who work in the same field

Objectives

At the conclusion of this session, the participant will be able to:

- define the optimal approach to maximize likelihood of publishing in one of the ATS journals;
- identify the impact of pre-publication servers on the peer review process;
- understand evolving approaches to data and methodology sharing at time of publication, reporting standards, and introduction of innovative educational methods.

The ATS family of journals includes the American Journal of Respiratory and Critical Care Medicine, the American Journal of Respiratory Cell and Molecular Biology, the Annals of the American Thoracic Society, and ATS Scholar. These journals provide an opportunity for publication of a broad swath of scientific expertise spanning a broad breadth of scientific interests. Moreover they are at the leading front of a wide range of publication challenges and opportunities. These will be discussed in detail to provide the scientific community an opportunity to define the optimal format for scientific publication.

Chairing: R.M. Tighe, MD, ATSF, Durham, NC
S.D. Davis, MD, ATSF, Chapel Hill, NC

- 2:15** **Introduction**
R.M. Tighe, MD, ATSF, Durham, NC
- 2:25** **American Journal of Respiratory and Critical Care Medicine**
F.J. Martinez, MD, MS, New York, NY
- 2:35** **American Journal of Respiratory Cell and Molecular Biology**
P.T. Schumacker, PhD, ATSF, Chicago, IL
- 2:45** **Annals of the American Thoracic Society**
C.R. Cooke, MD, Ann Arbor, MI
- 2:55** **ATS Scholar**
N. Seam, MD, ATSF, Bethesda, MD
- 3:05** **Discussion**
S.D. Davis, MD, ATSF, Chapel Hill, NC

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

B92 THE PAST, PRESENT, AND FUTURE OF E-CIGARETTE OR VAPING ASSOCIATED LUNG ILLNESS (EVALI)

Assemblies on Environmental, Occupational and Population Health; Allergy, Immunology and Inflammation; Behavioral and Health Services Research; Respiratory Cell and Molecular Biology; Respiratory Structure and Function; Thoracic Oncology; Tobacco Action Committee; International Health Committee; EOPH's Early Career Professionals Working Group

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 209-211 (South Building, Level 2)

Target Audience

Providers of lung health services; EVALI or e-cig using patients; those with clinical, research, or administrative responsibilities

Objectives

At the conclusion of this session, the participant will be able to:

- understand the need for careful inquiry and documentation of e-cigarette use in the clinical setting and the utility of this information in diagnosing e-cigarette induced lung injury;
- synthesize the current state of knowledge on e-cigarettes and EVALI and evaluate the link between e-cigarettes and lung injury before and after the 2019 EVALI epidemic;
- evaluate the need for increased public awareness of the risks of E-cigarette use and identify gaps in public health policies, regulations, research resources, and clinical assessments that can prevent future e-cigarette related lung injury.

EVALI emerged in 2019 and resulted in the hospitalization of 2800 and death of 68. While the pathophysiology remains under investigation, laboratory data implied that vitamin E acetate (VEA), an additive in THC-containing e-cigs, is strongly linked to EVALI. However, there are case reports prior to and during the EVALI epidemic not linked to VEA with unknown etiology. While the CDC has stopped aggregating data on EVALI, US cases continue to manifest despite public health efforts to increase public awareness to the dangers of e-cigarettes. This session will describe what is known about EVALI, mechanisms of injury, and the needed clinical, public health, and regulatory efforts to curb EVALI and prevent future e-cigarette induced lung injury as discussed in the EOPH EVALI Assembly Project Workshop.

Chairing: M.E. Rebuli, PhD, Chapel Hill, NC
J.J. Rose, MD, MBA, Pittsburgh, PA
A. Noel, PhD, MSc, BSc, Baton Rouge, LA
A.C. Melzer, MD, MS, Minneapolis, MN

- 2:15 Public Health Consequences of E-Cigarette Use: How We Got to EVALI - An International Perspective**
E. Dagli, MD, Istanbul, Turkey
- 2:27 The Spectrum of E-Cigarette Induced Illness: EVALI Past and Present**
M.D. McGraw, MD, Rochester, NY
- 2:39 EVALI Pathologic Findings: What We Learned Throughout the Epidemic**
B.T. Larsen, MD, PhD, Scottsdale, AZ
- 2:51 The Intersection of E-Cigarette Use, EVALI, and Pathogen Infection: Viruses, Bacteria, and Other Second Hits**
L.E. Crotty Alexander, MD, ATSF, San Diego, CA
- 3:03 Mechanisms of EVALI: E-Cigarette Components That Contribute to Injury and What We Still Need to Learn**
A. Noel, PhD, MSc, BSc, Baton Rouge, LA
- 3:15 How Could We Prevent a Second EVALI-Like Illness?: Outcomes From the EOPH EVALI Workshop**
E.R. Neptune, MD, ATSF, Baltimore, MD
- 3:27 Panel Discussion and Q&A**

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

B93 BREAKTHROUGHS IN PEDIATRIC AND ADULT ASTHMA CLINICAL TRIALS

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3006/3008 (West Building, Level 3)

Chairing: F. Holguin, MD, MPH, Aurora, CO
A. Barochia, MBBS, MHS, ATSF, Bethesda, MD

Oral Presentations:

- 2:15 Efficacy, Safety, and Tolerability of Lebrikizumab in Adolescent Patients with Uncontrolled Asthma (ACOUSTICS): A Phase 3, Randomised, Double-Blind, Placebo-Controlled Study/S.** Szeffler, G. Roberts, A.S. Rubin, S. Zielen, P. Kuna, O. Alpan, J. Anzures-Cabrera, Q. Chen, C.T.J. Holweg, J. Kaminski, W.S. Putnam, J.G. Matthews, N. Kamath, Aurora, CO, p.A3412
- 2:25 Efficacy and Safety of As-Needed Albuterol/Budesonide versus As-Needed Albuterol in Adults, Adolescents, and Children Aged =4 Years with Moderate-to-Severe Asthma: Results of the MANDALA Study/A.** Papi, B.E. Chipps, R.W. Beasley, R.A. Panettieri, F.C. Albers, C. Cappelletti, R. Rees, L. Dunsire, E. Johnsson, A. Jeynes-Ellis, E. Israel, Ferrara, Italy, p.A3413
- 2:35 Efficacy and Safety of Albuterol/Budesonide (PT027) in Mild-to-Moderate Asthma: Results of the DENALI Study/B.E.** Chipps, E. Israel, R.W. Beasley, R.A. Panettieri, F.C. Albers, C. Cappelletti, R. Rees, L. Dunsire, E. Johnsson, A. Danilewicz, A. Papi, Sacramento, CA, p.A3414
- 2:45 Dupilumab Impact on Lung Function in Children with Uncontrolled, Moderate-To-Severe Asthma and Elevated Type 2 Biomarkers/T.W.** Guilbert, L.B. Bacharier, A. Deschildre, W. Phipatanakul, A. Altincatal, L.P. Mannent, N. Amin, E. Laws, B. Akinlade, B. Ortiz, J.A. Jacob-Nara, Y. Deniz, P.J. Rowe, D.J. Lederer, M. Hardin, Cincinnati, OH, p.A3415
- 2:55 An Add-on Reliever-Triggered Inhaled Corticosteroid Strategy Reduces Severe Asthma Exacerbations in a Real-World Study of African American/Black and Hispanic/Latinx Patients with Asthma/J.C.** Cardet, W.D. Pace, J.K. Carroll, A.L. Fuhlbrigge, L. She, F.W. Rockhold, N.E. Maher, M. Fagan, V.E. Forth, P. Arias Hernandez, J. Kruse, B.K. Manning, J. Rodriguez-Louis, J.B. Shields, B. Ericson, A.D. Colon-Moya, T. Coyne-Beasley, G.M. Hammer, B. M. Kaplan, S. Madison, C. S. Rand, J. Robles, O. Thompson, M. E. Wechsler, J. P. Wisnivesky, M. D. McKee, S. P. Jariwala, E. Jerschow, P. J. Busse, D.C. Kaelber, S. Nazario, M. L. Hernandez, A. J. Apter, K. Chang, V. Pinto-Plata, P. M. Stranges, L. H. Hurley, J. Trevor, T. B. Casale, G. Chupp, I. L. Riley, K. V. Shenoy, M. Pasarica, R. A. Calderon Candelario, H. Tapp, A. Baydur, B. P. Yawn, E. Israel; Tampa, FL, p.A3416

- 3:05 Exacerbation Burden and Biologic Outcomes in US Patients with Severe Asthma and Significant Smoking History or COPD: Results from the CHRONICLE Study/N.** Lugogo, R.A. Panettieri, B.E. Chipps, J. Trevor, D. Carstens, A.W. Lindsley, C.S. Ambrose, Ann Arbor, MI, p.A3417
- 3:15 FeNO as a Potential Prognostic and Predictive Marker of Lung Function Decline in Patients with Uncontrolled, Moderate-to-Severe Asthma: LIBERTY ASTHMA QUEST/**I.D. Pavord, G. Brusselle, D.J. Jackson, C.E.E. Brightling, A. Papi, J.F. Maspero, K.F. Rabe, S. Korn, M. Zhang, M. Djandji, M. Hardin, L. De Prado Gomez, J.A. Jacob-Nara, P.J. Rowe, Oxford, United Kingdom, p.A3418
- 3:25 Clinical Responses to Treatment with Tezepelumab Among Patients with Severe, Uncontrolled Asthma in the Phase 3 NAVIGATOR Study/N.**L. Lugogo, C.S. Ambrose, G. Colice, K. Kmita, B. Cook, S. Ponnarambil, J.-P. Llanos Ackert, A. Menzies-Gow, Ann Arbor, MI, p.A3419
- 3:35 Characteristics of Asthma Exacerbations That Required Hospitalization in Patients with Severe, Uncontrolled Asthma Receiving Tezepelumab Compared with Placebo: Results from the Phase 3 NAVIGATOR Study/**C.S. Ambrose, B. Cook, S.L. Roseti, H. Gelhorn, K. Cutts, A.W. Lindsley, G. Colice, Gaithersburg, MD, p.A3420

CLINICAL

MINI SYMPOSIUM

B94 LEARNING FROM REGISTRIES AND CLINICAL TRIALS IN ILD

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 201-202 (South Building, Level 2)

Chairing: V. Cottin, DM, PhD, MD, Lyon, France
J.S. Lee, MD, Aurora, CO
K.I. Aronson, MD, MSci, New York, NY

Featured Speaker:

2:15 Transforming ILD Research: The Promise of Technology/H.R. Collard, San Francisco, CA

Oral Presentations:

2:25 Acute Exacerbations in Patients with Progressive Fibrosing Interstitial Lung Diseases: Data from the INBUILD Trial/M. Kreuter, E. Bendstrup, S. Cerri, K.R. Flaherty, S. Shapera, J.W. Song, H. Mueller, K.B. Rohr, Y. Kondoh, Heidelberg, Germany, p.A3428

- 2:35 Low Prevalence of Cardiac Sarcoidosis Using Routine and Enhanced Screening Strategies in Unselected Sarcoidosis Patients: Preliminary Baseline Data from the Foundation for Sarcoidosis Research Clinical Studies Network Screening Trial/**D.A. Culver, M.L. Ribeiro Neto, M.A. Judson, N.Y. Hamzeh, R.P. Baughman, P.H.S. Sporn, N. Sweiss, M. Veltkamp, M. Thillai, S. Josh, A. Wimer, S. Gole, C. Hamilton, T. Shivas, T. Al-Hakim, L.A. Maier, Cleveland, OH, p.A3421
- 2:45 Hospitalization Rates In Various Interstitial Lung Diseases: An Analysis of the Pulmonary Fibrosis Foundation (PFF) Patient Registry/**C.S. King, R.V. Ignacio, E. Freiheit, S. Aryal, V. Khangoora, A.L. Singhal, A. Nyquist, A.W. Brown, O.A. Shlobin, K.R. Flaherty, S.D. Nathan, Falls Church, VA, p.A3422
- 2:55 A Multivariable Protein-Inclusive Predictor of Death or Lung Transplant in Patients with Idiopathic Pulmonary Fibrosis: Data from the IPF-PRO Registry/**J.L. Todd, M.L. Neely, H. Mulder, L.H. Lancaster, E.S. White, C. Hesslinger, Durham, NC, p.A3423
- 3:05 Visual and Quantitative CT Derived Parameters Predict Transplant-Free Survival in Patients with Interstitial Lung Disease: Results from the Pulmonary Fibrosis Foundation Registry/**A.S. Oh, D.A. Lynch, K.R. Flaherty, S.M. Humphries, Denver, CO, p.A3424
- 3:15 Changes in Radiological Features in Patients with Progressive Fibrosing ILDs Treated with Nintedanib: A Sub-Study of The INBUILD Trial/**S.L.F. Walsh, N. Sverzellati, K.K. Brown, K.R. Flaherty, A.U. Wells, C. Ittrich, F. Risse, K.B. Rohr, A. Devaraj, London, United Kingdom, p.A3425
- 3:25 Minimal Clinically Important Differences in Radiological Changes of QLF Associated with Overall Survival in IPF: Analysis of Phase 2 Studies from FibroGen (Studies 049 and 067)/**G.H.J. Kim, W. Chou, T. Lee, M.S. Brown, L. Poole, J.G. Goldin, Los Angeles, CA, p.A3426
- 3:35 Decline in Forced Vital Capacity (FVC) in Patients with Systemic Sclerosis-Associated Interstitial Lung Disease (SSc-ILD) in Consecutive 6-Month Periods of the SENSICIS Trial/**B. Crestani, S. Jouneau, V. Smith, V. Steen, A.M. Hoffmann-Vold, F. Del Galdo, M. Alves, C. Stock, V. Cottin, Paris, France, p.A3427

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

B95 ARDS: WHAT'S THE LATEST AND GREATEST?

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3005/3007 (West Building, Level 3)

Chairing: S. Sahetya, MD, MHS, Baltimore, MD
B. Ferreyro, MD, Toronto, Canada
R. Awdish, MD, MS, Detroit, MI

Featured Speaker:

2:15 Understanding ARDS Heterogeneity: Is Lumping or Splitting the Answer?/A. Esper, Atlanta, GA

Oral Presentations:

2:25 Gene Expression Analyses of Acute Respiratory Distress Syndrome Phenotypes Indicate Shared Biological Mechanisms Across Critical Illness Syndromes/L. Neyton, P. Sinha, A. Sarma, E. Mick, S. Chen, K. Delucchi, H. Zhuo, A. Jauregui, A.D. Gomez, C.M. Hendrickson, K.N. Kangelaris, A. Leligdowicz, K. Liu, M.A. Matthay, C. Langelier, C.S. Calfee, San Francisco, CA, p.A3429

2:35 Early Clinical Improvement in ARDS Results from Selecting the Right Subphenotype for Anti-Inflammatory Treatment - a Preclinical Randomized Blinded Ovine Study/K. Wildi, S. Livingstone, C. Ainola, S.M. Colombo, S. Heinsar, N. Sato, K. Sato, M. Bouquet, E. Wilson, G. Abbate, M. Passmore, K. Hyslop, K. Liu, C. Palmieri, K. Ki, G. LiBassi, J. Suen, J. Fraser, Brisbane, Australia, p.A3430

2:45 Latent Class Analysis-Derived Hypoinflammatory and Hyperinflammatory Phenotypes Are Generalisable to Sepsis Patients Requiring Intensive Care/P. Sinha, J. He, K. Delucchi, H. Zhuo, J. Abbott, C. Jones, N. Wickersham, L. Neyton, B. McNeil, A.L. Desco, J. Alejandra, A.D. Gomez, C.M. Hendrickson, K.N. Kangelaris, A. Sarma, A. Leligdowicz, M.A. Matthay, K. Liu, L.B. Ware, C.S. Calfee, St. Louis, MO, p.A3431

2:55 Plasma Levels of Soluble Suppression of Tumorigenicity-2 (sST2) Are Associated with Markers of Injury, Severity of Illness, and Outcomes in Mechanically Ventilated Patients with Acute Respiratory Failure/A.S. Labar, W. Bain, F.A. Shah, J. Evankovich, C. Schaefer, C.M. Drohan, B.A. Kaufman, K.M. Redding, M. Finkelman, S. Qin, X. Wang, Y. Zhang, S.M. Nouraei, J. Lee, A. Morris, B.J. Mcverry, G. Kitsios, Pittsburgh, PA, p.A3432

3:05 Multi-Omic Profiling of Nasal Brushings Pediatric ARDS Identifies Patterns of Injury, Repair, and Recovery/B.M. Varisco, J.G. Williams, J. Brewington, R. Krishna, R. Joshi, R. Jones, Cincinnati, OH, p.A3433

3:15 Non-Invasive Measurement of Lung Epithelial and Endothelial Injury in ARDS Using Heat Moisture Exchanger (HME) Filter Fluid Reveals Previously Unrecognized Sex Differences/L.B. Ware, A.N. Rizzo, E.P. Schmidt, N. Wickersham, J.A. Bastarache, Nashville, TN, p.A3434

3:25 Utilizing Machine Learning and Esophageal Pressure to Detect Ventilator Dyssynchrony and Delineate the Potential for Ventilator Induced Lung Injury/P.D. Sottile, B.J. Smith, D. Albers, M. Moss, Aurora, CO, p.A3435

3:35 Identifying Novel Subphenotypes in COVID-19 Using Protein Biomarkers/A. Spicer, P.A. Verhoef, C. Lopez-Espina, A. Bhargava, L. Schmalz, M. Sims, A.V. Palagiri, K. V. Iyer, M.J. Crisp, A. Halalau, N. Maddens, F. Gosai, A. Syed, S. Azad, A. Espinosa, B. Reddy, P. Sinha, M.M. Churpek, Madison, WI, p.A3436

BASIC • TRANSLATIONAL

MINI SYMPOSIUM

B96 FISHERMAN'S WHARF: OMICS AND TRANSLATIONAL APPROACHES IN PULMONARY VASCULAR DISEASE

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Chairing: N.K. Dhillon, PhD, Kansas City, KS
S.Y. Chan, MD, PhD, Pittsburgh, PA
S. Gräf, PhD, Cambridge, United Kingdom
C.J. Rhodes, PhD, London, United Kingdom

Oral Presentations:

2:15 Mediator 1 Regulation of the BMP/TGF- β Pathway in Endothelium: Implications for Pulmonary Hypertension/C. Wang, Y. Xing, Z. Jiao, H. Ming, Y. Zu-Yi, Y.X.-J. Jason, S.Y.-J. John, Xi'an, China, p.A3437

2:25 Post-GWAS Functional Genomics Analysis to Define Pathogenic Mechanisms of Pulmonary Arterial Hypertension/W. Sun, D. Jiang, G. Li, S.Y. Chan, Pittsburgh, PA, p.A3438

2:35 Lung Single-Cell Transcriptomic Analysis During the Development of Pulmonary Arterial Hypertension in the Rat SU5416-Chronic Hypoxia Model/N.D. Cober, E. McCourt, R. Soares Godoy, Y. Deng, K. Schlosser, D.P. Cook, L. Wang, D.J. Stewart, Ottawa, Canada, p.A3439

2:45 Unsupervised Clustering of PH Using Circulating miRNA - Towards Molecular Classification of PH?/N. Errington, S. Kariotis, E. Jammeh, Y.-L. Fong, Z. Lihan, H. Chen, T. Jatkoe, C. Bridges, T. Vener, J. Wharton, R. Thompson, M. Toshner, L.S. Howard, C.J. Rhodes, M. Wilkins, D. Wang, A. Lawrie, Sheffield, United Kingdom, p.A3440

- 2:55** **Single Cell Transcriptomic Profiling of Endothelial Cells in the Model of NFU1 Deficiency Reveal Cell's Heterogeneity and Novel Targets in Pulmonary Hypertension**/J. James, M. Valuparampil Varghese, M. Niihori, D. Yi, Z. Dai, O. Rafikova, R. Rafikov, Tucson, AZ, p.A3441
- 3:05** **Metabolomic Signatures Associated with Right Ventricular Dilation and Mortality in Pulmonary Arterial Hypertension**/H. Pi, L. Xia, D.D. Ralph, S.G. Rayner, A. Shojaie, P.J. Leary, S.A. Gharib, Seattle, WA, p.A3442
- 3:15** **Targeting Integrins Signaling: A Novel Therapeutic Avenue to Counter Vascular Remodeling and Right Ventricular Failure in Pulmonary Arterial Hypertension**/S.-E. Lemay, M. Montesinos, Y. Grobs, T. Yokokawa, T. Shimauchi, S. Breuils Bonnet, S. Martineau, M. Orcholski, A. Bourgeois, C. Romanet, X. Huang, J.E. Dowling, M. Lu, A.S. Ray, F. Potus, S. Provencher, O. Boucherat, S. Bonnet, Quebec, Canada, p.A3443
- 3:25** **Role of Hypusine Signaling in Pulmonary Arterial Hypertension**/S.-E. Lemay, Y. Grobs, M. Orcholski, T. Shimauchi, L. Bonnet, F. Potus, S. Provencher, S. Bonnet, O. Boucherat, Quebec, Canada, p.A3444
- 3:35** **Long-Term Effects of Inhaled Treprostinil in Patients with Pulmonary Hypertension Due to Interstitial Lung Disease: The INCREASE Study Open-Label Extension**/A.B. Waxman, R. Restrepo Jaramillo, T. Thenappan, P. Engel, A.A. Bajwa, A.K. Ravichandran, J.P. Feldman, A. Hajari Case, V.F. Tapson, P. Smith, C. Deng, E. Shen, S.D. Nathan, Boston, MA, p.A5671
- 2:25** **Introduction of a New Model for In Vitro Volatile Organic Compound Detection from Co-Culture of Lung Epithelial Cell Line with Bacteria Commonly Associated with Pulmonary Infections**/D. Fenn, W.M. Ahmed, A. Tuip-de Boer, T. Lilien, P. Brinkman, A.H. Neerincx, S.J. Fowler, M.J. Schultz, A.H. Maitland-van der Zee, L.D.J. Bos, Amsterdam, Netherlands, p.A3446
- 2:35** **Lefamulin Efficacy and Safety in Adults with Community-Acquired Bacterial Pneumonia (CABP): Pooled Analysis of the Lefamulin Evaluation Against Pneumonia (LEAP) 1 and LEAP 2 Trials in Patients with Asthma or Chronic Obstructive Lung Disease (COPD)**/C.E. Sandrock, D. Mariano, S.P. Gelone, G.J. Moran, G.W. Waterer, T.M. File, Sacramento, CA, p.A3447
- 2:45** **Demographics and Outcomes of Hospitalized Influenza and Pneumonia Patients with Pulmonary Heart Disease and Diseases of Pulmonary Circulation: A National Inpatient Sample Analysis**/A. Jain, I. Ahmed, R.M. Rashid, N. Kagita, K. Amakye, H.S. Sreemantula, Darby, PA, p.A3448
- 2:55** **Untargeted 16s Gene Sequencing Versus Culture of Broncho-Alveolar Lavage Fluid for the Diagnosis of Ventilator Associated Pneumonia**/D. Fenn, M. Ibrahim, P.M.P. van Oort, P. Brinkman, W.A. Ahmed, T. Felton, A. Artigas, P. Póvoa, I. Martin-Loeches, M.J. Schultz, P. Dark, S.J. Fowler, L.D.J. Bos, Amsterdam, Netherlands, p.A3449
- 3:05** **Differential CircRNA Expression Profiles in Peripheral Blood Mononuclear Cells Among Young and Elderly Patients with Community-Acquired Pneumonia**/D. Cao, Y. Yin, H. Shen, S. Feng, X. Chen, C. Yang, L. Gu, Beijing, China, p.A3450
- 3:15** **Early Prediction of Ventilator-Associated Pneumonia in Intensive Care Unit Patients Using an Intelligent Machine Learning Algorithm**/J. Calvert, M. Faucher, S. Casie Chetty, S. Shokouhi, D. Evans, G. Barnes, Q. Mao, Houston, TX, p.A3451
- 3:25** **Lipopolysaccharide Targeted Bacteriophage Therapy Deceases Lung Inflammation in Cystic Fibrosis**/G.L. Stanley, B. Chan, K. Kortright, Y. Sun, G. Rajagopalan, Z. Harris, P.E. Turner, J.L. Koff, New Haven, CT, p.A3452
- 3:25** **Lipopolysaccharide Targeted Bacteriophage Therapy Deceases Lung Inflammation in Cystic Fibrosis**/G.L. Stanley, B. Chan, K. Kortright, Y. Sun, G. Rajagopalan, Z. Harris, P.E. Turner, J.L. Koff, New Haven, CT, p.A3452

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

B97 WHAT'S NEW IN PNEUMONIA

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 11-12 (South Building, Exhibition Level)

Chairing: M.I. Restrepo, MD, MSc, PhD, San Antonio, TX
J.P. Mizgerd, ScD, ATSF, Boston, MA

Oral Presentations:

- 2:15** **Ventilator-Associated Pneumonia Risk Is Increased Among Patients Who Receive Anti-Anaerobic Antibiotics**/R. Chanderraj, S. Kay, C. Brown, K. Hinkle, N. Falkowski, R. Woods, M.W. Sjoding, R.P. Dickson, Ann Arbor, MI, p.A3445

Featured Speaker:

- 3:35** **What's New in Pneumonia?**/M.L. Metersky, Farmington, CT

BASIC • TRANSLATIONAL

MINI SYMPOSIUM

B98 MOLECULAR AND CELLULAR MECHANISMS OF INJURY AND REPAIR IN ACUTE LUNG INJURY AND ARDS2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 2001/2003 (West Building, Level 2)

Oral Presentations:

- Chairing: K.M. Ridge, PhD, Chicago, IL
A. Schwingshackl, MD, PhD, Los Angeles, CA
J. Hook, MD, New York, NY
E.A. Middleton, MD, Salt Lake City, UT
- 2:15 Persistence of Transitional Cell State Without Senescence or Fibrosis During Alveolar Epithelial Regeneration in Human Acute Respiratory Distress Syndrome/C. Ting, F. Wang, M. Douglas, S.K. Huang, C.F. Farver, R.L. Zemans, Ann Arbor, MI, p.A3453**
- 2:25 Impact of Granulocyte-Macrophage Colony-Stimulating Factor on Lung Epithelial Cell Injury and Repair in Severe Influenza Virus Pneumonia/A.I. Vazquez, T. Schäfer, M. Heiner, J. Mengel, T. Hain, W. Seeger, S. Herold, Giessen, Germany, p.A3454**
- 2:35 Dysfunctional Endothelial Mitochondria Cause Airway LPS-Induced Lung and Liver Injury/R.F. Hough, M.T. Emin, G. Jin, J. Bhattacharya, New York, NY, p.A3455**
- 2:45 Angiopoietin-Like 4 Deletion Enhances Resolution of Lung Injury in Experimental Murine Influenza Infection/C. Hung, Y.-H. Chow, C. Liles, W. Altemeier, Seattle, WA, p.A3456**
- 2:55 Rescue of Alveolar Wall Liquid Secretion Protects Against Alveolar Damage by Influenza-Staphylococcus Coinfection/S. Tang, A. De Jesus, D. Chavez, S. Suthakaran, S. Moore, J. Bhattacharya, J.L. Hook, New York, NY, p.A3457**
- 3:05 TREK-1 Potassium Channel Activation Protects Against Influenza-A Induced Lung Injury/T. Zyrianova, B. Lopez, D. Pham, A. Ye, A. Schwingshackl, Los Angeles, CA, p.A3458**
- 3:15 Deletion of Claudin-18 Accelerates Alveolar Epithelial Cell Repair Following Injury/A. Castaldi, K. Samimi, N. Arias, A. Allen, W. Pinson-Rose, P. Zamani, K. Solaimanpour, Y. Liu, Y. Ji, H. Shen, M. Horie, P. Flodby, P. Mino, G. Carraro, B.R. Stripp, B. Zhou, Z. Borok, Los Angeles, CA, p.A3459**
- 3:25 Temporal Gene Expression Alterations in Self-Renewal and Maturation of Human Induced Pluripotent Stem Cell (iPSC)-Derived and Mouse Primary Alveolar Epithelial Type 2 Cells/J. Huang, C. Villacorta-Martin, R. Sohal, K.-D. Alysandratos, D.N. Kotton, Boston, MA, p.A3460**

- 3:35 Molecular and Structural Determinants of SARS-CoV-2 Ciliated Cell Tropism in the Airway Epithelium/E.K. Vldar, M.L. Saal, J.H. Morrison, E.M. Poeschla, Aurora, CO, p.A3461**

BASIC • TRANSLATIONAL

MINI SYMPOSIUM

B99 WHAT'S NEW IN AIRWAY BIOLOGY2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 2018/2020 (West Building, Level 2)

Oral Presentations:

- Chairing: S. Bose, MD, MPH, New York, NY
R.D. Britt, PhD, ATSF, Columbus, OH
- 2:15 TMEM16A Antagonism Prevents β -Adrenoceptor Desensitization in Ex-Vivo Human Airway Smooth Muscle Tissue/A. Wu, New York, NY, p.A3462**
- 2:25 Neutralizing Antibody for Oxidized Phosphatidylcholine Prevents Airway Inflammation and Small Airway Dysfunction in Allergen Challenged Mice/J.M. Vaghasiya, S. Basu, A. Bagan, A. Ravandi, A.J. Halayko, Winnipeg, Canada, p.A3463**
- 2:35 Piezo Channels Modulate Hyperoxia-Induced Airway Hyperreactivity and Remodeling in Developing Mouse Airways/B. Roos, M. Schiliro, J.J. Teske, L. Nesbitt, B. Kelley, C.M. Pabelick, Y.S. Prakash, E.R. Vogel, Rochester, MN, p.A3464**
- 2:45 Force Maintenance in Airway Smooth Muscle Is a Collective Phenomenon, and Does Not Exist in Isolated Cells/S.E. Stasiak, R. Jamieson, H. Parameswaran, Boston, MA, p.A3465**
- 2:55 Overcoming the Force-Dependent Inhibition of Collagenase to Target Collagen Deposition in Asthma/R. Jamieson, S.E. Stasiak, R.D. Augspurg, N. Bharath, J. Liu, Boston, MA, p.A3466**
- 3:05 Lung Macrophages Contribute to Immune Cell Infiltration and Corticosteroid Insensitivity in a Mouse Model of Severe Allergic Airway Inflammation/B.W. Lewis, A. Kahn, M.L. Ford, J. Walum, M.H. Grayson, R.D. Britt, Columbus, OH, p.A3467**
- 3:15 New β 2-Adrenergic Receptor Agonists Reduce Airway Hyperresponsiveness in Mouse Precision-Cut Lung Slices/D.L. Cervantes, N. Schaanaman, R.B. Penn, J.K.L. Walker, R. Bond, H.W. Chu, Denver, CO, p.A3468**
- 3:25 Locally Produced Estrogen Metabolites Regulate Airway Smooth Muscle Proliferation/A. Kumar, N.S. Ambhore, C.M. Pabelick, Y.S. Prakash, V. Sathish, Fargo, ND, p.A3469**

3:35 The Epithelium Modulates Bronchial - But Not Tracheal - Hyperreactivity After Acute Hypoxia and Reoxygenation in Isolated Rat Airways/T. Lewis, S. Lewis, R.M. Ryan, Cleveland, OH, p.A5672

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B101 VARIED OMICS TECHNIQUES APPLIED TO ALLERGIC AND RESPIRATORY TRAITS

2:15 p.m. - 3:45 p.m. MOSCONE CENTER

Room 303-304 (South Building, Level 3)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: B.E. Himes, PhD, ATSF, Philadelphia, PA
M.H. Cho, MPH, MD, Boston, MA

- 501 Genome-Wide Analysis of SARS-CoV-2 Variants in the United States/M. Kan, A. Tehim, Q. Lu, B.E. Himes, Philadelphia, PA, p.A3470**
- 502 Genome-Wide Profiling of Active Cis-Regulatory Elements Reveals the Dynamic Relationship of Transcription Factors Activity with COVID-19 ARDS Severity/M.T.Y. Lam, S.H. Duttke, M.F. Odish, H.D. Le, E.A. Hansen, C.T. Nguyen, S. Trescott, R. Kim, S. Deota, M. Chang, A. Patel, M. Hepokoski, M. Alotaibi, M. Rolfsen, K. Perofsky, A.S. Warden, J. Foley, L.E. Crotty Alexander, A. Malhotra, S. Panda, C.W. Benner, N. G. Coufal; San Diego, CA, p.A3471**
- 503 Multicohort Meta-Analysis of Bronchial Epithelial Cells Classifies Asthma from Healthy Subjects and Identifies Pathways in Asthma/I. Lee, A. Ganesan, L. Kalesinskas, S.C. Erzurum, J.V. Fahy, W.C. Moore, L.C. Denlinger, M. Castro, E. Israel, N.N. Jarjour, S.E. Wenzel, B.D. Levy, D.A. Meyers, E.R. Bleecker, P. Woodruff, V.E. Ortega, P. Khatri, Palo Alto, CA, p.A3472**
- 504 Single-Cell RNA Velocity Reveals Distinct Dynamics in Sarcoidosis Peripheral Blood Compared to Healthy Controls and Systemic Lupus Erythematosus/K. Huang, J. Jorgensen, C.L. Vagts, C. Ascoli, D.L. Perkins, P.W. Finn, Chicago, IL, p.A3473**
- 505 Accelerated Epigenetic Age in Lungs of Smokers and Electronic-Cigarette Users Compared to Never-Smokers/M.-A. Song, K.M. Mori, J.L. Freudenheim, D.Y. Weng, J.P. McElroy, S.A. Reisinger, M.D. Wewers, P.G. Shields, Columbus, OH, p.A3474**

- 506 Transcriptomics of Total and Allergen-Specific IgE in Nasal Epithelium from Children and Adolescents/Z. Xu, E. Forno, Y.-Y. Han, M.L. Manni, W. Chen, J.C. Celedon, Pittsburgh, PA, p.A3475**
- 507 The Association of Asthma and COPD Polygenic Risk Scores with Asthma-COPD Overlap and Related Outcomes/M. Moll, J. Sordillo, A.J. Ghosh, L.P. Hayden, A. Saferali, B.D. Hobbs, J. Ziniti, M. Mcgeachie, E.D. Abston, J. Sparks, E.K. Silverman, C.P. Hersh, A.C. Wu, M.H. Cho, Boston, MA, p.A3476**
- 508 Kinetics of Airway Gene Expression in Atopic Asthmatics Following Inhaled Allergen Challenge/R. Murphy, S.A. Gharib, R. Sehmi, G.M. Gauvreau, T.S. Hallstrand, Seattle, WA, p.A3477**
- 509 Heterogeneity in Clinically and Molecularly Defined Airway Type 2 Inflammation Among Children with Exacerbation-Prone Asthma/K.C. Goldfarbmuren, C.M. Moore, G.L. Zinnen, A. Fairbanks-Mahnke, E. Pruesse, N.D. Jackson, S. Sajuthi, J.L. Everman, K.C. Anderson, K.L. Hamlington, A.M. Schiltz, K. Freeman, T.E. Fingerlin, A.H. Liu, M.A. Seibold, Denver, CO, p.A3478**
- 510 Comparison of Lung and Blood Transcriptomics Reveals Shared Emphysema-Associated Pathways and Alternatively Spliced Genes/R. Lu, R. Suryadevara, Z. Xu, D. Jain, A. Gregory, B.D. Hobbs, N. Lichtblau, R. Chase, J.H. Yun, A. Saferali, E.K. Silverman, C.P. Hersh, P. Castaldi, A. Boueiz, Boston, MA, p.A3479**
- 511 Untargeted Metabolomics Analysis of Non-Small Lung Cancer in Never Smokers/J. Joo, E. Ho, S. Hofbauer, T. Penning, J. Steltz, A. Vachani, C. Mesaros, B.E. Himes, Philadelphia, PA, p.A3480**
- 512 Driving Metabolomic Signatures for Clinical Asthma Subtypes: Important Distinctions Leading to Personalized Treatment in the TOPMed Initiative/K. Mendez, N. Prince, M. Cote, M. Huang, R.S. Kelly, P. Kachroo, S. Chu, D. Soeteman, H. Knihtilä, C.E. Wheelock, C. Clish, S.T. Weiss, J.A. Lasky-Su, Boston, MA, p.A3481**
- 513 Pharmaco-Metabolomics of Inhaled Corticosteroid Response in Individuals with Asthma/J. Sordillo, P. Kachroo, S.M. Lutz, M. Mcgeachie, R.S. Kelly, S.T. Weiss, A.C. Wu, J.A. Lasky-Su, Boston, MA, p.A3482**
- 514 Airway Wall Splice-QTL Analysis Reveals Novel Downstream Mechanisms for Well-Known GWAS Asthma-SNPs/T. Kole, S.D. Pouwels, R. Bults, M.E. Ketelaar, V. Guryev, L. Koll, H.A.M. Kerstjens, M. Van Den Berge, A. Faiz, Groningen, Netherlands, p.A3483**
- 515 Lung B Cell Gene Expression Signature of Emphysema in Peripheral Blood/J. Morrow, P. Castaldi, A.R. El Boueiz, R.P. Chase, J.H. Yun, E.K. Silverman, C.P. Hersh, Boston, MA, p.A3484**

- 516 **Lung Tissue Gene Expression Profile of Eosinophilic Chronic Obstructive Pulmonary Disease**/J.H. Yun, A.J. Ghosh, B.D. Hobbs, A. Saferali, R. Chase, Z. Xu, E.K. Silverman, P. Castaldi, C.P. Hersh, Boston, MA, p.A3485
- 517 **Elucidating Transcriptional Networks Driving Idiopathic Pulmonary Fibrosis**/O. Lapohos, M. El-Hajjar, E.S. Charette, A. Emad, G. Fonseca, Montreal, Canada, p.A3486
- 518 **Effect of Neonatal Antibiotic Treatment on the Respiratory Microbiome: Altered Development and Sexual Dimorphism**/N.A. Siegel, M. Rolston, T. Westmont, A. Rindy, H. Deshmukh, L.A. Miller, Davis, CA, p.A3487
- 519 **Proteomic Analysis of Sputum from COPD Patients Reveal That Decreased PIGR and IgA Correlate with Exacerbation Frequency and Haemophilus Influenzae Burden**/J.S. Silver, C.-C. Chiang, O. Elneima, K. Haldar, H.J.C. Mcauley, R. Singh, D. Singh, G.C. Donaldson, J.A. Wedzicha, C.E. Brightling, S. Cohen, A. Digiandomenico, J. Kearley, Gaithersburg, MD, p.A3488
- 520 **Associations of Serum and Bronchoalveolar Immunoglobulins with Lung Microbiota Diversity, B-Cell Memory Phenotypes, and COPD Morbidity and Exacerbations**/V. Tejwani, N. Putcha, H. Woo, C. Liu, D. Lafon, M.T. Dransfield, A.P. Comellas, A. Azar, W.K. O'Neal, R.G. Barr, V.E. Ortega, R. Paine, I. Barjaktarevic, P. Woodruff, R.P. Bowler, F.J. Martinez, S.P. Peters, M.K. Han, J.A. Ohar, J.A. Krishnan, G. J. Criner, N. E. Alexis, M. R. Stampf11, R. J. Kaner, N. N. Hansel, C. M. Freeman, Y. J. Huang, J. L. Curtis; Cleveland, OH, p.A3489
- 521 **Low Gut Microbial Diversity Is Associated with Increased Gut Permeability in Murine Models of Interstitial Lung Disease**/N. Dey, J.C. Van Amburg, O.S. Chioma, L.E. Hesse, E.K. Mallot, S.R. Bordenstein, W.P. Drake, Nashville, TN, p.A3490
- 522 **Time Dependence of Alveolar Macrophage Transcriptomes After Human Endotoxin Lung Challenge**/S. Gairhe, C.Y. Demirkale, S. Alsaaty, P. Torabi-Parizi, A.F. Suffredini, Bethesda, MD, p.A3491
- 523 **Exhaled Metabolite Patterns to Identify Recent Asthma Exacerbations**/S. Principe, J.J.J.M.H. van Bragt, S. Hashimoto, N. Versteeg, P. Brinkman, S. Vijverberg, E.J.M. Weersink, N. Scichilone, A.-H. Maitland - van der Zee, Amsterdam, Netherlands, p.A3492
- 524 **Proteomic Characterization of Circulating Extracellular Vesicles in Adult Asthma**/M.A. Ramirez, A. Gupta, G.L. Chupp, J.L. Gomez, New Haven, CT, p.A3493
- 525 **Murine Ex Vivo Platform to Characterize Pneumonic Neutrophil Differentiation and Function in the Lung**/R. Pihl, K. Traber, Boston, MA, p.A3494

BEHAVIORAL • CLINICAL

POSTER DISCUSSION SESSION

B102 PROFESSIONAL TRAINING AND STAKEHOLDER PERSPECTIVES IN CHRONIC AND SERIOUS ILLNESS

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3016/3018 (West Building, Level 3)

- Poster Viewing** 2:15-2:45
- Discussion** 2:45-3:45
- Chairing:** L. Santhosh, MD, MEd, San Francisco, CA
E.K. Kross, MD, Seattle, WA
S.M. Kassutto, MD, Philadelphia, PA
- 1001 **A Qualitative Analysis of Barriers to Peri-Discharge Care for Patients with COPD and OSA Overlap**/A.L. Koza, M.Y. Chen, V.G. Press, M. Castro, D. Hughes, N.H. Stewart, Kansas City, MO, p.A3495
- 1002 **Differences in Treatment Decision-Making and Use Among White and Black Individuals with Asthma: Results from a Nationwide Survey**/S.M. Nyenhuis, M.B. Foggs, T.A. Winders, D.D. Gardner, M. Nelson, J. Balmer, J. Carter, L. Simone, Chicago, IL, p.A3496
- 1003 **The Origins and Evolution of Patients' Expectations in Severe Chronic Obstructive Pulmonary Disease: A Longitudinal Qualitative Study**/J. Hart, A. Summer, L. Ogunduyile, F. Lapite, D. Hong, B. Zoll, S.D. Halpern, Philadelphia, PA, p.A3497
- 1004 **The Accuracy and Impact of Patients' Personal Health Expectations in Severe Chronic Obstructive Pulmonary Disease: a Longitudinal Cohort Study**/J. Hart, A. Summer, L. Ogunduyile, F. Lapite, D. Hong, C. Whitman, W. Wang, S.D. Halpern, Philadelphia, PA, p.A3498
- 1005 **"Awareness of the Total Suffering": Existential Distress in Cystic Fibrosis**/N. Smirnova, E. Dubin, E.P. Dellon, W.R. Hunt, D. Kavalieratos, Atlanta, GA, p.A3500
- 1006 **Partner Perspectives on Women's Sexual and Reproductive Healthcare in Cystic Fibrosis**/S. Ehrenberg, O. Stransky, C. Wright, R. Jain, T. Kazmerski, Pittsburgh, PA, p.A3501
- 1007 **Women with Interstitial Pneumonia with Autoimmune Features Are Inconsistently Counseled on Family Planning**/E.K. Joerns, T.N. Adams, U.E. Makris, B. Mills, B. Bermas, Dallas, TX, p.A3502
- 1008 **Factors Associated with Physicians Perceptions of Interpersonal Conflict with Families in the Intensive Care Unit**/D.C. Ashana, A. Parish, A. Jan, M. Olsen, C.E. Cox, Durham, NC, p.A3503

- 1009 Associations Among Self-Efficacy, Communication Quality, and Emotional Preparedness as Reported By Families of Critically Ill Patients/M. Modes, J. Treadway Nomitch, R.A. Engelberg, L. Downey, E.L. Nielsen, J.R. Curtis, E.K. Kross, Los Angeles, CA, p.A3504**
- 1010 Longitudinal Classification and Trajectories of Documented Goals of Care Among Hospitalized Patients with Serious Illness/C.L. Auriemma, A. Song, J. Han, A. Bain, L. Walsh, S. Scott, S.D. Halpern, K.R. Courtright, Philadelphia, PA, p.A3505**
- 1011 Integrating Primary Palliative Care and Intensive Care Unit (ICU) Survivor Care: A Qualitative Inquiry of International Post-ICU Clinic Interprofessional Team Members/T.L. Eaton, J.B. Seaman, S. Alexander, A.L. Lewis, T.E. Lincoln, B.C. Davis, C.M. Sevin, T.J. Iwashyna, L.P. Scheunemann, Ann Arbor, MI, p.A3506**
- 1012 Predictors of Specialty Palliative Care Utilization and Associations with Family-Centered Outcomes Among Patients Experiencing Unplanned ICU Admission/J.T. Nomitch, L. Downey, L.R. Pollack, K.J. Ramos, E.K. Kross, J.R. Curtis, A.L. Jennerich, Seattle, WA, p.A3507**
- 1013 Barriers and Enablers to Using Decision Aids to Drive Shared Decision-Making in Mild Asthma: A Qualitative Study Informed by the Theoretical Domains Framework/M. Gagné, J. Lam Shin Cheung, A. Kouri, S. Gupta, Toronto, Canada, p.A3508**
- 1014 Mechanical Ventilation Use in Hospitalized Older Adults with Dementia: Opportunities to Promote Goal-Concordant Care/L. Pollack, L. Downey, J.T. Nomitch, S.R. Paul, M.J. Reed, E.K. Kross, R.Y. Lee, R.A. Engelberg, J.R. Curtis, Seattle, WA, p.A3509**
- 1015 Effect of a Policy Change to Invite Family Members to Be Present During Procedures on Clinician Stress Levels/B. Harris, A. Butler, E. Wilson, E.L. Hirshberg, R.O. Hopkins, J. Butler, J.F. Orme, S.M. Brown, S. Beesley, Salt Lake City, UT, p.A3510**
- 1016 Gendered Language in Letters of Recommendation for Applicants to Pulmonary and Critical Care Fellowships: A Quality Improvement Study/E.M. Viglianti, V. Sheffield, I. Choudhuri, R. Goldberg, A. Vita, K.M. Byrd, A.L. Oliverio, Ann Arbor, MI, p.A3511**
- 1017 The Limitations of Impact Factor as the Benchmark of Quality Assessment of the Pulmonary Journals/P. Mondal, L. Su, L. Mazur, S. Gope, Hershey, PA, p.A3512**
- 1018 Attitudes and Barriers to Academic Careers in Pulmonary and Critical Care Medicine/M.K. Scott, E.F. Kilb, A.J. Goodwin, N.R. Nadig, J. Harvey, Charleston, SC, p.A3513**
- 1019 Self-Assessment of Research Skills in Pulmonary and Critical Care Medicine Trainees/M.K. Scott, E.F. Kilb, A.J. Goodwin, N.R. Nadig, J. Harvey, Charleston, SC, p.A3514**
- 1020 Medical Student Perspectives on the Interprofessional Teaching Environment in the Medical Intensive Care Unit/C.R. Petri, V.A. Brady, R. Sternschein, K.A. Hibbert, M.M. Hayes, A.M. Sullivan, A.M. Anandaiah, Boston, MA, p.A3515**
- 1021 Creation of an International, Interprofessional Simulation-Based Mechanical Ventilation Curriculum/S.A. Nonas, N. Fontanese, C. Parr, C. Pelgorsch, A. Rivera-Tutsch, M. Saengpatrachai, N. Pongparit, N. Charoensri, J.A. Gold, Portland, OR, p.A3516**
- 1022 Healthcare Professionals' Different Attitudes Towards Life-Support Triage Based on Survival Likelihood, Life-Expectancy, and Life-Stage/D. Mangino, L. Wisk, R. Buhr, Los Angeles, CA, p.A3517**
- 1023 Changes in Accessibility of Pulmonologist to the Medicare Population 2012-2019: A State-By-State Analysis/M.Z. Arif, D. Afzal, S. Fatima, A. Khurana, Phoenix, AZ, p.A3518**

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B103 OUTCOMES AND BIOMARKERS IN ILD

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 212-214 (South Building, Level 2)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: E. Renzoni, PhD, London, United Kingdom
J. Oldham, MD, MS, Sacramento, CA
S.B. Montesi, MD, Boston, MA

401 Serum Apolipoprotein A-I Predicts the Mortality in Patients with Idiopathic Pulmonary Fibrosis/G. Chae, J.W. Song, Seoul, Korea, Republic of, p.A3519

402 Effects of Nintedanib on Circulating Biomarkers in Subjects with Progressive Fibrosing Interstitial Lung Diseases (ILDs)/T.M. Maher, R.G. Jenkins, F. Bonella, S. Assassi, C. Diefenbach, C. Itrich, K.B. Rohr, M. Kolb, Los Angeles, CA, p.A3520

403 A Clinical-Molecular Signature of Progression of Idiopathic Pulmonary Fibrosis (IPF)/J. Oldham, M.L. Neely, H. Mulder, J.A. Belperio, N.M. Patel, C. Hesslinger, J.L. Todd, Sacramento, CA, p.A3521

- 404 Single-Cell RNA Sequencing of Peripheral Blood Mononuclear Cells Reveals That T Cell Composition, Gene Expression, and Clonotype Significantly Distinguish Fibrotic Hypersensitivity Pneumonitis and Idiopathic Pulmonary Fibrosis/A.Y.-T. Zhao, A. Unterman, T. Adams, X. Yan, A. Justet, G. Delulius, E. Herzog, A. Prasse, I. Buendía-Roldán, A. Pardo, M. Selman, N. Kaminski, New Haven, CT, p.A3522**
- 405 Development of a Recurrent Neural Network to Predict Outcomes and Survival in Patients with Interstitial Lung Disease/B. Gross, X. Mei, M.M. Lange, P. Boddu, Z. Liu, Y. Yang, A. Singh, J. Lee, C. DeMarco, S. Platt, G. Sivakumar, A. Jacobi, M.L. Padilla, J. Zatakia, New York, NY, p.A3523**
- 406 Disease Progression and Stability Evaluated by Annual Change in Forced Vital Capacity in Patients with Idiopathic Pulmonary Fibrosis/S. Ota, R. Takei, H. Sasano, Y. Yamano, T. Yokoyama, T. Matsuda, K. Kataoka, T. Kimura, J. Fukuoka, T. Johkoh, Y. Kondoh, Seto, Japan, p.A3524**
- 407 Lung Function Trajectories in Patients with Idiopathic Pulmonary Fibrosis: Data from the IPF-PRO Registry/M. Neely, S. Bender, A.S. Hellkamp, J.L. Todd, T. Liesching, T.R. Luckhardt, J.M. Oldham, R. Raj, E.S. White, S.M. Palmer, Durham, NC, p.A3525**
- 408 Association of Genetic Variants with Disease Progression in Patients with Idiopathic Pulmonary Fibrosis (IPF): Data from the IPF-PRO Registry/J.L. Todd, G. Povysil, A.S. Allen, D.F. Dilling, H.J. Kim, M.L. Neely, I. Noth, Z. Ren, L.D. Snyder, M.E. Strek, A. Swaminathan, D. Zhang, C. Hesslinger, T.B. Leonard, D.B. Goldstein, S.M. Palmer, Durham, NC, p.A3526**
- 409 National Estimates and Predictors for Idiopathic Pulmonary Fibrosis Readmissions/A.M. Abdul Hameed, S. Malik, P. Bhattacharya, A. Afrah, J.H. Jennings, A. Abu Sayf, K. Thavarajah, Detroit, MI, p.A3527**
- 410 Clinical Impact of Comorbidity in Patient with Idiopathic Pulmonary Fibrosis: Based on Nationwide Claim Data/J.H. Lee, L. Hoon Hee, P. Hyung Jun, K. Ho Cheol, Seoul, Korea, Republic of, p.A3528**
- 411 Long-Term Outcomes in Patients with Idiopathic Pulmonary Fibrosis (IPF) Split by Surgical Lung Biopsy (SLBx) Status: A Post-Hoc Analysis from the Pooled CAPACITY Studies/S. Weigt, S. Gupta, J. Ko, K. Samara, J.A. Belperio, Los Angeles, CA, p.A3529**
- 412 Shortened Telomeres Are Independently Associated with the Presence of Rheumatoid Arthritis-Associated Interstitial Lung Disease/J.G. Natalini, B.R. England, J.F. Baker, Q. Chen, N. Singh, T.D. Mahajan, P. Roul, G.M. Thiele, B.C. Sauer, T.R. Mikuls, F.B. Johnson, S.M. Kawut, New York, NY, p.A3530**
- 413 Acute Exacerbation of Rheumatoid Arthritis-Associated Interstitial Lung Disease: Prognostic Factors and Mortality Prediction Model/H. Hozumi, M. Kono, H. Hasegawa, S. Kato, Y. Inoue, Y. Suzuki, M. Karayama, K. Furuhashi, N. Enomoto, T. Fujisawa, N. Inui, Y. Nakamura, K. Yokomura, H. Nakamura, T. Suda, Hamamatsu, Japan, p.A3531**
- 414 Frequencies and Prognostic Factors of Acute Exacerbation of Systemic Autoimmune Disease-Related Interstitial Lung Diseases: A Retrospective Study/N. Enomoto, Y. Mochizuka, Y. Tanaka, M. Fukada, H. Naoi, Y. Aono, M. Katsumata, H. Hozumi, M. Karayama, Y. Suzuki, K. Furuhashi, T. Fujisawa, N. Inui, Y. Nakamura, T. Suda, Hamamatsu, Japan, p.A3532**
- 415 Sildenafil Added to Pirfenidone in Patients with Advanced Idiopathic Pulmonary Fibrosis (IPF) and Risk of Pulmonary Hypertension (PH): Impact on Health-Related Quality of Life/W.A. Wuyts, S.D. Nathan, A.U. Wells, S.A. Harari, K. Samara, M. Bengus, F. Gilberg, J. Behr, Leuven, Belgium, p.A3533**
- 416 Assessment of Dyspnea Questionnaires as Predictors of Functional Impairment in Interstitial Lung Diseases/O. Moran Mendoza, A. Moran-MacDonald, S.M. Alyami, M. Kish, S. Davison, Kingston, Canada, p.A3534**
- 417 Minimal Clinically Important Difference (MCID) Estimates for the University of California, San Diego Shortness of Breath Questionnaire (UCSD-SOBQ) in Patients with Idiopathic Pulmonary Fibrosis (IPF) with Less Impaired Lung Function: Findings from the CAP/K.I. Aronson, G. Raghu, S. Gupta, J. Ko, D. Kile, E. Neuberger, J. Devine, J.J. Swigris, New York, NY, p.A3535**
- 418 A Neo-Epitope Biomarker of Type VI Collagen Formation Reflects Patient-Reported Outcomes/A.H. Hansen, T.S. Prior, D.J. Leeming, M. Karsdal, J.M.B. Sand, E. Bendstrup, Herlev, Denmark, p.A3536**
- 419 Validation of Clinical Criteria for Progressive Fibrosing Interstitial Lung Disease/J.V. Pugashetti, A.O. Adegunsoye, Z. Wu, C.T. Lee, A. Srikrishnan, S. Ghodrati, C.K. Garcia, F. Chua, C. Newton, P.L. Molyneaux, J.M. Oldham, Sacramento, CA, p.A5674**
- 420 Characteristics of Lung Transplant Recipients with Idiopathic Pulmonary Fibrosis and Moderate or Severe Secondary Pulmonary Hypertension, and Determinants of Post-Transplant Survival/B.H. Lashari, R.J. Vender, Y. Dotan, A.J. Mamary, Philadelphia, PA, p.A5675**
- 421 Incidence and Impact of Aspiration on Survival in Lung Transplant Recipients with Scleroderma/J. Gagermeier, B. Follman, B. Liem, V. Ananthanarayanan, Maywood, IL, p.A5676**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B104 COVID ACROSS THE CARE CONTINUUM

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3009/3011 (West Building, Level 3)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: R.S. Stephens, MD, ATSF, Baltimore, MD
M. Hua, MD, MS, New York, NY
L.E. Ferrante, MD, MHS, ATSF, New Haven, CT

- 901 Prone Position Is Beneficial in COVID-19 Patients on Venovenous Extracorporeal Membrane Oxygenation for Respiratory Failure/N. Nessler, C. Guervilly, A. Mansour, A. Porto, E. Flécher, M. Esvan, C. Fougerou-Leurent, J. Ross, A. Vincentelli, N. Massart, Rennes, France, p.A3537**
- 902 Plasma Proteomic Analysis and Targeted Immunoassay Validation Identifies the Role of Endothelial Dysfunction in Development of ARDS, Thrombosis and Clinical Outcomes in Critically Ill COVID-19 Patients/P. Bhatraju, E.D. Morrell, I. Stanaway, N.A. Sathe, A. Srivastava, R. Postelnicu, A. Andrews, M. Gonzalez, C. Kratochvil, V. Kumar, G.L. Anesi, D. Wyles, J. Broadhurst, D. Brett-Major, V. Mukherjee, J. Sevransky, D. Landsittel, S.A. Gharib, T. Uyeki, J.P., p.A3538**
- 903 Sustained Alveolar Hyperinflammatory Response in Critically Ill COVID-19 Patients/L.S. Boers, J. De Brabander, E.J. Nossent, L.M.A. Heunks, A.P.J. Vlaar, P.I. Bonta, T. van der Poll, J. Duitman, L.D.J. Bos, Amsterdam, Netherlands, p.A3539**
- 904 Reported Pulmonary Symptoms of Post-Acute Sequelae SARS-CoV-2 Infection (PASC) Compared to Performance on Six Minute Walk Tests/I.R. Young, R. Vakil, B. Heyman, R. Condos, New York, NY, p.A3540**
- 905 Receptor for Advanced Glycation End Products Is Associated with Both SARS CoV 2 Viral Burden in the Plasma and Clinical Outcomes in Non Ventilated Covid-19 Pneumonia/K.D. Wick, L. Siegel, J.D. Neaton, C. Oldmixon, J. Lundgren, B.T. Thompson, M.A. Matthay, San Francisco, CA, p.A3541**
- 906 Serial Thromboelastography and the Development of Venous Thromboembolism in Critically Ill Patients with COVID-19/T.K. Marvi, W. Stubblefield, B. Tillman, W. Self, T.W. Rice, Nashville, TN, p.A3542**
- 907 A Pandemic's Lifecycle: A Longitudinal Validation of Predictors in 26,249 Severe COVID-19 NYC Admissions/G. Crowley, S. Kwon, J. Kim, M. Liu, A. Nolan, New York, NY, p.A3543**
- 908 A Qualitative Study of Physicians' Perspectives on Communication and Therapeutic Relationships in the ICU During the COVID-19 Pandemic/K.C. Vranas, S. Golden, J. Chapa, A. Tuepker, D.R. Sullivan, C.G. Slatore, S.M. Nugent, Portland, OR, p.A3544**
- 909 Tenecteplase with Concomitant Anticoagulation for Acute Respiratory Failure in Patients with COVID-19: A Randomized Controlled Trial/H.D. Poor, E. Eisenberg, A. Shpiner, T.M. Tolbert, K. Yaeger, S. Deeba, S. Persaud, X. Liu, E. Chapman, J. Mocco, New York, NY, p.A3545**
- 910 Thiol Drugs Decrease SARS-CoV-2 Lung Injury In Vivo and Disrupt SARS-CoV-2 Spike Complex Binding to ACE-2 In Vitro/K. Khanna, W. Raymond, J. Jin, A.R. Charbit, I. Gitlin, M. Tang, A.D. Werts, E.G. Barrett, J. Cox, S. Birch, H.S. Sperber, S. Franz, R. Martinelli, S. Pillai, A.M. Healy, T. Duff, S. Oscarson, M. Hoffmann, S. Pöhlmann, G. Simmons, J.V. Fahy, San Francisco, p.A3546**
- 911 Plasma Immune Mediators Measured After Initiation of Therapy in Critically Ill COVID-19 Patients and Risk for Poor Clinical Outcomes/L. Mabrey, E.D. Morrell, P. Bhatraju, N.A. Sathe, T.E. West, C. Mikacenic, M.M. Wurfel, Seattle, WA, p.A3547**
- 912 Increased Use of Do-Not-Resuscitate Orders During COVID-19 Surges: A Population Based Cohort Study/A.B. Mehta, I.S. Douglas, M.K. Wynia, Denver, CO, p.A3548**
- 913 The Kinetics of Blood Soluble Mediators in Patients Requiring Hospitalization for COVID-19 Infection Before and During Dexamethasone Therapy/L. Appleton, K. Jakharia, C.-H. Lu, B. Sines, C. Rice, M.B. Drummond, W.A. Fischer, G.S. DeCherney, S.M. Walle, J.R. Mock, Chapel Hill, NC, p.A3549**
- 914 Racial Disparities Among Veterans with COVID-19 Disease/A. Castro, Y. Ou, V.B. Talisa, A.A. Butt, S. Yende, F.B. Mayr, Pittsburgh, PA, p.A3550**
- 915 Secondary Invasive Fungal Infection in Hospitalized Patients with COVID-19 in the United States/G. Thompson, M.H. Miceli, J. Jiang, E.F. Shortridge, K. Davies, G. Gurumoorthy, T. Kimura, Sacramento, CA, p.A3551**
- 916 Programmed Cell Death Protein-1 Is Negatively Associated with Endothelial Activation in Critically Ill COVID-19 Patients/M. Cohen, S. Monaghan, R. Zhao, A. Palmisciano, J.R. Tanzer, M. Levy, Providence, RI, p.A3552**
- 917 Pulmonary Barotrauma in COVID-19: A Systematic Review and Meta-Analysis/Y.R. Sedhai, D.B. Shrestha, P. Budhathoki, A. Adhikari, N. Pokharel, R. Dhakal, S. Kafle, A.B. Pant, M.G. Kashiouris, M.S. Parker, South Hill, VA, p.A3553**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B105 MORE CALLS TO ACTION: AIR POLLUTION EXPOSURES AND HEALTH

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 203-204 (South Building, Level 2)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: G.D. Thurston, DSc, New York, NY
 H. Chapman, MD, PhD, MPH, Washington, DC
 J.D. Kaufman, MD, MPH, Seattle, WA

- 918 Radiographic Lung Edema in Hospitalized Patients with COVID-19 Is Associated with Disease Severity and Clinical Outcomes/N.** Al-Yousif, S. Komanduri, H.M.S. Qurashi, A. Korzhuk, H.O. Lawal, N. Abourizk, K.J. Mitchell, C.M. Dietz, E.K. Hughes, R. Joyce, C.S. Brandt, G.M. Fitzgerald, A.S. Chaudhry, W. Bain, F.A. Shah, C. Schaefer, M. Bittner, M. Lu, B. Methe, J. Lee, A. Morris, B. J. Mcverry, G. Kitsios; Pittsburgh, PA, p.A3554
- 919 Transcriptomic Clustering of Severe COVID-19 Patients/C.** López-Martínez, P. Martín, E. Salgado del Riego, I. Lopez-Alonso, J. Gómez de Oña, H. Gil-Peña, E. Coto, M. Fernández-Rodríguez, I. Crespo, R. Rodríguez-García, G.M. Albaiceta, L. Amado-Rodríguez, Oviedo, Spain, p.A3555
- 920 Ketamine in Critical Care: Exploring Before and During COVID-19 Attitudes and Practices/A.** Ilg, C. Beltran, J. Shih, T. Yankama, M.M. Hayes, A. Moskowitz, Boston, MA, p.A3556
- 921 Impact on Care Providers of Restricting Family Presence in Pediatric Intensive Care Units During the Covid-19 Pandemic: A Cross-Sectional Survey/D.** Garros, L.A. Lee, J.A. Seabrook, M. Ryan, L.J. Betts, Edmonton, Canada, p.A3557
- 922 A National Survey of Noninvasive Modalities in the Management of COVID-19 Patients with Acute Respiratory Failure - Results from the COVIREGI-JP Database/K.** Yamamoto, K. Tomii, S. Izumi, H. Ishimoto, T. Takazono, N. Iwanaga, N. Ashizawa, S. Takemoto, Y. Obase, M. Tashiro, T. Tanaka, M. Yamauchi, N. Hosogaya, K. Izumikawa, K. Yanagihara, H. Mukae, Nagasaki, Japan, p.A3558
- 923 Alcohol Consumption and Misuse Among Patients with Respiratory Failure Before and During the COVID-19 Pandemic/G.** Perry, C. Higgins, J. McKeehan, J. Gaydos, S.E. Jolley, E.L. Burnham, Aurora, CO, p.A3559
- 924 Soluble Receptor for Advanced Glycation End-Products and Lung Compliance in Mechanically Ventilated Patients with COVID-19 ARDS/S.** Nath, B.J. Mcverry, G. Kitsios, W. Bain, C. Schaefer, T.L. Suber, J. Evankovich, J. Lee, F.A. Shah, J.W. Kreit, Pittsburgh, PA, p.A3560
- 925 A COVID-19 Derived Proteomic Risk Signature Discriminates Severity of Respiratory Failure in Patients with Influenza Pneumonia/C.V.** Cosgriff, H.M. Giannini, T.A. Miano, D. Mathew, B.J. Anderson, T.K. Jones, C. Ittner, A.R. Weisman, T. Dunn, J.P. Reilly, A.C. Huang, M.G.S. Shashaty, N.J. Meyer, Philadelphia, PA, p.A3561

- 201 Particulate Matter Impacts on Mortality and Lung Function in Patients with Fibrotic Interstitial Lung Disease/G.C.** Goobie, C. Carlsten, K.A.M. Johansson, N. Khalil, V. Marcoux, D. Assayag, H. Manganas, J.H. Fisher, M.R.J. Kolb, K.F. Gibson, Y. Zhang, D. Kass, K.O. Lindell, J.P. Fabisiak, C.J. Ryerson, S.M. Nouriae, Pittsburgh, PA, p.A3562
- 202 Indoor Particulate Matter Is Associated with Markers of Platelet Activation Among Former Smokers with COPD/A.** Fawzy, N. Putcha, H. Woo, C. Liu, C.T. Lin, S. Raju, M. Williams, N. Faraday, M.C. McCormack, K. Kohler, N.N. Hansel, Baltimore, MD, p.A3563
- 203 Household Air Pollution Is Associated with COPD Morbidity in a Rural Appalachia Cohort/S.E.** Enoch, S. Raju, M. Maisonet, N. Putcha, H. Woo, Y. Li, K.J. Maier, P.R. Scheuerman, T. Green, M. Wood, R. Koehl, K. Koehler, N.N. Hansel, M.C. McCormack, Baltimore, MD, p.A3564
- 204 Physical Activity and Personal Exposure to Air Pollution Among Adults with Chronic Obstructive Pulmonary Disease/M.** Aglan, A. Stanley Lee, K. Chen, L. Nurhussien, P. Koutrakis, B.A. Coull, M.B. Rice, Boston, MA, p.A3565
- 205 Air Pollution Exposure and Daily Lung Function in COPD: Effect Modification by Physical Activity/K.** Chen, L. Nurhussien, M. Aglan, A. Stanley Lee, P. Koutrakis, B. Coull, M.B. Rice, Boston, MA, p.A3566
- 206 Sputum Mucin Concentration Modifies the Response to Indoor Nitrogen Dioxide Exposure in Individuals with COPD/J.S.** Warner, N.E. Alexis, H. Woo, C. Liu, S. Shenoy, J. Suk, N. Putcha, A. Fawzy, M.C. McCormack, V. Tejwani, N.N. Hansel, L.M. Paulin, Lebanon, NH, p.A3567
- 207 An Evaluation of the Respiratory Impacts of the Closure of a Coking Operation - An Interrupted Time Series Analysis/W.** Yu, G.D. Thurston, New York, NY, p.A3568

- 208 **Impact of Ambient Air Pollutants on Pneumonia Burden in Poland in 2010-2018/A.J. Badyda, P. Dabrowiecki, P.O. Czechowski, A. Chcialowski, Warsaw, Poland, p.A3569**
- 209 **PolluRisk: An Innovative Platform Dedicated to Study the Health Effects of Air Pollution in Realistic Conditions/S. Lanone, P. Coll, M. Cazaunau, A. Bergé, Z. Lu, M. Blayac, Créteil, France, p.A3570**
- 210 **Impact of Particulate Matter Exposure on microRNA Expression and the Development of Allergic Airways Inflammation in Mice/G. Beier, R. Chen, S. Zhang, A. Hin, X. Wang, C.-W. Chow, J.A. Scott, Toronto, Canada, p.A3571**
- 211 **Characterization of Neutrophilic Responses in a Pollutant-Aggravated Asthma Mouse Model/J. De Volder, A. Bontinck, K. De Grove, I. Dirven, G.G. Brusselle, G.F. Joos, T. Maes, Gent, Belgium, p.A3572**
- 212 **A Novel Two-Hit Mouse Model of Allergic Asthma Exacerbation Due to Ozone Exposure/M.N. Ballinger, K. Ho, G.S. Torres Matias, K.M. Gowdy, J.A. Englert, Columbus, OH, p.A3573**
- 213 **The Impact of Air Pollution on Global DNA Methylation in Asthmatic Patients Living in Western Pennsylvania/T.V. Macedonia, W.W.-Y. Tang, B.M. Byrwa-Hill, S.E. Wenzel, Pittsburgh, PA, p.A3574**
- 214 **Pulmonary Effects of Simulated Vehicle Exhaust Exposure (SVEE)/S. Ahmad, S. Shakil, D. Aishah, I. Zafar, N. Mariappan, S. Manzoor, C. Kochi, F.Y. Atrooz, S. Salim, A. Ahmad, Birmingham, AL, p.A3575**
- 215 **Traffic-Related Air Pollution Induces a Concentration-Dependent Increase in Symptoms in a Controlled Human Exposure Study/J. Orach, C.F. Rider, A. Yuen, C. Carlsten, Vancouver, Canada, p.A3576**
- 216 **Increased Human Rhinovirus Replication Following Corticosteroid and Diesel Exhaust Particulate Exposures/R.D. Huff, C.F. Rider, S. Wiehler, D. Proud, N. Mookherjee, C. Carlsten, Vancouver, Canada, p.A3577**
- 217 **Alterations of the Functional Metagenomic Composition of the Airway Microbiome in Response to Diesel Exhaust Exposure/I. Hamidou Soumana, M.H. Ryu, F. Studart, J. Orach, J.S.W. Yang, C. Nislow, C.F. Rider, J. Leung, C. Carlsten, Vancouver, Canada, p.A3578**
- 218 **The Thromboxane A2 Pathway, as Assessed by Urinary Eicosanoids, Is Increased After Acute Controlled Exposure to Diesel Exhaust in Participants with COPD/M.H. Ryu, J. Kolmert, J. Zurita, C.E. Wheelock, C. Carlsten, Boston, MA, p.A3579**
- 219 **Docosahexaenoic Acid Treatment Mitigates Inflammation Induced by Extracellular Vesicles Contained in Agricultural Dust/D.J. Romberger, A.J. Heires, D. Villageliu, T.M. Nordgren, D. Samuelson, Omaha, NE, p.A3580**
- 220 **Aspirin-Triggered Resolvin D1 Alters the Lung Inflammatory and Carcinogenic Effects of Chronic Agricultural Dust Exposure in Mice/E. Dominguez, M. Nguyen, A. Ulu, S. Guardado, S. Svieven, P. Talbot, T.M. Nordgren, Riverside, CA, p.A3581**
- 221 **Purification and Characterization of Trypsin-Like Protease(s) from Organic Dust and Studies of Their Effects on Induction of Inflammatory Mediator Expression in Lung Epithelial Cells/S. Kusampudi, V. Meganathan, S. Keshava, V. Boggaram, Tyler, TX, p.A3582**
- 222 **NRF2- Activation via RTA-408 Partially Rescues Organic Dust Induced Lung Inflammation and Increased Systemic Invasion of Klebsiella Pneumoniae in a Mouse Model/D. Shrestha, M. Massey, B. Palanisamy, O. Sahin, Q. Zhang, A. Kanthasamy, C. Charavaryamath, Ames, IA, p.A3583**
- 223 **Aryl Hydrocarbon Receptor (AhR) Regulates Induction of Lung Inflammatory Mediators by Organic Dust/V. Meganathan, M. Stenhouse, S. Kusampudi, V. Boggaram, Tyler, TX, p.A3584**
- 224 **Pm_{2.5} Impacts on Telomere Length in Patients with Idiopathic Pulmonary Fibrosis/G.C. Goobie, R. Sutton, X. Chen, K.F. Gibson, J. Fabisiak, D.J. Kass, Y. Zhang, J.K. Alder, S.M. Nouraie, Pittsburgh, PA, p.A5677**
- 225 **Ozone Exacerbation of Acute Lung Injury Following Sepsis Is Associated with Oxidative and Nitrosative Stress/J.M. Radbel, O. Le-Hoang, E. Abramova, G. Papas, P. Zhou, J. Laskin, L. Joseph, A. Gow, D.L. Laskin, New Brunswick, NJ, p.A5678**

CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B106 UNION SQUARE: OBSERVATIONAL STUDIES AND CLINICAL TRIALS IN PULMONARY HYPERTENSION

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2005/2007 (West Building, Level 2)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: K.A. Fagan, MD, Mobile, AL
 S. Provencher, MD, Quebec city, Canada
 E.S. Klings, MD, Boston, MA
 C.D. Burger, MD, ATSF, FCCP, Jacksonville, FL

601 **⁶⁸Ga-Dotatate PET Imaging in Pulmonary Arterial Hypertension/P.B. Yu, T. Covington, H.J. Song, A.B. Waxman, M. Southwood, N.W. Morrell, F.N. Rahaghi, M. DiCarli, J.-M. Bruey, L. Zisman, H. Jacene, Boston, MA, p.A3585**

- 602 Causes and Outcomes of Intensive Care Unit Hospitalizations in Patients with Pulmonary Arterial Hypertension/M. Naranjo Tovar, V. Mercurio, H. Hassan, N. Alturaif, A. Cuomo, U. Attanasio, N. Diab, S. Sahetya, M. Mukherjee, S. Hsu, A. Balasubramanian, C. Simpson, R.L. Damico, T.M. Kolb, S.C. Mathai, P.M. Hassoun, Baltimore, MD, p.A3586**
- 603 Temporal Trends in Portopulmonary Hypertension (POPH) Model for End Stage Liver Disease (MELD) Exceptions/K. Del Valle, M.J. Krowka, J.K. Heimbach, H.M. Dubrock, Rochester, MN, p.A3587**
- 604 Patients' Perceptions on Clinical Trials Outcomes in Pulmonary Arterial Hypertension Therapy/V. Mai, C. Gosselin, É. Tremblay, G. Rompré, A.C. Lajoie, J.C. Weatherald, J.-C. Lega, S. Bonnet, S. Provencher, Quebec, Canada, p.A3588**
- 605 Clinician-Based Risk Assessment Compared to REVEAL Lite 2 and Parenteral Prostacyclin Utilization in a Physician-Conducted Retrospective Chart Review of Patients with Pulmonary Arterial Hypertension/A. Raina, O.A. Shlobin, R.P. Frantz, M. Broderick, B. Wu, M.R. Sketch, Pittsburgh, PA, p.A3589**
- 606 Fluid Loading During the Hemodynamic Evaluation of Pulmonary Hypertension: Response and Outcomes/K.N. Qaiser, A. Almoushref, A.K. Mehta, M. Alkhayyat, J.E. Lane, A.R. Tonelli, Cleveland, OH, p.A3590**
- 607 A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Ralinepag to Improve Treatment Outcomes in Subjects with Pulmonary Arterial Hypertension (ADVANCE OUTCOMES)/V.V. Mclaughlin, R.N. Channick, C. Deng, M. Escudero, R. Grover, D.T. Solum, M.J.C. Humbert, Ann Arbor, MI, p.A3591**
- 608 Clinical Improvement in Pulmonary Arterial Hypertension (PAH) Patients Transitioning from Selexipag to Oral Treprostinil: Interim Results from the ADAPT Registry/D. Lachant, R. Minkin, J. Swisher, M. Mogri, R. Zolty, D. Shelton, S. Seaman, M. Broderick, S. Sahay, Rochester, NY, p.A3592**
- 609 Understanding Drivers and Barriers to Participation in Clinical Trials for Patients with Pulmonary Arterial Hypertension (PAH)/S. Sahay, E. Aselage, D.F. Harris, M. Mascia-Rand, R.F. Roscigno, E. Elman, S.C. Mathai, Houston, TX, p.A3593**
- 610 A Phase 1 Single and Multiple Ascending Dose (SAD/MAD) Study to Evaluate the Safety, Tolerability, and Pharmacokinetics of AV-101, a Novel Inhaled Dry Powder Formulation of Imatinib in Healthy Subjects/H. Gillies, R. Niven, B. Dake, M.M. Chakinala, J.P. Feldman, N.S. Hill, M. Hoepfer, M.J.C. Humbert, V.V. Mclaughlin, M. Kankam, Waltham, MA, p.A3594**
- 611 Trends in Pulmonary Hypertension Mortality Between 1999 and 2019: An Observational Study Across the United States/H. Singh, P. Bhatt, L. Agarwal, A. Hartley, C. Jani, P. Patel, O. Al Omari, J.S. Kurman, A. Ahmed, R. Goodall, J. Shalhoub, D.C. Marshall, J.D. Saliccioli, Milwaukee, WI, p.A3595**
- 612 Methamphetamine Induced Pulmonary Arterial Hypertension (MIPAH) in the San Joaquin Valley of California - "An Evolving Phenotype"/B.J. Croft, M. Cummins, M. Beutner, E. Reid, V. Balasubramanian, Fresno, CA, p.A3596**
- 613 The Prognostic Impact of Serum Uric Acid on Disease Severity and 5-Year Mortality in Patients with Idiopathic Pulmonary Artery Hypertension/Z. Huang, L. Yan, Z. Zhao, Q. Zhao, Y. Tang, Y. Zhang, X. Li, A. Duan, Q. Luo, Z. Liu, Beijing, China, p.A3597**
- 614 Sleep Disordered Breathing, Hypoxia and Transplant-Free Survival in WSPH Group 1 Pulmonary Arterial Hypertension in the Pulmonary Vascular Disease Phenomics (PVDOMICS) Cohort/M.M. Lowery, L. Wang, C.L. Jellis, D.H. Kwon, N.S. Hill, R. Mehra, Cleveland, OH, p.A3598**
- 615 Could Anorexigen Exposure Contribute to the Increased Penetrance of Pulmonary Arterial Hypertension in Women Who Carry Pathogenic BMP2 Mutations?/J. Badlam, D. Badesch, E.D. Austin, R.L. Benza, W.K. Chung, H.W. Farber, K. Feldkircher, A.E. Frost, A. Poms, K.A. Lutz, M. Pauciulo, C. Yu, W. Nichols, C.G. Elliott, Burlington, VT, p.A3599**
- 616 Clinical Characteristics and Predictors of Methamphetamine-Associated Pulmonary Arterial Hypertension Among Methamphetamine Users Within the University of Kansas Health System/C.M. Cook, X. Shi, N.K. Dhillon, Kansas City, KS, p.A3600**
- 617 A Claims-Based, Machine-Learning Algorithm to Identify Patients with Pulmonary Artery Hypertension (PAH)/K. Bettencourt, B. Hyde, C.J. Paoli, K.S.B. Lynam, S. Panjabi, M. Selej, Titusville, NJ, p.A3601**
- 618 Association Between Submaximal Exercise Gas Exchange and Clinical Worsening Events in Patients with Pulmonary Arterial Hypertension/B.J. Taylor, J.T. Call, H. Saunders, T.K. Zeiger, J.E. Moss, C.D. Burger, S.A. Helgeson, Jacksonville, FL, p.A3602**
- 619 Peripheral Endothelial Dysfunction and Arterial Stiffness in Pulmonary Arterial Hypertension: Association with Severity and Changes After Treatment/A.R. Garcia, I. Blanco, Y. Torralba-Garcia, C. Martin Ontiyuelo, L. Piccari, V. Peinado, A.M. Ramirez, O. Tura-Ceide, J.A. Barbera, Barcelona, Spain, p.A3603**

- 620 Clustering of Systemic Sclerosis-related Pulmonary Hypertension by Global Longitudinal Left Ventricular Strain/J.K. Lui, M. Winburn, M.A. Trojanowski, A.M. Bujor, M.P. LaValley, D.M. Gopal, R.S. Wiener, E.S. Klings, Boston, MA, p.A3604**
- 621 Computed Tomography (CT) Features Are of Diagnostic Utility in Pre Diagnosis Idiopathic Pulmonary Arterial Hypertension (IPAH): A Case Controlled Study/K. Dwivedi, R. Lewis, R. Condliffe, M.J. Sharkey, M. Mamalakis, S. Alabed, J.M. Wild, A.J. Swift, D. Kiely, Sheffield, United Kingdom, p.A3605**
- 622 Does the Vascular Hypothesis of Bronchopulmonary Dysplasia Persist? VEGF Levels in Adults Born Preterm/K. Goss, G. Barton, Dallas, TX, p.A3606**

BASIC • TRANSLATIONAL

POSTER DISCUSSION SESSION

B107 MOLECULAR MECHANISMS OF SARS-CoV-2, INFLUENZA, AND OTHER LUNG INFECTIONS2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 2009/2011 (West Building, Level 2)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: G.S. Budinger, MD, ATSF, Chicago, IL
B.D. Singer, MD, ATSF, Chicago, IL

- 701 Molecular Clock Rev-erb α Regulates Influenza A Virus-Induced Lung Fibrotic Progression via Collagen Stabilization/Q. Wang, J. Park, I.K. Sundar, J. Lucas, L. Martinez-Sobrido, I. Rahman, Rochester, NY, p.A3607**
- 702 Targeting Endoplasmic Reticulum (ER) Based Redox Regulation of Influenza and Host Proteins a Novel Avenue for Therapy/V. Anathy, N. Chamberlain, M. Ruban, A. Kumar, Z. Mark, J.F. Alcorn, S. Bruno, A. Jegga, D. Souza De Lima, Burlington, VT, p.A3608**
- 703 Inhibition of Caspase Activity Diminishes Influenza A Virus (IAV) Replication in the Airway Epithelial Cells and Protects Mice from IAV-Induced Mortality/S. Soni, S. Walton, Y. Tesfaigzi, Y.A. Mebratu, Boston, MA, p.A3609**
- 704 Water Soluble Tocopherol Derivatives Inhibit the SARS-CoV-2 RNA-Dependent RNA Polymerase/K.S. Harrod, H.T. Pacl, J.L. Tipper, S. Ahmad, A. Ahmad, G. Holder, C. Petit, T. Green, A.J.C. Steyn, M. Might, Birmingham, AL, p.A3610**

- 705 Proteomic Profiling of Host and Viral Proteins in Apical and Basal Secretions of SARS-CoV2 Infected Human Airway Tissue Cultures/B. Reidel, J.K. Macdonald, C.E. Edwards, R.S. Baric, M. Kesimer, Chapel Hill, NC, p.A3611**
- 706 Prevalence and Mechanisms of Bronchiolar Mucus Plugging in COVID-19 Lung Disease/T. Kato, T. Asakura, C.E. Edwards, H. Dang, Y. Mikami, K. Okuda, G. Chen, L. Sun, R.C. Gilmore, P.E. Hawkins, S.M. Hewitt, D.S. Chertow, A. Borczuk, F.J. Martinez, L.B. Thorne, F.B. Askin, C. Ehre, S.H. Randell, W.K. O'Neal, R.S. Baric, R.C. Boucher, Chapel Hill, NC, p.A3612**
- 707 Ubiquitin Proteasome Degradation Is Involved in the Protein Stability of SARS-CoV-2 Encoded Proteins/W. Li, T. Li, G. Kitsios, W. Bain, J. Lee, A. Morris, C. Zou, Pittsburgh, PA, p.A3613**
- 708 Deubiquitinases Regulate ACE2 Protein Stability and SARS-CoV-2 Viral Infection in Epithelial Cells/J.S. Bednash, F. Johns, A. Elhance, J. Adair, J.D. Londino, Columbus, OH, p.A3614**
- 709 SARS CoV-2 Infection Is Increased with Cigarette Smoke Exposure in Airway Epithelial Cells In Vitro and Blocked by Dual ACE2 and TMPRSS2 Blockade/S.S. Hussain, E.F. Libby, J.L. Tipper, S. Phillips, Q. Li, J. Campos-Gomez, J.E. Peabody Lever, K.S. Harrod, S.M. Rowe, Birmingham, AL, p.A3615**
- 710 Hypercapnia Increases ACE2 Protein Expression and Pseudo-SARS-CoV-2 Virus Entry in Airway Epithelial Cells by Augmenting Cellular Cholesterol/M. Casalino-Matsuda, F. Chen, A. Matsuda, G.S. Budinger, P.H.S. Sporn, Chicago, IL, p.A3616**
- 711 Alterations in the Airway Epithelial Landscape of Patients Infected with SARS-CoV-2 Virus: A Single Cell Transcriptomics Analysis/F. V.gerayeli, S. Milne, C.Y. Cheung, J.S.W. Yang, Y. Yang, D. D.Sin, Vancouver, Canada, p.A3617**
- 712 The OM-85 Bacterial Lysate Inhibits SARS-CoV-2 Infection of Epithelial Cells by Downregulating SARS-CoV-2 Receptor Expression/V. Pivniouk, O. Pivniouk, A. DeVries, J. Uhrlaub, A. Michael, D. Pivniouk, S. VanLinden, M. Conway, S. Hahn, S. Malone, P. Ezech, J. Churko, D. Anderson, M. Kraft, J. Nikolich-Zugich, D. Vercelli, Tucson, AZ, p.A3618**
- 713 Inflammatory Phenotypes of Nasal Epithelium from Long-COVID-19 Patients: Results of the Precision Medicine for More Oxygen-COVID-19 Extension Study/N. Baalbaki, S. Bazdar, H.J. Bogaard, C.M. Drunen, I.H. Heijink, A.-H. Maitland-van der Zee, E.J. Nossent, L. Houweling, N. Noij, Amsterdam, Netherlands, p.A3619**
- 714 In Vitro Evaluation of Inhaled Drugs Therapies to Prevent Severe COVID19/C.A. Barrero, V. Parmar, K. Taylor, F. Wang, M. Florez, Philadelphia, PA, p.A3620**

- 715 Spatial Transcriptional Profiling of Chronic Pulmonary Disease in a Mouse-Adapted Model of SARS-CoV-2/K.** Okuda, K.H. Dinnon III, S.R. Leist, H. Dang, K. Gully, G. De la Cruz, M.D. Evangelista, T. Asakura, R.C. Gilmore, P.E. Hawkins, S. Nakano, A. West, A. Schaefer, L.E. Gralinski, M.R. Zweigart, S. Dong, J. McBride, M.R. Cooley, M.K. Love, M.K. Sakthivel, Y. Z. Lee, J. S. Hagood, J. R. Mock, W. K. O'Neal, S. A. Montgomery, R. C. Boucher¹, R. S. Baric; Chapel Hill, NC, p.A3621, p.A3621
- 716 FBXO45 Targets IFNLR1 to Impair IFN-lambda Signaling During Influenza Infection/M.J. Tsai, W. Osman, A. Elhance, J. Adair, L. Chafin, J.D. Londino, R.K. Mallampalli, Columbus, OH, p.A3622**
- 717 Inhibition of the IL-36 Receptor Reduces Viral Induced Cross-Talk Between Small Airway Epithelial Cells and Fibroblast in COPD/J.R. Baker, P.S. Fenwick, C.K. Koss, H.B. Owles, K.C. El Kasmi, P.J. Barnes, L.E. Donnelly, London, United Kingdom, p.A3623**
- 718 Correlation of Alpha-1 Antitrypsin Levels and Exosome-Associated Neutrophil Elastase Endothelial Injury in Subjects with SARS-CoV2 Infection/J. Lascano, R. Oshins, C. Eagan, Z. Wadood, X. Qiang, T. Flagg, Y. Scindia, B. Mehrad, M.L. Brantly, N. Khodayari, Gainesville, FL, p.A3624**
- 719 Local and Systemic Responses to SARS-CoV-2 Infection in Children and Adults/K. Worlock, M. Yoshida, R.G.H. Lindeboom, N. Huang, C.R. Butler, N. Kumasaka, C. Dominguez Conde, L. Mamanova, L. Bolt, L. Richardson, K. Polanski, E. Madisson, J.L. Barnes, J. Allen-Hyttinen, E. Kilich, B.C. Jones, A. de Wilton, A. Willbrey-Clark, J. Pett, E. Prigmore, H. Yung, P. Mehta, A. Saleh, A. Saigal, J. Cohen, V. Chu⁵, A. Reuschl, C. Argento, R. G. Wunderink, S. B. Smith, T. A. Poor, C. A. Gao, J. E. Dematte, NU SCRIPT Study Investigators, G. Reynolds, M. Haniffa, G. S. Bowyer, M. Coates, M. R. Clatworthy, F. J. Calero-Nieto, B. Göttgens, C. O'Callaghan, N. J. Sebire, C. Jolly, P. de Coppis³, C. M. Smith, A. V. Misharin, S. M. Jane¹, K. B. Meyer, M. Z. Nikolic Cambridge, UK, p.A3625**
- 720 Hyaluronan in Acute and Chronic Manifestations of Covid-19/A.M. Peters, S. Collum, B. Zhao, P. Shivshankar, W. Bi, L.M. Buja, R.A. Thandavarayan, H.J. Huang, X. Yuan, H.K. Eltzschig, I.O. Rosas, F. Poli de Frias, B. Akkanti, S. Jyothula, H. Karmouty-Quintana, Houston, TX, p.A3626**
- 721 Highly Expandable Human Alveolar Organoids to Study Respiratory Diseases/P. Kramer, V. Ho, C. Bowden, N. Ronaghan, U. Pena, D. Rowbotham, T. Brown, M. Tellis, J. Finn, A.Y. Yoshikawa, A.C. Eaves, S.A. Louis, W. Chang, J. Hou, Vancouver, Canada, p.A3627**
- 722 Transcriptomic Profiling of Lung Tissue from Active and Recovered SARS-CoV-2 Infections/S. Bhattacharya, C.S. Anderson, G. Bandyopadhyay, H. Hyuck, R. Misra, G.S. Pryhuber, T.J. Mariani, Rochester, NY, p.A3628**
- 723 Protease-Anti-Protease Compartmentalization in SARS-CoV-2 ARDS: Therapeutic Implications/O.F. Mcelvaney, T. Asakura, S. Meinig, J.L. Torres-Castillo, R.S. Hagan, C. Gabillard, M.P. Murphy, D. Fraughen, T.P. Carroll, M. Herron, M. Casey, L. Alhaddah, R. Heeney, L. Thorne, A. Borczuk, E.P. Reeves, R.E. Zumwalt, Y. Mikami, K. Okuda, G. Hogan, O. Mcelvaney, J. Clarke, N. L. McEvoy, P. W. Mallon, C. Mccarthy, G. Curley, M. C. Wolfgang, R. C. Boucher, N. G. Mcelvaney; Dublin, Ireland, p.A3629**
- 724 Gene Expression Risk Scores for COVID-19 Illness Severity /S. Bhattacharya, D. Peterson, A. Baran, A. Branche, D. Croft, A. Corbett, E. Walsh, A. Falsey, T.J. Mariani, Rochester, NY, p.A3630**
- 725 Endothelial Actin-Fence Enhancement Increases Survival in Mice Given Intra-Peritoneal Pseudomonas Aeruginosa/S.K. Quadri, J. Guangchun, M.N. Islam, S. Bhattacharya, J. Bhattacharya, New York, NY, p.A3631**

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B108 ORIGINS AND OUTCOMES OF COPD

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 9-10 (South Building, Exhibition Level)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: A. Noel, PhD, MSc, BSc, Baton Rouge, LA
S. Milne, BMedSci, MBBS, FRACP, PhD, Vancouver, Canada

101 Which Came First, Emphysema or Small Airway Disease? A Longitudinal Analysis of Parametric Response Mapping on Chest Computed Tomography in Chronic Obstructive Pulmonary Disease/Y. Im, K. Lee, S.H. Shin, H.Y. Park, H.Y. Lee, Seoul, Korea, Republic of, p.A3632

102 Epigenetic Biomarker of Telomeric Age Highlights Sex Differences in Chronic Obstructive Pulmonary Disease Exacerbations/A.I. Hernandez Cordero, C.X. Yang, S. Milne, V.Y. Chen, Z. Hollander, R. Ng, G.J. Criner, P. Woodruff, S.C. Lazarus, J.E. Connett, M.K. Han, F.J. Martinez, R.M. Reed, S.F. Paul Man, J.M. Leung, D.D. Sin, Vancouver, Canada, p.A3633

103 Minimally Invasive Endobronchial Valves for Severe Emphysema: Systematic Review and Meta-Analysis, an Update/Y.B. Moreno, A. Vu, Fort Lauderdale, FL, p.A3634

- 104 Differential Roles for Lysyl Oxidase (Like) Family Members in Chronic Obstructive Pulmonary Disease; from Gene and Protein Expression to Function/N.** Migulina, G. Tjin, A. Faiz, T. Borghuis, M. Metzlar, E.M. Dijk, W. Timens, R. Gosens, C.-A.A. Brandsma, J.K. Burgess, Rochester, MN, p.A3635
- 105 Can External PEEP Worsen the Neuromechanical and Neuroventilatory Coupling of the Diaphragm in Patients with COPD?/L.** Nezirova, D. Radovanovic, H. Shaikh, S. Pini, M.J. Tobin, F. Laghi, Hines, IL, p.A3636
- 106 Prognostic Value of Key Variables from Cardiopulmonary Exercise Testing in Patients with COPD: 42-Month Follow-Up/C.L.** Goulart, M.R. Oliveira, M.G. Renata, A.B. Silva, Sao Carlos, Brazil, p.A3637
- 107 Genetic Architecture of the Epigenome Reveals New Associations for Lung Function in HIV/A.I.** Hernandez Cordero, C.X. Yang, J.S.W. Yang, J. MacIsaac, D. Lin, M. Kobor, E. Tedaldi, C. Ekenberg, N. Dharan, S.F.F. Paul Man, D.D. Sin, K.M. Kunisaki, J.M. Leung, Vancouver, Canada, p.A3638
- 108 Smaller Baseline TLC and VC Differentiate Smokers with Preserved Spirometry (GOLD-0) Who Progress to More Severe Spirometric Obstruction (GOLD-2 to GOLD-4 versus GOLD-1): An Analysis of the Department of Veterans Affairs Electronic Health Records/S.** Zeng, J. Chen, M. Arjomandi, San Francisco, CA, p.A3639
- 109 FEV1 and FVC Vital Lung Function Trajectories Associated to COPD/N.** Olvera, A. Agusti, J. Ross, M.R. Faner, Barcelona, Spain, p.A3640
- 110 Association of Airway Tree Caliber with Airway Macrophage Black Carbon Content: The SubPopulations and Intermediate Outcome Measures in COPD Air Pollution Study (SPIROMICS AIR)/C.G.** Murphy, V. Tejwani, H. Woo, A.J. Gassett, R.E. Kanner, E.A. Hoffman, F.J. Martinez, A. Fawzy, K. Koehler, M.K. Han, J.L. Curtis, C.M. Freeman, C.B. Cooper, A.P. Comellas, C.S. Pirozzi, R. Paine, J.A. Krishnan, C. Sack, N. Putcha, L.M. Paulin, M. Zusman, R. Barr, P. G. Woodruff, J. D. Kaufman, N. E. Alexis, N. N. Hansel, B. M. Smith; New York, NY, p.A3641
- 111 Emphysema Cluster Shape and Disease Progression in Chronic Obstructive Pulmonary Disease/S.** Bodduluri, A. Nakhmani, J.M. Reinhardt, S.P. Bhatt, Birmingham, AL, p.A3642
- 112 Whole Genome Sequence Analysis of Pulmonary Function and COPD for 44,403 Multi-Ethnic Participants from the NHLBI Trans-Omics for Precision Medicine (TOPMed) Program/W.** Kim, X. Hu, B. Yu, L.J. Rasmussen-Torvik, S.A. Gharib, B. Cade, J. Dupuis, R. Kaplan, S. Musani, S.J. London, R. Kalhan, S. Redline, B.M. Psaty, G.T. O'Connor, A. Correa, E.K. Silverman, D. Qiao, A.W. Manichaikul, M.H. Cho, Boston, MA, p.A3643
- 113 Deep Learning and CT-Based Automated Measure of Pectoral Muscle Area and Its Association with Aging and COPD Severity/I.**N. Dutta, S.A. Nadeem, E.A. Hoffman, A.P. Comellas, P.K. Saha, Iowa City, IA, p.A3644
- 114 Machine Learning Using Combined Spirometry and Oscillometry to Predict COPD Assessment Test/A.** Abufardeh, M. Wright, R. MacDonald, T. Thorne, G.N. Maksym, R.J. Dandurand, Halifax, Canada, p.A3645
- 115 Cigarette Smoke Exposure Increases the Airway Epithelial Cell Susceptibility to HIV-1 Infection Mediated by ICAM-1 and Long Noncoding RNAs/M.** Manevski, D. Devadoss, S.P. Singh, M. Nair, H.J. Unwalla, M. Sopori, S. Byrareddy, H.S. Chand, Miami, FL, p.A3646
- 116 Hypoxia Genes Associated with Different Infiltrating Immune Cells in Chronic Obstructive Pulmonary Disease (COPD) and Idiopathic Pulmonary Fibrosis (IPF)/F.** Xu, D.M. Vasilescu, K. Ikezoe, N. Tanabe, D. Kinose, F. Chu, S. Ledoux, J. McDonough, K. Ng, S. Verleden, B. Vanaudenaerde, J.D. Cooper, Y. Mikami, R.C. Boucher, M.E. Lenburg, A. Spira, T.-L. Hackett, R. Ng, J.C. Hogg, Vancouver, Canada, p.A3647
- 117 Understanding the Impact of Pulmonary Vascular Dysfunction on Exercise Tolerance and Dyspnea Across the Continuum of Chronic Obstructive Pulmonary Disease/S.** Collins, Z.H. Rampuri, D.P. Fuhr, A.R. Brotto, D.B. Phillips, M. Kirby, R.I. Beaudry, E.Y. Wong, R.A. Varughese, T.L. Bryan, B.M. Smith, S. van Diepen, M.K. Stickland, Edmonton, Canada, p.A3648
- 118 Characterization of Parenchymal Structural and Functional Changes Due to Chronic JUUL Electronic Cigarette Aerosol Exposure in Apoe^{-/-} Mice/H.** Millán Cotto, J. Matz, Y. Farra, C. Bellini, J.M. Oakes, Boston, MA, p.A3649
- 119 Respiratory Syncytial Virus Induces Epithelial Permeability in COPD and HIV Airway Epithelium/R.K.** Hansi, G.K. Singhera, T. Shaipanich, D.D. Sin, D.R. Dorscheid, J.M. Leung, Vancouver, Canada, p.A3650
- 120 Prevalence of Small Airway Dysfunction in Mild COPD and Smokers at Risk - Baseline Data from CAPTO-COPD/**F. Trinkmann, M. Abdo, K.F. Rabe, F.J.F. Herth, A.-M. Kirsten, H. Watz, Heidelberg, Germany, p.A5679
- 121 Peribronchiolar Metaplasia: A Histological Marker of Small Airway Injury Associated with Emphysema and Interstitial Lung Abnormalities in a Rural Lobectomy Cohort/R.G.** Sangani, A.J. Ghio, V. Deepak, A. King, Z. Patel, E. Alshaikhnassir, M. Forte, R. Zulfikar, G. Abbas, J. Vos, Morgantown, WV, p.A5680

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

B109 FROM GUT TO BRAIN: NEW INSIGHTS INTO THE IMPACT OF OSA

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2022/2024 (West Building, Level 2)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: H.K. Yaggi, MD, New Haven, CT
 R. Tamisier, MD, PhD, MBA, Grenoble, France
 A.W. Varga, MD, PhD, New York, NY
 G.G. Haddad, MD, La Jolla, CA

- 801 Predictors for Persistent Sleep-Disordered Breathing from Pregnancy to Postpartum/E. Lui, A.M. Al-Dobyany, P. Panyarath, R.J. Kimoff, N. Huynh, L. Drouin-Gagné, S. Meltzer, A. Benedetti, L. Lavigne, N. Garfield, I. Marc, F. Series, A. Olha, S. Pamidi, Montreal, Canada, p.A3651**
- 802 Effects of Positive Airway Pressure (PAP) Treatment of Obstructive Sleep Apnea-Hypopnea (OSAH) on Maternal and Fetal Outcomes in Hypertensive Disorders of Pregnancy (HDP): A Pilot Randomized Controlled Trial/P. Panyarath, N. Goldscher Minerbi, S. Pamidi, S.S. Daskalopoulou, R. Gagnon, N. Dayan, K. Raiche, A. Olha, A. Benedetti, R.J. Kimoff, Hatyai, Thailand, p.A3652**
- 803 Association Between Night-to-Night Variability in Obstructive Sleep Apnea Severity with Hypertension Risk and Blood Pressure Variability/B. Lechat, K. Loffler, A. Reynolds, G. Naik, A. Aishah, H. Scott, A. Vakulin, P. Escourrou, R.D. McEvoy, R. Adams, P. Catcheside, D.J. Eckert, Adelaide, Australia, p.A3653**
- 804 Blood Pressure Variability With and Without Supplemental Oxygen During CPAP Withdrawal/S. Ercan, C.D. Turnbull, J.R. Stradling, Izmir, Turkey, p.A3654**
- 805 Comprehensive Circulating Cell-Free DNA Analysis Enables Molecular Characterization in Patients with OSA with and Without Atherosclerosis/R. Cortese, J. Hummel, K. Hohensee, D. Sanz Rubio, J.M. Marin, D. Gozal, Columbia, MO, p.A3655**
- 806 Contribution of Nocturnal Oximetry Measure on Mortality and Cardiovascular Diseases in the General Population After 20 Years of Follow Up/I. Cano-Pumarega, A. García-Sánchez, E. Mañas, J.A. Durán, J.A. Tenes Mayen, L. Pozuelo, B. Pintado-Cort, A. Pérez-Figuera, D. Velasco, A. Retegui, D. Durán-Barata, A. Muriel, M. Sanchez De La Torre, C. Egea, J. Duran Cantolla, Madrid, Spain, p.A3656**
- 807 Cognitive Impairments and Blood Brain Barrier Permeability in Mice Exposed to Sleep Fragmentation During the Daylight Period/C. Puech, M. Badran, A.R. Runion, M.B. Barrow, D. Gozal, Columbia, MO, p.A3657**
- 808 Behavior, Sleep and Blood Brain Barrier Permeability in Genetically Identical Mice with Divergent Gut Microbiota/C. Puech, M. Badran, A. Ericsson, A. Khalyfa, D. Gozal, Columbia, MO, p.A3658**
- 809 Combination of Obstructive Sleep Apnea (OSA) Severity Indices and Ultra-Sensitive Single Molecule Array (SIMOA) Asses Plasma A β 42/A β 40 Improves Diagnosed Cerebrospinal Fluid (CSF) Brain Amyloidosis and Tau Pathology/O.M. Bubu, L. Debure, K. Kam, A. Mullins, A. Parekh, N. Williams, M. de Leon, D.M. Rapoport, I.A. Ayappa, G. Jean-Louis, A.W. Varga, R. Osorio, New York, NY, p.A3659**
- 810 Association of Serum BDNF with Obstructive Sleep Apnea Severity/A.N. Adekunle, M. Gabani, I. Brimah, New York, NY, p.A3660**
- 811 Associations Between Hypersomnolence, Obesity, Brain Health and Cognitive Decline/M. Kaminska, J. Yu, F. Morys, E. Ock, A.C. Lajoie, A. Dagher, Montreal, Canada, p.A3661**
- 812 Computational Assessment of Upper Airway Muscular Activity in Obstructive Sleep Apnea - In Vitro Validation/D.A. Ignatiuk, Q. Xiao, K. McConnell, A. Schuh, R.J. Fleck, J.C. Woods, R.S. Amin, A. Bates, Cincinnati, OH, p.A3662**
- 813 Obstructive Apnea Hypopnea Index of Children with Persistent Obstructive Sleep Apnea Correlates Significantly with Airway Neuromuscular Activation/Q. Xiao, D.A. Ignatiuk, K. McConnell, A. Schuh, C.C. Gunatilaka, S. Ishman, R.J. Fleck, R.S. Amin, A. Bates, Cincinnati, OH, p.A3663**
- 814 Predicting Healthcare Resource Utilization and Long-Term Adherence to Positive Airway Pressure Therapy in an Obstructive Sleep Apnea Population/K. Cole, K.L. Sterling, A.V. Benjafeld, A. Malik, C.M. Nunez, J.-L. Pépin, A. Malhotra, P.A. Cistulli, San Diego, CA, p.A3664**
- 815 12-Years Follow-Up: Relationship Among Cardiovascular, Cerebrovascular Diseases and Obstructive Sleep Apnea Based on Karamay Health Study Cohort/H. Zhongming, Q. Zhang, X. Jiang, D. Chen, M. Han, S. Ma, P. Da, M. Li, J. Shi, F. Han, T. Penzel, H. Wang, Karamay, China, p.A5681**
- 816 Association of Nap Duration with Cognitive Decline Among Geriatrics Population/Y. Alqurashi, K. Alharkan, A. Aldhwiyan, A. Bahamdan, A. Alabdulkader, R. Alotaibi, S. Alduailej, M. Alqahtani, Dammam, Saudi Arabia, p.A5682**

BEHAVIORAL • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

B110 THE MIDAS TOUCH INTERVENTIONAL PULMONOLOGY IN THORACIC ONCOLOGY

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 207-208 (South Building, Level 2)

Viewing 2:15-2:45

Summaries/Discussion 2:45-3:45

Chairing: C. Argento, MD, Baltimore, MD
S. Kuperberg, MD, Brooklyn, NY
B.D. Shaller, MD, Stanford, CA

- 301 Risk Factors Associated with Malignant Lymph Node in Patients Underwent Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration/K.M. Moon, B.-H. Jeong, Seoul, Korea, Republic of, p.A3665**
- 302 Image-Guided Bronchoscopy for Comprehensive Lymph Node Staging: A Phantom Study/W.E. Higgins, T. Kuhlengel, D. Ahmad, D. Guck, M. Chopra, D. Shore, J. Nuschke, R. Bascom, University Park, PA, p.A3666**
- 303 Randomized Control Trial Comparing the Utilization of Balloon versus No Balloon for Endobronchial Ultrasonography/T. Huseini, A. Katz, B. Nasir, A. Majid, A. DeMaio, L.B. Yarmus, C. Pollock, S.A. Soder, M. Liberman, Montreal, Canada, p.A3667**
- 304 Endoscopic Ultrasound Videos of Intratumoral Injections Can Inform Initial Drug Dynamics/V. Mori, J.H.T. Bates, C.M. Kinsey, Burlington, VT, p.A3668**
- 305 Should we start with navigation or endobronchial ultrasound bronchoscopy? Insights from Monte Carlo simulations/B.E. Heideman, M.N. Kammer, F. Maldonado, Nashville, TN, p.A3669**
- 306 The Feasibility of Using the “Vessel Sign” for Pre-Procedural Planning in Navigation Bronchoscopy for Peripheral Pulmonary Lesion Sampling: A Dual-Center Retrospective Study/E. Ho, R.J. Cho, J. Keenan, S. Murgu, Loma Linda, CA, p.A3670**
- 307 Evaluation of 3D Fluoroscopy Aiding Robotic Assisted Bronchoscopy for Biopsy of Peripheral Lung Nodules/W.R. Grier, M. Saleh, E. Pickering, A. Sachdeva, V.K. Holden, F. Nasim, Baltimore, MD, p.A3671**
- 308 Electromagnetic Navigation Transthoracic Needle Aspiration Improves Diagnostic Yield of Bronchoscopic Biopsy for Peripheral Lung Lesions/S.S. Shahangian, D. Hsia, A. Chrissian, B. Furukawa, Torrance, CA, p.A3672**
- 309 A Multicenter Prospective Study on Addition of Ultrathin Bronchoscopy to Thin Bronchoscopy When Evaluating Peripheral Pulmonary Lesions/D. Himeji, M. Oki, H. Saka, T. Imabayashi, Y. Nishii, M. Ando, Miyazaki, Japan, p.A3673**
- 310 Ultrathin Bronchoscopic Cryobiopsy of Peripheral Pulmonary Lesions/M. Oki, H. Saka, Y. Kogure, H. Niwa, A. Yamada, A. Torii, C. Kitagawa, Nagoya, Japan, p.A3674**
- 311 Long Term Outcomes of Bronchoscopic Microwave Ablation of Peripheral Lung Nodules/K.K.W. Lau, K. Maceviciute, R. Baranowski, London, United Kingdom, p.A3675**
- 312 Lower Paraspinous Muscle Cross-Sectional Area Is Associated with Shorter Survival in Patients with a Malignant Pleural Effusion/A.M. Meggyesy, C.L. Wilshire, J.A. Gorden, C. Gilbert, Seattle, WA, p.A3676**
- 313 Relative Lung Echogenicity as a Novel Predictor of Lung Re-Expansion Following Pleural Effusion Drainage/M.H. Fayed, B. El-Shaarawy, M. Al-Qaradawi, S. Ahmer, Alexandria, Egypt, p.A3677**
- 314 Application of Transthoracic Shear-Wave Ultrasound Elastography in Pleural Lesions/Y.-W. Kuo, Y.-L. Chen, H.-D. Wu, H.-C. Wang, Taipei City, Taiwan, p.A3678**
- 315 Upstaging Chest and Lymph Node evaluation During bRonchoscopy Assessment (ULTRA): Systematic Approach to Improving Quality of Lung Cancer Staging/S.-W. Low, J. Katsis, H. Batra, O.B. Rickman, F. Maldonado, R.J. Lentz, Nashville, TN, p.A3679**
- 316 Physician-Led Neck Lymph Node Scanning and Biopsy in Patients with Thoracic Disease and Mediastinal Lymphadenopathy/M.H. Fayed, B. El-Shaarawy, H. Gharraf, A. Al-Hefny, C. Daneshvar, Alexandria, Egypt, p.A3680**

4:30 p.m. - 7:00 p.m

ASSEMBLY MEMBERSHIP MEETINGS



The fourteen Assemblies are the primary groups of the American Thoracic Society. Each Assembly holds an annual Membership Meeting at the International Conference. The meetings will be held on Sunday, May 15th from 5-7 PM and Monday, May 16th from 5-7 PM.

All Assembly members and other interested individuals are invited to attend.

To learn more about an assembly, please click the button under each assembly and you will be re-directed to that assembly's page..

ALLERGY, IMMUNOLOGY & INFLAMMATION (AII)

MOSCONE CENTER

Room: 3001/3003 West Building 3rd Level



PEDIATRICS (PEDS)

MOSCONE CENTER

Room: 3000/3002/3004 West Building 3rd Level



CLINICAL PROBLEMS (CP)

MOSCONE CENTER

Room: 3005/3007 West Building 3rd Level



PULMONARY CIRCULATION (PC)

MOSCONE CENTER

Room: 3006/3008 West Building 3rd Level



CRITICAL CARE (CC)

MOSCONE CENTER

Room: 3020/3022/3024 West Building 3rd Level



SLEEP & RESPIRATORY NEUROBIOLOGY (SRN)

MOSCONE CENTER

Room: 3010/3012 West Building 3rd Level



NURSING (NUR)

MOSCONE CENTER

Room: 3014 West Building 3rd Level






ATS 2022
INTERNATIONAL CONFERENCE
San Francisco, CA

Tuesday Morning, May 17

[Click Here to Access the Program Itinerary and Add Tuesday Sessions and Presentations to Your Calendar](#)

MEET THE EXPERTS

CME Credits Available: 1

 **Pre-registration and additional fees required. Attendance is limited.**
Member: \$100 LMIC Member: \$70.

7:00 a.m. - 8:00 a.m. MOSCONE CENTER

- ME29 MANAGEMENT OF CTD-ILD IN THE ERA OF ANTIFIBROTICS**
T. Paul, MD, Charlottesville, VA
Room 52/54/56 (South Building, Lower Mezzanine)
- ME30 CHRONIC TRACHEOSTOMY MANAGEMENT**
R. Krochmal, MD, Washington, DC
K. Van Nostrand, MD, Atlanta, GA
Room 58/60 (South Building, Lower Mezzanine)
- ME31 MAPPING HEALTH AND EXPOSURE: GIS TO IMPRESS!**
H. Chapman, MD, PhD, MPH, Washington, DC
M.G. Macmurdo, MBChB, Cleveland, OH
A. Anyamba, PhD, Greenbelt, MD
Room 70/72 (South Building, Lower Mezzanine)
- ME32 BRINGING WEIGHT LOSS TO THE FOREFRONT IN THE TREATMENT OF OBSTRUCTIVE SLEEP APNEA: INTEGRATING EVIDENCE-BASED GUIDELINES INTO CLINICAL PRACTICE**
V. Kundel, MD, New York, NY
S.R. Patel, MD, MS, ATSF, Pittsburgh, PA
Room 74/76 (South Building, Lower Mezzanine)

10:45 a.m. - 11:45 a.m.

MOSCONE CENTER

- ME33 AVOIDING BIAS WHEN ANALYZING LONGITUDINAL PATIENT TRAJECTORIES: NOT ALL REPEATED MEASURES DATA IS CREATED EQUALLY**
M. Neely, PhD, Durham, NC
Room 50/62 (South Building, Lower Mezzanine)
- ME34 LUNG TRANSPLANT IN IPF: WHO, WHEN, AND HOW?**
N. Patel, MD, Philadelphia, PA
Room 52/54/56 (South Building, Lower Mezzanine)
- ME35 BABY, BABY, BABY: EXPLORING OBSTRUCTIVE SLEEP APNEA INFANTS**
Z. Ehsan, MD, Kansas City, MO
Room 58/60 (South Building, Lower Mezzanine)
- ME36 WHAT IS NEW IN PNEUMONIA AND IN PLEURAL DISEASE**
G.W. Waterer, MBBS, MBA, PhD, Perth, WA
Y.C.G. Lee, MBChB, PhD, Perth, WA
Room 70/72 (South Building, Lower Mezzanine)
- ME37 ARTIFICIAL INTELLIGENCE 101**
B. Camoretti-Mercado, PhD, MBAIS, Tampa, FL
Room 74/76 (South Building, Lower Mezzanine)

BASIC • BEHAVIORAL • TRANSLATIONAL

KEYNOTE SERIES

CME Credits Available: 1.5

K3 UNFINISHED BUSINESS: THE ACHIEVABLE GOAL OF ELIMINATING ALL TOBACCO PRODUCT USE IN THE UNITED STATES BY 2030

8:15 AM - 9:00 AM

MOSCONE CENTER

Room 7-8 (South Building, Exhibition Level)

Incredible progress has been achieved in terms of reducing tobacco use rates since the first Surgeon General's Report was released in 1964. Since that time, adult prevalence has declined from about 43% to about 14% now. Even with this progress, over 30 million Americans continue to smoke and half of them (over 15 million) will die prematurely of a tobacco-caused disease if they don't quit.

In 2009, as part of the Family Smoking Prevention and Tobacco Control Act, regulatory authority was given to the FDA to essentially eliminate tobacco use, in large part by reducing the nicotine content of all tobacco products (including both combustible tobacco products and e-cigarette products) to non-addictive levels.

This keynote talk will broadly describe the greatest public health and clinic challenge facing Americans and the very real potential to eliminate that risk to both individuals and society by 2030.

Introduction: L.M. Schnapp, MD, ATSF, Madison, WI

Featured Speaker: M.C. Fiore, MD, MPH, MBA, Madison, WI

YEAR IN REVIEW

CME Credits Available: 1.5

MOC Points Available: 1.5

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL**CLINICAL TOPICS IN PULMONARY MEDICINE**

CME Credits Available: 1.5

C1 CLINICAL YEAR IN REVIEW 3

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Hall E (North Building, Exhibition Level)

Target Audience

Pulmonary, critical care and sleep providers. The program will discuss general topics of interest to a broad group of providers, inside and outside of these subspecialties. The program is relevant to not only clinicians, but also to researchers and administrators.

Objectives

At the conclusion of this session, the participant will be able to:

- apply new clinical research knowledge to clinical practice;
- learn new findings about key conditions in pulmonary, critical care and sleep;
- have new strategies to manage the care of common conditions in pulmonary, critical care, and sleep.

Clinical Year in Review sessions will include core topics in pulmonary, critical care, and sleep medicine. The goal of the session is to discuss critical state of the art topics and evolving concepts. The learner will be exposed to a carefully curated review of the current literature by emerging leaders in the field. After the course, participants will better understand novel concepts in each specific domain that we hope will translate to improved patient care.

Chairing: J.L. Gomez, MS, MD, ATSF, New Haven, CT
R.J. Shah, MD, MSCE, San Francisco, CA
J.C. Ferreira, MD, PhD, Sao Paulo, Brazil

9:30 General Critical Care

E. Wilcox, MD, PhD, FRCPC, Toronto, Canada

9:52 Cystic Fibrosis

C.M. Bojanowski, MD, New Orleans, LA

10:15 Sepsis

F.R. Machado, PhD, MD, Sao Paulo, Brazil

10:37 Bronchiectasis

W. Elmaraachli, MD, San Diego, CA

This session and the International Conference are supported by an independent medical educational grant from Insmmed Incorporated.

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C2 PRO/CON: INTERSTITIAL LUNG DISEASE DIAGNOSIS AND MANAGEMENT

Assemblies on Clinical Problems; Behavioral and Health Services Research; Environmental, Occupational and Population Health

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3-4 (South Building, Exhibition Level)

Target Audience

Clinicians, nurses, other allied health staff, researchers and investigators in basic and clinical with focus on interstitial lung disease. sponsors for research

Objectives

At the conclusion of this session, the participant will be able to:

- appreciate differences and similarities between the implications of a probable UIP pattern vs a UIP pattern on CT chest;
- discuss potential need for genetic testing and implications of genetic testing with patients who have fibrotic lung disease;
- integrate decisions on antifibrotic versus immunosuppressive medications for fibrotic hypersensitivity pneumonitis and fibrotic connective tissue disease associated ILD into clinical practice.

The aim of this session is to surface the evolving knowledge and controversies of hot clinical topics where there is not one clear "right" answer based on existing evidence, review reasoning on both sides of the issue/question to the clinician-pulmonologist. The following few specific and highly relevant clinical questions are cutting edge topics in interstitial lung disease and have not been answered well in existing guidelines and evidence to date. These will be addressed in this session as 4 pro/con debates: role of genetic testing in diagnosis and management of patients with interstitial lung disease; whether radiographic probable UIP and UIP should be merged as a single UIP pattern; decision to treat patients with progressive fibrotic HP and CTD with immunosuppression or antifibrotics first; whether patient reported outcomes should be formally evaluated at each clinic visit. Audience response software will be used pre and post each debate to assess attendees' opinions on each topic and it is hoped that the information will be useful for future guideline developers on the specific questions.

Chairing: B. Collins, MD, Seattle, WA
G. Raghu, MD, Seattle, WA

9:30 PRO: Genetic Testing is Prime Time for Evaluation of Fibrotic Lung Disease

A.E. Tzouveleakis, MD, PhD, Patras, Greece

9:38 CON: Genetic Testing is Prime Time for Evaluation of Fibrotic Lung Disease

C. Newton, MD, Dallas, TX

- 9:46 PRO: Definite UIP and Probable UIP Patterns on HRCT Images Should Be Merged as One UIP Pattern**
M. Remy-Jardin, MD, Lille, France
- 9:54 CON: Definite UIP and Probable UIP Patterns on HRCT Images Should Be Merged as One UIP Pattern**
D.A. Lynch, MB BCH, Denver, CO
- 10:02 PRO: Patient Reported Outcomes Should Be Formally Evaluated at Every Clinic Visit for Patients with Fibrotic Lung Disease**
K.I. Aronson, MD, MSci, New York, NY
- 10:10 CON: Patient Reported Outcomes Should Be Formally Evaluated at Every Clinic Visit for Patients With Fibrotic Lung Disease**
S.S. Biring, MD, London, United Kingdom
- 10:18 PRO: Antifibrotic Drugs Should Not Be Started Until Fibrotic HP and Fibrotic CTD-ILD Have Progressed on Immunosuppressive Medications**
B. Collins, MD, Seattle, WA
- 10:26 CON: Antifibrotic Drugs Should Not Be Started Until Fibrotic HP and Fibrotic CTD-ILD Have Progressed on Immunosuppressive Medications**
A. Azuma, MD, PhD, Tokyo, Japan
- 10:34 Highlights of the New Official 2022 ATS/ERS/JRS/ALAT Clinical Practice Guideline on Idiopathic Pulmonary Fibrosis (an Update) and Progressive Pulmonary Fibrosis in Adults**
G. Raghu, MD, Seattle, WA

This session and the International Conference are supported by an independent medical educational grant from Boehringer Ingelheim Pharmaceuticals, Inc.

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CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

C3 PEDIATRIC CLINICAL CHEST ROUNDS

Assembly on Pediatrics

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Target Audience

Pediatric pulmonary clinicians and trainees (including students, physicians, advanced practice providers, nurses and other health professionals interested in the diagnosis and management of challenging pediatric cases)

Objectives

At the conclusion of this session, the participant will be able to:

- generate a broad differential diagnosis for challenging cases in pediatric pulmonary medicine;
- apply current diagnostic testing to the management of challenging cases in pediatric pulmonary medicine;
- discuss state of the art management of challenging pediatric pulmonary cases.

Pediatric Clinical Chest Rounds focuses on the diagnosis and management of 4 challenging clinical cases selected from the case reports submitted to the Pediatric Assembly. Each case is presented by a trainee (usually a pediatric pulmonary fellow) and discussion is led by expert in the field.

Chairing S.C. Sadreameli, MD, MHS, Baltimore, MD
T.J. Moraes, BSc, MD, PhD, Toronto, Canada
C.E. Loughlin, MD, Chapel Hill, NC

9:30 The Curious Case of the Blues
S. Vaziri, MD, San Francisco, CA

9:42 Expert Discussant
R.K. Hopper, MD, Palo Alto, CA

9:53 Acute COVID-19: Keep a Broad Differential
B.D. Harris, MD, Charlotte, NC
R. Raffler, DO, Charlotte, NC

10:05 Expert Discussant
M. Kazachkov, MD, New York, NY

10:15 A Case of Dyspnea in an Ex-Prem
M.V. De La Paz, MD, MBA, Vancouver, Canada

10:27 Expert Discussant
S.A. Mcgrath-Morrow, MD, Philadelphia, PA

10:38 Recurrent Lobar Consolidation: An Unusual Cause and Treatment
D. Curran, MD, Boston, MA

10:50 Expert Discussant
B.K. Rubin, MD, MBA, FRCPC, Richmond, VA

BEHAVIORAL • CLINICAL

CRITICAL CARE TRACK

CME Credits Available: 1.5

C4 COMMUNICATING PROGNOSIS TO CRITICALLY ILL PATIENTS AND THEIR FAMILIES: CHALLENGES AND RECOMMENDED STRATEGIES WHICH CONSIDER CULTURE AND PREFERENCES

Assemblies on Critical Care; Behavioral and Health Services Research

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3020/3022/3024 (West Building, Level 3)

Target Audience

Nurses, physicians, respiratory and physical therapists, case managers, social workers, healthcare professionals working with ICU settings and advanced lung disease patients, patients, and surrogate decision-makers.

Objectives

At the conclusion of this session, the participant will be able to:

- understand critically ill patients' and family members' perspectives about prognosis communication;
- recognize risks of relying on either experiential/subjective prognostication or quantitative prognostic models in clinical practice;
- use evidence-based strategies for delivering prognostic estimates within compassionate shared decision making conversations.

This symposium will explore the challenges to compassionate communication about prognosis to critically ill patients and their families. We will learn about patient, family and provider perspectives about prognostication, and the risks/benefits of subjective (experience-based) prognostic communication compared to data-driven prognostication. This will include definitions of biases/heuristics, with particular emphasis on the challenges of including race and ethnicity as predictors without regard for social determinants of health and systemic racism. We will learn how providers can tailor communication about prognosis, for individual patient/family needs and preferences including cultural considerations.

Chairing: N. Hajizadeh, MD, MPH, Manhasset, NY
D.B. White, MD, Pittsburgh, PA
J. Hart, MD, MS, Philadelphia, PA
N. Sederstrom, PhD, MPH, FCCP, MA, FCCM,
Minneapolis, MN

- 9:30 Introduction**
N. Hajizadeh, MD, MPH, Manhasset, NY
- 9:35 Prognosticating in Serious Respiratory Illness: Assessing Risk Amidst the Unknown**
A.S. Iyer, MD, MSPH, Birmingham, AL
- 9:45 “She Won’t Ever Be the Same”: Sources of Prognostic Estimates Where Our Predictions Originate and How Bias May Prevail**
J. Hart, MD, MS, Philadelphia, PA
- 9:55 “We Told Her Family How Bad Things Are”: What Doctors Think They Say, What Surrogates Actually Hear**
D.B. White, MD, Pittsburgh, PA
- 10:05 Centering the Margins: Addressing Inequities in Patient-Clinician Communication**
C.E. Brown, MD, MA, Seattle, WA
- 10:15 Tools to Support Shared Decision Making Conversations: The Promise and Limits of Decision Aids**
N. Hajizadeh, MD, MPH, Manhasset, NY

10:25 Applying Data to the Individual Patient: Considering the Ethics of Prediction Modeling and the Patient-Physician Relationship

A.E. Turnbull, DVM, MPH, PhD, Baltimore, MD

10:35 Centering the Margins: Addressing Inequities in Patient-Clinician Communication

N. Sederstrom, PhD, MPH, MA, FCCP, FCCM, Minneapolis, MN

10:45 A Patient and Caregiver Perspective: They Spoke and This is What I Heard

E. Courtenay-Mann, Spring, TX

10:55 Wrap-Up and Discussion

D.B. White, MD, Pittsburgh, PA

CLINICAL • TRANSLATIONAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1.5

C5 PNEUMONIA IN THE IMMUNOCOMPROMISED HOST

Assemblies on Pulmonary Infections and Tuberculosis; Allergy, Immunology and Inflammation; Clinical Problems

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 209-211 (South Building, Level 2)

Target Audience

Pulmonologists and other providers who care for patients in the acute setting, researchers interested in pneumonia and/or host immune responses

Objectives

At the conclusion of this session, the participant will be able to:

- apply new knowledge of immune vulnerabilities to better identify patients who are at increased risk of immunocompromised host pneumonia;
- better diagnose pneumonia in the immunocompromised host, including identification of pathogens of special interest;
- define new management strategies to improve the health of patients with immunocompromised host pneumonia.

Pneumonia remains a leading cause of death around the world, and immunocompromised hosts are at particular risk for atypical presentations and unusual organisms. They demand a diagnostic approach and management strategy that adapts to their circumstances. This session will shed light on the approach to pneumonia in the immunocompromised host by focusing on paradigmatic settings of immunocompromise and on specific etiologies of infections in this vulnerable population.

- Chairing:** B.S. Staitieh, MD, Atlanta, GA
K.A. Cohen, MD, Baltimore, MD
J.S. Zifodya, MD, MPH, New Orleans, LA
- 9:30 Introductory Remarks**
K.A. Cohen, MD, Baltimore, MD
- 9:35 Collateral Damage: Pneumonia in the Setting of Immunosuppressive Medications**
S.E. Evans, MD, ATSF, Houston, TX
- 9:55 No Fun Whatsoever: Fungal Pneumonia in the Immunocompromised Host**
E.M. Carmona Porquera, MD, PhD, Rochester, MN
- 10:15 An Uninvited Guest: Non-Tuberculous Mycobacterial Infections in Lung Transplant Patients**
M. Mirsaeidi, MD, Miami, FL
- 10:35 The Usual Suspects: Community Acquired Pneumonia in HIV**
J.S. Zifodya, MD, MPH, New Orleans, LA
- 10:55 Concluding Remarks and Q&A**

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C6 GROWING UP OLD: EVIDENCE FOR PREMATURE LUNG AGING IN EARLY LIFE

Assemblies on Respiratory Structure and Function; Environmental, Occupational and Population Health; Pediatrics, Respiratory Cell and Molecular Biology

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Target Audience

Pulmonary clinician scientists, population health scientists, environmental epidemiologists, basic and translational scientists

Objectives

At the conclusion of this session, the participant will be able to:

- gain perspective on altered physiologic trajectories of lung health beginning early in life that represent accelerated pathways towards age-related chronic lung disease;
- gain understanding of new findings about the cellular, molecular, and epigenetic alterations found in infants and children that reflect premature aging beginning in earlier life stages;
- increase awareness of early life exposomic factors which promote senescence of the respiratory system among children.

Numerous early life insults in the perinatal and childhood periods—for example, intrauterine hypoxia, environmental tobacco smoke, nutritional and metabolic factors, childhood respiratory infections and chronic

airways disease, contribute to altered trajectories of lung health as early as infancy and childhood. This symposium focuses on current physiologic, epigenetic, cellular, and molecular evidence that supports that these factors may contribute to aged phenotypes early in the life course, leading to accelerated development of chronic lung disease.

- Chairing:** S. Bose, MD, MPH, New York, NY
C.D. Pascoe, PhD, Winnipeg, Canada
C. Pascoe, PhD, Manitoba, Canada
C.T. Mcevoy, MD, ATSF, Portland, OR

- 9:30 Introductory Remarks**
S. Bose, MD, MPH, New York, NY
- 9:35 As the Twig is Bent? Early Life Determinants of Respiratory Health**
W.J. Morgan, MD, Tucson, AZ
- 9:55 Prenatal Smoking and Lung Disease: Epigenetic Aging and the Epigenetic Clock**
M. Jones, PhD, Winnipeg, Canada
- 10:15 Prematurity and Cellular Senescence as a Cause of Future Lung Disease**
R.D. Britt, PhD, ATSF, Columbus, OH
- 10:35 Early Life Exposure to Air Pollution May Lead to Early Lung Aging**
J.R. Balmes, MD, ATSF, San Francisco, CA
- 10:55 Closing Remarks**
S. Bose, MD, MPH, New York, NY

CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C7 THE LONG TERM EFFECTS OF COVID-19 ON PATIENTS AND PUBLIC HEALTH

Assemblies on Pediatrics; Clinical Problems; Pulmonary Rehabilitation

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

Pediatric pulmonologists who are seeing patients with long term effects from COVID19 infection; physical therapists; epidemiologists for respiratory viral infections; individuals working in health disparities research

Objectives

At the conclusion of this session, the participant will be able to:

- apply new recommendations for patients with long COVID-19 to enhance pulmonary rehabilitation and overall well-being;

- identify health disparities that have heightened due to the pandemic in pediatric respiratory care;
- examine the changing landscape of viral respiratory epidemiology as a result of the pandemic.

One presentation would discuss the long term physical, behavioral, and psycho-social effects of COVID-19, including presenting data from "LONG COVID" clinics and management of these patients. The second presentation would look at the unintended benefits/challenges of the pandemic on lung health (eg asthma exacerbations) and the changes the pandemic brought on viral respiratory epidemiology. The third presentation and discussion would evaluate how the pandemic has heightened health disparities in terms of access to care, vaccine delivery, etc, specifically in Pediatrics. The fourth presentation would involve resiliency and well-being research with regards to our Pediatric providers during the pandemic.

Chairing: S. Das, DO, Houston, TX
T. Simoneau, MD, Boston, MA

- 9:30 A Patient's Perspective**
S. Ghanoongooi, Beverly Hills, CA
- 9:35 Long-Term Complications of Pediatric COVID-19 Infection**
T. Simoneau, MD, Boston, MA
- 9:57 The Changing Viral Landscape During COVID-19**
C. Rosas-Salazar, MD, MPH, ATSF, Nashville, TN
- 10:17 Health Disparities and Lung Health During COVID-19**
A. De, MD., New York, NY
- 10:40 Physician Well-Being During the Pandemic**
H.H. De Keyser, MD, MSCR, Aurora, CO

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C8 LOST IN TRANSLATION? PRECLINICAL TO CLINICAL STUDIES IN PULMONARY HYPERTENSION

Assemblies on Pulmonary Circulation; Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 7-8 (South Building, Exhibition Level)

Target Audience

Physicians, researchers and nurses from any field interested in learning about novel, state of the art research identifying the contributions of translational research approaches to the treatment of pulmonary hypertension

Objectives

At the conclusion of this session, the participant will be able to:

- describe and discuss new findings from bench to bedside with the hope to enable the development of effected targeted therapies PH patients;
- recognize and learn the benchmarks needed to launch a translatable preclinical study to clinical study;
- identify new potential avenues for therapeutic interventions targeting multiple groups of PH.

Pulmonary Hypertension (PH) is a multifactorial pulmonary vascular disease that can arise spontaneously or as a complication of left heart disease, or chronic pulmonary disease and commonly leads to profound and refractory RV failure and death. Although preclinical models of PH are extensively utilized in the field to identify novel pathways driving PH pathogenesis and to test potential therapeutic approaches, the translatability of findings using these models into clinical practice and patient care is contested. This session will discuss current and state of the art research identifying novel therapeutic approaches, following their progression from preclinical to clinical studies in PH.

Chairing: A.L. Frump, MS, PhD, Indianapolis, IN
Y.C.C. Lai, PhD, Indianapolis, IN
J.M. Elinoff, MD, ATSF, Bethesda, MD
C.E. Ventetuolo, MD, MSCR, Providence, RI

- 9:30 Rebalancing TGF/Activin/BMP Signaling in Pulmonary Arterial Hypertension**
M. Gu, MD, PhD, Cincinnati, OH
- 9:45 Sotatercept for the Treatment of Pulmonary Arterial Hypertension: Restoring Balance Between Activin and BMP Pathways**
D.B. Badesch, MD, Aurora, CO
- 10:00 Novel Findings From Preclinical and Clinical Studies of Group 2 PH**
M.T. Gladwin, MD, Pittsburgh, PA
- 10:15 Updates From PVDIOMICS and FDA Recommendations for the Treatment of Group 2 PH**
J. Leopold, MD, Boston, MA
- 10:30 Prostacyclin and Pulmonary Hypertension**
M.W. Geraci, MD, Pittsburgh, PA
- 10:45 Inhaled Treprostinil in Pulmonary Hypertension Due to Interstitial Lung Disease**
S.D. Nathan, MD, Falls Church, VA

This session and the International Conference are supported by an independent medical educational grant from

Actelion Pharmaceuticals US, Inc.,

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SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C9 SEX, LUNGS, AND ENVIRONMENTAL EXPOSURES

Assemblies on Environmental, Occupational and Population Health; Behavioral and Health Services Research; Pulmonary Infections and Tuberculosis; EOPH's Early Career Professionals Working Group

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 201-202 (South Building, Level 2)

Target Audience

Providers of lung health, basic and translational researchers who are interested in translational and impacts of environmental exposures, those with clinical or research responsibilities

Objectives

At the conclusion of this session, the participant will be able to:

- recognize and learn about new findings of sex specific responses to environmental exposures;
- apply and integrate sex as a biological variable appropriately in environmental exposure assessment research;
- improve ability to identify environmental lung disease by better understanding sex-specific effects and susceptibilities.

Lung disease susceptibility is often sex specific. However, only recently, have clinical and translational research studies incorporated a thorough analysis of sex differences in response to environmental exposures and the potential link of these differences to disease susceptibility. This session will explore the interaction of sex with environmental exposures to increase susceptibility to lung disease and infection. Studies in rodents, non-human primates, and humans will be described, providing an overview of this emerging field. This session will also provide recommendations on next steps for the study of respiratory sex differences in response to environmental exposures and best practices in study design and analysis to facilitate the incorporation of sex as a biological variable.

Chairing: M.E. Rebuli, PhD, Chapel Hill, NC
L.S. Van Winkle, PhD, Davis, CA
J.P. Reilly, MD, MSCE, Philadelphia, PA

9:30 Sex Differences in Respiratory Health: Evidence from Epidemiology and the Exposome
R.J. Wright, MD, MPH, New York, NY

9:42 Where There Is Smoke, There Are Sex Differences: Part 1 - Wildfire Smoke
L.A. Miller, PhD, Davis, CA

9:54 Where There Is Smoke, There Are Sex Differences: Part 2 - Secondhand Tobacco Smoke
A. Noel, PhD, MSc, BSc, Baton Rouge, LA

10:06 Can Sex and Environmental Exposures Make Your Flu Worse?

M.E. Rebuli, PhD, Chapel Hill, NC

10:18 Sex Differences in Ozone Responses and the Influence of Diet and Microbiome

H. Tashiro, MD, PhD, Saga, Japan

10:30 Sex Differences With Environmental Exposure: What Do We Know and Where Do We Go From Here?

P. Silveyra, PhD, MSc, Bloomington, IN

10:42 Panel Discussion and Audience Q&A

BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C10 BIOMARKERS IN LUNG CANCER: PIERRE MASSION MEMORIAL SYMPOSIUM

Assembly on Thoracic Oncology

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 205-206 (South Building, Level 2)

Target Audience

Pulmonary clinicians, thoracic surgeons, radiologists, and public health workers including those involved in organizing/running CT screening programs, or those referring to CT screening programs, as well as those interested in chemoprevention

Objectives

At the conclusion of this session, the participant will be able to:

- gain a greater understanding and narrowing of the field of high risk individuals to target for Lung cancer screening;
- establish a knowledge base for greater objectivity in nodule management and establishment of low, intermediate and high risk pools of screened individuals;
- understand the emerging for recurrence prediction. Understand the future behind advances beyond TNM.

Pierre Massion was a tremendous researcher, clinician, mentor and family man. Pierre passed away unexpectedly and far too soon this year leaving behind a tremendous family, a wealth of scientific accomplishment and list of friends and mentees to carry on his legacy. We honor Pierre through this symposium on biomarkers and risk assessment in cancer. This symposium will serve to better understand what populations are at risk for lung cancer and which nodules can move from intervention to surveillance. We will also explore determinants of risk for cancer recurrence and better understand populations that may benefit from adjuvant therapy. We will also explore decision making and make the case for models, genetics and metabolomics over experience and gut instinct.

Chairing: F. Maldonado, MD, Nashville, TN
T.S. Blackwell, MD, Nashville, TN
H. Kathuria, MD, ATSF, Boston, MA

9:30 Introductory Remarks in Honor of Pierre Massion
T.S. Blackwell, MD, Nashville, TN

9:33 Biomarkers for Lung Cancer Screening and Nodule Evaluation: No Free Lunch
M.K. Gould, MD, MS, Pasadena, CA

9:51 Searching for the Elusive Liquid Biopsy in Lung Cancer: Are We Getting Close?
P. Nana-Sinkam, MD, Richmond, VA

10:08 Promoting Collaboration for Progress: The Advancing Early Lung Cancer Detection Meeting
P.J. Mazzone, MD, MPH, Cleveland, OH

10:25 Investigating Biological Determinants of Early Lung Adenocarcinoma Behavior Through Data Integration
M.F. Senosain Ortega, PhD, Nashville, TN

10:42 Disparities in Lung Cancer Screening and Treatment: Will Biomarkers Make Any Difference at All if We Can't Reach the Target Population?
G.A. Silvestri, MD, Charleston, SC

This session and the International Conference are supported by an independent medical educational grant from Merck & Co.

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BEHAVIORAL • CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C11 USE OF NOVEL TECHNOLOGIES TO IMPROVE CLINICAL TRAINING AND ENHANCE PATIENT SAFETY

Assemblies on Behavioral and Health Services Research; Training Committee; Education Committee

9:30 a.m. - 11:00 a.m. MOSCONE CENTER
Room 3010/3012 (West Building, Level 3)

Target Audience

All members of the interprofessional team, including trainee and international conference participants and leaders in education, clinical administration, patient safety, and information technology

Objectives

At the conclusion of this session, the participant will be able to:

- identify strategies to incorporate novel technologies in health professions education to enhance both the teacher and the learner experience;

- describe best practices for simulation and virtual reality to improve procedural teaching and learning;
- develop a successful interprofessional team training session using novel technologies in both high and low fidelity environments.

This symposium will introduce learners to novel technologies that are specifically relevant to pulmonary and critical care training and directed at enhancing patient safety. Through a critical appraisal of the literature, experts will review the roles of virtual reality, augmented reality and traditional manikin-based simulation to support the teaching of clinical procedures and interprofessional team training.

Chairing: S.M. Kassutto, MD, Philadelphia, PA
M.M. Hayes, MD, ATSF, Boston, MA
N. Seam, MD, ATSF, Bethesda, MD

9:30 Overview of Novel Technologies for Provider Education
S.M. Kassutto, MD, Philadelphia, PA

9:40 Harnessing Novel Technologies to Teach Bronchoscopy and Other Bedside Procedures
J.B. Richards, MD, MA, ATSF, FACP, Cambridge, MA

10:00 Interprofessional Team Training: High Fidelity Simulation vs. Virtual Reality
A. Alismail, MS, MA, RRT, FCCP, Loma Linda, CA
D.M. Donesky, PhD, ANP-BC, ATSF, Napa, CA

10:25 The Technology Enhanced Virtual Classroom: From UME to CME
J.C. Ferreira, MD, PhD, Sao Paulo, Brazil

10:45 PRO-CON Discussion: What Should the Future of Clinical Training and Patient Safety Look Like?
N. Seam, MD, ATSF, Bethesda, MD
M.M. Hayes, MD, ATSF, Boston, MA

10:55 Questions and Wrap Up
S.M. Kassutto, MD, Philadelphia, PA

BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C12 ACHIEVING HEALTH EQUITY IN ASTHMA, LUNG CANCER, COPD, SLEEP, PULMONARY HYPERTENSION AND COVID-19

Assemblies on Sleep and Respiratory Neurobiology; Behavioral and Health Services Research; Clinical Problems; Environmental, Occupational and Population Health; Pulmonary Circulation; Thoracic Oncology

9:30 a.m. - 11:00 a.m. MOSCONE CENTER
Room 3001/3003 (West Building, Level 3)

Target Audience

Providers and researchers in the fields of pulmonary, sleep medicine, critical care and includes pediatrics

Objectives

At the conclusion of this session, the participant will be able to:

- improve the quality of life of patients by learning the evidence demonstrating disparities in health care access and outcomes related to lung cancer screening, sleep disorders, pulmonary hypertension and COVID-19;
- learn evidence demonstrating disparities in COPD prevalence and outcomes, highlighting environmental and other contributors (i.e. smoking) as well as learn potential points of intervention;
- understand and review evidence on disparities in the prevalence and outcomes for minority children with asthma and learn culturally tailored approaches to reduce these disparities.

Health disparities are an increasingly recognized driver of public health outcomes, especially health outcomes that are not only ameliorable but also high priority. Respiratory and sleep health disparities have been documented and have been shown to be related to these important outcomes. This multidisciplinary session will address the state of the on the impact of health disparities in common and orphan respiratory diseases and will to point to future directions in promoting pulmonary and sleep health equity.

Chairing: S.R. Patel, MD, MS, ATSF, Pittsburgh, PA
M. Eakin, PhD, Baltimore, MD
R.S. Wiener, MD, MPH, ATSF, Boston, MA
C.A. Powell, MD, MBA, New York, NY
N. Shah, MD, MPH, New York, NY

- 9:30 Disparities in Lung Cancer Screening**
N.T. Tanner, MD, MSCR, Charleston, SC
- 9:45 Promoting Adherence to Treatment Plans for Asthma among Pediatric Minority Communities**
T. Bryant-Stephens, MD, Philadelphia, PA
- 10:00 COPD Disparities and Drivers**
S. Raju, MD, MPH, Baltimore, MD
- 10:15 From Sleep Health Disparities to Sleep Health Equity**
M. Grandner, PhD, Tucson, AZ
- 10:30 Addressing Disparities in the Care of Pulmonary Hypertension and Other Orphan Pulmonary Diseases**
V. De Jesus Perez, MD, ATSF, Palo Alto, CA
- 10:45 Health Equity Post COVID-19: Gaps in Access to High Quality and Affordable Healthcare**
Speaker To Be Announced

This session and the International Conference are supported by independent medical educational grants from Genentech, Inc, Insmad Incorporated.

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BASIC • TRANSLATIONAL**MINI SYMPOSIUM****C13 IMMUNE RESPONSES AND POTENTIAL INFLAMMATORY BIOMARKERS IN SARS-CoV-2 INFECTION****9:30 a.m. - 11:00 a.m.****MOSCONE CENTER****Room 2018/2020 (West Building, Level 2)**

Chairing: J.K. Kolls, MD, New Orleans, LA
A. Rogers, MD, MPH, ATSF, Stanford, CA

Oral Presentations:

- 9:30 Transcriptome Analysis Demonstrates IL-13 Stimulation Reduces SARS-CoV2 Replication in Asthmatic Airway Epithelium Through Changes in Cell-Cell Adhesion, Steroid Metabolism and RNA Processing/M.C. Altman, L.M. Rich, E.R. Vanderwall, M. White, D.J. Jackson, J.S. Debley, Seattle, WA, p.A3681**
- 9:40 Type-2 Cytokine Mitigates Inflammatory Response to SARS-CoV-2/A. Molzahn, M. Conway, D. Francisco, H. Kimura, V. Pivniouk, D. Vercelli, M. Kraft, Tucson, AZ, p.A3682**
- 9:50 Eosinophil-Independent IL-5 Increase in Critically Ill COVID-19 Patients Associates with Favourable Outcome/K. Son, X. Ju, R. Jamil, B. Salter, S. Culgin, K. Miyasaki, Z. Patel, B. Cowbrough, M. Kjarsgaard, K. Radford, A. Dvorkin-Gheva, W. Alhazzani, D.M.E. Bowdish, P. Nair, D. Perri, R. Sehmi, M. Mukherjee, Hamilton, Canada, p.A3683**
- 10:00 Hyaluronan Ameliorates SARS-CoV-2 Infection via Steric Inhibition of Virion Attachment to Cells/V. Stober, N. Martin, M. Cronce, S.-H. Chen, Y. Sakamachi, S. Gabel, G. Mueller, R. Petrovich, T. Stanley, S. Rowe, S. Garantziotis, Research Triangle Park, NC, p.A3684**
- 10:10 Circulating Autoantibodies in Post-Acute Sequelae of COVID-19/R. Jamil, K. Son, C.P. Venegas, K. Miyasaki, T.N. Ho, A. Kennedy, Z. Patel, T. Swindall, S. Banerjee, B. Cowbrough, C. Huang, M. Kjarsgaard, K. Radford, J. Smith, A. Dvorkin-Gheva, Q.-Z. Li, P.K. Nair, I. Nazy, D. Bowdish, C. Carlsten, S. Svenningsen, M. Mukherjee; Vancouver, BC, Canada, p.A3685**
- 10:20 Characterization of the Immune Response by Flow Cytometry in Vaccinated versus Non-Vaccinated Patients Infected with SARS-COV-2/J.A. Huapaya, A. Etsubdink, S.M. Kanth, S. Gairhe, C. Barnett, J. Kovacs, J. Adelsberger, P. Torabi-Parizi, A.F. Suffredini, Bethesda, MD, p.A3686**

- 10:30 Humoral and Cellular Immune Responses Following SARS-CoV-2 Vaccination in Patients Receiving B-Cell Targeted Therapy/P. Marty, M. Shah, V. Van Keulen, C. Erskine, E. Theel, H. Zeng, U. Specks, P. Escalante, T. Peikert, Rochester, MN, p.A3687**
- 10:40 Identification of Highly Immunogenic Epitopes in the SARS-CoV-2 Spike Protein to Produce Neutralizing Monoclonal Antibodies for Treatment/R. Lopez-Aladid, L. Bueno-Freire, R. Farriol, E. Porta, A. López-Gavin, A. Motos, R. Aguilar, M. Vidal, A. Jimenez, R. Cabrera, N. Vazquez, E. Barbata, M. Ferrer, A.C. Palomeque, G. Moncunill, M. Lozano, A. Garcia-Basteiro, C. Dobaño, L. Fernandez-Barat, A. Torre, Barcelona, Spain, p.A3688**
- 10:50 Local SARS-CoV-2 Peptide-specific Immune Responses in Convalescent and Uninfected Human Lung Tissue Models/J. Deshane, K. Goliwas, V.J. Thannickal, K.S. Harrod, J. Donahue, Birmingham, AL, p.A3689**

BEHAVIORAL • CLINICAL

MINI SYMPOSIUM

C14 BURNOUT, DISPARITIES, AND OUTCOMES OF THE COVID-19 PANDEMIC

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 2014/2016 (West Building, Level 2)

Chairing: C.E. Brown, MD, MA, Seattle, WA
A.C. Melzer, MD, MS, Minneapolis, MN
S. Rinne, MD, PhD, Boston, MA

Oral Presentations:

- 9:30 Targeting Healthcare Provider Burnout During the COVID-19 Pandemic/S. Joshi, S. Vaishnavi, A. Brucker, A. Taylor, S. Jessica, T. Harshbarger, S.-C. Chow, P. Lee, Durham, NC, p.A3690**
- 9:40 The Influence of the COVID-19 Pandemic on Author Gender and Manuscript Acceptance Rates Among Pulmonary and Critical Care Journals/K.C. Vranas, H.B. Gershengorn, D. Ouyang, S. Cheng, A. Rogers, L. Schweiger, C.R. Cooke, C.G. Slatore, Portland, OR, p.A3691**
- 9:50 Improving Diversity in COVID-19 Vaccine Clinical Trial Enrollment: A Retrospective Analysis/A.J.O. Davis, L.M. Schnapp, S. Bidar-Sielaff, D.S. Siraj, S.L. Henderson, J.Y. Zapata, F. Osman, R.F. Veintimilla, N.W. Elizabeth, W. Hartman, Madison, WI, p.A3692**
- 10:00 The Color of a Pandemic: The Association Between Historical Residential Redlining and COVID-19 Outcomes in California/E. Casillas, M. Ye, J. Vargo, A.L. Nardone, P.B. Shete, N. Thakur, San Francisco, CA, p.A3693**

- 10:10 Preferred Language Mediates Association Between Race, Ethnicity and Delayed Presentation to Care in Critically Ill Patients with COVID-19/M. Kelly, A. Mohammed, D. Okin, G.A. Alba, S.J. Jesudasan, N.A. Dandawate, A. Gavralidis, L.L. Chang, E.E. Moin, A.S. Witkin, K.A. Hibbert, A. Kadar, P.L. Gordan, L.M. Bebell, P.S. Lai, Boston, MA, p.A3694**
- 10:20 Racial and Rural Disparities in COVID-19 Vaccination Uptake in a National Sample of Veterans/E. Bernstein, E. DeRycke, L. Han, L. Bastian, B. Bean-Mayberry, B. Bade, C. Brandt, M.M. Farmer, K.A. Crothers, M. Skanderson, C. Ruser, J. Spelman, I.S. Bazan, A. Justice, C. Rentsch, K.M. Akgun, New Haven, CT, p.A3695**
- 10:30 Factors Associated with Disability Over the 6 Months After a COVID Hospitalization Among Older Adults: The VALIANT (COVID-19 in Older Adults: A Longitudinal Assessment) Study/L.E. Ferrante, A. Hajduk, A. Cohen, G. McAvay, M. Geda, S. Chattopadhyay, S. Lee, D. Acampora, T. Gill, T. Murphy, New Haven, CT, p.A3696**
- 10:40 How Has the COVID-19 Pandemic Affected the Health Care Utilization in Children with Asthma - A Canadian Population Study/T. To, J. Zhu, K. Zhang, E. Terebessy, C. Liciskai, Toronto, Canada, p.A3697**
- 10:50 COVID-19 Patients Expressed Distinct Clinical Trait Signatures at Index Hospitalization Across the Four SARS-CoV-2 Pandemic Waves in Florida/J.E. Sia, P. Idogun, D. Patel, I. Motie, K. Hamad, M. Geary, J. Seaman, W. Wiese-Rometsch, Sarasota, FL, p.A3698**

BASIC • CLINICAL

MINI SYMPOSIUM

C15 “SURVIVING SEPSIS” IN THE POST PANDEMIC ERA

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 3005/3007 (West Building, Level 3)

Chairing: B. Rochweg, MD, MSCE, FRCPC, Hamilton, Canada
M.M. Hosey, PhD, Baltimore, MD

Featured Speaker:

- 9:30 Sepsis Syndemics and Surviving Sepsis in the PA Post-Pandemic Era/K. Rudd, Pittsburgh, PA**

Oral Presentations:

- 9:40 Identification of Pediatric Septic Shock Subclasses Using the Whole Blood Transcriptome/J.O. Yang, M. Zinter, M.Y. Wong, K. Gala, D. Markovic, B. Nadel, M. Pellegrini, L. Asaro, M. Agus, A. Sapru, Los Angeles, CA, p.A3699**

- 9:50 Associations Between Plasma Cell-Free Mitochondrial DNA, Delirium and Coma During Sepsis/C.A.**
Onyemekwu, X. Tan, J. Gamboa, K. Moghbeli, K. Potter, N. Prendergast, P. Tiberio, F. Billings, E.W. Ely, T. Hulgán, P. Pandharipande, D. Samuels, G. Tang, T.D. Girard, Pittsburgh, PA, p.A3700
- 10:00 The Immunopathological Profile of HIV-Associated Sepsis in Uganda: A Prospective Propensity-Matched Cohort Study/M.J. Cummings, B. Bakamutumaho, A. Price, N. Owor, J. Kayiwa, J. Namulondo, T. Byaruhanga, S. Sameroff, K. Jain, R. Tokarz, W. Wong, M. Muwanga, C. Nsereko, S. Shah, M. Larsen, W.I. Lipkin, J. Lutwama, M.R. O'Donnell, New York, NY, p.A3701**
- 10:10 Balanced Crystalloids versus Normal Saline for the Critically Ill Patients: A Meta-Analysis and Trial Sequential Analysis/Y. Zayed, M. Banifadel, B.N. Alzghoul, R. Reddy, A. Nasser, H.M. Alnuaimat, A. Ataya, Gainesville, FL, p.A3702**
- 10:20 Antimicrobial Activity of New β -Lactam/ β -Lactamase Inhibitor Combinations Against *Pseudomonas Aeruginosa* and *Enterobacteriales* from Patients with Pneumonia in Intensive Care Units/H.S. Sader, R.E. Mendes, C.G. Carvalhaes, M. Castanheira, North Liberty, IA, p.A3703**
- 10:30 Gut Microbiota Explain Variation in a Murine Model of Sepsis-Induced Acute Kidney Injury/K. Winner, R.P. Dickson, C. Brown, N. Falkowski, J. Luth, Ann Arbor, MI, p.A3704**
- 10:40 The Impact of Aging on Sepsis-Related Endothelial Glycocalyx Degradation/R. Sullivan, K. Oshima, N. Siddiqui, I. Zakharevich, E.P. Schmidt, J.A. Hippensteel, Aurora, CO, p.A3705**
- 10:50 Real-World Impact of Surviving Sepsis Campaign's Updated Risk-Based Strategy for Guiding Antibiotic Urgency in Suspected Sepsis/S. Skewes, S.-H. Chou, M. Kowalkowski, S.P. Taylor, Charlotte, NC, p.A3706**

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

C16 EMERGING EVIDENCE FOR REHABILITATION IN COVID-19

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2001/2003 (West Building, Level 2)

Chairing: S.J. Singh, PhD, Leicester, United Kingdom
C. Burtin, PT, PhD, Diepenbeek, Belgium

Oral Presentations:

- 9:30 Frailty and Physical Performance in 1,133 Patients Five Months Following Hospitalisation for COVID-19/H.J.C. Mcauley, R.A. Evans, C.E.R. Bolton, P. Greenhaff, A. Gupta, W. Man, S. Singh, M. Steiner, J. Whitney, J.M. Lord, N.J. Greening, Leicester, United Kingdom, p.A3707**
- 9:40 Self-Reported Recovery Status, Ongoing Symptoms and Outcome Measures at Six and 12 Months Following Hospitalisation for COVID-19 in a Large National UK Cohort Study/H.J.C. Mcauley, O. Leavy, A. Docherty, O. Elneima, N.J. Greening, E. Harrison, S. Kerr, N. Lone, A. Parmar, M. Richardson, M. Sereno, A. Sheikh, A. Singapuri, M. Thorpe, L.V. Wain, C.E. Brightling, R.A. Evans, Leicester, United Kingdom, p.A3708**
- 9:50 Joint Patient and Clinician Priority Setting to Identify Ten Key Research Questions for Survivors of a Hospital Admission with COVID-19/L. Houchen-Wolloff, K. Poinasamy, K. Holmes, M. Tarpay, C. Hastie, J. Mangwani, A. Horsley, M. Marks, A. Parmar, O. Elneima, L.V. Wain, C. Brightling, R.A. Evans, Leicester, United Kingdom, p.A3709**
- 10:00 Effects of an Automatically Titrating Oxygen-Flow System During Walking in Hypoxemic Post-COVID-19 Patients - a Pilot Randomized Controlled Double-Blind Cross Over Trial/T. Schneeberger, S. Berkel, I. Jarosch, D. Leidl, R. Gloeckl, C.J. Dennis, C. Nell, A.R. Koczulla, Schoenau am Koenigssee, Germany, p.A3710**
- 10:10 Rehabilitation for Patients Hospitalized with COVID19/E. Daynes, L. Houchen-Wolloff, N. Gardiner, S.J. Singh, Leicester, United Kingdom, p.A3711**
- 10:20 Improving Knowledge About Length of Hospital Stay, Functional Status and Muscle Strength in COVID-19 Survivors: A Prospective Observational Cross-Sectional Study/R.G. Mendes, A.D. Heubel, A.A. Viana, S.N. Linares, V.T. Amaral, G.Y.O. Oliveira, N.S. Schafausser, A.B. Silva, E.G. Ciolac, Sao Carlos, Brazil, p.A3712**
- 10:30 Outcomes Following Comprehensive Pulmonary Rehabilitation After COVID-19 Infection/S.L. O'Beirne, A.M. O'Mahony, P. Tonge, N. Jackson, D. Kidney, G. Nolan, Dublin, Ireland, p.A3713**
- 10:40 Effects and Safety of Exercise Training During the Acute Phase of Moderate COVID-19/A. Nakazawa, T. Sasaki, Y. Arayama, S. Inukai, S. Komatsu, T. Ogura, Yokohama, Japan, p.A3714**
- 10:50 Does Mild to Moderate COVID-19 Infection Impair Lung Function and Exercise Capacity After One Month of Recovery?/G.D. Back, C. da Luz Goulart, M.R. Oliveira, P.F. Camargo, C.R. Oliveira, K.W. Wende, J.C. Bonjorno Junior, R. Arbex, F.R. Caruso, R. Arena, A. Borghi Silva, Sao Carlos, Brazil, p.A3715**

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

C17 NOVEL THERAPEUTICS AND BIOMARKERS FOR IDIOPATHIC PULMONARY FIBROSIS9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 215-216 (South Building, Level 2)

Chairing: E.F. Redente, PhD, Denver, CO
N. Kaminski, MD, ATSF, New Haven, CT
D. Lagares, PhD, MSc, Boston, MA

Oral Presentations:

- 9:30 Plasma Lysophosphatidic Acid (LPA) Species Are Associated with Disease Progression in Idiopathic Pulmonary Fibrosis (IPF)/M. Neighbors, J. Zhu, Q. Li, W. Wong, G. Jia, W. Sandoval, W. Tew, South San Francisco, CA, p.A3716**
- 9:40 Selective Inhibition of Bromodomain Containing Protein 4 (BRD4) Reduces Myofibroblast Transdifferentiation and Pulmonary Fibrosis/K. Bernau, M. Skibba, J. Leet, S. Furey, C. Gehl, Y. Li, J. Zhou, N.K. Sandbo, A.R. Brasier, Madison, WI, p.A3717**
- 9:50 Optimizing of PET Allysine Probe for Imaging Lung Fibrogenesis/R.S. Knipe, S. Shuvaev, M. Drummond, J. Roberts, I. Zhou, I. Ay, P. Caravan, Boston, MA, p.A3718**
- 10:00 Mechanisms of Chronic Metabolic Stress Identify Intervention Strategies for Mitochondrial Dysfunction in Murine and Human Sftpc^{173T} Preclinical Models of Pulmonary Fibrosis/L. Rodriguez, K.-D. Alysandratos, J. Katzen, A. Murthy, Y. Tomer, P. Carson, T. Dimopoulos, V. Abraham, B.E. Himes, M. Morley, D.N. Kotton, M.F. Beers, Philadelphia, PA, p.A3719**
- 10:10 Characterization of a Novel IL-11 Receptor-Blocking Antibody, a Potential Therapeutic for IPF and Other Fibrosing Lung Diseases/J. Swaney, T. Jun, R. Horlick, I. Lu, S. Geller, M. Chai, D. King, San Diego, CA, p.A3720**
- 10:20 N23Ps as a Novel Highly Potent Antifibrotic Therapeutic Compound Class and Discovery of Its Mode of Action in a Human Ex Vivo Fibrosis Model/X. Wei, M. Gerckens, D. Porras-Gonzalez, N.J. Lang, C. Mayr, B. Ballester, H. Ma, F. See, Y. Lin, M. Wögrath, A.-M. Dworsky, F. Pelizza, M.G. Stoleriu, N. Kneidinger, J. Behr, M. Königshoff, O. Eickelberg, M. Lehmann, A.O. Yildirim, O. Plettenburg, H.B. Schiller, G. Burgstaller, Munich, Germany**

- 10:30 Antifibrotic Effects of Sobetirome, a Thyroid Hormone Receptor Beta Agonist/T. Baerenthaler, S. Ding, M. Chioccioli, F. Poli, A. Justet, K.-A. Rose, C. Cosme Jr., T. Adams, F. Ahangari, I.O. Rosas, N. Kaminski, New Haven, CT, p.A3722**
- 10:40 ABT-263 (Navitoclax) Induces Fibroblast Apoptosis and Reduces Fibrosis in Two Mouse Models of Progressive Fibrotic Interstitial Lung Disease/J. Cooley, N. Javkhlan, J. Wilson, B. Edelman, D.W.H. Riches, E.F. Redente, Aurora, CO, p.A3723**
- 10:50 Phage Immunoprecipitation Sequencing Defines CDHR5 and GIMAP1 as Novel Biomarkers for a Subset of Fibrotic Pulmonary Disorders/V. Upadhyay, Y.M. Yoon, S.E. Vazquez, T.E. Velez, K.D. Jones, C.T. Lee, C.S. Law, I. Noth, M.E. Streck, M. Anderson, J.L. DeRisi, A.I. Sperling, A. Shum, San Francisco, CA, p.A5683**

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

C18 COPD: WHO, WHY, AND HOW9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 11-12 (South Building, Exhibition Level)

Chairing: T.-L. Hackett, PhD, ATSF, Vancouver, Canada
S.S. Gutor, PhD, MD, Nashville, TN

Oral Presentations:

- 9:30 Gravitational Gradient of Expiratory Air Trapping in Early-Stage COPD Patients with Small Airways Disease/R. Baron, Y. Xin, H. Hamedani, F. Amzajerian, S. Kadlecek, I. Duncan, M.K. Ismail, K. Ruppert, R.R. Rizi, Philadelphia, PA, p.A3724**
- 9:40 Dysanapsis Is Associated with COPD Trajectories At-Risk for Mortality and Exacerbations/J. Ross, R. San Jose Estepar, S. Ash, C.L. Pistenmaa, M.K. Han, S.P. Bhatt, S. Bodduluri, J.-P. Charbonnier, G.R. Washko, A.A. Diaz, Boston, MA, p.A3725**
- 9:50 Clinical Implications of a Race-Specific Approach to Spirometry Interpretation in Chronic Obstructive Pulmonary Disease/J.H. Brems, A. Balasubramanian, N. Putcha, A. Fawzy, A. Singh, N.N. Hansel, R.A. Wise, M.C. McCormack, Baltimore, MD, p.A3726**

- 10:00 SPIROMICS COPD Patients with Decline of Lung Function Have Thinner Airway Walls at Baseline and Are More Likely to Show Bronchodilator Responsiveness/D. Gomez Ladron De Guevara, W.H. Anderson, D. Couper, P.M. Quibnera, I.Z. Barjaktarevic, R.G. Barr, S.P. Bhatt, E.R. Bleeker, R. Bowler, S. Christenson, A.P. Comellas, J.L. Curtis, M.B. Dransfield, S. Fortis, M.K. Han, N.N. Hansel, E.A. Hoffman, R.E. Kan, V. Kim, J. A. Krishnan, F. J. Martinez, V. E. Ortega, W. K. O'Neal, R. Paine III, S. P. Peters, N. Putcha, S. I. Rennard, B. Smith, D. P. Tashkin, P. G. Woodruff, C. B. Cooper, Los Angeles, CA, p.A3727**
- 10:10 Physical Activity and Exercise Capacity, and Their Relation to Pulmonary Vascular Function in COPD: Results from a Multicenter, Population-Based Study/S.É. Collins, M. Kirby, B.M. Smith, D.E. O'Donnell, W.C. Tan, J. Bourbeau, D. Jensen, M.K. Stickland, Edmonton, Canada, p.A3728**
- 10:20 Association of Central Airway Tree Caliber with Mortality Among Older Adults: The Multi-Ethnic Study of Atherosclerosis (MESA) Lung Study/M. Vameghestahbanati, C. Sack, E.A. Hoffman, N. Allen, A. Bertoni, J. Guo, D. Jacobs Jr, J.D. Kaufman, A. Laine, C.-L. Lin, D. Malinsky, E. Michos, E. Oelsner, S. Shea, K. Watson, A. Benedetti, R.G. Barr, B.M. Smith, Montreal, Canada, p.A3729**
- 10:30 Spirometry-Based Measures of Dysanapsis Among Adults with or at Risk of Obstructive Lung Diseases/L. Kingdom, M. Kirby, D. Jensen, A. Benedetti, M. Vameghestahbanati, S.D. Aaron, K.R. Chapman, D. Doiron, P. Hernandez, D.D. Marciniuk, F. Maltais, D.E. O'Donnell, B. Walker, W.-C. Tan, J. Bourbeau, B.M. Smith, Montreal, Canada, p.A3730**
- 10:40 Circulatory Proteins Mediating the Association Between COPD Phenotypes and Coronary Artery Calcification in COPD Gene Participants/A. Abbasi, K. Ahmad, K.A. Pratte, R.P. Bowler, M.J. Budoff, R. Casaburi, D.L. Demeo, C. Ferguson, W. Liu, V.S. Manubolu, J. Moore, A. Kinninger, N.B. Tiller, H.B. Rossiter, Torrance, CA, p.A3731**
- 10:50 Association Between A Plant Centered Diet and Lung Function Trajectory and Incident Emphysema: Findings from the CARDIA Lung Study/E. Eisenberg, Y. Choi, M. Jackson, A. Wang, C. Hanson, J.G. Wang, G.R. Washko, G.Y.-H. Liu, J. Shikany, L. Steffen, R. Kalhan, D. Jacobs, S. Bose, New York, NY, p.A3732**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

C19 BENCH TO BEDSIDE: ADVANCES IN SLEEP AND CARDIOVASCULAR OUTCOMES

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 3014 (West Building, Level 3)

Chairing: S. Jelic, MD, New York, NY
D.J. Gottlieb, MD, MPH, Boston, MA
M. Sanchez De La Torre, PhD, Lleida, Spain
T. Kendzerska, MD, PhD, Ottawa, Canada

Oral Presentations:

- 9:30 Long-Term Effect of OSA and CPAP on Blood Pressure in Patients with Acute Coronary Syndrome: A Post-Hoc Analysis of the ISAACC Study/M. Sanchez De La Torre, E. Garcia Gil, I.D. Benítez, A. Zapater, G. Torres, A. Sánchez-de-la-Torre, J. de Batlle, A. Targa, O. Mínguez, L. Pascual, A. Cortijo Fernandez, D. Martínez, M. Dalmases, F. Barbe, Madrid, Spain, p.A3733**
- 9:40 CPAP Adherence, Mortality and Cardio-Vascular Events in Patients with OSA: Data from the Pays de la Loire Sleep Cohort/C. Gerves-Pinquier, S. Bailly, F. Goupil, T. Pigeanne, S. Launois, L. Leclair-Visonneau, P. Masson, A. Bizieux-Thaminy, E. Oger, W. Trzepizur, F. Gagnadoux, Beaucaouze, France, p.A3734**
- 9:50 Effect of Oral Appliances on Blood Pressure in Obstructive Sleep Apnea Patients with Elevated Hypoxic Burden/D. Vena, A. Azarbarzin, R. Radmand, B. Radmand, L. Gell, L. Taranto-Montemurro, G. Labarca, L. Messineo, D. White, S. Sands, A. Wellman, Boston, MA, p.A3735**
- 10:00 Overall Diet Quality and Proinflammatory Diet in Relation to Risk of Obstructive Sleep Apnea in Three Prospective US Cohorts/T. Huang, Y. Liu, F.K. Tabung, M.J. Stampfer, S. Redline, Boston, MA, p.A3736**
- 10:10 Time-Restricted Feeding Improves Glucose Metabolism in a Mouse Model of Obstructive Sleep Apnea/M. Zhang, J. Reeves, E. Lawrence, A. Sanchez Azofra, L. Barnes, E.A. Moya, O.A. Mesarwi, La Jolla, CA, p.A3737**
- 10:20 Endothelial Cell Cholesterol Trafficking Is Disrupted in Obstructive Sleep Apnea/A. Chang, S. Gao, M. Emin, R. Shah, A. Jimenez, S. Jelic, New York, NY, p.A3738**
- 10:30 Prevalence of Nocturnal Cardiac Arrhythmias in Patients with Heart Failure and Sleep-Disordered Breathing from the ADVENT-HF Trial/C. Fisser, C.M. Horvath, D. Bradley, J.S. Floras, S. Sossalla, F. Rankin, M. Arzt, Regensburg, Germany, p.A3739**

Featured Speaker:

- 10:40 Dying with OSA, or From It: A Perspective/J.C. Jun, Baltimore, MD**

BASIC • CLINICAL

POSTER DISCUSSION SESSION

C21 DRILLING DOWN ON INFLAMMATORY MECHANISMS IN ASTHMA VIA HUMAN CELLS AND MURINE MODELS

9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 303-304 (South Building, Level 3)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: A.I. Sperling, PhD, ATSF, Charlottesville, VA
J.F. Alcorn, PhD, Pittsburgh, PA

- 501** **Leptin Augments Human Airway Fibroblast Invasion and IL-13-Induced Eotaxin Production in a Murine Model of Allergic Airway Disease/V.** Mcquade, M. Ihrle, J. Womble, K. Zhao, H. Kim, L.G. Que, J.L. Ingram, Durham, NC, p.A3740
- 502** **Role of Secretoglobulin+(Club Cell) NFκB/RelA-TGFβ Signaling in Aero-Allergen-Induced Epithelial Plasticity and Subepithelial Myofibroblast Transdifferentiation/M.** Skibba, K. Weiss, J. Huisken, A. Brasier, Madison, WI, p.A3741
- 503** **Macrophage-Intrinsic DUOX1 Contributes to Type 2 Inflammation and Mucus Metaplasia During Chronic Allergic Airway Disease/A.** Van Der Vliet, C.R. Morris, A. Habibovic, C.M. Dustin, C. Schiffers, M.-C. Lin, Y.M.W. Janssen-Heininger, M.E. Poynter, O. Utermohlen, M. Kroenke, Burlington, VT, p.A3742
- 504** **IRL201104, a Novel Immunomodulatory Peptide, Shows a Long Lasting, Dose Response and Wide Spectrum Effect Through Different Routes of Administration in a Model of Allergic Inflammation/J.** De Alba, C. Burgess, R. Foulkes, London, United Kingdom, p.A3743
- 505** **Purinergic Receptor Activation Stimulates Lipoxin A4 Production in Alveolar Macrophages Derived from Individuals with Asthma/E.A.** Townsend, A.G. Guadarrama, L.C. Denlinger, Madison, WI, p.A3744
- 506** **Primary Infection of Mast Cells with Human Rhinovirus A16 Induces T2 Gene Expression via an Autocrine Loop/Y.** Lai, M. Liu, R.C. Murphy, L.M. Rich, W.A. Altemeier, J.S. Debley, T.S. Hallstrand, Seattle, WA, p.A3745
- 507** **Ovarian Hormones Modify Pulmonary Mechanics and Allergic Inflammatory Responses to Methacholine Challenge/K.** Warren, C.E. Deering-Rice, B.S. Armstrong, T. Huecksteadt, S. Trivedi, A. Venosa, C.A. Reilly, K.A. Sanders, R. Paine, Salt Lake City, UT, p.A3746
- 508** **Fungal Allergen Induces Expansion of Invariant Natural Killer T Cell in an Acute Innate Type 2 Lung Inflammation/N.** Azalde Garcia, R. Karkout, L. Labrie, H. Al Dossary, E.D. Fixman, Montréal, Canada, p.A3747
- 509** **Airway Tuft/Brush Cells Are Required for Exaggerated Type 2 Inflammation and Mucous Metaplasia in Immature Mice Undergoing Heterologous Rhinovirus Infection/M.** Han, H. Breckenridge, D. Sawicky, C. Stroupe, A. Goldsmith, K. Bentley, I. Matsumoto, M.B. Hershenson, Ann Arbor, MI, p.A3748
- 510** **Vacuolating Cytotoxin A (VacA) - Therapeutic Potential of a Helicobacter Derived Molecule for Asthma/S.** Reuter, J. Raspe, H. Beckert, A. Westendorf, E. Pastille, T. Cover, A. Müller, C. Taube, Essen, Germany, p.A3749
- 511** **RLS-0071 Reduces Inflammatory Biomarkers in T2 Low (neutrophilic) Asthma Animal Model/P.** Kumar, Norfolk, VA, p.A3750
- 512** **Mouse Model of Late-Onset Neutrophilic Asthma Reveals Novel Cellular and Molecular Circuits Underlying Destructive Airway Neutrophilia/A.T.** Shenoy, F.T. Korkmaz, C. Lyon De Ana, C. Odom, K. Barker, W. Goltry, I. Martin, F.-Z. Shao, M.R. Jones, L.J. Quinton, A. Fine, F. Chen, A. Belkina, J.P. Mizgerd, Boston, MA, p.A3751
- 513** **Parkin Promotes Non-Type 2 Airway Inflammation Through Stat1 Signaling/B.** Berg, H.W. Chu, K.G. Dimasuay, Denver, CO, p.A3752
- 514** **Chronic House Dust Mite Exposure Shows Time-of-Day Difference in Immune-Inflammatory Response and Circadian Clock Gene Expression in the Lung/I.K.** Sundar, A. Srinivasan, S.K. Duraisamy, M. Castro, Kansas City, KS, p.A3753
- 515** **Low Airway Deoxyribonuclease-1 Activity in Eosinophilic Asthma/A.R.** Charbit, W. Raymond, M.C. Peters, D. Mauger, S.A.A. Comhair, S.C. Erzurum, L.C. Denlinger, M. Castro, A.T. Hastie, W.C. Moore, E.R. Bleecker, S.E. Wenzel, E. Israel, P. Woodruff, B.D. Levy, J.V. Fahy, San Francisco, CA, p.A3754
- 516** **IL5-Priming Increases Autophagy and Does Not Lead to Eosinophil Release of Toxic Content by Cytolysis/S.** Esnault, P. Fichtinger, K. Bernau, S.K. Mathur, N.K. Sandbo, N.N. Jarjour, Madison, WI, p.A3755
- 517** **Crosstalk Between Macrophages and Pericytes Promotes M2 Differentiation and Exacerbates Inflammatory Cytokine Release/J.R.** Johnson, R.E. Bignold, I. Ragbotra, E.S. Pugh, Birmingham, United Kingdom, p.A3756

- 518 **Identifying Extracellular Vesicles in T2-High Bronchial Epithelium: Evidence from Ex Vivo and In Vitro Studies**/A.J. Schuyler, R. Crum, J. Zhao, S. Badylak, S.E. Wenzel, Pittsburgh, PA, p.A3757
- 519 **PRMT5 in T Cells Drives Mixed Granulocytic Inflammation and Severe Allergic Airway Inflammation**/M. Guerau-De-Arellano, B.W. Lewis, S.A. Amici, H.-Y. Kim, E. Shalosky, A. Khan, J. Walum, K.M. Gowdy, J.A. Englert, N.A. Porter, M.H. Grayson, R.D. Britt, Columbus, OH, p.A3758
- 520 **Chronic Allergic Lung Inflammation Negatively Influences Neurobehavioral Outcomes in Mice**/A. Kanaya, C.W. Emala, M. Mikami, New York, NY, p.A3759
- 521 **Development of a Porcine Model of Mixed-Allergen Inflammatory Airway Disease**/M. Rector, R. Villacreses, M. Abou Alaiwa, N. Gansemer, C. Cano Portillo, L. Powers, D.K. Meyerholz, J.L. Cho, A. Pezzulo, D.A. Stoltz, Iowa City, IA, p.A3760
- 522 **Mechanisms of Early Life Respiratory Syncytial Virus Infection-Mediated Enhancement of Type 2 Allergic Lung Inflammation**/L. Labrie, H. Aldossary, V. Gaudreault, V. Moarbes, B. Ward, E.D. Fixman, Montreal, Canada, p.A3761
- 523 **Mucosal Associated Invariant T Cells May Have Any Protective Role Against Type 2 Airway Inflammation in OVA-Induced Murine Asthma Model**/H. Sasano, N. Harada, Y. Sandhu, Y. Tanabe, S. Harada, T. Watanabe, Y. Sato, T. Nishimaki, S. Abe, S. Ueda, A. Goto, T. Takeshige, K. Matsuno, J. Ito, T. Nagaoka, R. Atsuta, A. Chiba, H. Akiba, S. Miyake, K. Takahashi, Tokyo, Japan, p.A3762
- 524 **Endothelial Thrombopoietin Receptor Controls Eosinophil Trafficking in Asthma and Chronic Rhinosinusitis**/A. Korde, M. Haslip, F. Ahangari, J. Pober, G.L. Chupp, P. Manes, A. Gonzalez, S. Takyar, New Haven, CT, p.A5684
- 525 **Dectin-2 Recognizes Gut Dysbiosis of the Commensal Fungi *Walleimia Mellicola* and Is Essential for the Gut-Lung Axis Interactions Aggravating Asthma in Murine Models**/A. Kanj, T. Kottom, M. Choudhury, K. Schaeffbauer, A.H. Limper, J. Skalski, Rochester, MN, p.A5685

BEHAVIORAL • CLINICAL

POSTER DISCUSSION SESSION

C22 INFLUENCE OF SYSTEMS AND SOCIETY ON HEALTHCARE AND HEALTHCARE DELIVERY

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3016/3018 (West Building, Level 3)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: M.A. Valerio, PhD, MPH, Brownsville, TX
A. Volerman, MD, Chicago, IL
S. Niranjana, PhD, MS, BPharm

- 1001 **Examining Changes in Tobacco Consumption Amidst the COVID-19 Pandemic**/H. Loui, L. Wisk, R. Buhr, Los Angeles, CA, p.A3763
- 1002 **Cannabis Use and Risk of Adverse Respiratory Events: A Population-Based, Data-Linkage Cohort Study**/N. Vozoris, J. Zhu, C.M. Ryan, C.-W. Chow, T. To, Toronto, Canada, p.A3764
- 1003 **Prevalence of High Flow Nasal Canula in the Covid-19 Era - An Appraisal of Usage and Outcome in US Hospitals**/Y. Dai, B. Mohr, A. Harvey, Pittsburgh, PA, p.A3765
- 1004 **Barriers to TB Care During the COVID19 Pandemic: A Comparison Between Urban and Rural Populations in Uganda**/R. Padalkar, I. Sekitoleko, B. Mudashiru, M. Hammad, M. Helwig, S. Zawedde Muyanja, T. Siddharthan, P.D. Jackson, Stratford, NJ, p.A3766
- 1005 **Area Deprivation Index (ADI), a Marker of Socioeconomic Status, as a Predictor of Patient- and Family-Level Characteristics in COVID-19 Critical Illness**/M. Mayer, M.D. Althoff, S. Yu, H. Cruse, R.D. Stapleton, T. Amass, Aurora, CO, p.A3767
- 1006 **Impact of the COVID-19 Pandemic on Health Care Resource Utilization (HCRU) and Costs in Asthma in the United States: A Population-Based Study**/M. Bogart, X. Han, L. Bengtson, K. Rothnie, S. Gelwicks, T. Bancroft, A. Cole, H. Birch, N. Swamy, D. Leather, C. Compton, A. Ismaila, Research Triangle Park, NC, p.A3768
- 1007 **The Impact of Insurance Coverage on COVID-19 Outcomes Among a Racially Diverse Population**/P.A. Verhoef, Honolulu, HI, p.A3769
- 1008 **Factors Associated with Antimicrobial Overtreatment or Delayed Intervention for Early Sepsis in a Single Health System**/A.R. Schertz, S.P. Taylor, Winston-Salem, NC, p.A3770

- 1009 Utilization of Addiction Treatment Services for Patients Admitted to the ICU with an Alcohol-Related ICU Encounter/K. Hills-Dunlap, M. Moss, S.E. Jolley, Boston, MA, p.A3771**
- 1010 Looking Through the Lens: Using Youth Participatory Action Research and PhotoVoice to Empower Youth and Identify Place-Based Interventions in Environmental Justice Communities/C. Curiel, C. Vera, M. Williams, L. Copeland, H.D. Muñoz, J. Arellanes, M. Rodriguez, S.J. Diaz, J.M. Gomez Garcia, M.J. Gomez Garcia, R. De La Rosa, J.R. Balmes, N. Thakur, San Francisco, CA, p.A3772**
- 1011 The Association of Race with Subspecialty Pulmonary Service Admission and Patient-Centered Outcomes: A Retrospective Cohort Study/A. Winston, C. Clancy, J.K. Heath, J.T. Lee, R. Kohn, Philadelphia, PA, p.A3773**
- 1012 Precision Sleep Medicine: Variations in Sleep Quality Among Asian Americans in the National Health Interview Survey (2006-2018)/R. Wang, Z. Wang, A. Jamal, S. Dan, M. Srinivasan, L. Eggert, Houston, TX, p.A3774**
- 1013 Association of Perceived Stress on COPD Outcomes in Low-Income Urban Neighborhoods/M. Krishnan, J. Woo, K.M. Romero, W. Lorizio, K. Koehler, M.C. McCormack, N. Putcha, M. Eakin, N.N. Hansel, Baltimore, MD, p.A3775**
- 1014 Formulary Changes in Chronic Obstructive Pulmonary Disease and the Association with COPD Exacerbations, Health Care Utilization and Costs: A Difference-in-Differences Analysis/K. Duan, L.M. Donovan, E.S. Wong, L.J. Spece, L.C. Feemster, A. Bryant, R. Plumley, M.P. Collins, D.H. Au, Seattle, WA, p.A3776**
- 1015 Real-World Treatment Patterns Following Chronic Obstructive Pulmonary Disease (COPD) Exacerbation in Patients with Commercial or Medicare Insurance in the United States/M. Bogart, G. Germain, F. Laliberté, D. Lejeune, M.S. Duh, Research Triangle Park, NC, p.A3777**
- 1016 Red-Lining Magnifies Socio-Economic Contributions to COPD Prevalence/A.D. Baugh, M. Ye, P. Woodruff, N. Thakur, San Francisco, CA, p.A3778**
- 1017 Patents and Exclusivities on Inhalers for Asthma and COPD, 1986-2020/W.B. Feldman, D. Bloomfield, R. Beall, A. Kesselheim, Boston, MA, p.A3779**
- 1018 Implementing Holistic Review Practices in a Pulmonary and Critical Care Medicine Fellowship/J. Bailey, A.C. Wang, D.R. Crouch, B.Y. Sunwoo, J. Mandel, K.M. Kerr, L.E. Crotty Alexander, La Jolla, CA, p.A3780**
- 1019 Mechanical Ventilation Training of Pulmonary Critical Care Fellows During the COVID-19 Pandemic/A. Shiari, A. Mohamed, D.G. Venkat, S.J.-E. Lee, A. Sankari, Detroit, MI, p.A3781**
- 1020 Effects of the COVID-19 Pandemic on Pulmonary and Critical Care Training in the United States/A. Madanieh, C. Orabi, S. Madanieh, J.P. Metcalf, H. Youness, Oklahoma City, OK, p.A3782**
- 1021 Bridging to Adulthood — Pediatric to Adult Transition Experience of Young Adults with Neuromuscular Disease and Ventilator-Dependent Chronic Respiratory Failure/P.C. Cheng, A.G. Chidambaram, E. Chotzoglou, J.H. Hansen-Flaschen, J. Ackrivo, M.M. Rey, P. Nelin, L. Gagen, S. Vahlsing, A. Perng, L. Marchiano, A. Carraher, J. Aldridge, H.B. Panitch, Indianapolis, IN, p.A3783**
- 1022 Women Empowerment in Medical Literature: A Journey of 60 Years/S. Nadeem, O. Haider, S. Fatima, F.N. Masud, I. Ratnani, Houston, TX, p.A3784**
- 1023 Measuring the Cost of Multidisciplinary Ambulatory Care for Cystic Fibrosis with a Patient-Level Costing Model/R. Perkins, S. Shehab, P. Marchetti, R. Kaplan, G.S. Sawicki, Boston, MA, p.A3785**
- 1024 Out of Pocket Expenditure and High Deductible Insurance Plans Impart High Economic Burden for Persons with Cystic Fibrosis/R. Perkins, P. Marchetti, G.S. Sawicki, Boston, MA, p.A3786**
- 1025 Preventive Drug Lists and Controller Medication Use and Out-of-Pocket Costs for Patients with Asthma in High-Deductible Health Plans/A. Galbraith, J.F. Wharam, D. Ross-Degnan, F. Zhang, A.C. Wu, R. LeCates, A. Sinaiko, Boston, MA, p.A5686**

CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

**C23 BEYOND THE LUNG:
COMORBIDITIES IN COPD**

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 9-10 (South Building, Exhibition Level)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: N.A. Hanania, MD, MS, MSc, ATSF, Houston, TX
 J.K. Krishnan, MD, MBA, MSc, New York, NY
 J. Bon, MD, MS, ATSF, Pittsburgh, PA

101 Prediction of Sarcopenia Using Proteomics/N.A. Enzer, S. Mason, B. Choi, A.A. Diaz, G.R. Washko, R.S.J. Estépar, S. Ash, Boston, MA, p.A3787

102 Plasma Adiponectin Is Inversely Correlated with Muscle Mass in Smokers/R.H. Zou, S.M. Nourae, Y. Zhang, C.R. Kliment, F.C. Sciruba, D. Forman, J. Bon, Pittsburgh, PA, p.A3788

- 103 Long Term Clinical Outcome of Chronic Obstructive Pulmonary Disease Patients with Sarcopenia/Y.J. Choi, T. Kim, H.J. Park, J.-H. Cho, H.J. Kim, M.K. Byun, Seoul, Korea, Republic of, p.A3789**
- 104 Sex-Specific Patterns of Skeletal Muscle Fiber Type Shifts in a Cohort of COPD Patients/J.W. Chiles, R.R. Tindal, A.C. Wilson, B.Y. Hanaoka, K.M. Lavin, M.T. Dransfield, M.M. Bamman, M.-L.N. McDonald, Birmingham, AL, p.A3790**
- 105 Contrast Enhanced Computed Tomography Based Cumulated Thoracic Muscular Cross-Sectional Area and the Correlation to Single Muscle Groups of the Thorax; Pectoralis, Latissimus Dorsi, and Spinae Erector Muscles in Patients Without Chronic Diseases, a Pilot /M.S.G. Brath, M. Sahakyan, P. Veiss-Pedersen, E.B. Mark, J.B. Frokjær, L.R. Ostergaard, H.H. Rasmussen, U.M. Weinreich, Aalborg, Denmark, p.A3791**
- 106 Prevalence of Osteoporosis in Patients Hospitalized with COPD Exacerbation: Descriptive Analysis from National Inpatient Sample/R. Sinha, A. Gopalakrishnan, U. Khan, H. Guzman, A. Sadeghi, V.P. Vasudevan, Brooklyn, NY, p.A3792**
- 107 Improvements in Lung Function with Revefenacin for Nebulization in Adults with Moderate to Very Severe Chronic Obstructive Pulmonary Disease and Comorbid Anxiety and Depression: Post Hoc Subgroup Analysis of Phase 3 Clinical Trials/A.S. Iyer, A.M. Yohannes, C. Clay, L.S. Cochran, D.A. Lombardi, S.P. Bhatt, Birmingham, AL, p.A3793**
- 108 Depression Moderates Response to a Pedometer-Mediated, Web-Based Physical Activity Intervention in Veterans with Chronic Obstructive Pulmonary Disease (COPD)/P. Bamonti, S.A. Robinson, M. Mongiardo, M. Moy, Boston, MA, p.A3794**
- 109 Impact of Heart Failure in Patients Admitted for Acute Exacerbation of Chronic Obstructive Pulmonary Disease/A. Shahi, U. Vardar, R. Atluri, M. Murthi, S. Khouri, Chicago, IL, p.A3795**
- 110 Abnormalities of Ventricular Repolarization in Chronic Obstructive Pulmonary Disease/A.L. Koch, T. Siddharthan, N.M. Punjabi, Miami, FL, p.A3796**
- 111 Acute Kidney Injury in Community Treated Exacerbations of Chronic Obstructive Pulmonary Disease in the London EXCEL Cohort/M.A. Macleod, G.C. Donaldson, D.J. Wiseman, A.I. Ritchie, J.A. Wedzicha, London, United Kingdom, p.A3797**
- 112 Genetic Variation in Genes Associated with GERD in COPD/A.C. Wilson, S.P. Bhatt, H. Tiwari, M.T. Dransfield, M.-L.N. McDonald, Birmingham, AL, p.A3798**
- 113 Retrospective Cohort Analysis of Hemoglobin A1C in a Cigarette Exposed COPD Population/J.C. Hulbert, J. Bon, C. Karoleski, F.C. Sciruba, Pittsburgh, PA, p.A3799**
- 114 Replication of Comorbidity Medication Patterns Among Smokers in the COPD Gene Study/Y. Li, H. Anderson, K.A. Young, N. Richmond, K. Pratte, E. Austin, J.E. Hokanson, S.I. Rennard, S. Schmiege, T.L. Crume, G.L. Kinney, Aurora, CO, p.A3800**
- 115 Older US Adults with COPD Face High Risk of Polypharmacy, Falls, and Difficulty with Activities of Daily Living/E. Wang, K.E. Wroblewski, M.K. McClintock, J.M. Pinto, L.J. Witt, Chicago, IL, p.A3801**
- 116 Insomnia Among Patients Admitted with an Acute Exacerbation of Chronic Obstructive Pulmonary Disease and Association with Readmission/J.M. Neborak, J.C. Rojas, N. Kappel, J. Gupta, M. Huisingh-Scheetz, S.R. White, V. Arora, V.G. Press, Chicago, IL, p.A3802**
- 117 Characteristics and Clinical Outcomes of Type 1 Versus Type 2 Myocardial Infarction in Patients with Chronic Obstructive Pulmonary Disease/M. Al Khateeb, M. Yusuf, M. Aldiabat, Y. Al Jabiri, A. Horoub, Bronx, NY, p.A5687**

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C24 ARDS: BASIC SCIENCE TO THE BEDSIDE

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 3009/3011 (West Building, Level 3)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: N.A. Sathe, MD, Seattle, WA
 N.J. Meyer, MD, MS, Philadelphia, PA
 S. Sahetya, MD, MHS, Baltimore, MD

901 Lung Protection by Hypercapnia Depends Critically on the Method Used to Raise CO₂ in an Animal Model of Unilateral Pulmonary Artery Ligation/T. Mauri, E. Spinelli, A. Damia, I. Marongiu, A. Caccioppola, E. Garbelli, V. Figgiaconi, G. giudici, G. Dal Santo, G. Lopez, F. Damarco, C. Lonati, O. Biancolilli, M. Battistin, L. Rosso, V. Vaira, S. Gatti, A. Pesenti, Milan, Italy, p.A3803

902 Minimizing Lung Collapse versus Lung Overdistension in ARDS: A Randomized Controlled Experimental Study - Preliminary Results/M.L.D.A. Sousa, B.H. Katira, V. Hsing, D. Engelberts, M.B.P. Amato, M. Post, L. Brochard, Toronto, Canada, p.A3804

- 903 Patient Ventilator Asynchrony in Pediatric ARDS Can Be Detected by Machine Learning Models/B. Yoon, D. Ledbetter, I. Obeso, A. Eckberg, R.G. Khemani, Los Angeles, CA, p.A3805**
- 904 Mechanical Ventilation of Lung Injury with an Automatic Resuscitator: Randomized Controlled Experimental Study Using an ARDS Model/M.L.D.A. Sousa, B.H. Katira, V. Hsing, D. Engelberts, M. Post, P. Dorian, L.J. Brochard, Toronto, Canada, p.A3806**
- 905 Pediatric Esophageal Balloon Manometry: Errors Between Automated and Manual Inflation/C.J. Newth, J.C. Hotz, W. Wong, M. Virk, D.R. Shapiro, R.G. Khemani, Los Angeles, CA, p.A3807**
- 906 Pharmacologically-Enhanced Mitochondrial (mt) DNA Repair Suppresses Organ Dysfunction in a Porcine Model of Hemorrhage and Truncal Ischemia-Reperfusion Injury/V.M. Pastukh, A. Francis, R.J. Langley, B. Prey, J. Williams, G.T. Daly, G. Reynolds, N. Ieronimakis, M. Eckert, J. Bingham, M. Martin, M.N. Gillespie, Mobile, AL, p.A3808**
- 907 Serum Growth Differentiation Factor-15 and Myostatin Accurately Detect Distinct Neuromyopathy Phenotypes in Patients Exposed to Systemic Neuromuscular Blockade/S.E. Jolley, E.L. Burnham, J. Gaydos, J. McKeenan, C. Higgins, C.T. Hough, M. Moss, Aurora, CO, p.A3809**
- 908 Fenofibrate Improves the Muscle Metabolic Profile in Aged but Not Adult Lung Injured Mice/J.T.W. Krall, K. Gibbs, L. Belfield, C. Liu, L.D. Purcell, C.-C. Chuang Key, D.C. Files, Winston-Salem, NC, p.A3810**
- 909 Quantification and Characterization of Mitochondrial DNA(mtDNA) Damage Associated Molecular Patterns(DAMPs) in Cell-Free Serum of Acute Respiratory Failure Patients/N.N. Ahmed, E. Hartsell, G.T. Daly, V.M. Pastukh, L.D. Purcell, M. Hamo, M. E. Miguad, D.C. Files, P. E. Morris, M.N. Gillespie, R.J. Langley, Mobile, AL, p.A3811**
- 910 MUC5B Promoter Polymorphism and Acute Respiratory Distress Syndrome: Validation in a De-Identified Electronic Health Record Biobank/V.E. Kerchberger, J.B. McNeil, C.T. Wang, N. Zheng, A. Tapdiya, J.A. Bastarache, W.-Q. Wei, L.B. Ware, Nashville, TN, p.A3812**
- 911 Plasma Biomarkers in Acute Respiratory Distress Syndrome Show Different Patterns in COVID-19 Compared to Non-COVID-19 Etiology/N. Heijnen, L. Hagens, M. Smit, R. Schnabel, I. van der Horst, M. Schultz, D. Bergmans, L. Bos, Maastricht, Netherlands, p.A3813**
- 912 Metabolomic Biomarkers Measured at Patient Discharge Predict Long-Term Physical Function in Survivors of Acute Respiratory Failure/T. Shaw, K. Grant, S. Gandotra, E. Hartsell, G.T. Daly, L.D. Purcell, M. Hamo, M.N. Gillespie, D.C. Files, P.E. Morris, R.J. Langley, Mobile, AL, p.A3814**
- 913 Epinephrine-Induced Hyperperfusion of Acute Lung Injury Using Dynamic Contrast Enhanced Computed Tomography/Y. Xin, T. Kim, K. Martin, H. Song, A. Lenart, L. Staelin, J. Shen, M. Petrov, K. Rozenberg, S. Gerard, J. Herrmann, S. Humayun, P. Shah, U. Sidhu, S. Bathula, K. Reutlinger, M. Staley, P. Delvecchio, J. Barakat, S. Sarfaraz-Khan, I. Duncan, R. Rizi, L. Berra, M. Cereda; Philadelphia, PA, p.A3815**
- 914 Does the Tidal Volume Matter? A Retrospective Analysis of Ventilation Parameters in Severe Acute Lung Injury Patients/D.C. Marshall, J.D. Saliccioli, S. Hao, L.A. Celi, M. Komorowski, London, United Kingdom, p.A3816**
- 915 Variation in Ventilator Management and Mortality in Acute Respiratory Distress Syndrome (ARDS)/M. Lesieur, N.A. Bosch, A.J. Walkey, Boston, MA, p.A3817**
- 916 Analysis of the Effects of Glucocorticoid Use on the Systemic Host Immune Response in Acute Respiratory Failure/N. Al-Yousif, S.M. Nouraie, M. Broerman, Y. Zhang, T.L. Suber, J. Evankovich, C. Schaefer, C.M. Drohan, W. Bain, G. Kitsios, B.J. Mcverry, F.A. Shah, Pittsburgh, PA, p.A3818**
- 917 Diaphragm Neurostimulation During Mechanical Ventilation Mitigates Hippocampal Apoptosis in a Porcine Moderate-ARDS Model/T. Bassi, E. Rohrs, K. Fernandez, M. Nicholas, M. Ornowska, J. Wittmann, M. Gani, D. Evans, S.C. Reynolds, Vancouver, Canada, p.A3819**
- 918 Sex as a Biologic Variable in the Skeletal Muscle Wasting Response to Acute Lung Injury in Mice/L. Belfield, J.T.W. Krall, W. Hiatt, C. Liu, L.D. Purcell, S. Carter, K. Gibbs, D.C. Files, Winston-Salem, NC, p.A3820**
- 919 Acute Respiratory Distress Syndrome After In-Hospital Cardiac Arrest: Incidence and Association with Outcomes/J. Shih, H.K. Robertson, M. Issa, A.V. Grossestreuer, M.W. Donnino, K.M. Berg, A. Moskowitz, Boston, MA, p.A3821**
- 920 Hospital-Level Availability of Prone Positioning, 2019 vs 2021/X. Audhya, N.A. Bosch, J. Stevens, A.J. Walkey, A. Law, Boston, MA, p.A3822**
- 921 Inhaled Sedation in Patients with COVID-19-Related Acute Respiratory Distress Syndrome: An International Retrospective Study/M. Jabaudon, R. Coupet, M. Schläpfer, T.A. Neff, P. Boucher, P. Bailly, M. Bellgardt, R. Badenes, T. Becher, C. Varillon, U. Günther, D. Morand, B. Pereira, B. O'Gara, Clermont-Ferrand, France, p.A3823**
- 922 Prospective Evaluation of Serial Protein Biomarker Measurements in Sepsis-Induced Acute Respiratory Distress Syndrome/P. Yang, E. Iffrig, F. Harris, G.S. Martin, A.M. Esper, Atlanta, GA, p.A3824**

- 923 **Increased Circulating Alpha-1 Antitrypsin Confers a Short- and Long-Term Survival Benefit in Acute Respiratory Distress Syndrome**/G. Hogan, T.P. Carroll, D.F. McAuley, C.M. O'Kane, N.G. Mcelvaney, G.F. Curley, Dublin, Ireland, p.A3825
- 924 **Characterization of Club Cell Secretory Protein (CC16) in Serum Samples from the FACTT Trial**/A.M. Chase, S. Almutashiri, A.S. Newsome, D. Zhang, Augusta, GA, p.A3826
- 925 **Effects of Inhaled Sevoflurane on Alveolar Fluid Clearance in a Piglet Model of Acute Respiratory Distress Syndrome**/M. Jabaudon, R. Blondonnet, B. Paquette, J. Audard, R. Guler, C. Belville, L. Blanchon, C. Saint-Béat, C. Leclaire, W. Lenga, B. Pereira, J.-M. Constantin, R. Zhai, Clermont-Ferrand, France, p.A3827

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C25 **TERRORISM, INHALATIONAL DISASTERS, AND DEPLOYMENT-RELATED LUNG DISEASE**

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 203-204 (South Building, Level 2)

Poster Viewing

9:30-10:00

Discussion

10:00-11:00

Chairing: S.E. Jordt, PhD, Durham, NC
K.L. Bailey, MD, ATSF, Omaha, NE
A.M. Szema, MD, ATSF, South Setauket, NY

- 201 **Acute Lung Injury Following a Single Inhaled Exposure to Arsenic Trioxide**/N. Mariappan, I. Zafar, C.-C. Wei, S. Ahmad, A. Abdelsalam, H.M. Goymer, A. Agarwal, M. Athar, V.B. Antony, A. Ahmad, Birmingham, AL, p.A3828
- 202 **Delayed Lung Injury in the Survivors of Cutaneous Exposure to Arsenicals**/R. Surolia, F. Li, P. Singh, K.G. Dsouza, C.T. Stephens, Z. Wang, H. Zeng, M. Athar, V. Antony, Birmingham, AL, p.A3829
- 203 **Role of BRD4 in Arsenic Driven Small Airways Disease**/K.G. Dsouza, R. Surolia, P. Singh, F.J. Li, C.T. Stephens, W. Zheng, H. Zeng, V.B. Antony, Birmingham, AL, p.A3830
- 204 **Acute Effect of Chlorine Exposure on Inflammation and Lung Remodeling of Domestic Dust Mite-Sensitized Mice**/S.N. Felix, S.K.M. Bezerra, I.S. de Genaro, D.C.H. Kunzler, L.C.T. Lazarin, B. Schaeffer, F.C.P. de Andrade, R.D.P. Vieira, I.D.F.L.C. Tiberio, J. Waisberg, B.M.S. Romanholo, Sao Paulo, Brazil, p.A3831

- 205 **Antidotal Effects of the HSP90 Inhibitor, AT13387, Against Exposure to HCl in Adult and Pubescent Mice**/R.M.L. Colunga Biancatelli, P.A. Solopov, C. Dimitropoulou, J.D. Catravas, Norfolk, VA, p.A3832
- 206 **Phytoestrogens as a Potential Antidotes Against Hydrochloric Acid-Induced Pulmonary Fibrosis**/P.A. Solopov, R.M.L. Colunga Biancatelli, C. Dimitropoulou, J.D. Catravas, Norfolk, VA, p.A3833
- 207 **Biomarkers and Drugs Targets for Phosgene Induced Pulmonary Inhalation Injuries**/S. Achanta, A. Marcus, A. Caceres, I. Merutka, S.E. Jordt, Durham, NC, p.A3834
- 208 **Epigenetic Modifications and Inflammatory Phenotype of Mouse Lung Topically Exposed to Chemical Vesicant, Phenylarsine Oxide**/S. Manzoor, N. Mariappan, I. Zafar, S. Shakil, R. Srivastava, M. Kashyap, J. Khan, S. Ahmad, A. Agarwal, M. Athar, V. Antony, A. Ahmad, Birmingham, AL, p.A3835
- 209 **Pulmonary Response to a Single Day of Exposure to Aerosolized Graphene Oxide in Sprague Dawley Rats**/P. Upadhyay, L.S. Van Winkle, S.M. Thomasy, D. Bitounis, D. Parviz, P. Demokritou, K.E. Pinkerton, Davis, CA, p.A3836
- 210 **Novel Primary Human Airway Epithelial Signatures of Toxic Chemical Inhalation Exposures Identified from Single Cell RNA Sequencing**/M.D. Mcgraw, C.-Y. Chu, S. Kim, S. Bhattacharya, J. Malik, G.S. Pryhuber, T.J. Mariani, Rochester, NY, p.A3837
- 211 **Evaluation of a Murine Model of Deployment-Related Constrictive Bronchiolitis Using Sulfur Dioxide Exposure**/J.J. Osterholzer, S. Lahiri, S. Teitz-Tennenbaum, K.N. Selbmann, K. Siddiqui, C. Flory, A. Ganguly, Ann Arbor, MI, p.A3838
- 212 **Depletion of Alveolar Macrophages Ameliorates Club Cell Injury-Induced Peribronchiolar Fibrosis in a Murine Model of Deployment-Related Constrictive Bronchiolitis**/J.J. Osterholzer, S. Teitz-Tennenbaum, K.N. Selbmann, S. Lahiri, N. Subbotina, T.H. Sisson, A.-K.T. Perl, Ann Arbor, MI, p.A3839
- 213 **The Degree of Functional Small Airways Disease in Young Military Personnel with Constrictive Bronchiolitis Is Comparable to Older Patients with COPD**/C.W. Davis, C. Lopez, A.J. Bell, A. Rabin, R.F. Miller, A. Guttentag, S. Murray, M.J. Falvo, M.K. Han, C.J. Galban, J.J. Osterholzer, Ann Arbor, MI, p.A3840
- 214 **Asthma Endotypes in Post-9/11 Deployment-Related Asthma**/S.D. Krefft, L. Zell-Baran, K. Pang, C. Onofrei, R. Kraus, S. Sharma, F. Holguin, C.S. Rose, Denver, CO, p.A3841

- 215 Laryngeal Hypersensitivity in a Veteran Cohort with Remote Exposure to Tear Gas and Pepper Spray/A.** Shah, J. Therkorn, M. Arjomandi, M.J. Falvo, N. Jani, S.D. Krefft, J.J. Osterholzer, A.M. Sotolongo, S.E. Hines, Baltimore, MD, p.A3842
- 216 Chronic Respiratory Symptoms Following Deployment-Related Occupational and Environmental Exposures Among US Veterans/E.** Garshick, S.P. Proctor, K.S. Nakayama, N.L. Smith, A.M. Korpak, P. Ciminera, C. Baird, W. Kuschner, C.A. Redlich, P.D. Blanc, West Roxbury, MA, p.A3843
- 217 Dyspnea, Wheeze, and Chronic Cough in Blast-Exposed Veterans from the Veterans Affairs Toxic Embedded Fragment Registry/D.R.** Glick, J. Gaitens, C.H. Brown, M.A. Reback, K.H. Chin, K. Agnetti, M.A. McDiarmid, S.E. Hines, Baltimore, MD, p.A3844
- 218 Cardiopulmonary Exercise Testing and Exertional Dyspnea STAMPEDE III Evaluation of Post-Deployment Respiratory Symptoms/M.M.** Rosas, J. Hunninghake, B. Barber, R.J. Walter, M.J. Morris, Fort Sam Houston, TX, p.A3845
- 219 Reduced Gas Diffusion Among Deployed Veterans with Preserved Spirometry Is Driven by a Reduction in Pulmonary Capillary Volume/M.J.** Falvo, J. Therkorn, W. Qian, M. Watson, T. Alexander, D. Ndirangu, H.M. Kipen, A. Gow, B. Samy, A.M. Sotolongo, East Orange, NJ, p.A3846
- 220 Development and Validation of a Simple Mortality Prediction Score for Carbon Monoxide Poisoning Utilizing Deep Learning/M.** Zhang, J.J. Rose, J. Pan, A. Pizon, M. Saul, M. Donahoe, M.T. Gladwin, S.M. Nouraei, Pittsburgh, PA, p.A3847
- 221 Antifibrotic Treatment Prevalence, Clinical Outcomes, and Economic Burden Among Veterans with Idiopathic Pulmonary Fibrosis (IPF) in the United States/Y.** Qiu, J. Zhu, B. Elpers, C. Dieyi, C. Byrne, R. Singh, A. Fischer, Princeton, NJ, p.A3848
- 222 IL-17a Neutralization in Rats Exposed Repetitively to Diacetyl Vapors/E.** House, S.-Y. Kim, C.J. Johnston, M.D. Mcgraw, Rochester, NY, p.A5688
- 223 Are Human Monocyte Derived Macrophages a Suitable Surrogate for In Vivo Derived Lung Macrophages in Studies of Inhaled Toxicants?/E.** Hickman, C. Cobos-Urbe, R. Immormino, M.E. Rebuli, T. Moran, N.E. Alexis, I. Jaspers, Chapel Hill, NC, p.A5689

CLINICAL

POSTER DISCUSSION SESSION

C26 ADVANCING CARE IN ACUTE AND CHRONIC ILLNESS

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 212-214 (South Building, Level 2)

- Poster Viewing 9:30-10:00**
- Discussion 10:00-11:00**
- Chairing:** T.T. Von Visger, APRN, PhD, CCNS, PCCN, Buffalo, NY
K. Calkins, PhD, Milwaukee, WI
- 401 Association Between Depression and Frailty Among Adults with Chronic Obstructive Pulmonary Disease: The Health and Retirement Study/S.** Woo, K. Lee, Wilmington, NC, p.A3849
- 402 Urban Superfund Sites and Impact on Local Community/C.T.** Stephens, R. Surolia, F.J. Li, Z. Wang, P. Singh, K.G. Dsouza, H. Zeng, M.T. Dransfield, V.B. Antony, R. Ramachandran, Y.-I. Kim, S. Bae, Birmingham, AL, p.A3850
- 403 A Dedicated Emergency Department Sepsis RN Team to Reduce Sepsis Mortality and Readmissions/L.** Gomez, K. LeClair, D. Jenkins, J.K. Graham, Chula Vista, CA, p.A3851
- 404 Size and Interactions of Mechanically Ventilated ICU Teams: A Network Science Approach/H.** Ratliff, D. Isaman, O. Yakusheva, D.K. Costa, Ann Arbor, MI, p.A3852
- 405 Disaster Preparedness Disparities: Analysis of the 2018-2020 FEMA National Household Survey/M.** Shukla, W.M. Gibson-Scipio, T. Amberson, J. Castner, Detroit, MI, p.A3853
- 406 Results of Clinical Performance Testing of a Novel Wearable e-Stethoscope in Patients with Chronic Lung Diseases/M.** Glass, J. Kroh, S. McClintock, H.L. Glass, Wilmington, DE, p.A3854
- 407 Involving High School Students for Community Participation in Health Equity Research/C.T.** Stephens, R. Surolia, F.J. Li, P. Singh, Z. Wang, H. Zeng, K.G. Dsouza, S. Bae, A. Lake, M.T. Dransfield, V.B. Antony, Birmingham, AL, p.A3855
- 408 Nurse-Led Home-Visit Transitional Care Programs for People Discharged from Hospital to Home: A Scoping Review/K.** Lee, S. Woo, N. Baek, J. Seo, Incheon, Korea, Republic of, p.A5690
- 409 School Nurse Asthma Policy Knowledge and Implementation: An Illinois Perspective/A.A.** Pappalardo, R. Dasgupta, M. Gonzalez, E. Salem, N. Wolverton, S. Geiger, N. Amerson, E. Ewoo, A. Volerman, Chicago, IL, p.A5691

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C27 JUST BREATHE: UPDATES IN PEDIATRIC LUNG EXPOSOME SCIENCE9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 2005/2007 (West Building, Level 2)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: D.R. Rao, MD, Dallas, TX
J. Rice, MHS, Philadelphia, PA
A. Brown, MD, MBE, Valhalla, NY

601 Examining Respiratory Symptoms Among Young Adults Using "Ice"-Hybrid E-Cigarette Flavors/A.P. Tackett, J. Cho, L. Whitted, A. Harlow, E. Vogel, S. Cwalina, H. Lung, S. Coreas, A.M. Leventhal, J.L. Barrington-Trimis, J.P. Lewinger, K.T. Islam, R. McConnell, Los Angeles, CA, p.A3856

602 Lung Disease Severity and Steroid Dosing in Adolescents with E-Cigarette, or Vaping Product, Use Associated Lung Injury (EVALI)/B. Abdallah, D.R. Rao, Dallas, TX, p.A3857

603 Impulsivity-Related Personality Traits as Predictors of E-cigarette Use Among Young Adults Over Time/A. Du, A. Mittal, W.W. Merz, M. Myers, L.E. Crotty Alexander, N. Doran, La Jolla, CA, p.A3858

604 Patient Characteristics of Adolescents with E-cigarette and Vaping Abuse Identified Through a Novel Partnership Between Pediatric Pulmonary Medicine and Addiction Psychiatry/E. Holmes, K. Johnston, R. Deterding, P. Riggs, A. Messinger, Aurora, CO, p.A3859

605 Lung Function Test Changes in Symptomatic Patients Using E-cigarette and Vaping Products/S. Choudhary, M.B. Pirzada, S. Ocal, A. Lin, S. Safi, M. Akerman, Mineola, NY, p.A3860

606 Implementing Vaping Screening: A Single Center Experience/S. Imran, J.B.-Y. Tam-Williams, Kansas City, MO, p.A3861

607 Air Quality Index and Childhood Asthma: A Pilot Intervention/F.J. Rosser, Y.-Y. Han, S.D. Rothenberger, E. Forno, J.C. Celedon, Pittsburgh, PA, p.A3862

608 Associations Between Prenatal Exposure to Fine Particulate Matter and Age Four Impulse Oscillometry: Effect Modification by Maternal Atopy/L. Alpert, M. Minchala, E. Colicino, A. Wilson, B. Coull, R.J. Wright, A. Lee, New York, NY, p.A3863

609 The Association Between Vape Shop Density and E-cigarette, or Vaping, Product-Use Associated Lung Injury in Adolescents/H. Lee, S. Weerakoon, B. Abdallah, S.E. Messiah, D.R. Rao, Dallas, TX, p.A3864

610 The Impacts of Gentrification on Traffic Related Air Pollutant Levels Measured Near New York City Schools/Z. Pitkowsky, K.H. Jung, K. Argenio, M. Perzanowski, J. Stingone, A. Rundle, S. Lovinsky-Desir, New York, NY, p.A5692

611 Higher Road Density Near Urban Homes and Schools Is Associated with Lower Lung Function in Children with Higher Sports Activity/S. Lovinsky-Desir, K. Argenio, K.H. Jung, J. Quinn, K.M. Sanchez, L. Murray, M. Perzanowski, A. Rundle, R.L. Miller, J.E. Gern, D.J. Jackson, M. Kattan, New York, NY, p.A5693

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C28 LET'S TALK NTM9:30 a.m. - 11:00 a.m. **MOSCONE CENTER**

Room 207-208 (South Building, Level 2)

Poster Viewing 9:30-10:00

Discussion 10:00-11:00

Chairing: M.C.I. Lipman, MD, London, United Kingdom
T.R. Aksamit, MD, Rochester, MN
S.H. Kasperbauer, MD, Denver, CO

301 Incidence of Nontuberculous Mycobacteria Infections Among Persons with Cystic Fibrosis in the United States (2010-2017)/J. Marshall, R. Mercaldo, E. Lipner, R. Prevots, Rockville, MD, p.A3865

302 Reduction in Hospitalizations Following Initiation of Amikacin Liposome Inhalation Suspension: A Retrospective Cohort Study of Patients in Real-World Settings/J. Wu, M. Hassan, A. Cyhaniuk, C. Margiotta, A. Ratiu, A. Chatterjee, Bridgewater, NJ, p.A3866

303 Nontuberculous Mycobacteria (NTM) Isolation Status Relative to Pulmonary Exacerbation Frequency in Bronchiectasis Patients: Results from the Bronchiectasis and NTM Research Registry (BRR)/N. Lapinel, R. Choate, T.R. Aksamit, K.L. Winthrop, A. Schmid, M.L. Metersky, New Orleans, LA, p.A3867

304 The Natural History of COVID-19 Recovery: Changes in Physiologic, Radiologic, and Patient Reported Outcomes 12 Months After Symptom Onset/A.W. Wong, A.S. Shah, C.J. Hague, J.C. Johnston, C.J. Ryerson, C. Carlsten, Vancouver, Canada, p.A3868

- 305 Immune Profiles in Bronchiectasis Patients With and Without MAC Lung Disease/R. Terada, K. Greenlee, T. Drake, K. Dean, J. Philley, B.-G. Jung, P.J. Mcshane, Tyler, TX, p.A3869**
- 306 Gastroesophageal Reflux Disease (GERD) and Pulmonary Exacerbation Frequency in Bronchiectasis Patients from the Bronchiectasis and NTM Research Registry (BRR)/N. Lapinel, R. Choate, T.R. Aksamit, K.L. Winthrop, A. Schmid, M.L. Metersky, New Orleans, LA, p.A3870**
- 307 Identification of Small Molecule Inhibitors Against Non-Tuberculous Mycobacteria (NTM) in Activated Macrophages/L. Danelishvili, R. Vande Voorde, E. Dzalamidze, Corvallis, OR, p.A3871**
- 308 In Vitro Amikacin Resistance Is Not Associated with In Vivo Outcomes in Patients with Mycobacterium Avium Complex Pulmonary Disease in Ontario, Canada/L. Minuk, S.K. Brode, M. Mehrabi, M. Sharma, H. Soualiline, T.K. Marras, Toronto, Canada, p.A3872**
- 309 Fostamatinib Reduces Innate Neutrophil Activation in Hospitalized Patients with COVID-19/J.R. Strich, S. Warner, X. Tian, R. Miao, M. Ramos-Benitez, R. Reger, M. Chakraborty, S. Wong, A. Saxena, J.P. McCoy, Y. Kanthi, D. Chertow, A.F. Suffredini, S.D. Nathan, R.W. Childs, Potomac, MD, p.A3873**
- 310 Impact of Treatment on Long-Term Survival of Patients with Mycobacterium Avium Complex Pulmonary Disease/J.-Y. Kim, Y. Choi, J.M. Goo, T.S. Kim, M.-W. Seong, N. Kwak, J.-J. Yim, Seoul, Korea, Republic of, p.A3874**
- 311 Saliva Immunoglobulins as a Culture-Independent Marker of Nontuberculous Mycobacterial Infection in Cystic Fibrosis/K.M. Calhoun, K. Malcolm, E. Wheeler, K. Poch, S. Caceres, N. Rysavy, J.A. Nick, Aurora, CO, p.A3875**
- 312 Home-Based Intermittent Inhaled High-Dose Nitric Oxide in Nontuberculous Mycobacterial Pulmonary Disease Using a Novel Nitric Oxide Generator and Delivery System Is Safe and Well Tolerated/R. Thomson, A.R. Colin, L. Morgan, Brisbane, Australia, p.A3876**
- 313 Twelve-Month Mortality Following Prescription of Multi-Drug Antibiotic Treatment for Pulmonary Nontuberculous Mycobacterial Disease Due to Mycobacterium Avium Complex in U.S. Medicare Beneficiaries with Bronchiectasis/C.D. Varley, J.H. Ku, E. Henkle, L.C. Strnad, K.L. Winthrop, Portland, OR, p.A3877**
- 314 Pulmonary Mycobacterium Avium Complex Drug Susceptibility Testing and Patterns, Kaiser Permanente Hawaii, 2005-2019/R.A. Blakney, A. Zelazny, Y.G. Daida, T.B. Frankland, S. Honda, K.N. Olivier, R. Prevots, Rockville, MD, p.A3878**
- 315 The Hospitalization Burden Among Treatment-Refractory Nontuberculous Mycobacterial Lung Disease Patients in Japan/P. Wang, K. Morimoto, N. Hasegawa, S. Burns, M. Hassan, A. Chatterjee, Bridgewater, NJ, p.A3879**
- 316 Sarcopenia and Myosteatorsis in Pulmonary Nontuberculous Mycobacterial Disease Outcomes/M. Williams, R.A. Blakney, S. Lee, R. Prevots, R.M. Summers, K.N. Olivier, K.P. Fennelly, Bethesda, MD, p.A3880**
- 317 Novel Screening System of Virulent Strains for Establishment of Mycobacterium Avium Complex Lung Disease Mouse Model Using Whole Genome Sequencing/K. Furuuchi, S. Seto, N. Hajime, H. Hikichi, A. Miyabayashi, K. Wakabayashi, K. Morimoto, K. Mizuno, M.H. Minako Hijikata, N. Keicho, Kiyose, Tokyo, Japan, p.A3881**
- 318 Self-Reported Symptom and Adverse Event Profiles in Macrolide-Based Oral Treatment of Mycobacterium Avium Complex Pulmonary Disease/E. Henkle, J. Philley, D.J. Addrizzo-Harris, C.L. Daley, D.E. Griffith, T.R. Aksamit, C. Swenson, S.J. Ruoss, T.K. Marras, A. Brunton, K.L. Winthrop, Portland, OR, p.A3882**
- 319 A Pilot Geospatial Study of Environmental Risks of Nontuberculous Mycobacteria Disease for Patients with Cystic Fibrosis in Florida/R. Mercaldo, A. Weisman, G. Tupayachi Ortiz, A.R. Colin, E. Lipner, R. Prevots, Rockville, MD, p.A3883**
- 320 Bronchiectasis and Gender: Results from the National Bronchiectasis and NTM Research Registry/C.J. Kang, R. Choate, M.L. Metersky, T. Shah, O. Rohret, N. Lapinel, D.J. Maselli, P.J. Mcshane, Tyler, TX, p.A3884**
- 321 Intramuscular Streptomycin for the Treatment of Pulmonary Mycobacterium Avium Complex Infection/A. Weyer, K.L. Greenlee, T.J. Drake, B.A. Brown-Elliott, R.J. Wallace, J.V. Philley, P.J. Mcshane, Tyler, TX, p.A3885**
- 322 Natural History of Mycobacterium Avium Complex Pulmonary Disease According to Disease Severity/B.-G. Kim, H. Kim, O.J. Kwon, B.W. Jhun, Seoul, Korea, Republic of, p.A3886**
- 323 Virulence of Mycobacterium Abscessus Clinical Isolates in Zebrafish Larvae Infection Model/R.M. Basnet, J.L. da Silva, S. Gupta, K.N. Olivier, Bethesda, MD, p.A3887**

BASIC • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

C29 SENESENCE, SENOLYTICS, AND AGING IN LUNG BIOLOGY

9:30 a.m. - 11:00 a.m. MOSCONE CENTER

Room 2009/2011 (West Building, Level 2)

Viewing 9:30-10:00

Summaries/Discussion 10:00-11:00

Chairing: A.L. Mora, MD, Columbus, OH
M. Bhattacharya, MD, San Francisco, CA
M. Lehmann, PhD, Neuherberg, Germany
J.K. Alder, PhD, Pittsburgh, PA

- 701 **A Novel Senolytic Agent, ARV-825, Ameliorates Bleomycin-Induced Pulmonary Fibrosis in Mice**/S. Sato, K. Koyama, H. Ogawa, K. Murakami, T. Imakura, Y. Yamashita, K. Haji, K. Kagawa, H. Kawano, E. Hara, Y. Nishioka, Tokushima, Japan, p.A3888
- 702 **Prevention of Replicative Senescence in IPF by Telomerase Enhancement**/J.R. Connor, N. Razdan, C.T. Cottage, A. Migneault, D. Macapagal, J. Boyd, R. Lemaire, Gaithersburg, MD, p.A3889
- 703 **A Human Ex Vivo Model of Lung Cellular Senescence to Study Age-Related Pulmonary Diseases**/M.C. Melo Narvaez, M.G. Stoleriu, A. Hilgendorff, M. Koenigshoff, M. Lehmann, Neuherberg, Germany, p.A3890
- 704 **Single-Cell Transcriptomics Reveals Reduced Number of Lung Progenitors and Aberrant Vascular Homeostasis as Distinctive Features Associated with Lung Disrepair and Persistent Fibrosis with Aging**/T.X. Pham, J. Lee, M. Trojanowska, X. Varelas, G. Ligresti, Boston, MA, p.A3891
- 705 **Nox4 Mediates Age-Associated Endothelial Barrier Dysfunction and Severity of Pre-Clinical ARDS**/K. Kato, L. Hecker, Atlanta, GA, p.A3892
- 706 **Dysregulation of Lipid Metabolisms Alters Expression of Heat Shock Proteins and Promotes Cellular Senescence in the Alveolar Epithelium**/F. Poli, R.E. Cardenas Castillo, R.S. Summer, I.O. Rosas, F. Romero, Houston, TX, p.A3893
- 707 **Involvement of SOX17-Regulated Endothelial Cellular Senescence in IPF and PH Pathogenesis**/K. Tsubouchi, Q. Zhou, A.J.J. Noble, K. Ask, M.R.J. Kolb, Hamilton, Canada, p.A3894
- 708 **CD148 Loss-of-Function Promotes Cellular Senescence and the Development of Experimental Fibrosis**/B.J. Moss, A. Ebrahimpour, C. Coarfa, N. McKenna, S. Ochsner, Y. Shi, S.W. Ryter, M. Robertson, R. Bowen, F. Poli, J. Whiteford, K. Tsoyi, F. Romero, I.O. Rosas, Houston, TX, p.A3895

- 709 **XBP1 Is a Key Contributor of AT2 Quality Control Protecting Against Premature Senescence and Lung Fibrosis**/J. Calyeca, J.D. Londino, M. Bueno, D. Alvarez, T. Khaliullin, E. Polyak, S. Scott, T. Tabib, J. Sembrat, R. Lafayatis, M. Rojas, A.L. Mora, Columbus, OH, p.A3896
- 710 **Syndecan 1 Regulates Epithelial Cell Senescence Mediating Through Macropinocytosis**/T. Parimon, Y. Huang, D. Narayanan, J. Hwang, S. Chang, G.C. Cerro Chiang, H. Suri, C. Yao, C. Koziol, M.S. Espindola, D. Jiang, M. Koenigshoff, C.M. Hogaboam, P.W. Noble, B.R. Stripp, S.A. Gharib, P. Chen, Los Angeles, CA, p.A3897
- 711 **Hermansky-Pudlak Syndrome Type 1 (HPS1) Disrupts Proteostasis and Induces Cellular Senescence in the Alveolar Epithelium**/R.E. Cardenas Castillo, F. Poli, R.S. Summer, I.O. Rosas, F. Romero, Houston, TX, p.A3898
- 712 **Timing of Senescence Drives Postnatal Lung Development and Injury**/H. Yao, A.L. Peterson, S. Rizal, J. Chang, P.A. Dennery, Providence, RI, p.A3899
- 713 **Toll-Like Receptor 4 Prevents Cellular Senescence by Inhibiting SOX9/miR-223/HDAC2 Signaling in Emphysema**/S.-J. Kim, H. Kim, E. Lofgren, Y. Chen, E. Coutavas, C. Hwangbo, P. Lee, Durham, NC, p.A3900
- 714 **Loss of Mitochondrial Adenine Nucleotide Translocase 2 (Ant2) in Alveolar Epithelial Cells Worsens Emphysema Through Cellular Senescence in a Mouse Model of COPD**/C.R. Kliment, J. Shi, E. Fandozzi, J.C. Boatz, J. Sui, Pittsburgh, PA, p.A3901
- 715 **Conditional Knockout of Telomere Protection Protein 1 (TPP1) in Lung Epithelium Triggers Senescence-Associated Lung Diseases and Increases Cancer Risk Upon Cigarette Smoke Exposure**/T. Muthumalage, I. Rahman, Rochester, NY, p.A3902
- 716 **Decellularized Lung Tissue Proteomics Showed Decreased Surfactant and Increased Inflammatory Proteins in the Aged Lung**/J.E. McDonough, C. Cosme Jr., C. Rupert, J.C. Schupp, F. Ahangari, G. Deluiliis, X. Yan, J.S. Hagood, B. Vanaudenaerde, L.E. Niklason, K. Hansen, N. Kaminski, New Haven, CT, p.A3903

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C30 LIFE AND LUNGS AFTER COVID: FUNCTIONAL RECOVERY AND OUTCOMES FOLLOWING SARS-CoV2 INFECTION

9:30 a.m. - 11:00 a.m.

MOSCONE CENTER

Room 2022/2024 (West Building, Level 2)

- Poster Viewing** 9:30-10:00
- Discussion** 10:00-11:00
- Chairing:** A.A. Hope, MD, Portland, OR
I.D. Peltan, MD, MSc, Murray, UT
- 801 A Descriptive Study of Mean Inspiratory Pressures (MIPs) and Mean Expiratory Pressures (MEPs) in Covid-19 Patients/K. Sankar, I. Pedraza, C. Yoo, C. Le, R. Zabner, Los Angeles, CA, p.A3904**
- 802 Hyperpolarized ¹²⁹Xe MRI Is Sensitive to Variations in Gas Exchange Impairment in Patients with Long Haul COVID-19 and Normal Cardiac Structure and Function/D. Mummy, E. Bier, J. Lu, S. Leewiwatwong, A. Bechtel, I. Dummer, S. Kabir, J. Korzekwinski, K. Williford, S. Martindale, C.X. Giovacchini, D. Shaz, J. Mammarrappallil, F. Alenezi, R. Kim, B. Driehuys, L.G. Que, Durham, NC, p.A3905**
- 803 Dynamic Contrast-Enhanced Lung MRI in COVID-19 Survivors May Demonstrate Ongoing Microvascular Abnormalities/S.B. Montesi, M. Mascia, G.A. Alba, M. Magaletta, P. Caravan, I. Zhou, Boston, MA, p.A3906**
- 804 The Utility of Cardiopulmonary Exercise Testing in Patients with Long COVID/S. Alrawaf, P. Khaing, D. Baram, K.J. Diab, Washington, VA, p.A3907**
- 805 Quantitative CT Metrics Associated with the Dispersion in Diffusion Capacity of the Lung in Recovered Patients from COVID-19 with Clear Chest CTs/H. Wen, S.M. Kanth, J.A. Huapaya, H. Do, M.Y. Chen, A.A. Malayeri, A.F. Suffredini, Bethesda, MD, p.A3908**
- 806 Evaluating the Respiratory Function Impairments in Patients with Previous SARS-COV2 Pneumonia/L. Pini, R. Montori, J. Giordani, A. Pini, M. Guerini, N. Orzes, M. Ciarfaglia, G. Levi, C. Tantucci, Brescia, Italy, p.A3909**
- 807 Effect of COVID-19 on Pulmonary Function Testing Among Adult Survivors with Pre-Existing Lung Disease/A. Daouk, Y. Shammaa, M.N. Chalhoub, Staten Island, NY, p.A3910**
- 808 Pulmonary Function Before and After COVID-19 in a Mid-South US Cohort/P.J. Edmonds, J. Watchmaker, V.E. Kerchberger, C.M. Sevin, Nashville, TN, p.A3911**
- 809 1 Year Follow-Up of Pulmonary Mechanics in Post-Covid Period Using Forced Oscillation Technique/N. Dhadge, K. Rao, N. Vanjare, R. Ahire, Pune, India, p.A3912**
- 810 Follow Up Study of the Pulmonary Function in COVID-19 Survivors Three Months After Admission to a Public Health Hospital in Montevideo, Uruguay/C. Rodriguez Flores, E. Pacheco, M. Mamchur, J. Nuñez, A. Tempone, K. Rabuñal, F. Gimenez, C. Silva, A.I. Gruss, C. Chao Pedoja, V. Iraola, C. Acosta, M.V. Lopez Varela, Montevideo, Uruguay, p.A3913**
- 811 Lung Subtraction Iodine Mapping in Breathless Patients After COVID-19/A.A.R. Thompson, J.E. Meiring, A. Holbourn, J. Cole, J. Hockridge, P. Metherall, R.A. Lawson, S. Rajaram, A.J. Swift, Sheffield, United Kingdom, p.A3914**
- 812 Assessment of Functional Impairment Using an Integrative Cardiopulmonary Exercise Test (CPET) in Patients with Long COVID/B. Heyman, M. Sheikh, J.H. Whiteson, R. Vakil, K.I. Berger, R.M. Goldring, R. Condos, New York, NY, p.A3915**
- 813 Effect of Obesity on Long Term Outcomes After COVID-19 Infection/M.S. Mccravy, N. Navuluri, A. Meservey, S. Morrison, C. Green, S. Martindale, K. Williford, D. Shaz, B.W. Stephenson, A.M. Mathews, C.X. Giovacchini, I.L. Riley, L.G. Que, Durham, NC, p.A3916**
- 814 Characteristics and Outcomes of COVID-19 Patients Who Had Chest Tube Placement for Pneumothorax/S. Perinkulam Sathyanarayanan, S. Narayana Gowda, F.G. Jamous, A.J. Hericks, Sioux Falls, SD, p.A3917**
- 815 Breath-Holding Physiology and Adverse Outcomes of COVID-19: A Prospective Validation Study/L. Messineo, F. Fanfulla, L. Pedroni, F. Pini, A. Borghesi, S. Golemi, G. Vailati, A. Malhotra, L. Corda, S.A. Sands, Boston, MA, p.A3918**
- 816 Post-Acute Sequelae of COVID-19 (PASC): A Descriptive Study of Clinical and Physiologic Outcomes/N. Ng, C.A. Powell, New York, NY, p.A3919**
- 817 Ventilation and Perfusion Abnormalities Following Recovery from Non-Critical COVID-19/C.P. Venegas, C.J.C. Marriott, T. Ho, K. Son, R. Jamil, M. Jamal, M. Kjarsgaard, C. Huang, K. Radford, M.B. Dolovich, C.E. Farrow, T. Farncombe, M. Lubanovic, E. Haider, P. Nair, M. Mukherjee, S. Svenningsen, Hamilton, Canada, p.A3920**
- 818 Biomarker Identification in Fatal Covid-19 and Post-Acute Sequelae of SARS-CoV-2 (PASC) Lungs/M.S. Espindola, G.C. Chiang, M. Hohmann, S. Garcia, B. Creyns, A.L. Coelho, C. Yao, B.R. Stripp, T. Parimon, P. Chen, C.M. Hogaboam, Los Angeles, CA, p.A5694**
- 819 A Retrospective Analysis of DLCO Changes in Post-Acute Sequelae of SARS-CoV-2 Infection/B. Bustos, R. Randhawa, E. Padrao, D. O'Sullivan, T. Shah, Farmington, CT, p.A5695**

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C31 LATE-BREAKING ABSTRACTS IN ALLERGY, IMMUNOLOGY AND INFLAMMATION9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P527 Exploring Use of Regular ICS/LABA Dosing in Moderate to Severe Asthma Among Physicians: Results from the Asthma Patients' and Physicians' Perspectives on the Burden and Management of Asthma Studies (APPAARENT 1 & 2)**/K.R. Chapman, S. Bosnic-Anticevich, M.D.C. Cano, A. PG, Toronto, Canada, p.A5696
- P528 Safety, Tolerability and Preliminary Signals of Activity in Adult Patients with Partly Controlled Asthma Treated with Live Biotherapeutic MRx-4DP0004 as an Add-On Maintenance Therapy to Inhaled Corticosteroids (ICS) With or Without Long-Acting Beta Agonist**/C.E. Brightling, A. Stevenson, L. Markinson, C. Moore, C. Badham, Leicester, United Kingdom, p.A5697
- P529 Benralizumab Improves Mannitol Airway Hyperresponsiveness in Uncontrolled Severe Eosinophilic Asthma**/R. Chan, C.R.W. Kuo, S. Jabbal, C. Smith, B.J. Lipworth, Dundee, United Kingdom, p.A5698
- P530 Long Covid: Evidence of Persistent Abnormalities in Thrombotic Markers and Correlation with Functional Impairment**/E. Brennan, N. Prasannan, A. Sarna, A. Kessler, A. Devaraj, H. Toby, M. Scully, M.J. Heightman, London, United Kingdom, p.A5699
- P531 Hematopoietic Cell Transplantation Diminishes Lung Microbiota Lactobacillus and Alters T Helper Responses to Gamma Herpesvirus Infection**/X. Zhou, G.J. Oh, C. Guo, D.N. O'Dwyer, B.B. Moore, Ann Arbor, MI, p.A5700
- P532 MALAT1 and MiR-155 Regulate Inflammatory Cytokine Signaling in HIV- Infected Macrophages**/Z. Yuan, Y. Huang, R.T. Sadikot, Omaha, NE, p.A5701
- P533 The Development of Genetic Tools in FLAMs, an Ex Vivo Model of Alveolar Macrophages, Allows for the Mechanistic Investigation of Pulmonary Inflammation**/S. Thomas, K.A. Wierenga, J. Pestka, A. Olive, East Lansing, MI, p.A5702

- P534 IgE-Mediated Sensitization Towards Frequent and Rare Allergens in Severe Asthmatics. The ATLAS Project**/J. Schreiber, C. Thurm, D. Reinhold, E. Luecke, B. Schraven, Q. Wu, A. Lux, C. Mailaender, Magdeburg, Germany, p.A5703
- P535 Randomized, Double-Blind Trial of the Efficacy and Safety of Pirfenidone in Patients with Fibrotic Hypersensitivity Pneumonitis**/E.R. Fernandez Perez, D.A. Lynch, S.D. Groshong, J.L. Crooks, J.J. Solomon, M.P. Mohning, T.J. Huie, Z.X. Yunt, R.C. Keith, K. Fier, Denver, CO, p.A5704
- P536 A Randomized, Cross-Over Study Comparing Critical and Overall Errors, Learning Time, and Preference of the Ellipta Versus Breezhaler Dry Powder Inhalers in Patients with Asthma**/J. Van Der Palen, D. Slade, M. Verma, M. Plank, Enschede, Netherlands, p.A5705
- P537 Chi3l1 Modulates ICOS Expression Downstream of CD4+ T Cell Activation**/M.L. Curtiss, F. Lund, Birmingham, AL, p.A5706
- P538 Asthma Diagnosis Confirmation in a Large US Health System Cohort - Impact Upon Medication Usage and Outcomes**/M. Restko, S.K. Bellam, Evanston, IL, p.A5707
- P539 Real-World Safety and Effectiveness of Fluticasone Furoate/Vilanterol in Patients with Asthma or Chronic Obstructive Pulmonary Disease: A Post-Marketing Study in Korea**/C. Eun Yeong, J.-E. Cho, S.-H. Jang, K.-E. Hwang, Seoul, Korea, Republic of, p.A5708
- P540 Real-World Safety and Effectiveness of Fluticasone Furoate (Arnuity® Ellipta™) in Patients with Asthma: A Post-Marketing Surveillance (PMS) in Korea**/C. Eun Yeong, E.-B. Lee, S.-H. Yang, H.-R. Kim, Seoul, Korea, Republic of, p.A5709
- P541 Lung-Delivered Interleukin (IL)-10 Hastens Recovery Following Acute High Dose Inhalant Endotoxin Exposure**/R. Gaurav, T.A. Wyatt, A.J. Nelson, D.J. Romberger, J.A. Poole, Omaha, NE, p.A5710

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C32 INTERROGATION OF GENETIC VARIATION, GENE EXPRESSION, AND OTHER BIOLOGICAL LAYERS WITH OMICS TECHNIQUES TO UNDERSTAND RESPIRATORY TRAITS9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P543 Investigating Interactions Between MUC5B and Other Genetic Risk Variants with Cigarette Smoking and Race on the Risk of Rheumatoid Arthritis-Associated Interstitial Lung Disease/A.** Wheeler, J.A. Poole, J. Baker, D. Ascherman, G. Kerr, A. Reimold, G. Kunkel, K. Wysham, N. Singh, D. Lazaro, P. Monach, L. Bridges, T. Mikuls, B. England, Omaha, NE, p.A3921
- P544 ORMDL3 Gene Polymorphisms in Patients with Pulmonary Alveolar Proteinosis (PAP) and Interstitial Lung Diseases (ILDs): Preliminary Results/F.** Bonella, D. Hässig, S. Cabric, J. Waelscher, E. Boerner, L. Jehn, C. Taube, M. Schedel, Essen, Germany, p.A3922
- P545 Genetic Loci for Lung Function in Japanese Adults with Adjustment for Exhaled Nitric Oxide Levels as an Indicator of Type 2 Inflammation in Airway/M.** Yamada, I.N. Motoike, K. Kojima, A. Mitsune, T. Ohe, M. Ichinose, M. Yamamoto, H. Sugiura, Sendai, Japan, p.A3923
- P546 Ancestry-Specific Markers for Asthma Exacerbation Among African American Individuals in the Trans-Omics for Precision Medicine (TOPMed) Program's Asthma Translational Genomics Collaborative (ATGC)/S.** Xiao, D. Hu, A.C.Y. Mak, M. Yang, S. Hochstadt, S. Simons, W. Cabral, N. Sahasrabudhe, C. Eng, D.E. Lanfear, E.G. Burchard, L.K. Williams, Detroit, MI, p.A3924
- P547 Multi-Compartment Clustering of Asthma Patients Using Network-Based Transcriptional Profiling/M.** Camiolo, T.B. Oriss, K.C. Nadeau, P. Ray, S.E. Wenzel, A. Ray, Pittsburgh, PA, p.A3925
- P548 Transcriptional Profiling of Nasal Epithelial Cells Reveals Decreased Expression of Cilia-Related Genes in Obesity And Asthma/C.R.** Morris, A. Habibovic, M.-C. Lin, R. Chandrasekaran, M.E. Poynter, V. Anathy, A.E. Dixon, Y.M.W. Janssen-Heininger, A. Van Der Vliet, Burlington, VT, p.A3926
- P549 The Metagenomic Resistome in Severe Asthma with Fungal Sensitisation (SAFS)/F.X.** Ivan, P.Y. Tiew, K.X. Thng, T.K. Jaggi, E.P.P. Hwee, M.S. Koh, O.T. How, J.A. Abisheganaden, S.H. Chotirmall, Singapore, Singapore, p.A3927
- P550 Elucidation the Role of Macrophage Ageing in Idiopathic Pulmonary Fibrosis/M.** El-Hajjar, O. Lapohos, G. Fonseca, Montreal, Canada, p.A3928
- P551 Peripheral Blood Gene Expression Changes Predict Mortality and Treatment Response in Acute Covid-19 and Associate with Lung Fibrosis/B.** Tourki, I. Vera, C. Perrot, F. Farsaei, A. Arsenault, B. Juan-Guardela, D. Allen, R. Restrepo Jaramillo, D. Bandyopadhyay, E. Belli, G. Katlaps, K. Patel, S.B. Liggett, K. Kim, J. Herazo-Maya, Tampa, FL, p.A3929
- P552 miR-107 Is Associated with House Dust Mite Sensitization in Asthmatics/M.-S.** Yang, U. Srivastava, A. Kho, J.C. Celedon, A. Tiwari, A. Wang, S.T. Weiss, M. Mcgeachie, K. Tantisira, San Diego, CA, p.A5711
- P553 Causal Inference of DNA Methylation Identifies a Subtype of COPD Patients with Increased Survivability/R.** Gregg, P.V. Benos, D.L. DeMeo, Pittsburgh, PA, p.A5712
- P554 Plasma and Airway Levels of Surfactant Protein D Degradation Reflect Progression of ARDS in Ventilated Patients with SARS-CoV-2/T.** Castillo, J. Madsen, A. Postle, D. Brealey, J.B. Fink, M. Grocott, A. Dushianthan, H.W. Clark, London, United Kingdom, p.A5713
- P555 IL-4 Receptor Alpha Chain Q576R Genotype and Aspirin Exacerbated Respiratory Disease/W.** Stevens, J. Norton, A. Kato, R. Carter, L. Suh, K. Erickson, J. Huang, A. Peters, L. Grammer, D. Conley, S. Shintani-Smith, B. Tan, K. Welch, R. Kern, C. Ober, R. Schleimer, Chicago, IL, p.A5714

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C33 INFLAMMATORY MODULATION IN SARCOIDOSIS, LUNG TRANSPLANT, AND OTHER DISEASES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P557 Abatacept Treatment Is Safe in Patients with Steroid-Refractory Sarcoidosis/B.C.** Frye, I. Pink, I.C. Rump, W. Meschede, T. Schlaich, J. Kappes, B. Grimbacher, F. Schubach, G. Ihorst, K. Höhne, D. Stolz, G. Zissel, A. Prasse, J. Muller-Quernheim, Freiburg, Germany, p.A3930
- P558 Negative Influence of OX40 Pathway on Regulatory T Cells in Pulmonary Sarcoidosis/D.** Mitra, S. Chakraborty, R. Kumari, Delhi, India, p.A3931
- P559 Safety and Efficacy ATYR1923, a Novel Immunomodulator for Pulmonary Sarcoidosis: Results of a Phase 1b/2a Randomized Placebo-Controlled Trial/P.H.S.** Sporn, D.A. Culver, J. Barney, L.A. Maier, W.E.E. James, C.C.W. Hsia, N.J. Sweiss, S. Aryal, O.N. Obi, M. Tabassomi, L.T. Marts, G. Walker, L. Carey, S. Shukla, R.P. Baughman, Chicago, IL, p.A3932

- P560 ATYR1923 Treatment Reduces Pro-Inflammatory Serum Biomarkers in Pulmonary Sarcoidosis Patients/R.**
Adams, L. Guy, G. Walker, L. Carey, L. Nangle, S. Shukla, San Diego, CA, p.A3933
- P561 Transcriptomic Profiling to Validate an In-Vitro Nanotube-Induced Sarcoid Model/M.** Kala, N.G. Casanova, A. Feng, Y. Liang, L. Herrmann, W.G. Grisco, Y. Moreno, T. Wang, K.S. Knox, Phoenix, AZ, p.A3934
- P562 Association of Markers of Lung Tissue Remodeling with Sarcoidosis Clinical Phenotypes/R.L.** Perez, D.R. Kramer, J. Ritzenthaler, E. Torres-Gonzalez, B.T. Hehn, P. Kulandaisamy, J. Roman Rodriguez, Philadelphia, PA, p.A3935
- P563 Differential Transcriptome of Peripheral Mononuclear Blood Cells in Pulmonary Sarcoidosis/K.** Yoshioka, T. Kawasaki, H. Sato, D. Ishii, T. Imamoto, M. Abe, Y. Hasegawa, O. Ohara, T. Suzuki, K. Tatsumi, Chiba, Japan, p.A3936
- P564 XTMA-16 Attenuates Granuloma Formation in a Human In Vitro Sarcoidosis Model/N.** Singh, E.D. Crouser, M.W. Julian, L.W. Locke, T. Matthews, Chicago, IL, p.A3937
- P565 Ex Vivo Stimulation of PBMCs from Pulmonary Sarcoidosis Patients Treated with ATYR1923 Show Reduced Inflammatory Responses/S.** Paz, S. Tyler, S. Foerster, D. Siefker, M. Ferrer, E. Escobedo, Y. Becker, L. Carey, G. Walker, M. Muters, L. Nangle, San Diego, CA, p.A3938
- P566 Outcomes in ANCA Associated Vasculitis with Diffuse Alveolar Hemorrhage Without Initial Dialysis Requirement/A.J.** Wodarczyk, S. Cohen, A. Wong, K. Patterson, M. Lyons, A. Barnes, A. Meara, S. Almaani, L. Fussner, Columbus, OH, p.A3939
- P567 Comparison Between High-Intensity Focused Ultrasound (HIFU) Therapy and Coblation for Treatment of Inferior Turbinate Hypertrophy/D.-Y.** Kim, Seoul, Korea, Republic of, p.A3940
- P568 Comparative Effects of Ketamine and Dexmedetomidine on Brain and Lung Damage in Experimental Acute Ischemic Stroke/L.B.** Heil, C.L. Braga, R.M. Sacramento, M.A. Antunes, C.D.S. Samary, P. Pelosi, F.F. Cruz, P.L. Silva, P.R.M. Rocco, Rio de Janeiro, Brazil, p.A3941
- P569 Novel Bronchovascular-Bundle-Associated Mesenchymal Stromal Cell Population Promote the Survival of Antibody Secreting Cells in Lung Allografts with a Restrictive Allograft Syndrome Phenotype/A.P.** Mclinden, Y. Ibuki, N.M. Walker, I. Grigorova, V.N. Lama, Ann Arbor, MI, p.A3942
- P570 Metformin Attenuates Chronic Lung Allograft Rejection in Rat Lung Transplantation/D.** Tian, X.-Y. Zheng, H. Huang, H.-T. Tang, J.-J. Wang, Nanchong, China, p.A3943
- P571 Monocytic Myeloid-Derived Suppressor Cells Mediate the Resolution of Lung Ischemia-Reperfusion Injury/V.** Leroy, J. Cai, A. Gonzalez, S. Sharma, H.B. Joseph, J. Mulligan, T. Machuca, J.K. Harrison, C. Atkinson, G. Upchurch Jr., A.K. Sharma, Gainesville, FL, p.A3944
- P572 Impact of Telomere Length on Circulating T Cell Receptor Repertoire, Phenotype, and Function After Lung Transplantation for Idiopathic Pulmonary Fibrosis/M.E.** Snyder, M.R. Anderson, L.J. Benvenuto, R. Koshy, C.J. Iasella, R. Sutton, A. Bondonese, A. Craig, Y. Zhang, P.G. Sanchez, J.K. Alder, J.F. McDyer, Pittsburgh, PA, p.A3945
- P573 B and Plasma Cell Populations Drive Chronic Rejection After Lung Transplantation/M.** Bueno, N. Smirnova, K. Riemondy, P. Suresh, X. Wang, M. Brown, S. Collins, J. Sembrat, M. Koenigshoff, M.E. Snyder, J.F. McDyer, O. Eickelberg, Pittsburgh, PA, p.A3946
- P574 Divergent Roles of Lymphatic Endothelial Cell-Expressed Hypoxia-Inducible Factors in Airway Transplant Rejection/A.S.** Mcquiston, D. Kim, R. Vihn, E.C. Schneider, W. Tian, X. Jiang, M.R. Nicolls, Stanford, CA, p.A3947

BEHAVIORAL • CLINICAL

THEMATIC POSTER SESSION

C34 ADVANCEMENTS IN MEDICAL EDUCATION AND PROFESSIONAL DEVELOPMENT

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area H, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P645 Student Exam Scores at the Beginning of Medical School: Factors Outside the Classroom/S.D. Nilaad, E. Lin, J. Bailey, A. Mittal, S. Gaboyan, C. Truong, K. Guluma, A. Iglewicz, L. Lander, S. Evans, C. Goldberg, L.E. Crotty Alexander, La Jolla, CA, p.A3948

P646 Sub-Internship Clerkships in the Medical Intensive Care Unit: A Needs Assessment/K. Selvan, A. Clark, R. Walters, S. Jain, V. Kaul, K.J. Caverzagie, J.B. Richards, G. Dallaghan, N.H. Stewart, Chicago, IL, p.A3949

P647 Evaluation of Cognitive Load, Emotional Level, and Stress Level in Tracheostomy Suctioning Among Healthcare Students: Wearable Vs Standard Manikin/K. Lumowa, K.L. Lui, C. Baek, N. Daher, A. Alismail, Loma Linda, CA, p.A3950

- P648 Improving Pediatric Residents Pulmonary Physical Exam Skills/C.** Ungs, D. Hamilton, G.F. Perez, Buffalo, NY, p.A3951
- P649 Simulation-Based Thoracentesis Training Program in Pediatrics Using a Low-Cost Homemade Mannequin/S.** Marchal, A. Tran, A. Dupont, D. Drummond, A. Gatin, D. Demonchy, B. François, J. Breaud, J. Rondel, A.L. Herisse, L. Giovannini-chami, Nice, France, p.A3952
- P650 Consistent Critical Care Curriculum for Internal Medicine Resident Physicians/A.B.** Mathew, S. Rhoads, J. Simmons, Providence, RI, p.A3953
- P651 Development of a Mechanical Ventilation Curriculum for Internal Medicine Residents/B.R.** Macedo, A. Haydar, C.S.N.H. Lima, F.K. Hayashi, M.P.T. Nunes, J.C. Ferreira, Sao Paulo, Brazil, p.A3954
- P652 Resident-Led Morbidity and Mortality Conference in the Intensive Care Unit/S.** Pyskir, K. Silangcruz, S. Randhawa, A. Obeidat, S. Yoshimura, B.J. Matsuda, Honolulu, HI, p.A3955
- P653 What Should Residents Learn in the Medical Intensive Care Unit - A Consensus Survey/B.** Poole, A. Ryden, L. Leclair, Salt Lake City, UT, p.A3956
- P654 Flipped Classroom vs. Engaging Lecture Style for Pulmonary Physiology/L.M.** Ulrich, S. Palacios, S.E. Kirkby, Columbus, OH, p.A3957
- P655 Creation of a Multidisciplinary Interstitial Lung Disease Clinical Care Team/H.D.** Bachert, J. George, A. Abu Sayf, A.L. Martirosov, K. Thavarajah, Detroit, MI, p.A3958
- P656 Applicant Assessment During Virtual Interview as Compared to In-Person Ratings/J.K.** Heath, C.B. Clancy, M.E. Kreider, Philadelphia, PA, p.A3959
- P657 A Single-Center Study of Applicant Characteristics Associated with a Successful Match into PCCM Fellowship/S.A.** Iantorno, M. Lee, Los Angeles, CA, p.A3960
- P658 Understanding Physician Trainee Attitudes and Knowledge of Inferior Vena Cava Ultrasound/T.** Ramaswamy, J. Hootman, J. Wilson, A. Rogers, Palo Alto, CA, p.A3961
- P659 Defining Core Entrustable Professional Activities for Critical Care Ultrasound Competence Assessments of Critical Care Fellows/H.P.** Israel, R.E. Burk, A. Goffi, J.P. Kanaan, M.J. Lanspa, D. Pradhan, H. Sauthoff, I.D. Weir, G. Zaidi, D. DeBernardo, M.A. Pisani, R. Liu, K. Gielissen, A. Chichra, New Haven, CT, p.A3962
- P660 Towards Rapid, Real-Time Assessment of Bronchoscopy Competency in Fellowship/D.K.** Devlin, S. Brown, B. Wang, J.I. McSparron, D. Claar, Ann Arbor, MI, p.A3964
- P661 Effect of Video Game Experience on Performance with a Robotic-Assisted Bronchoscopy Simulator/S.L.** Dickey, A. Sachdeva, E. Pickering, F. Nasim, V.K. Holden, Baltimore, MD, p.A3965
- P662 A Pilot Study of Robotic Assisted Bronchoscopy and Cone Beam Computed Tomography (CBCT) Training Curricula for Advanced Fellowship Trainees/A.E.** Revelo, C. Ghattas, J.K. Pannu, E. Josan, N.J. Pastis, Columbus, OH, p.A3966
- P663 Smoke and Mirrors: Evaluation of Tobacco Use Disorder Education in a Pulmonary and Critical Care Fellowship/Z.** Reese, J. Deepak, H. Gogineni, C. Clancy, Philadelphia, PA, p.A3967
- P664 Gaps in Pleural Procedure Training for Pulmonary and Critical Care Fellows/J.** Green, D.G. Dunlap, R. Semaan, J. Chiarchiaro, Pittsburgh, PA, p.A3968
- P665 Pilot Study of a Scalable Web- and Videoconference-Based Training Platform to Improve ICU Nurses' Serious Illness Communication Skills/J.B.** Seaman, R.A. Butler, R.M. Arnold, R. Doobay, D.J. Maloney, W.C. Gautier, M.K. Norman, S.P. Dev, D.B. White, Pittsburgh, PA, p.A3969
- P666 Education in the Medical ICU - A Targeted Needs Assessment of Residents, Fellows, and Faculty/B.** Poole, A. Ryden, L. Leclair, Salt Lake City, UT, p.A3970
- P667 A Telehealth Approach to Addressing ICU Healthcare Worker Mental Health Distress/N.** Shah, A.J. Goodwin, A.A. Rheingold, K.J. Ruggiero, D.W. Ford, Charleston, SC, p.A3971
- P668 Intensive Care Unit Physiotherapy Session Length Is Associated with the Number of Patients Requiring Care: A Longitudinal Panel Study/C.** Fu, L.T.Y. Silveira, M.T. Politi, A.S. Colombo, Sao Paulo, Brazil, p.A3972
- P669 Identifying Daily Attending Among Critically Ill Patients Using Electronic Healthcare Records: A Methodological Comparison/N.E.** Ingraham, R. Kohn, M.P. Kerlin, R.A. Dudley, Minneapolis, MN, p.A3973
- P670 Evaluating the 'Warm Handoff': A Key Piece of the Cystic Fibrosis Transition Process/E.** Kapania, E. Chen, Chicago, IL, p.A3974
- P671 An Investigation into the Association Between Race and Patient Satisfaction in Outpatient Pulmonary Clinics/F.A.** Faizee, A. Bilderback, S. Altieri Dunn, J. Green, S. Maximous, T.L. Suber, A. Morris, S.R. Patel, F.A. Shah, McKeesport, PA, p.A3975
- P672 Evaluations of Racial Disparities in Pulmonary Consultation and the Association with Patient-Centered Outcomes/J.T.** Lee, A. Winston, C. Clancy, J.K. Heath, R. Kohn, Philadelphia, PA, p.A3976

- P673 Hospital Discharge Summaries Are Insufficient Following Intensive Care Unit Stays/K. Hauschildt, R.K. Hechtman, H.C. Prescott, T.J. Iwashyna, Ann Arbor, MI, p.A5715**
- P674 Expectations Versus Reality: Understanding the Accuracy of Impressions Made During Virtual Interviews of Pediatric Pulmonary Fellowship Programs/D. Atwood, L. Chiel, A.M.H. Casey, B.A. Nelson, Boston, MA, p.A5716**

BEHAVIORAL • CLINICAL
THEMATIC POSTER SESSION
C35 TOPICS IN CRITICAL CARE AND RESPIRATORY FAILURE
9:30 a.m. - 3:45 p.m. MOSCONE CENTER
Area H, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P677 WHY STOP: A Behavioural Approach to Study the Factors Influencing Antibiotic Stop Decisions in ICU. The Impact of Point of Care Tests (POCT) on Decision Making/S. Singh, M. Nurek, S. Mason, M. Vizcaychipi, London, United Kingdom, p.A3977**
- P678 Specificity and Sensitivity of ICD Codes for Alcohol and Substance Use in ICU Patients/P. Tiberio, J.N. Kennedy, J. Holton, N. Prendergast, C. Onyemekwu, K. Potter, P. Roy, B.J. Mcverry, T.D. Girard, Pittsburgh, PA, p.A3978**
- P679 A Summarized Literature Tool to Improve Implementation of Evidence-Based Medicine in the Medical Intensive Care Unit/S. Guleria, F. Adams, E. Kapania, A.P. Trivedi, Chicago, IL, p.A3979**
- P680 Acute Respiratory Failure: Prevalence and Correlates of Diagnostic Error/J. Howe, J.I. Mcsparron, D. Claar, T.S. Valley, M.W. Sjoding, Ann Arbor, MI, p.A3980**
- P681 The Most Common Pulmonary Diseases and Characteristics of Patients Frequently Admitted to Pulmonary Service/H.H. Al-Jahdali, A. AL-Harbi, M. AL-Gamed, A. Almuttari, S.M. Alyami, A. Khan, H. AL Hayyan, Riyadh, Saudi Arabia, p.A3981**
- P682 High Flow Nasal Cannula Use: A Survey on Weaning Practices/S. Tuthill, H. Freeman, S.A. Nonas, M.G. Drake, K.C. Vranas, Portland, OR, p.A3982**
- P683 Patient Initiation of End-of-Life Discussions, a Randomized Control Trial/E.J. Smith, L. Nici, Providence, RI, p.A3983**
- P684 The Acquisition of New Medical Devices in Patients with Persistent Critical Illness: A Retrospective Cohort Study in the Veteran Affairs/E.M. Viglianti, E. Carlton, J.M. Mcpeake, X.Q. Wang, S. Seelye, T.J. Iwashyna, Ann Arbor, MI, p.A3984**
- P685 “Lo and Behold, a Pandemic, Right?” A Virtual Care and Remote Monitoring Program for Individuals Using Long-Term Home Mechanical Ventilation - Patients’ Respond/A.M. Qazi, M. Ambreen, R. Pizzuti, F. Buchanan, A.S. Gershon, L. Rose, R. Amin, Toronto, Canada, p.A3985**
- P686 “Lo and Behold, a Pandemic, Right?” A Virtual Care and Remote Monitoring Program for Individuals Using Long-Term Home Mechanical Ventilation - Healthcare Providers’ Respond/A.M. Qazi, M. Ambreen, R. Pizzuti, F. Buchanan, A.S. Gershon, L. Rose, R. Amin, Toronto, Canada, p.A3986**
- P687 Daily Written Care Summaries for Surrogates of Critically Ill Patients: A Randomized Controlled Trial/J.A. Greenberg, S. Basapur, T.V. Quinn, J.L. Bulger, N.H. Schwartz, S.K. Oh, E.M. Ritz, C.M. Glover, R.C. Shah, Chicago, IL, p.A5717**
- P688 Many Patients Discharged After Acute Respiratory Failure Do Not See a Primary Care Provider Within 60 Days/M. Nagle, C.R. Cooke, J.I. Mcsparron, T.S. Valley, H.C. Prescott, A.J. Admon, Ann Arbor, MI, p.A5718**
- P689 Continuous Artificial Intelligence Video Monitoring of ICU Patient Activity for Detecting Sedation, Delirium and Agitation/S. Parker, D. Gilstrap, A. Bedoya, P. Lee, K. Deshpande, P.G. Gabriel, L. Urbisci, T. Troy, D. Hu, T. Hata, N. Singh, M.A. Choma, Durham, NC, p.A5719**

BEHAVIORAL • CLINICAL
THEMATIC POSTER SESSION
C36 HOT TOPICS IN BEHAVIORAL SCIENCES AND HEALTH SERVICES RESEARCH
9:30 a.m. - 3:45 p.m. MOSCONE CENTER
Area H, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P691 “It’s a Cause I Believe In”: Factors Influencing Participation and Engagement in Longitudinal, Respiratory-Focused Research Studies/A. Synn, K. Menson, M. Carnethon, A.E. Dixon, R. Kalhan, M. Krishnan, E. Sugar, G.R. Washko, R.A. Wise, M. Eakin, Boston, MA, p.A3987**

- P692 Associations Among Social Determinants of Health and Quality of Life in Rural Appalachia/R.** Dhand, P. Terry, G. Kumar, H. Worth, J. Ferris, D. Norwood, R.E. Heidel, L. Shali, Knoxville, TN, p.A3988
- P693 Trends in Pediatric Hypoxia Altitude Simulation Testing (HAST): Data from a Pediatric Referral Center/L.** Caldaroni, K. Massa, S. Rani, A. Strang, Philadelphia, PA, p.A3989
- P694 Does Air Pollution Impact Medication and Laboratory Test Utilization Among Children?/T.** To, E. Terebessy, J. Zhu, K. Zhang, S.D.M. Dell, D. Stieb, Toronto, Canada, p.A3990
- P695 Respiratory Airflow Estimation Using Tracheal Sounds and Motion/N.** Montazeri Ghahjaverestan, W. Fan, C. Aguiar, J. Yu, D. Bradley, Toronto, Canada, p.A3991
- P696 The Patient Journey in Patients with CRSwNP in the United States and Europe/J.** Hwee, S.G. Smith, M. Small, L. Lee, S. Yang, Mississauga, Canada, p.A3992
- P697 Impact of an Integrated Specialty Pharmacy in an Otolaryngology Clinic at a Large, Urban Academic Medical Center/S.M.** Rotolo, A. Naserallah, M.G. Macias, E.C. Coogan, M.K. Lach, A.M. Leslie, J.M. Pinto, Chicago, IL, p.A3993
- P698 Australia and New Zealand Interstitial Lung Disease Registry (ANZ ILD) 2021 Update - Progress During the Pandemic/I.** Moore, J. Wrobel, D. Jackson, J. Mackintosh, I. Glaspole, C. Grainge, M.L. Wilsher, F. Thien, D. Chambers, N. Goh, A. Edwards, H. Gallagher, B. Kwan, E. Veitch, G. Keir, T.J. Corte, Midland, Australia, p.A3994
- P699 Content Analysis of Idiopathic Pulmonary Fibrosis-Related Information on Twitter/S.R.** Ong, J. Koo, K.A.M. Johansson, C.J. Ryerson, G.C. Goobie, Toronto, Canada, p.A3995
- P700 Hemoptysis Associated with Sexual Activity in Lymphangioleiomyomatosis/R.** Rubin, B.M. Shaw, E. Koprass, F.X. McCormack, N. Gupta, Cincinnati, OH, p.A3996
- P701 Development of a Comprehensive, Integrated Patient Data Repository of US Pulmonary Arterial Hypertension (PAH) Patients to Assess the Impact of Clinical Care on Patient Outcomes/H.W.** Farber, S. Milligan, S. Panjabi, Y. Tsang, K. Bettencourt, M. Cho, Boston, MA, p.A3997
- P702 Impact of a Specialty Pharmacy-Prepared Infused Prostacyclin Admixture Program on Central Venous Catheter Infections in Patients with Pulmonary Arterial Hypertension/A.M.** Portik, L. D'Albini, D. Julian, C. Bloor, D. Mager, Warrendale, PA, p.A3998
- P703 Patient Compliance with Venous Thromboembolism Prophylaxis in the Inpatient Setting: Comparison of Enoxaparin versus Heparin Subcutaneous/A.S.** Saini, K. Shayani, H.C. Meng, New York, NY, p.A3999
- P704 Incidence of Significant Incidental Findings on Computed Tomographic Pulmonary Angiography Performed for Suspected Pulmonary Embolism/T.K.** Eng, D. Steiger, New York, NY, p.A4000
- P705 Treatment Strategies and Clinical Outcomes Among Patients with Eosinophilic Esophagitis/G.T.** Smith, D.L. Caruana, A.M. Szema, Stony Brook, NY, p.A4001
- P706 Impact of an Endoscope Tip Protection Device on Repair Costs for Flexible Bronchoscopes/H.** Singh, B. Benn, C. Jani, M. Abdalla, M. Mindham, V. Ladwig, J.V. Heiden, J.S. Kurman, Milwaukee, WI, p.A4002
- P707 Evaluation of Several Small Volume Nebulizer (SVN) Kits Intended for Aerosol Treatments in the Home/M.** Nagel, C. Doyle, R. Ali, J. Suggett, London, Canada, p.A4003
- P708 Accessibility of Cardiothoracic Surgeons to the Medicare Population: A State-by-State Analysis/M.Z.** Arif, D. Afzal, S. Fatima, A. Khurana, Phoenix, AZ, p.A4004
- P709 US Expert Consensus on Short-Acting Beta Agonist (SABA) Reliever Medication Use for Asthma Clinical Decision-Making: A Mixed-Method Delphi Adjudication Approach/N.L.** Lugogo, M. O'Connor, M. George, R. Merchant, G. Bensch, J. Portnoy, J. Oppenheimer, M. Castro, Ann Arbor, MI, p.A5720
- P710 Use of Patient Reported Outcomes Measures in Asthma Among Pulmonologists: A Pilot Study/K.L.** Robles Velasco, I. Cherrez-Ojeda, M. Maurer, G.D. Ramón, J. Bousquet, D.E.S. Larenas-Linnemann, C. Caballero-López, M.A. Al-Nesf Al-Mansouri, T.S.A. Mohammed Ibrahim, S. Neisinger, D. Fomina, A. Zalewska, R. Oztas, M. Felix, F.D. Mihaltan, A. Kaspersk, p.A5721
- P711 Ensuring Timely Pulmonary Follow Up After an Inpatient Asthma Hospitalization: A Quality Improvement Initiative/E.** Brumer, C.G. Cherian, S. Godse, T. Kockar Kizilirmak, M. Grossman, L. Chen, B. Sheares, New Haven, CT, p.A5722

CLINICAL

THEMATIC POSTER SESSION

C37 COPD PREDICTORS AND PHENOTYPES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P417 Mortality in Relation to Baseline and Exertional Hypoxemia Status in Veterans with COPD/R. Diaz Lankenau, E. Jean, B. Garnet, F. Tang, M.A. Campos, Miami, FL, p.A4005**
- P418 COPD Staging with Graph Neural Networks/P. Nardelli, R. San Jose Estepar, Boston, MA, p.A4006**
- P419 Impact of Marijuana on Progression of COPD in Middle-Aged and Older Ever Smokers of Tobacco: SPIROMICS Longitudinal Cohort Analysis/D.P. Tashkin, I. Barjaktarevic, C.B. Cooper, T. Shing, R. Buhr, G. Kinney, E.A. Hoffman, P. Woodruff, M.-L. Han, B. Drummond, R.E. Kanner, N.N. Hansel, S. Jacobson, M. Morris, R.P. Bowler, D. Couper, Los Angeles, CA, p.A4007**
- P420 A Polygenic Risk Score of BMI and COPD-Related Phenotypes in Smokers/J. Zhang, B.D. Hobbs, E.K. Silverman, G.R. Washko, B.R. Celli, M.-L.N. McDonald, M. Moll, M.H. Cho, Boston, MA, p.A4008**
- P421 Influence of Lung Function and Cardiovascular Disease on Mortality/I. Sekitoleko, N. Robertson, C. Anonubi, P.D. Jackson, R. Padalker, P. Herrera, M. Nyirenda, E. Webb, N.M. Punjabi, T. Siddharthan, Kampala, Uganda, p.A4009**
- P422 Annual Body Weight Change and Prognosis in Chronic Obstructive Pulmonary Disease/Y. Abe, M. Suzuki, H. Shima, Y. Shiraishi, N. Tanabe, S. Sato, K. Shimizu, H. Kimura, H. Makita, T. Hirai, S. Konno, M. Nishimura, Sapporo, Japan, p.A4010**
- P423 Clinical Heterogeneity of Asthma-Chronic Obstructive Pulmonary Disease Overlap: An Analysis from the PIRICA Study/N. Takei, M. Suzuki, M. Mastumoto-Sasaki, A. Oguma, Y. Abe, K. Shimizu, H. Kimura, H. Makita, M. Nishimura, S. Konno, Sapporo, Japan, p.A4011**
- P424 Characteristics of Veterans with COPD Who Improve Walking Distance with Supplemental Oxygen/E. Jean, R. Diaz Lankenau, B. Garnet, F. Tang, M.A. Campos, Miami, FL, p.A4012**
- P425 Relationships Between Symptoms and Lung Function in Asthma and/or Chronic Obstructive Pulmonary Disease in the NOVELTY Study/A. Papi, R. Hughes, R.A. Del Olmo Sansone, A. Agusti, B.E. Chipps, B. Make, E. Tomaszewski, K. Peres Da Costa, D. Srivastava, J. Vestbo, C. Janson, P.-R. Burgel, D. Price, Ferrara, Italy, p.A4013**
- P426 Mortality Among Smokers and Non-Smokers with COPD/C.I. Anunobi, I. Sekitoleko, N. Robertson, N. Punjabi, T. Siddharthan, Miami, FL, p.A4014**
- P427 Predictors of Allergen Sensitization with Exposure in COPD/R. Dahake, H. Woo, M.F. Davis, K. Koehler, M.C. McCormack, E.C. Matsui, N.N. Hansel, N. Putcha, Baltimore, MD, p.A4015**
- P428 Clinical Characteristics and Predictors of Preserved Ratio Impaired Spirometry in China: Results from Population-Based, Cross-Sectional Study/N. Zhao, Y. Zhou, F. Wu, J. Peng, P. Ran, Guangzhou, China, p.A4016**
- P429 Predicting In-Hospital Death in Pneumonic COPD Exacerbation via BAP-65, CURB-65, and Machine Learning/A. Shiroshita, K. Yuya, H. Shiba, S. Chigusa, S. Kenya, M. Shinya, T. Keisuke, K. Yuki, Ichinomiya City, Japan, p.A4017**
- P430 Prognostic Utility of Markers of Eosinophilic Inflammation in Non-Smoking Chronic Obstructive Pulmonary Disease in Developing Countries; Exploring Potential Treatable Traits Within a Clinical Phenotype/N. Bhatta, A.K. Sah, D.R. Mishra, B.K. Sah, M. Lamsal, P. Upadhyaya, N.R. Bhattarai, Dharan, Nepal, p.A4018**
- P431 Relationship of Heart Rate Variability to Disease Severity and Functional Status in COPD/S.C. Park, D. Gomez, B. Dolezal, D. Jung, R. Buhr, D.P. Tashkin, I. Barjaktarevic, C.B. Cooper, Goyang-si, Korea, Republic of, p.A4019**
- P432 Influences of Hiatus Hernia and Gastro-Esophageal Reflux Disease on the Incidence of Acute Exacerbations in Older Patients with COPD (AECOPD)/Y. Iwata, S. Teramoto, Hachioji-shi, Japan, p.A4020**
- P433 The Effect of COPD Co-Morbidity on Mortality in CHF/D. Amann, R. Akdogan, A. Kaur, R. ZuWallack, D. Wakefield, S. Tabtabai, North Haven, CT, p.A4021**
- P434 Risk Factors Predicting of 30-Day Readmission of COPD Patients After Discharge From Hospital Related to Disease Exacerbation/A.S. Sadigov, A. Bagirzadeh, K. Abasaliyeva, Baku, Azerbaijan, p.A4022**
- P435 The Course of Chronic Obstructive Pulmonary Disease in Patients with Arterial Hypertension/O. Boiko, V. Rodionova, L. Glyniana, Dnipro, Ukraine, p.A4023**

CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C38 RARE AND COMMON ILDS: EPIDEMIOLOGY, DIAGNOSIS, AND MANAGEMENT

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area E, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P317 Predictive Value of Pre-Treatment Abnormalities on Chest Imaging and Pulmonary Function Tests (PFTs) for Immune Checkpoint Inhibitor Pneumonitis/A.** Wong, M. Riley, J. Wang, V. Esguerra, S. Zhao, M. Li, K. Kendra, G. Lopez, C.J. Presley, L. wei, D. Owen, K. Ho, Columbus, OH, p.A4024
- P318 Clinical Outcomes in Immunotherapy Induced Pneumonitis/A.E.** Davis, D.B. Johnson, J.A. Bastarache, Nashville, TN, p.A4025
- P319 Safety of Immune Checkpoint Inhibitors in Advanced Non-Small Cell Lung Cancer Patients with Interstitial Lung Abnormalities or Disease/S.** Nakazawa, M. Kato, S. Soma, H. Namba, Y. Arai, H. Motomura, Y. Ochi, K. Kurokawa, I. Sumiyoshi, J. Watanabe, H. Ihara, T. Asao, N. Shimada, S. Togo, S. Sasaki, K. Takahashi, Bunkyo, Japan, p.A4026
- P320 Patient Characteristics and Manner of Clinical Presentation in Lymphangioleiomyomatosis/A.N.** Khan, D.F. Dilling, Maywood, IL, p.A4027
- P321 Presentation, Mode of Diagnosis and Prevalence of Lymphangioleiomyomatosis in an Irish Population/E.** Lynn, M. O'Callaghan, L.A. Brown, A. Fabre, J.D. Dodd, D. Murphy, M.P. Keane, C. Mccarthy, Dublin, Ireland, p.A4028
- P322 Effects of Sirolimus on Anti-Spike Protein Antibody Levels Following Vaccination of Patients with Lymphangioleiomyomatosis/T.A.** Worthy, A.M. Jones, N. Gupta, J. Moss, Bethesda, MD, p.A4029
- P323 In Patients with Highly Probable Pulmonary Sarcoidosis, the Detection of Granulomas in the First Lymph Node Station Is Sufficient to Secure the Diagnosis/A.** Tharwani, A. Bhardwaj, F. Almeida, D.A. Culver, M. Lessa Ribeiro Neto, Cleveland, OH, p.A4030
- P324 Diagnostic and Therapeutic Practices of Cardiac Sarcoidosis in the United States: A Nationwide Registry Study/M.** Younis, A. AbuKar, Y. Al-Zamer, B. Alkilany, M. As Sayaideh, D.C. Patel, B.N. Alzghoul, Gainesville, FL, p.A4031
- P325 Repository Corticotropin Injection in African-Americans with Advanced Symptomatic Sarcoidosis: A Retrospective Analysis of Medical Records/G.** Wan, J. Bindra, I. Chopra, K. Hayes, J. Niewoehner, M. Panaccio, Hampton, NJ, p.A4032
- P326 Clinical and Biochemical Characteristics of Multiorgan Sarcoidosis/D.M.** Perlman, S.M. Leach, B. Thyagarajan, N. Kapur, M. Bhargava, Minneapolis, MN, p.A4033
- P327 Clinical Characteristics in Isolated Versus Non-Isolated Cardiac Sarcoidosis According to Two Different Diagnostic Strategies/M.L.** Ribeiro Neto, C. Jellis, Z. Taimeh, P. Cremer, A.V. Pulapaka, A. Wimer, D.A. Culver, Cleveland, OH, p.A4034
- P328 Characteristics of Danish Patients with Pulmonary Sarcoidosis/J.** Moller, O. Hilberg, E. Bendstrup, Aarhus, Denmark, p.A4035
- P329 Clinical Correlation of MRI with T2 Mapping and FDG-PET in Cardiac Sarcoidosis/D.J.** Dennis, J. Burt, W.J. Rieter, B. Houston, A. Montes, G. Aquino, J. Chamberlin, W.E. James, Charleston, SC, p.A4036
- P330 Prognosis of Isolated Versus Non-Isolated Cardiac Sarcoidosis According to Two Different Definitions/M.L.** Ribeiro Neto, A.V. Pulapaka, D. Rozenbaum, S. Ganerawal, C. Jellis, Z. Taimeh, P. Cremer, A. Wimer, D.A. Culver, Cleveland, OH, p.A4037
- P331 Thinking Outside of the Lungs; Screening for Extrapulmonary Features of Sarcoidosis/M.** Penugonda, M. O'Callaghan, L. Brown, E. Mcgrath, M.P. Keane, C. Mccarthy, Dublin, Ireland, p.A4038
- P332 Post-COVID: The Transformation of the Pulmonary Specialist into a Rheumatologist/D.** Gagiannis, K. Steinestel, Ulm, Germany, p.A4039
- P333 A Lung-Term Sequela: Risk Factors for Presence of Long-Term Interstitial Lung Abnormalities After Admission for COVID-19/T.** Ahmed, A. Walker, R. Durgam, D. Corwin, Fountain Hill, PA, p.A4040
- P334 Radiographic and Pathologic Patterns Among Patients with COVID-19 That Underwent Lung Transplantation/F.** Pyarali, A. Khan, S. Mortazavi, M. Venturina, A. Marchevsky, T. Zaman, R. Rampolla, Los Angeles, CA, p.A4041
- P335 Fibrotic-Like CT Alterations in COVID-19: Distinct Patterns of Temporal Evolution/L.** Kawano-Dourado, J.I. Enghelmayer, D.C. Patel, R. Fittipaldi, A. Jardim, J. Puka, T. Viaceli, J. Loso Girard, D. Samolski, A. Gaser, C.R.R. Carvalho, M.-P. Debray, B. Crestani, R. Borie, Sao Paulo, Brazil, p.A4042
- P336 Predictors of Functional and Radiographic Abnormalities 6 Months Post COVID-19 Illness/J.** Klapholz, B. Heyman, M. Sunseri, A. Witzl, R. Vakil, I.R. Young, R. Condos, New York, NY, p.A4043
- P337 Spectrum of Post COVID Lungs: A Descriptive Study/B.** Dizon, J.M. Crisostomo, R.M. Legaspi, R.M. Divinagracia, Taguig City, Philippines, p.A4044
- P338 Pulmonary Fibrosis After COVID-19: What Are Risk Factors and How Reduce Extensivity of Residual Lung Abnormalities?/A.S.** Sadigov, S. Akhundov S, A. Agayeva, F. Hadgiyeva, Baku, Azerbaijan, p.A4045
- P339 Pirfenidone for COVID-19 Associated Pulmonary Fibrosis: A Case Series/J.L.** Co, F.A. Badilles, C.B. Halun, G.N. Dy-Agra, C.M.L. Campomanes, R.S. Pagcatipunan, R.M. Divinagracia, Taguig City, Philippines, p.A4046

- P340 Autoimmune Pulmonary Alveolar Proteinosis: Update from the US National PAP Registry/B.C. Carey, C. Chalk, J. Stock, C. Mccarthy, A. Toth, H. Greenberg, T.S. Wang, J. Krischer, B.C. Trapnell, Cincinnati, OH, p.A4047**
- P341 A National Rare Lung Disease Clinic: Patient Characteristics and Lessons Learned/M. O'Callaghan, F. Helly, L.A. Brown, M.P. Keane, C. Mccarthy, Dublin, Ireland, p.A4048**
- P342 Detection of FEV1 Decline Preceding Bronchiolitis Obliterans Syndrome Diagnosis in Allogeneic Hematopoietic Stem Cell Transplant Recipients/M. Peha, K. Baker, Q. He, E. Rankin, M. Guerriero, J. Turner, A. Sheshadri, J.L. Hsu, H. Sharifi, G. Yanik, G.-S. Cheng, Seattle, WA, p.A4049**
- P343 Pulmonary Function Test Screening for Bronchiolitis Obliterans Syndrome in Recipients of Allogeneic Hematopoietic Stem Cell Transplantation Conditioned with Antithymocyte Globulin/N.A. Adderley, W.W. Flemons, K. Jamani, Calgary, Canada, p.A4050**
- P344 Restrictive Lung Impairment After Hematopoietic Stem Cell Transplant: Etiology and Impact/M.A. Alkhunaizi, R. Saliba, B. Patel, L. Bueno, M. Arain, R. Mehta, U. Popat, C. Hosing, G. Rondon, L. Bashoura, N. Bhan, B. Dickey, R. Champlin, A. Alousi, A. Sheshadri, Houston, TX, p.A4051**
- P345 Effects of Tacrolimus on Mechanical and Humoral Determinants of Brain Death-Induced Lung Injury/A. Belhaj, L. Dewachter, M. Rimmelink, B. Rondelet, Yvoir, Belgium, p.A4052**
- P346 Identifying Areas for Improvement in Vaccination Completion in Lung Transplant Recipients at a Tertiary Care Center/T.K. Boyle, A. Goree, C.M. Shaver, Nashville, TN, p.A4053**
- P347 Risks, Management, and Early Outcomes of COVID-19 in Lung Transplant Recipients During the First Year of the Pandemic: A Single-Center Cohort Study/M. Cano, H. Kulkarni, R. Vazquez Guillamet, C. Witt, J. Alexander-Brett, L. Tague, L. Halverson, R. Nava, P. Varun, D. Kreisel, R. Hachem, D. Byers, Saint Louis, MO, p.A4054**
- P348 Increased Bone Marrow Dysfunction in Idiopathic Pulmonary Fibrosis Lung Transplant Recipients with Short Telomeres/S. Hannan, C. Iasella, R. Sutton, I. Popescu, S. Winters, H. Mannem, R. Koshy, E.A. Lendermon, D. Kass, J.K. Alder, J.F. McDyer, Pittsburgh, PA, p.A4055**
- P349 Are Low Dose CT Scan Lung Screening Criteria Useful in Lung Transplant Recipients?/B.H. Lashari, R.J. Vender, T. Sinha, D.C. Fleitas Sosa, G.J. Criner, Philadelphia, PA, p.A4056**
- P350 Incidence of Lung Cancer in Lung Transplant Recipients/R.J. Vender, B.H. Lashari, T. Sinha, D.C. Fleitas Sosa, G.J. Criner, Philadelphia, PA, p.A4057**
- P351 Doubling Time of Primary Lung Cancers in Lung Transplant Patients/S. Dachert, B.H. Lashari, R.J. Vender, M. Kumaran, M. Weir, Philadelphia, PA, p.A4058**
- P352 Real World Use of Ruxolitinib in Pulmonary Chronic Graft-versus-Host Disease/Z. Zhang, M. Hefazi, S.G. Peters, C.C. Kennedy, H. Yadav, Rochester, MN, p.A4059**
- P353 COVID-19 Vaccination Safety Profile and Patient Perceptions in Solid Organ Transplant Recipients at a Quaternary Referral Center/R. Singh, C. Kutac, S. Bourgeois, J.A. Goss, A.B. Civitello, R. Stribling, K.S. Timmins, B. Murthy, M.A. Baz, J.M. Seagraves, G.W.-C. Li, P.S. Garcha, A. Kumar, Houston, TX, p.A4060**
- P354 Esophageal pH and Timing of CLAD in Lung Transplant Recipients/F. Pyarali, A. Peiris, J. Thomas, D. Megna, P. Catarino, R. Rampolla, Los Angeles, CA, p.A4061**
- P355 A Survey of Referral Rates for Lung Transplant Assessment in Patients with Interstitial Lung Disease Meeting Pulmonary Function Criteria/O. Deri, D. Ovadya, M. Peled, S. Chatterji, L. Levy, Ramat Gan, Israel, p.A4062**
- P356 Differences in Body Composition and Frailty Between Lung Transplant Candidates with Connective Tissue Disease-Related Interstitial Lung Disease and Idiopathic Pulmonary Fibrosis/K.F. Flack, M.D. George, Y. Gao, E.J. Bernstein, C. Johnson, J.M. Diamond, L.J. Benvenuto, S.A. Arcasoy, J.R. Greenland, L. Betancourt, M. Oyster, M. Brown, L. Kalman, D. Zaleski, J. Adler, M. Tevald, P. Balar, S. Patel, N. Medikonda, M. Kreider, J. D. Christie¹, J. P. Singer, M. R. Anderson; Philadelphia, PA, p.A4063**
- P357 Post-Transplant Survival in Patients with Idiopathic Pulmonary Fibrosis with Moderate and Severe Pulmonary Hypertension/B.H. Lashari, R.J. Vender, T. Sinha, Y. Dotan, A.J. Mamary, Philadelphia, PA, p.A5723**
- P358 Impact of Lung Function Decline on Mortality in Lung Transplant Recipients: Long-Term Results from the L-CsA-i Study for the Prevention of Bronchiolitis Obliterans Syndrome/N. Kneidinger, A. Ghiani, K. Milger, V. Monforte, P. Jaksch, C. Knoop, J. Parmar, P. Ussetti, A. Solé, J. Muller-Quernheim, J. Behr, C. Neurohr, Munich, Germany, p.A5724**
- P359 Abnormal Features of Cardiac MRI Associated with Non-Inducibility of Ventricular Arrhythmias in Cardiac Sarcoidosis Patients with Mildly Impaired Left Ventricular Ejection Fraction/R. Pereira, P. Tandon, M. Basist, A.M. Mustafa, N.A. Shah, A.S. Morgenthau, New York, NY, p.A5725**

CLINICAL

THEMATIC POSTER SESSION

C39 CASE REPORTS: SARCOIDOSIS IS ALWAYS IN THE DIFFERENTIAL9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P771 Unique Case Involving an Extrapulmonary Manifestation of Sarcoidosis**/K. Bhandari, D. Wu, M.F. Perez, Farmington, CT, p.A4064
- P772 Cystic Bronchiectasis in Pulmonary Sarcoidosis**/R.S. Jadav, D. Budh, S. Maddika, A. Avula, Bronx, NY, p.A4065
- P773 You Can Feel It in Your Bones**/S. Qutubuddin, P. Sen, S. Chaaban, J.R. McCormick, J.L. Sturgill, D. Gleason, Lexington, KY, p.A4066
- P774 Neurosarcoidosis, Not an Easy Diagnosis to Ace**/S. Tauscher, Philadelphia, PA, p.A4067
- P775 Frequent Falls - An Unusual Presentation of Sarcoidosis**/S.E. Kennedy, F. Jung, S. Hadigal, D.C. Patel, D.C. Gomez Manjarres, Gainesville, FL, p.A4068
- P776 Rare Case of Transverse Myelitis as Initial Presentation of Sarcoidosis**/M. Parmar, S. Gupta, S. Daouk, Oklahoma City, OK, p.A4069
- P777 Mandibular and Periodontal Involvement in Sarcoidosis**/L. Zeineddine, J.F. Jaber, D.M. Cohen, D.C. Gomez Manjarres, Gainesville, FL, p.A4070
- P778 Transverse Myelitis as an Initial Presentation of Sarcoidosis**/T. Cook, Y. Fahmawi, R. Petrossian, P. Almalouf, Mobile, AL, p.A4071
- P779 Head, Shoulders, Knees, and Toes: An Uncommon Presentation of Sarcoidosis**/T. Mandelkern, A. Doyle, N. Faraci, T. La, S. Nath, Pittsburgh, PA, p.A4072
- P780 Delayed Diagnosis of Sarcoidosis Leading to Unintended Progression of Neurosarcoidosis**/J.F. Hendrickson, R.P. Nayak, St. Louis, MO, p.A4073
- P781 When in Doubt, It's Always Sarcoid! A Peculiar Presentation of Sarcoidosis**/M. Maki, M. Cherabuddi, I. Murskyj, M.K. Ngassa Tayou, H. Abdulla, D.R. Ouellette, Detroit, MI, p.A4074
- P782 Systemic Sarcoidosis Masquerading as a Metastatic Malignancy**/R. Swier, K. Jakharia, S.L. Tilley, T. Saint-Surin, Chapel Hill, NC, p.A4075

P783 Possible Sarcoidosis Flare After SARS CoV-2 Vaccination?/R. Kapil, J.P. Higuero Sevilla, S. Woo, M. Gulati, Bridgeport, CT, p.A4076

P784 Non-Caseating or Caseating Granulomas in Sarcoidosis?/A. Marathe, R. Marrero Alamo, J. Parikh, J. Goyos, Kissimmee, FL, p.A4077

P785 Seeds in the Lungs: A Pseudo-Miliary Pattern of Sarcoidosis/P. Ghimire, A. Chu, Syracuse, NY, p.A4078

P786 Silent DVTs Masquerading as Mortimer's Malady/Y. Singh, M. Gogtay, C. Ramasamy, S.V.A. Venkataramanan, Worcester, MA, p.A4079

P787 Parathyroid Adenoma in Sarcoidosis Patient Presenting with Hypercalcemia/M. Andreas, T. Shih, D. Cabrera, A. Berman, Newark, NJ, p.A4080

P788 Miliary Nodules: An Unusual Presentation of Pulmonary Sarcoidosis/I.E. Eze, L. Rougui, A. Mehari, K. Pais, S. Simmons, Washington, DC, p.A4081

P789 Diagnostic Challenges of Sarcoidosis/A. Devine, S. John, J. Brady III, Lititz, PA, p.A4082

P790 The Curious Case of a Right Upper Lobe Lung Mass with Scattered Lung Nodules/C. Iyer, H. Faisal, A. Elkhapery, L.K.T. Boppana, H. Boppana, F. Genese, Rochester, NY, p.A4083

P791 Hypercalcemia: It's Not Cancer!/A. Ronghe, S. Bhura, G. Fuhrer, Buffalo, NY, p.A4084

CLINICAL

THEMATIC POSTER SESSION

C40 INVESTIGATIONS IN INTERVENTIONAL PULMONOLOGY AND PLEURAL DISEASE9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area E, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P361 Comparison of diagnostic yield and complications in ultrasound guided closed pleural biopsy versus thoracoscopic pleural biopsy in undiagnosed exudative pleural effusion a randomized controlled trial**/P.R. Mohapatra, G. Durgeshwar, S.K. Bal, P. Mishra, S. Bhuniya, M.K. Panigrahi, S. Mohakud, S. Naik, V.R.M. Acharyulu, A. Datta, M.S. Goud, D. Chatterjee, V. Palanisamy, Bhubaneswar, India, p.A4085

- P362 A Multicenter Study Evaluating the Surgical Management of Patients with Pleural Infection Who Received Intrapleural Enzyme Therapy/M. Diddams, E. Bedawi, L.B. Yarmus, N. Rahman, J. Akulian, Chapel Hill, NC, p.A4086**
- P363 Stability of Pleural Fluid pH Stored in Plastic Blood-Gas Syringes on Slushed Ice versus Room Temperature Conditions/G.S. Zavorsky, Sacramento, CA, p.A4087**
- P364 Defining Optimal Settings for Lung Cryobiopsy in Interstitial Lung Disease/V. Menezes, A. Godin, J.C. Molina, C. Leduc, C. Pollock, J. Morisset, B. Nasir, P. Ferraro, M. Liberman, Montreal, Canada, p.A4088**
- P365 A Novel PAI-1-Targeted Treatment for Empyema That Decreases Pleural Thickening/G. Florova, A.O. Azghani, R. Girard, K. Sarva, C. De Vera, R. Emerine, A. Buchanan, A.R. Tvinnereim, P.J. Declerck, S. Idell, A. Komissarov, Tyler, TX, p.A4089**
- P366 Long-Term Outcomes After Tracheostomy for Severe COVID-19: A Retrospective Cohort Study/K.E. Swenson, D. Okin, P.S. Lai, E.E. Folch, Boston, MA, p.A4090**
- P367 Validation of a New Rabbit Model of Retained Hemothorax Amenable to Testing of Novel Pharmacological Interventions/C. De Vera, G. Florova, A. Buchanan, A. Azghani, R. Girard, R. Emerine, K. Sarva, C. Huckestein, A. Tvinnereim, S. Norwood, A. Cook, A.A. Komissarov, S. Idell, Tyler, TX, p.A4091**
- P368 Tracheobronchoplasty for Expiratory Central Airway Collapse: Should We Make the Distinction Between Tracheobronchomalacia and Excessive Dynamic Airway Collapse?/D. Ospina-Delgado, C.S. Digesu, D. Cloonan, M.S. Parikh, A. Majid, S.P. Gangadharan, J.L. Wilson, Boston, MA, p.A4092**
- P369 Real-World Complication Rates in Ultrasound and Navigational Bronchoscopy/A.M. Quinn, C. Kim, T. Shende, C.-F. Chang, Los Angeles, CA, p.A4093**
- P370 Operator Perception of the Ability of Multiple Single-Use Bronchoscopes to Engage Difficult Airway Segments/G. Senyei, D. Nettlow, A. Husain, M. Nobari, R. Miller, G.Z. Cheng, La Jolla, CA, p.A4094**
- P371 Using Quality Improvement Methodology to Increase Efficiency in Pleural Procedures/E. Mccully, Lanarkshire, United Kingdom, p.A4095**
- P372 Patient Selection and Outcomes for Bronchoscopic Lung Volume Reduction: A Single Center Experience/M. Martin, M. Dulohery Scrodin, E.S. Edell, T. Peikert, Rochester, MN, p.A4096**
- P373 Performance of Rapid On-Site Cytology for Detection of Granulomas by Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration Utilizing a Cytotechnologist/D.R. Laporte, L.A. Seaburg, S.H. Kirtland, D.G. Guinee, S.L. Cleman, T.J. Gerbino, Seattle, WA, p.A4097**
- P374 Association Between Severe Chronic Obstructive Pulmonary Disease and Severe Excessive Central Airway Collapse/G.A. Munera, D. Abia-Trujillo, J. Uribe, M.S. Parikh, F. Kheir, Z. Chenchen, S. Gangadharan, J.L. Wilson, A. Majid, Boston, MA, p.A4098**
- P375 Prevention of Droplet Dispersal with Endoscopic Mask; a New Daily Use Endoscopic Mask During Bronchoscopy/T. Ito, S. Okachi, K. Sato, H. Yasui, N. Fukatsu, M. Ando, T. Chen-Yoshikawa, H. Saka, Nagoya, Japan, p.A4099**
- P376 Indwelling Tunneled Pleural Catheters in Patients with Hepatic Hydrothorax A Single-Center Analysis for Outcomes and Complications/F.F. AL-Habeeb, K. Carle-Talbot, N. Rakocevic, T. Zhang, M. Mitchell, K. Amjadi, Ottawa, Canada, p.A4100**
- P377 A Multicenter Study Evaluating the Radiologic Characteristics of Patients with Pleural Infection Who Received Intrapleural Enzyme Therapy/B. Demarco, E. Bedawi, L.B. Yarmus, N. Rahman, J. Akulian, Chapel Hill, NC, p.A4101**
- P378 Simplifying and Protocolizing Intrapleural Lytic Instillation Therapy (SPLIT)/A. Agameya, D. Thakkar, K. Rechache, K. Halligan, L. Gazourian, C.R. Lamb, Burlington, MA, p.A4102**
- P379 Characteristics and Factors Associated with Mortality Among COVID-19 Patients and Pneumothorax/S.P.E. Nishi, S. Malik, C. Kaushik, E. Heidelman, E. Polychronopoulos, G. Sharma, Galveston, TX, p.A4103**
- P380 Uncovered Self-Expandable Metallic Stents for Expiratory Central Airway Collapse/D. Ospina-Delgado, J.P. Uribe, K.E. Swenson, M.S. Parikh, J.L. Wilson, S.P. Gangadharan, F. Kheir, C. Zhang, A. Majid, Boston, MA, p.A4104**
- P381 The Effects of COVID-19 on Pulmonary Procedures in a New York City Hospital System/M.J. Alexander, A. Rothman, New York, NY, p.A4105**
- P382 Spray Cryotherapy in Benign Tracheal Stenosis: A Single-Center Six-Year Experience/A. Ratwani, E.A. Schwartz, L. Roller, S.-W. Low, R.J. Lentz, A. Gelbard, O.B. Rickman, F. Maldonado, Nashville, TN, p.A4106**
- P383 Influence of Experience and Location on Thoracentesis Complication Rates/M.J. Alexander, A. Rothman, New York, NY, p.A4107**

- P384 Outcomes Following Medical versus Surgical Management of Chylothorax/D.K. Devlin, M. Wayne, J. De Cardenas, J.C. Deng, Ann Arbor, MI, p.A4108**
- P385 The Value, Mechanism and Safety of Preoperative Intra-Bullae and Intrathoracic Catheter Drainage in Patients with Severe Chronic Obstructive Pulmonary Disease (SCOPD) Complicated with Giant Emphysematous Bulla/H. Zhang, C. Ge, X. Bu, G. Xue, Y. Cai, W. Xu, W. Zhang, L. Wang, Z. Liu, Z. Zheng, Ri Zhao City, China, p.A4109**
- P386 Bronchoscopy in COVID19 ARDS Patients on Mechanical Ventilation: A Prospective Study/A. Kumar, R.M. Mehta, S. Bansal, A. Thorbole, C. Loknath, H. Kalpakam, Bangalore, India, p.A4110**
- P387 Value of Medical Thoracoscope for Pleural Diseases in Internal Medicine/Y. Hu, T. Ma, Q. Zhang, Changchun, China, p.A4111**
- P388 A Multicenter Study Evaluating the Relationship Between Chest Tube Output and Outcomes in Patients with Pleural Infection Who Received Intrapleural Enzyme Therapy/B. Demarco, E. Bedawi, L.B. Yarmus, N. Rahman, J. Akulian, Chapel Hill, NC, p.A4112**
- P389 Clinical Outcomes Among Patients with Radiographic Recurrence Following Tracheobronchoplasty/D. Ospina-Delgado, C.S. Digesu, D. Cloonan, A. Majid, M.S. Parikh, S.P. Gangadharan, J.L. Wilson, Boston, MA, p.A4113**
- P390 CALIPER-Based Lobar Changes Following Bronchoscopic Lung Volume Reduction with Endobronchial Valves: A Multicenter Review/M. Martin, S. Rajagopalan, B.J. Bartholmai, D. Abia Trujillo, A. Yu Lee-Mateus, S. Fernandez-Bussy, K. Sakata, T. Peikert, Rochester, MN, p.A5726**
- P391 Outcomes of Bronchoscopic Lung Volume Reduction (BLVR) with Endobronchial Valves (EBV) in Clinical Practice in Patients with Advanced Emphysema and Severe Hyperinflation/G.J. Criner, J. Thomas, N. Patlakh, C. Dass, M. Kumaran, S. Dadparvar, N. Marchetti, Philadelphia, PA, p.A5727**
- P393 Evaluation of Safety and Pharmacokinetics of the Recombinant Human AAT-Fc Fusion Protein INBRX-101 in Patients with Alpha-1 Antitrypsin Deficiency/A. Veale, J. Kalabus, H. Farah, R. Mahadeva, B.T. Kuhn, A. Cole, C.L. Chang, C.D. Brown, M.A. Campos, K.W. Wagner, V. Andrianov, S. Bhagwat, B. Eckelman, Q. Deveraux, M.L. Brantly, Greenlane East, Auckland, New Zealand, p.A4114**
- P394 Longitudinal Rates of Decline in Spirometry in AAT Deficiency (AATD) - A Collaboration Between Ireland, Switzerland and Austria/D. Fraughen, T. Meischl, N.A. Sievi, G.-C. Funk, K. Schmid-Scherzer, C.F. Clarenbach, L. Clarke, T. Carroll, M. Herron, L. Alhaddah, M. Casey, M. Murphy, O.J. McElvaney, O.F. McElvaney, R. Heeney, C. Gunaratnam, N.G. McElvaney, Dublin, Ireland, p.A4115**
- P395 Comparison of ZZ- and SZ-Genotype Patients in a Canadian Alpha-1 Antitrypsin Deficiency Population: Rate of FEV₁ Decline and Other Clinical Characteristics/S.S. Gurupatham, J. Gould, S. Mohan, K.R. Chapman, Vancouver, Canada, p.A4116**
- P396 Bronchoalveolar Lavage Cell Differential in Alpha-1 Antitrypsin Deficiency/M. Herron, D. Fraughen, T.P. Carroll, O. McElvaney, O.F. McElvaney, M. Casey, L. Alhaddah, P. Branagan, C. Gunaratnam, M.P. Murphy, N.G. McElvaney, Dublin, Ireland, p.A4117**
- P397 The Alpha-1 Research Registry: Establishment of a Clinical Research Registry Within the Alpha-1 Foundation/M.P. Goldklang, J.M. Wells, R. Plant, L. Fonseca, A. Chin, K. Neff, P. Chieng, N. Joseph, C. Strange, J.M. D'Armiento, New York, NY, p.A4118**
- P398 COVID-19 Vaccination for Patients with Severe Alpha-1 Antitrypsin Deficiency/O. McElvaney, D. Fraughen, G. Kelly, O.F. McElvaney, M. Herron, M.P. Murphy, T.P. Carroll, N.G. McElvaney, Dublin, Ireland, p.A4119**
- P399 Management of Pulmonary Exacerbations in a Cohort of Patients with Alpha-1 Antitrypsin Deficiency/R. Choate, R.A. Sandhaus, K. Holm, D.M. Mannino, C. Strange, Lexington, KY, p.A4120**
- P400 COVID-19 Impact on Health of Alpha-1 Antitrypsin Deficient Patients in a Disease Management Program/M.A. Hay, K. Holm, J. McCathern, R.A. Sandhaus, C. Strange, Charleston, SC, p.A4121**
- P401 Alpha-1 Antitrypsin Testing: Opportunities for Improvement in Physician Ordering Practices and Test Follow-Up/B. Ratakonda, R. Munagala, B. Gunsolus, W. Healy, Augusta, GA, p.A4122**
- P402 Alpha-1 antitrypsin deficiency in pregnancy and birth outcomes/H.T. Orimoloye, J.E. Heck, Denton, TX, p.A4123**

CLINICAL

THEMATIC POSTER SESSION

C41 ALPHA-1 ANTITRYPSIN DEFICIENCY

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area E, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: **11:15-12:15** authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

CLINICAL

THEMATIC POSTER SESSION

C42 CASE REPORTS: CHALLENGES AND INTERESTING CASES IN INTERVENTIONAL PULMONOLOGY

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P793 A Rare Presentation of Disseminated Coccidioidomycosis Requiring Mechanical Intervention/** A.M. Scott, A. Sam, B.A. Bixby, Tucson, AZ, p.A4124
- P794 Congenital Pulmonary Airway Malformation in Adult Male Presenting with Hemoptysis/**M. Valentin, R. Sharma, J.M. Trabanco, T. Ashby, Jacksonville, FL, p.A4125
- P795 A Case of Xanthoma Disseminatum in the Trachea/**J. Mclaughlin, D. Martin, A. Kazi, R.W. Shepherd, S. Shojaee, Richmond, VA, p.A4126
- P796 Post-Bronchoscopic Lung Volume Reduction Surgery (BLVRS) Hydropneumothorax Masquerading as a Lung Abscess/**A.R. Halawa, J. Jacob, M. Arif, L.F. Meza, A. Khokar, Phoenix, AZ, p.A4127
- P797 Navigational Bronchoscopy with Cryobiopsy for Diagnosis of Interstitial Lung Disease. A New Safe and Effective Alternative/**F. Figueroa Rodriguez, A.A. Ghauri, T. Abdo, S. Daouk, B. Shideler, H. Youness, Oklahoma City, OK, p.A4128
- P798 Two Peas in a Pod: Unusually Similar Foreign Body Presentations/**E. Mackay, S. Alonzo, B. Madden, London, United Kingdom, p.A4129
- P799 Cryo-Bronchoscopy for Removal of Endobronchial Fungal Ball/**J. Ho, L.F. Meza, M. Arif, J. Jacob, A.R. Halawa, A.I. Saeed, Phoenix, AZ, p.A4130
- P800 Challenging Central Airway Tumor Management in a Patient with Prior Pneumonectomy/**J. Ho, L.F. Meza, M. Arif, J. Jacob, A.R. Halawa, A.I. Saeed, Phoenix, AZ, p.A4131
- P801 Endobronchial Closure of Bronchopleural Fistulas Using Patent Foramen Ovale Occluder/**I. Barreto, J.D. Cardoso, F.J.A. Freitas, P. Monteiro, Lisbon, Portugal, p.A4132
- P802 Detection of a Self-Resolving Pulmonary Nodule Utilizing Intraoperative C-Arm Based Tomography/**M. Matti, G. Cho, G. Cheng, R. Miller, M. Nobari, San Diego, CA, p.A4133
- P803 Management of Fractured Central Airway Self-Expandable Metallic Stent/**V.S. Pulivarthi, L.F. Meza, M. Arif, J. Jacob, A.R. Halawa, A.I. Saeed, Phoenix, AZ, p.A4134
- P804 A Curious Case of Bronchial Stenosis/**A. Asharaf, P. Sriram, D.C. Gomez Manjarres, L. Riley, Gainesville, FL, p.A4135
- P805 "Yank It Out" - The Case of the Fallen Yankauer/**D. Lazar, S. Quintiliani, D. Marin, P.S. Patel, Newark, NJ, p.A4136
- P806 An Unusual Case of Hemoptysis Following Heart Surgery/**S.-E. Lemieux, F.-A. Vézina, Sherbrooke, Canada, p.A4137
- P807 Severe Tracheal Stenosis in a Patient with History of Prolonged Intubation/**M. Patel, H. Patel, C. Voong, Augusta, GA, p.A4138
- P808 Complexity of Managing Excessive Dynamic Airway Collapse of Bronchus Intermedius with Tortuosity and Cobble Stone Appearing Mucosa After Right Upper Lobe Lobectomy/**M. Arif, R. Mendez, J. Jacob, J. Ho, A.R. Halawa, L.F. Meza, A.I. Saeed, Phoenix, AZ, p.A4139
- P809 Endobronchial Chondroma: A Rare Case of Benign Pulmonary Tumor/**M. Parmar, A. Bajwa, S. Gupta, A. Ghauri, F. Chaudry, Oklahoma City, OK, p.A4140
- P810 Incidental Finding of a Tracheal Lipoma/**A. Clark, M. Postigo Jasahui, Kansas City, KS, p.A4141
- P811 Post Intubation Tracheal Stenosis After Severe Covid-19 Infection- Case Series and Literature Review/**C. González, O.M. Garcia Morales, M.J. Fernandez Sanchez, C. Villaquiran-Torres, J.R. Lutz Peña, C.A. Celis-Preciado, J.I. Lasso Apráez, J.D. Botero Bahamon, H. Russi, D.S. Romero Rojas, A. Canas, Bogota, Colombia, p.A4142
- P812 Decade-Old Subglottic Silicone Stent with Exuberant Granulation/**R. Mendez, M. Arif, J. Ho, J. Jacob, A.R. Halawa, L.F. Meza, A.I. Saeed, Phoenix, AZ, p.A4143
- P813 Bronchoscopic Pneumonectomy with Endobronchial Valves: A Minimally Invasive Alternative to Traditional Surgical Pneumonectomy/**D.K. Yu, R. Alalawi, Phoenix, AZ, p.A4144
- P814 Putting a Pin in It: Delayed Presentation of Foreign Body Aspiration/**W.C. Callicott, L. Aljundi, M.P. Muthiah, Memphis, TN, p.A4145
- P815 Asymptomatic Aspiration of Endoscopy Capsule/**L. Gibbons, R. Alalawi, Phoenix, AZ, p.A4146
- P816 Bronchus Suis as a Sequela of Prior Pneumonectomy Causing Intrathoracic Abscess via a Bronchopleural Fistula Requiring Endobronchial Valve/**D. Young, A. Mei, K. D'Souza, M. Perwaiz, Elmhurst, NY, p.A4147

- P817 An Easy-to-Swallow Extension of Bronchoscopic Evaluation of Upper Lobe Nodules: EUS Visualization with Safe and Diagnostic FNA of Right Apical Nodule/M.** Bogart, R. Obata, S. Ahmad, R.J. Durrance, K. D'Souza, M.K. Perwaiz, Queens, NY, p.A4148
- P818 Tooth or Dare: An Unusual Bronchoscopy Finding/J.** Anwar, A. Ahmed, L.E. Stawovy, S.F.Z. Naqvi, S. Deskins, J. Gelman, E. Rojas, V. Badami, K. Chapman, Morgantown, WV, p.A4149
- P819 Pneumothorax Ex Vacuo Following Bronchoscopic Lung Volume Reduction/S.** Brahmandam, S. Brahmandam, U.A. Gauhar, Louisville, KY, p.A4150
- P820 Novel of Use of an EZ-Blocker for Massive Hemoptysis in a Critically Ill Patient/R.J.** Cho, J. Wong, H. Gibson, M. Kakol, Minneapolis, MN, p.A4151
- P821 Endobronchial Valve Treatment for Native Lung Hyperinflation in a Single-Lung Transplant Patient/J.J.** Amja, A.N. Khan, A. Goyal, D.F. Dilling, Maywood, IL, p.A4152
- P822 Airway Stenting for Symptomatic Right Middle Lobe Atelectasis After Video Assisted Right Upper Lobe Lobectomy/J.** Jacob, A.R. Halawa, L.F. Meza, M. Arif, V.S. Pulivarthi, A.I. Saeed, Phoenix, AZ, p.A4153
- P823 A Case of Symptomatic Endobronchial Hamartoma Causing Right Upper Lobe (RUL) Atelectasis/M.** Yasin, Z. Khan, T.A. Wiese, Louisville, KY, p.A4154
- P824 Can't Find It? Endobronchial Ultrasound (EBUS) Can! Hilar Lymph Node Evidence of Cardiac Sarcoidosis/F.J.** Marquez, D.K. Yu, R. Alalawi, Phoenix, AZ, p.A4155
- P825 Pneumothorax in a Postoperative Heart Transplant Patient Due to Continued Air Entry from a Mediastinal Drain Site/T.** Herzog, O. Elmadhoun, M. Norton, R. Kern, Rochester, MN, p.A4156
- P826 A Novel Approach to Recanalization of a Middle Lobe Occlusion in a Patient with Lung Cancer/R.J.** Cho, M. Kakol, H. Gibson, Minneapolis, MN, p.A4157
- P827 Novel Approach to the Diagnosis of Pulmonary Ossification/D.** Rees, Y. Guo, G.E. Abraham, Jackson, MS, p.A4158
- P828 Hemorrhagic Lobar Pneumonia Treated Successfully with Endobronchial Blocker and Tranexamic Acid/R.R.** Sanivarapu, S. Arjun, V. Kashyap, J. Akella, J. Iqbal, East Meadow, NY, p.A4159
- P829 An Interesting Case of Non Resolving Pneumonia: A Case Report/M.** Quadri, Y. Pothini, Eluru, India, p.A4160
- P830 Traumatic Bronchial Rupture - A Clinical Case Report/I.** Barreto, F.G. Oliveira, C. Pereira, J.D. Cardoso, F.J.A. Freitas, P. Monteiro, Lisbon, Portugal, p.A4161
- P831 Endobronchial Leiomyoma Successfully Resected with Electrocautery Snare/E.T.** Sumner, P.T. Le, B.D. Quick, Oakland, CA, p.A4162
- P832 An Unusual Presentation of a Retained Covid-19 Swab in a Patient with a Cuffed Tracheostomy/E.** Mackay, S. Alonzo, B. Madden, London, United Kingdom, p.A4163
- P833 Severe Hyperinflation of Ipsilateral Lobes After Bronchoscopic Lung Volume Reduction Surgery/J.** Ho, A. Talon, M. Arif, L. Meza, J. Jacob, A.R. Halawa, A.I. Saeed, Phoenix, AZ, p.A4164
- P834 Bronchoscopic Lobar Lavage in the Treatment of a Single Lung Transplant Recipient with Pulmonary Alveolar Proteinosis: A Case Report/P.** Kahn, M. Siegelin, M. Carroll, F. D'Ovidio, S.M. Arcasoy, New York, NY, p.A4165

CLINICAL

THEMATIC POSTER SESSION

C43 CASE REPORTS: PLEURAL DISEASE DILEMMAS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P836 Loculated Effusion Due to Lupus Pleuritis Successfully Treated with Intrapleural Tissue Plasminogen Activator and DNase./M.** Valentin, S. Nuthulaganti, J.M. Trabanco, J.D. Cury, Jacksonville, FL, p.A4166
- P837 Subpleural Schwannoma: A Case Report and Literature Review/H.** Minhas, A.A. Alratroot, C.R. Jinjavadia, Detroit, MI, p.A4167
- P838 Crossing Boundaries: A Case of Pleuroperitoneal Leak/K.** Mcconn, A. Egan, Rochester, MN, p.A4168
- P839 A Rare Case of Hemothorax Caused by an Osteochondroma in Adulthood/L.** Desy, M.-M. Theriault, M. Chevrier, C. He, Sherbrooke, Canada, p.A4169
- P840 Pleural Effusion in a Patient with Pyogenic Liver Abscess Following Appendectomy/A.** Mukherjee, New Brunswick, NJ, p.A4170
- P841 Rare Cause of Pleural Effusion - Expect the Uncommon/A.** Akbar, T. Hendrickson, A. Vangara, A. Hussain, S.S. Ganti, Harlan, KY, p.A4171

- P842 Hemothorax After Use of Percussion Massage Gun: A Case Report/A.** Masters, R. Duarte, B. Chiang, K. Sarvottam, K. Patel, Philadelphia, PA, p.A4172
- P843 Unsuspecting Adult Case of Rhinovirus Pleuropericarditis/M.** Younan, M. Zaman, C. Harry, B. Patel, Morristown, NJ, p.A4173
- P844 Successful Resolution of a Large Left Primary Spontaneous Pneumothorax with a Conservative Management Approach/N.** Sharma, E. Lu, L. Barnes, M. Nobari, R.J. Miller, G.Z. Cheng, La Jolla, CA, p.A4174
- P845 A Rare Case of Buffalo Chest in a Young Woman/H.** Channa, J. Packer, Shreveport, LA, p.A4175
- P846 A Rare Case of Massive Catamenial Hemothorax Complicated by Fibrothorax/V.** Reyes Pinzon, P. Khamooshi, C.-Y. Kang, M. Saad Eldin, S.S. Fakhran, Chicago, IL, p.A4176
- P847 Intrapleural Lytic Therapy in the Management of Pancreatic Pleural Effusion Due to a Post-Operative Complication/R.** Ali, T.T. Pham, C. Brillante, Chicago, IL, p.A4177
- P848 Pathologic Connections in the Poorly Connected: A Case of Bronchopleural Fistula/J.** Meland, J. Zogelman, St. Louis, MO, p.A4178
- P849 Bilateral Pneumothoraces Secondary to Metastatic Proximal Epithelioid Sarcoma of the Perineum/T.** Vu, B. Yaghmour, A. Kalansky, Orange, CA, p.A4179
- P850 Chronic Loculated Pleural Effusion in a Patient with Long-Standing Ventriculo-Pleural Shunt/J.** Gelman, S. Deskins, E. Rojas, J. Anwar, L.E. Stawovy, A. Ahmed, V. Badami, M. Graves, K. Chapman, R. Leonard, Morgantown, WV, p.A4180
- P851 A Rare Case of Boerhaave Syndrome with Chylothorax/B.C.** Wilson, J. Nguyen, A. Srinivasan, J. Torres, J.M. Alam, H. Hamzoain, Z. Shakir, S. Alim, S. Sarva, Kingwood, TX, p.A4181
- P852 When Fluid Sweeps from Abdomen to Lungs - Hepatic Hydrothorax with Minimal Ascites/R.** Tiperneni, R.P. Padappayil, F. Khalid, A. Al-Alwan, Long Branch, NJ, p.A4182
- P853 A Bilateral Chylothorax on a 65 Year Female with End Stage Invasive Ductal Carcinoma/R.**P.D.C. Fajardo, Las Piñas City, Philippines, p.A4183
- P854 Clagett Procedure for Respiratory Distress in Case of Recurrent Chronic Hydropneumothorax with Bronchopleural Fistula/K.** Amlani, J. Michalik, A.A. Rodriguez, W.B. Fitzgerald, Bridgeport, CT, p.A4184
- P855 Management of Malignant Alveolopleural Fistula/C.** Cuvillier Padilla, A. Bhardwaj, K.N. Qaiser, A.M. Goyanes, U. Ahmad, F.A. Almeida, M.L. Ribeiro Neto, Cleveland, OH, p.A4185
- P856 A Rare Clinical Case of Ulcerative Colitis Presenting with Unexpected Pulmonary Findings/K.Z.** Hernandez Moya, J.M. Garcia Puebla, A. Nieves-Ortiz, R.A. Hernandez-Castillo, R. Fernandez, San Juan, PR, p.A4186
- P857 Thoracic Endometrial Syndrome: A Premenstrual Symptom That Can Take Your Breath Away/J.** Carbono, A. Magh, Z.R. Mattar, Orlando, FL, p.A4187
- P858 A Case of Left Sided Chylothorax as an Initial Manifestation of Stage 4 Follicular Lymphoma/J.** Anwar, A. Ahmed, L.E. Stawovy, S. Deskins, J. Gelman, V. Badami, E. Rojas, A. Mittal, S. Hadique, Morgantown, WV, p.A4188
- P859 Hemothorax as a Late Complication of Renal Biopsy: What Lurks Beneath the Diaphragm/C.** Miller, H. Bakalli, R. Suri, S.S. Oh, G.W. Soo Hoo, Los Angeles, CA, p.A4189
- P860 Chest X-ray Unremarkable: A Case of a "Late Blooming" Empyema/C.A.** Macko, Oakland, CA, p.A4190
- P861 Pneumothorax, Pneumomediastinum and Subcutaneous Emphysema as Complications of Asthma/N.** Jiwa, D. Ro euth, J. Harrison, Farmington, CT, p.A4191
- P862 Pleural Window Creation in a Trapped Lung Complicated by Covid-19, Tuberculous and Bacterial Infection/A.P.** Calleja, Quezon City, Philippines, p.A4192
- P863 Extended Use of Awake Video Assisted Thoracic Surgery (AVATS) as First Line for Diagnosis and Treatment of Pleural Effusions/A.** Kl ijian, K. Bagheri, R. Al-Naser, San Diego, CA, p.A4193
- P864 A Novel Pleurodesis Method Using Hydroxyapatite Microspheres/Y.** Tanaka, Y. Hasegawa, L.B. Pitstick, H. Wu, E.J.-A. Kopr as, F.X. McCormack, Cincinnati, OH, p.A4194
- P865 'I Fell Down and Things Went Downhill, Feel Like I'm Drowning!' A Case of Distressing Pleural Effusion Following Splenic Artery Embolization/M.** Cherabuddi, M. Maki, I. Murskyj, H. Abdulla, D.R. Ouellette, Detroit, MI, p.A4195
- P866 A Case of Reexpansion Pulmonary Edema Following Large Volume Paracentesis/K.** Holbert, M. MacDonald, F.A. Kaik sow, Madison, WI, p.A4196
- P867 Pneumothorax as a Complication of COVID-19 Interstitial Lung Disease/G.** Boghdadi, K.J. Diab, M. Alsaggaf, Washington, DC, p.A4197
- P868 Tension Pneumothorax Following Nasogastric Tube Placement - A Case Report/D.** Kotok, Weston, FL, p.A4198

- P869 Is It a Spontaneous Hemothorax?**/M. Saleh, V.K. Holden, E. Pickering, A. Sachdeva, G. Henry, W. Burrows, F. Nasim, Baltimore, MD, p.A4199
- P870 Dasatinib-Induced Pleural Effusion Managed with a Tunneled Pleural Catheter**/E. Gosciniak, F. Nasim, E. Pickering, A. Sachdeva, V.K. Holden, Baltimore, MD, p.A4200
- P871 Doxycycline for Chemical Pleurodesis in Secondary Spontaneous Pneumothorax**/E. Gosciniak, V.K. Holden, E. Pickering, J.S. Friedberg, A. Sachdeva, F. Nasim, Baltimore, MD, p.A4201
- P872 Utilizing Closed Pleural Biopsy in the Diagnosis of Pleural TB**/M. Saleh, F. Alghanim, V.K. Holden, E. Pickering, A. Sachdeva, A. Burke, F. Nasim, Baltimore, MD, p.A4202
- P873 Pneumonitis Following Intrapleural Administration of Povidone-Iodine for Pleurodesis**/M. Ueoka, R.E. Garcia Tome, C.L. Channick, Los Angeles, CA, p.A4203
- P874 COVID-19 Barotrauma Associated with Coal Workers' Pneumoconiosis**/T.V.C. Do, S.S. Ganti, M. Gudipati, L. Gupta, Anaheim, CA, p.A4204
- P875 Rare Case of Rapid Empyema Caused by Streptococcus Anginosus Group**/S. Arjun, N. Sayedy, V. Mehta, J. Akella, J. Iqbal, East Meadow, NY, p.A4205
- P880 Antifibrotic Risk of Bleeding with Anticoagulation - A Case Report**/A.L. Martirosov, T. Ho, H.D. Bachert, K. Thavarajah, A. Abu Sayf, Detroit, MI, p.A4209
- P881 A Case of Bronchiolitis Obliterans Developed After Mild Covid-19 Infection**/Z.J. Yaqoob, H.A. Nayef, S. Alsamman, Detroit, MI, p.A4210
- P882 Post-COVID-19 Fibrosis Presenting with Usual Interstitial Pattern**/S. Simeone, A. Rasheed, Farmington, CT, p.A4211
- P883 A Case of Idiopathic Pulmonary Fibrosis (IPF) Diagnosed with Progression Post-Covid-19 Pneumonia**/T. Ozlu, A. Pehlivanlar, Trabzon, Turkey, p.A4212
- P884 A Case of Exogenous Lipoid Pneumonia Caused by Inhalation of Baby Oil**/K. Bamunuarachchi, R.K. Ragatha, M. Anwar, P. Russell, U. Ekeowa, M. Long, Harlow, United Kingdom, p.A4213
- P885 Diffuser Induced Dyspnea: A Case of Exogenous Lipoid Pneumonia**/J.P. Moran, G.M. Pagnotta, L.E. Meece, B. Wilcox, Des Moines, IA, p.A4214
- P886 Lipoid Pneumonia as a Long-Term Complication of Laparoscopic Gastric Banding Surgery**/G. Ha, B.J. Matsuda, Honolulu, HI, p.A4215
- P887 Persistent Abnormal Imaging in Chronic Exogenous Lipoid Pneumonia: Surveillance of Complications**/A. Chand, A. Kolimas, K. Yannapudi, T. Nguyen, S. Puthalapattu, Tucson, AZ, p.A4216
- P888 Post-Lung Transplant Brain Abscess - A Rare Case of Scedosporium Apiospermum**/S. Li, A. Grzegorzczuk, A. Sharma, K. Bagavathy, P. Chung, S. Ganesh, Los Angeles, CA, p.A4217
- P889 A Case Report of Progressive Segmental Stenosis in a Transplant Patient**/E.C. Santillana, M. Tukey, K. Van Nostrand, G.C. Michaud, Tampa, FL, p.A4218
- P890 Persistent Headaches and Ring-Enhancing Lesions in a Lung Transplant Recipient**/M.T. Olson, T. Walia, V. Ganatra, A. Arjuna, Phoenix, AZ, p.A4219
- P891 Incidentally Found Gastrointestinal Stromal Tumor in a Lung Transplant Recipient**/M.T. Olson, T. Walia, A. Arjuna, Phoenix, AZ, p.A4220
- P892 What's Abuzz? Encephalopathy in a Transplant Recipient**/J.R.M. Lim, M.D.M. Lucio Paredes Aulestia, S. Nematollahi, T. Zangeneh, M. Al-Obaidi, Tucson, AZ, p.A4221
- P893 Mycophenolate Induced Colitis in a Lung Transplant Recipient**/S. Leonard, K.A. Young, J.M. Reynolds, Durham, NC, p.A4222

CLINICAL

THEMATIC POSTER SESSION

C44 CASE REPORTS: PULMONARY POTPOURRI9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area J, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P877 Take My Breath Away: A Case of Arterial and Venous Thrombi After Initiation of Nintedanib**/N. Sawal, D. Kelm, Rochester, MN, p.A4206
- P878 Peribronchiolar Metaplasia Associated to Interstitial Lung Disease: A Case Report**/G.D.A.C. Santos, G.D.P. Bridi, N.L.M. Saavedra, A.C. Vasconcelos, N.F.D. Silva, G.C.D. Almeida, E.C.T. Nascimento, F.E. Arimura, A.F. Amaral, B.G. Baldi, R.A. Kairalla, Sao Paulo, Brazil, p.A4207
- P879 Respiratory Bronchiolitis Associated Interstitial Lung Disease: Clinical and Radiological Improvement with Smoking Cessation**/C. Ramasamy, Y. Singh, Y. Goldman, Worcester, MA, p.A4208

- P894 A Case of Acute Encephalopathy Following Lung Transplantation: Ureaplasma Induced Hyperammonemia Syndrome/J. Loso Girard, R.L. Goetz, J. Minish, K.M. Wille, C. Hoopes, E. Gongora, E. Orozco-Hernandez, V. Rusanov, T. Kaleekal, Birmingham, AL, p.A4223**
- P895 Midol-Induced Urinary Retention and Acute Kidney Injury in a Lung Transplant Recipient/M.T. Olson, T. Walia, H. Mohamed, A. Arjuna, Phoenix, AZ, p.A4224**
- P896 Systemic Capillary Leak Syndrome as Extra-Pulmonary COVID-19 Infection in a Vaccinated Patient/M. Root, K. Lyn-Kew, Denver, CO, p.A4225**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
C45 HEMATOLOGY AND ONCOLOGY CASES
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area A, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P1 A Rare Case of Hemophagocytic Lymphohistiocytosis Secondary to Severe Epstein Barr Infection in an Immunocompetent Individual/A. Alam, C. Gates, A. Gross, R.G. Sangani, B. Guangul, R.C. Stansbury, Morgantown, WV, p.A4226**
- P2 A Case of Delayed Transfusion-Related Acute Lung Injury/M. Borchart, T. Ardiles, Phoenix, AZ, p.A4227**
- P3 A Case of Hyperhemolysis Syndrome Complicating Vasoocclusive Crisis, Pulmonary Embolism, and Acute Chest Syndrome/A. O'Laughlin, C. Grossman, Richmond, VA, p.A4228**
- P4 A Deadly Duo; Thrombotic Thrombocytopenic Purpura and Antiphospholipid Syndrome/H.M.S. Qurashi, T. Saleem, I. Kovalenko, B. Ravichander, R. Pathak, Q.K. Uddin, Q. Uddin, Harrisburg, PA, p.A4229**
- P5 Multiorgan Failure Resulting from Disseminated Adenovirus Infection in a Patient with a History of Mantle Cell Lymphoma on Rituximab/A.J. Davies, C. Snaveley, E. Marciniak, Baltimore, MD, p.A4230**
- P6 Development of Cryoglobulinemia and Acute Limb Ischemia in Patient with Underlying Inflammatory Bowel Disease/J. Romano, P. Mehrotra, E. Wasserman, New York, NY, p.A4231**
- P7 A Rare Cause of Multiple Organ Failure, With an Unusual Trigger/H. Arsenault, T. Al-Mohamad, A. Deitchman, Newark, DE, p.A4232**
- P8 A Rare Case of Complement Mediated Thrombotic Microangiopathy/K. Muralidharan, K. Nketiah Sarpong, K. Mathialagan, P. Pednekar, M.S. Rahi, M. Buscher, Bridgeport, CT, p.A4233**
- P9 When a Car Accident Is More Than Meets the Eye/M. Hodge, R.C. Swazo, Indianapolis, IN, p.A4234**
- P10 Critical Iron Deficiency Anemia with Record Low Hemoglobin/A. Chai, O. Huang, R. Rakocevic, P. Chung, Los Angeles, CA, p.A4235**
- P11 Bleeding Downhill Esophageal Varices as a Rare Complication of Superior Vena Cava Obstruction/M. Dvalishvili, O. Khdeir, Greenville, NC, p.A4236**
- P12 Rapidly Progressive Sickle Cell Hepatopathy Leading to Multiorgan Failure/M. Fernandes, N. Sadiq, I. Nwachukwu, O. Aroyewun, Brooklyn, NY, p.A4237**
- P13 Immune Checkpoint Inhibitor Related Auto Immune Demyelinating Polyneuropathy/S.A. Mohammed, S. Hadigal, S. Sutchu, A. Saleem, Gainesville, FL, p.A4238**
- P14 Simultaneous Blast and Myasthenic Crises Requiring Concomitant Plasma- and Leukapheresis/C. Schott, J. Taylor-Fishwick, M. Orlov, A. Harrington, J. Stacy, A. Kannappan, Aurora, CO, p.A4239**
- P15 Sepsis, Sepsis, Sepsis! Except When It's Not/S. Mullapudi, V. Arelli, Ann Arbor, MI, p.A4240**
- P16 A Rare Case of Splenic Vein Thrombosis Associated with Diffuse Large B-Cell Lymphoma/D. Abedeen, B.N. Nguyen, N. Ramesh, Harrisburg, PA, p.A4241**
- P17 A Bloody Mess: A Rare Case of Spontaneous Hemothoraces from Chronic Myeloid Leukemia/E. Tope, C.A.M. Buckley, B.A. Bagley, Indianapolis, IN, p.A4242**
- P18 Severe Refractory Evan's Syndrome: Case Report/K. Amlani, J. Michalik, A. Vera, J. Xenakis, H. Mopuru, Bridgeport, CT, p.A4243**
- P19 Shock and DIC of Unexpected Etiology/A. Elkhapery, L.K.T. Boppana, C. Iyer, M.N. Gurell, Rochester, NY, p.A4244**
- P20 A Complex Case of Hypercoagulability and Multiorgan Failure/N. Gupta, J. Kushner, A. Bhandary, New York, NY, p.A4245**
- P21 The Bleeding Kidney and Risks to Be Mindful of, a Case Report/H.M.S. Qurashi, T. Saleem, M. Sangillo, A. Korzhuk, N. Ramesh, Harrisburg, PA, p.A4246**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C46 RHEUMATOLOGY, RENAL, NEUROLOGY, AND GASTROENTEROLOGY CASES9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P23 Black Esophagus - A Fatal Case Report of UGIB Complicated by ARDS/M. Hache-Marliere, F. Palmares, J. Morante, D. Varrias, P. Gulani, Bronx, NY, p.A4247**
- P24 Tuberos Sclerosis: A Case Report/M.A. Quiñonez, M.E. Vijil, T.W. Yanes, San Pedro Sula, Honduras, p.A4248**
- P25 Acute Flaccid Quadriplegia and Respiratory Failure Due to Acute Intermittent Porphyrin/R. Diaz Lanckenau, A. Sutaria, D.J. De La Zerda, Miami, FL, p.A4249**
- P26 A Rare Case of Severe Isolated Enteritis in the Setting of Checkpoint Inhibitor Therapy/R. Ramanathan, H. Sauthoff, New York, NY, p.A4250**
- P27 The Urea Cycle, Trans-Arterial Chemoembolization and Refractory Hyperammonemia/A. Alam, B. Balakrishnan, T. Narumanchi, R.C. Stansbury, Morgantown, WV, p.A4251**
- P28 Profound Hypokalemia Presenting with Diaphragmatic Dysfunction/Z.Z. Sheikh, K. Gapuz, B. Al-Sunboli, M. Yusuf, A. Poor, New York, NY, p.A4252**
- P29 "It's Never Lupus": A Case of Rapidly Progressing Polyneuropathy Secondary to Systemic Lupus Erythematosus/M. Garisa, N. Thiruchelvam, Fairview, OH, p.A4253**
- P30 Multiorgan Failure in Systemic Lupus Erythematosus: The Use of Eculizumab in a Patient with Cardiomyopathy, Acute Kidney Injury, and Pancytopenia/P.E. Dormish, K. Corbitt, E. Bondarsky, New York, NY, p.A4254**
- P31 Unusual Reason for Urgent Hemodialysis; Iatrogenic Hypermagnesemia/K. Srour, J. Uduman, Detroit, MI, p.A4255**
- P32 Anticoagulation: A Double Edge Sword in the Management of Embolic Stroke/T. Nagar, V. Khanam, P. Giri, S. Chaudhry, A. Khan, Rochester, MI, p.A4256**
- P33 An Unexpected Turn After MVA: Multiple Brain Abscesses and CSF Leak Complicating a Severe Blunt Traumatic Brain Injury/R. Ondracek, H. Pasupuleti, S. Goswami, F. Abuzeid, C. Robinson, M. Babi, A. Ondracek, Gainesville, FL, p.A4257**
- P34 Traumatic Pseudocyst: A Rare Manifestation from Traumatic Injury/S. Deskins, J. Gelman, J. Anwar, A. Ahmed, L.E. Stawovy, M. Graves, E. Rojas, R. Leonard, K. Chapman, A. Abdullah, Morgantown, WV, p.A4258**
- P35 Polyarteritis Nodosa Presenting with Recurrent Cholangitis, Acute GI Bleed, and Severe Cerebral Vasculitis/M. Gilani, J.T. Berry, E. Villa, P. Jetanalin, J.R. Jacobson, Chicago, IL, p.A4259**
- P36 A Challenging Case of Acute Tubular Necrosis Mimicking Lupus Nephritis in a Patient with Systemic Lupus Erythematosus (SLE)/H. Asif, I. Nwachukwu, P. Rashmi, Brooklyn, NY, p.A4260**
- P37 Rare Case of Calciphylaxis in Patient Admitted for Septic Shock/S. Iqbal, B. Baralo, A. Khanam, B.C. Buragamadagu, V. Thota, K. Akinbamijo, S. Sharma, Darby, PA, p.A4261**
- P38 Paroxysmal Sympathetic Hyperactivity: Autonomic Instability in Traumatic Brain Injury/M. Cheema, M. Patel, A. Adial, A. Iftikhar, New Hyde Park, NY, p.A4262**
- P39 What Hiding Under the Uremia? A Rare Case Presentation and Miraculous Recovery with Clevidipine/S. Khanal, C. Robince, O. Okorie, Orlando, FL, p.A4263**
- P40 Hemorrhagic Brain Metastasis in Liposarcoma/M. Sandhu, B.N. Nguyen, N. Ramesh, Harrisburg, PA, p.A4264**
- P41 Renal Transplant in Severe COPD and Granulomatosis with Polyangiitis (GPA)/C. Chao, Z. Khan, M. Bachan, Bronx, NY, p.A4265**
- P42 "A Fault in the Salt": A Perplexing Case of Multifactorial Hyponatremia in the Intensive Care Unit/A. Asghar, A. Khan, S.H. Sohail, J. Slater, Springfield, MA, p.A4266**
- P43 Stercoral Colitis: A Life-Threatening Complication of Constipation/S. Manickam, M. Dvalishvili, O. Khdeir, Greenville, NC, p.A4267**
- P44 Esophageal Perforation with Associated Low Pleural Fluid Amylase/J. Hitchings, A. Gandler, Philadelphia, PA, p.A4268**
- P45 Four-Limb Compartment Syndrome Related to Severe Hyponatremia/A. Henning, D. Guck, P. Patel, Hershey, PA, p.A4269**
- P46 The Role of POCUS in Establishing an Early Diagnosis of Abdominal Compartment Syndrome/M. Macdougall, R. Patel, N. Patel, J. Longoria, Orange, CA, p.A4270**
- P47 A Fatal Case of Intraparenchymal Hemorrhage Masquerading as Central Diabetes Insipidus/S. Khanal, M.Z. Khan Suheb, A. Parikh, Orlando, FL, p.A4271**
- P48 A Crisis of Complement? Scleroderma Renal Crisis Treated with Complement Inhibition/S. Rhoads, K.M. Calhoun, A.R. Lara, Aurora, CO, p.A4272**
- P49 The Diagnostic Challenge of Systemic Lupus Erythematosus/C. Gauvin, J.F. Penabad, A.T. Chua, Stony Brook, NY, p.A4273**

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THEMATIC POSTER SESSION

C47 PREDICTORS OF COVID OUTCOMES

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area D, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P229 Clinical Outcomes of Patients Hospitalized for COVID-19 Infection Treated with Tocilizumab/R.** Swaney, I. Jackson, S. Aurit, C. Desatche, R. Walters, R. Vivekanandan, S. Narechania, M. Velagapudi, Omaha, NE, p.A4274
- P230 Predictors of Severity of COVID19 Pneumonia in Patients Admitted in Philippine Heart Center/P.A.** Dela Cruz, Quezon City, Philippines, p.A4275
- P231 Critically Ill Patients Boarding in the Emergency Department and the Association with ICU Length of Stay and Hospital Mortality During COVID-19 Pandemic/E.N.** Tuttle, C. Wisecup, E. Lemieux, X. Wang, A. Modrykamien, Dallas, TX, p.A4276
- P232 An Examination of Early Intubation Versus Initial Trial of Non-Invasive Ventilation on Outcomes in COVID-19 Pneumonia/S.A.** Raia, E. Wittrock, A. Khatiwada, M. Strand, G.C. Lockhart, Denver, CO, p.A4277
- P233 Effect of Remdesivir in COVID19 Patients for Five Days vs Ten Days in a Community Hospital: A Retrospective Study/J.P.** Villamizar, K. Deidrick, C.B. Marcano, A. De Diego, T. Melhuish, F. Hernandez, Fort Lauderdale, FL, p.A4278
- P234 Use of the Alveolar Gas Meter to Predict Respiratory Deterioration in COVID-19/W.C.** Mcguire, A.K. Pearce, A.R. Elliott, J. Fine, J.B. West, G.K. Prisk, D.R. Crouch, A. Malhotra, La Jolla, CA, p.A4279
- P235 The Effect of Prone Positioning During Mechanical Ventilation on Hospitalized COVID-19 Patient Outcomes/M.** Benson, J. Kandrevas, X. Gu, J. Weinberg, A. Brook, A. Ahmad, A. Reddy, E. Morganroth, K. Alexander, N.R. Sutton, E. Kline-Rogers, Ann Arbor, MI, p.A4280
- P236 Days Alive and Free of Mechanical Ventilation in Patients with COVID-19-Associated ARDS: Methylprednisolone versus Dexamethasone/T.** Kellogg, G.C. Gutierrez, C. Small, B. Stephens, P. Sanchez, M. Beg, H.L. Keyt, M.I. Restrepo, D.J. Maselli, B. Attridge, San Antonio, TX, p.A4281
- P237 Use of Inhaled Epoprostenol Delivered by High-Flow Nasal Cannula in Patients with Severe Acute Hypoxemic Respiratory Failure Secondary to COVID-19/N.** Sharma, M.K. Bhagat, T.M. Dudney, R. Dhand, B.T. Beville, P.R. Branca, M.T. McCormack, R.E. Heidel, J.W. Green, F.J. Soto, Knoxville, TN, p.A4282
- P238 Impact of COVID-19 Pandemic on Rate of Ventilator Associated Pneumonia/H.** Saunders, M. Tatari, S.A. Helgeson, Jacksonville, FL, p.A4283
- P239 Pandemic Epidemiology of COVID-19 and Non-COVID-19 Critical Illness in a Resource-Limited Setting: Report from South Africa/S.M.** Savarimuthu, J. Invernizzi, M. Smith, R. Hyman, A. Ramkillawan, C. Eddey, R. Wise, G.L. Anesi, New Haven, CT, p.A4284
- P240 A Predictive Model for Optimizing Survival with Therapeutic Enoxaparin and Steroids in the Treatment of COVID-19 Mechanically Ventilated Patients: When Do Benefits Outweigh Risk?/K.** Johnson, R.J. Durrance, D. Papademetriou, P. Ram, U. Dhamrah, M. Davila-Molina, J. Anwar, N. Shah, H. Khan, A. Mizoue, J. Ji, J. Penny, R. Kompella, A.J. Astua, Elmhurst, NY, p.A4285
- P241 Barriers to Enteral Nutrition in Patients Requiring Extracorporeal Membrane Oxygenation (ECMO): Observations from the COVID-19 Pandemic/Z.** Muzaffarr, C. De La Cuesta, F. Ujueta, Miami Beach, FL, p.A4286
- P242 Comparison of Extracorporeal Membrane Oxygenation Survivors with Non-Survivors; A Retrospective Analysis at a Quaternary Center/H.** Yaqoob, T. Henson, D. Greenberg, D. Peneyra, L. Huang, A. Pitaktong, O. Epelbaum, D. Chandy, Valhalla, NY, p.A4287
- P243 Inhaled Nitric Oxide Via High Flow Nasal Cannula in Severe COVID-19; A Propensity-Matched Analysis of Effects on Oxygenation and Clinical Outcomes/E.S.** Tarras, J.S. Munger, A.S. Lubinsky, S.B. Brosnahan, New York, NY, p.A4288
- P244 Clinical Characteristics of Patients Who Develop Pneumomediastinum in the Setting of Severe Acute Respiratory Syndrome Coronavirus-2/B.** George, G. Saffran, V. Natarajan, L. Nweke, J. McGee, U. Govindarajulu, A. steiner, M. Megally, F. Coletta, L. Saffran, Oceanside, NY, p.A4289
- P245 Serial Studies in COVID Patients with Left Ventricular Dysfunction/S.** Hollenberg, J.E. Parrillo, M. Fata, B. Klinkhammer, S. Jamal, D. Landers, J. Tancredi, Z.G. Turi, West New York, NJ, p.A4290
- P246 Changes in NT-proBNP Levels Are Predictive of In-Hospital Mortality in Patients Admitted to the ICU for COVID-19/C.** O'Donnell, A.R. Moore, A. Pacheco-Navarro, J. Roque, T. Ramaswamy, M. Joshi, S. Pienkos, P.A. Sanchez, H. Sharifi, J. Hsu, W. Collins, A. Rogers, Stanford, CA, p.A4291

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THEMATIC POSTER SESSION

C48 MECHANICAL VENTILATION

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P247 A Retrospective Analysis of Serial Modified Sequential Organ Failure Assessment (SOFA) Scores in Intubated Patients with COVID-19/N.M. De La Rúa, M. Middleton, P. Rabin, R.A. Balk, Chicago, IL, p.A4292**
- P248 Acute Skeletal Muscle Loss in Patients with SARS-CoV-2 Infection Contributes to Poor Clinical Outcomes Including Mortality/A. Attaway, N. Welch, D. Dasarathy, J. Amaya-Hughley, M.P. Engelen, J.G. Zein, A. Bellar, M. Biehl, S.P. Dugar, S. Dasarathy, Cleveland, OH, p.A4293**
- P249 Prediction of Progression to Critical Illness in Heart Failure Patients Hospitalized with COVID-19: Multiple Chronic Conditions Matter/K. Burns, R. Walo, D. Patel, Z. Whiteside, B. Malik, R. Thompson, K. Baez Rodriguez, R. Villasmil, Q. Abdelal, K. Hamad, R. Heibel, W. Wiese-Rometsch, Sarasota, FL, p.A4294**
- P250 Inhaled Epoprostenol Use in SARS-CoV2 Related Severe Hypoxic Respiratory Failure to Prevent Mechanical Ventilation/J.F. Jaber, A. Austin, R. Reddy, H. Saker, M.H. Almomani, H. Kaseer, J. Lascano, B.N. Alzghoul, Gainesville, FL, p.A4295**
- P251 Fostamanib Therapy in Severe ARDS Requiring Extracorporeal Membrane Oxygenation (ECMO) Support/C.S. King, M. Desai, J. Lantry, V. Khangoora, T.B. Lee, S. Amedeo, S.D. Nathan, Falls Church, VA, p.A4296**
- P252 18 Month Clinical Outcomes in COVID-19 patients: A Review of Pulmonary Function Testing and Symptom Data/R. Vakil, I.R. Young, B. Heyman, R. Condos, New York, NY, p.A4297**
- P253 LTOT and Its Delivery/S.S. Patil, Dhule, India, p.A4298**
- P254 Deterioration Scores in Covid-19 Delta Variant/S. Bhakta, P. Moreno Franco, S.A. Helgeson, Jacksonville, FL, p.A5729**
- P255 Understanding Coronavirus-Related Delirium: Neurovirulent Cytokines and Their Impact on Neuronal Excitability/S. Rajayer, S.M. Smith, Portland, OR, p.A5730**
- P256 Dexamethasone Decreases Respiratory Tract and Systemic Pro-Inflammatory Signaling in Patients with Covid-19 Acute Respiratory Distress Syndrome/A. Sarma, L.P.A. Neyton, R.K. Patel, C.R. Langelier, W.L. Eckalbar, M.F. Krummel, A.J. Combes, C.S. Calfee, G.K. Fragiadakis, San Francisco, CA, p.A5731**

- P51 Effect of Mechanical Ventilation (MV) Strategy on Outcomes of COVID ARDS (C-ARDS)/M.A. Tanios, M. Nguyen, S.H. Park, E. Hahm, G. Oh, F.A. Youssef, Long Beach, CA, p.A4299**
- P52 Do Two-Point Restraints Prevent Unplanned Extubation in Medical Intensive Care Units?/V.K. Patel, Y.I. Lee, New York, NY, p.A4300**
- P53 The Utility of Respiratory Rate-Oxygenation (ROX) Index at Admission in Acute Hypoxic Respiratory Failure Patients/M. Anil Kumar, P.R. Addanki, D. Grover, D. Datta, Farmington, CT, p.A4301**
- P54 Static and Dynamic Measures of Respiratory System Mechanics/P.N.F. Tawfik, M.K. Hayat Syed, F.S. Elmufdi, M. Evans, D.J. Dries, J.J. Marini, Minneapolis, MN, p.A4302**
- P55 Chronic Critical Illness: Continuous Improvement at a Regional Weaning Center/M.S. Hassenpflug, D.R. Nelson, J. Steckart, Los Angeles, CA, p.A4303**
- P56 ICU Clinician Perspectives on Machine Learning and the Implementation of a Mechanical Ventilation Prediction Tool: A Single Center Survey Study/E. Mlodzinski, G. Wardi, S. Nemat, L.E. Crotty Alexander, A. Malhotra, San Diego, CA, p.A4304**
- P57 Prognostic Variables and Decannulation of Tracheostomy in the Long-Term Acute Care Hospital Environment: A Case for Clinician-Driven Decision-Making/K. Weil, V. Baumann, B. Brown, R. Nadeau, B. Gerstenhaber, E.P. Manning, Syracuse, NY, p.A4305**
- P58 Adequate Pressure Setting of Mechanical In-Exsufflation in ALS Patients with Tracheostomy/W. Choi, H.E. Cho, D.H. Kim, S. Yoon, S.-W. Kang, Seoul, Korea, Republic of, p.A4306**
- P59 Pain Assessment of Intubated and Mechanically Ventilated Patients in PICU/L. Jankauskaite, G.C. Mickeviciute, A. Daugela, Kaunas, Lithuania, p.A4307**

- P60** **Beta Blocker Use in Asthma Patients with Respiratory Failure in Intensive Care Unit and Mortality/A.** Chohan, S. Choudhury, P.T. Taweeseedt, R. Dadhwal, R. Franco, A. Vakil, P. Pattharanitima, Corpus Christi, TX, p.A4308
- P61** **Dyspnea and the Electromyographic Activity Inspiratory Muscles During Weaning from Mechanical Ventilation/C.** Bureau, M. Dres, E. Morawiec, J. Mayaux, J. Delemazure, T. Similowski, A. Demoule, Paris, France, p.A4309
- P62** **A Novel Active Airway Humidification Technology Device (RespirAq®) for Ventilated Patients: A Feasibility Study/M.** Moylan, R. Martynoga, D. McCormack, H. Cunningham, S. Grau Bartual, Auckland, New Zealand, p.A4310
- P63** **Does the ROX Index Correlate with the Rapid Shallow Breathing Index as a Predictor of Successful Extubation?/D.** Grover, M. AnilKumar, P.R. Addanki, D. Datta, Hartford, CT, p.A4311
- P64** **Tracheostomy in Patients on VV-ECMO for Acute Respiratory Failure with High Body Mass Index and High Positive End-Expiratory Pressure/C.** Zheng, C. Rackley, Durham, NC, p.A4312
- P65** **Outcomes Associated with Asthma Exacerbations with Respiratory Failure Treated with Extracorporeal Membrane Oxygenation/J.** Zakrajsek, A. Kannappan, P.D. Sottile, T. Kiser, R. Allen, S.-J. Min, M.D. Althoff, M. Ho, P. Reynolds, E.L. Burnham, M. Moss, R.W. Vandivier, Aurora, CO, p.A5818
- P66** **Design and Efficacy of a Novel Low-Cost Ventilator: A Feasibility Study on Artificial Lungs/A.** Mehrabani, G. Meyerowitz, I.O. Emeruwa, N. Jackson, K. Schwab, Sylmar, CA, p.A5732
- P67** **Lung Ultrasound for Diagnosis of Acute Respiratory Distress Syndrome - A Prospective Observational Study/M.R.** Smit, L.A. Hagens, N.F.L. Heijnen, L. Pisani, F. Paulus, R.M. Schnabel, M.J. Schultz, D.C.J.J. Bergmans, L.D.J. Bos, Amsterdam, Netherlands, p.A5733
- P68** **Mechanical Power Over Time Is Moderately to Strongly Correlated with Hippocampal Apoptosis in Pigs Mechanically Ventilated for 50 Hours/E.** Rohrs, T. Bassi, K. Fernandez, M. Ornowska, M. Nicholas, J. Wittmann, M. Gani, D. Evans, S.C. Reynolds, New Westminster, Canada, p.A5734

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C49 VASCULAR AND HEMODYNAMICS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area A, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P70** **Manually-Traced Right Ventricular Global Longitudinal Strain Identifies Substantial Evidence of Dysfunction in Critically-Ill Patients, Not Captured by Conventional Measures/P.A.** Sanchez, C. O'Donnell, J. Roque, T. Asuni, J.E. Levitt, A. Rogers, Stanford, CA, p.A4313
- P71** **Systematic Review of Coronary Air Embolism Following Percutaneous Lung Biopsy/H.** Rashid, T. Pansuriya, A. Srinivasan, B. Wilson, H. Ahmed, S. Sarva, Houston, TX, p.A4314
- P72** **Is BRASH Underdiagnosed/S.** Sasidharan, A. Muthyala, S. Shringi, J. Sargent, Worcester, MA, p.A4315
- P73** **Gender Differences in Clinical Profile, Health-Related Quality of Life, and Clinical Outcomes in African Adults with Heart Failure/G.A.** Amusa, B.I. Awokola, G.Z. Shut, Jos, Nigeria, p.A4316
- P74** **Impact of Aortic Valve Anomalies on Outcomes in Hospitalizations with Thoracic Aortic Dissection/O.** Khdeir, S. Yalamanchili, Greenville, NC, p.A4317
- P75** **Feasibility of Velocity-Time Integral Measurements of the Descending Thoracic Aorta and Abdominal Aorta and Correlation with the Left Ventricular Outflow Tract/A.M.** Paddock, R. Sadony, C. Kersey, G. Huang, K. Fincken, L. Liu, S. Mazimba, A. Adedipe, J. Kirkpatrick, Y. Kwon, Seattle, WA, p.A4318
- P76** **Real-World Operating Characteristics of Fellow-Performed Critical Care Echocardiography/S.W.** Fox, Cleveland, OH, p.A4319
- P77** **Pulseless Electrical Activity and Asystole: Disentangling the 'Nonshockable' Rhythms/L.** Andrea, M.O. Colvin, A.L. Shiloh, A.V. Grossestreuer, K.M. Berg, M.N. Gong, A. Moskowitz, Bronx, NY, p.A4320
- P78** **Role of Vasopressin and Corticosteroid During Cardiopulmonary Resuscitation in In-Hospital Cardiac Arrest: A Meta-Analysis of Randomized Control Trials/S.** Sarkar, A. Rout, Syracuse, NY, p.A4321

- P79** **Brief Training in Ultrasound Allows Inexperienced Clinicians to Accurately and Reliably Assess Jugular Venous Pressure in Obese Patients/N.A. Pettit, B. Pedroja, Portland, OR, p.A5735**
- P80** **Echocardiographic Profile of Cirrhotic Patients with Sepsis and Septic Shock/J.Y. You, R. Sato, S. Chawla, G. Sacha, A. Kapoor, P. Collier, A. Duggal, S.P. Dugar, Cleveland, OH, p.A5736**
- P81** **Change in Ejection Fraction and In-Hospital Mortality in Patients with Sepsis and Septic Shock/S. Chawla, R. Sato, D. Alayan, O.A. Perez, T. Saleem, J.Y. You, M.J. Lanspa, S.P. Dugar, Cleveland, OH, p.A5737**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C50 EMERGING EPI IN OBSTRUCTIVE AND RESTRICTIVE LUNG DISEASE

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P576** **COPD-Related Sarcopenia Is a Major Public Health Issue That Increases the Risk for Mortality/A. Attaway, R. Lopez, U.S. Hatipoglu, J.G. Zein, M. Biehl, M.P. Engelen, S. Dasarathy, Cleveland, OH, p.A4322**
- P577** **Limited Food Access Is Associated with Decreased Omega-3 Fatty Acid Levels Among Individuals with Chronic Obstructive Pulmonary Disease/D. Belz, H. Woo, N. Putcha, A.L. Koch, W. Lorizio, C. Hanson, N.N. Hansel, Baltimore, MD, p.A4323**
- P578** **Adoption of Remote Patient Monitoring for COPD Patients in a Resource-Limited Rural Healthcare Setting/F.D. Seifer, C. Lovelett, S. Moyer, N. Moraveji, R.K. Murray, G. Hansen, Potsdam, NY, p.A4324**
- P579** **Can Computer Aided Diagnostics Help Predict Those Subjects with Emphysema During Lung Cancer Screening/S. Ramesh, H. Jones, S. Raza, A. Bain, F. Hanna, I. Hussain, Keele, United Kingdom, p.A4325**
- P580** **Is There a Difference Between New and Previously Diagnosed COPD During Lung Cancer Screening/I. Hussain, S. Ramesh, S. Raza, A. Bain, H. Jones, F. Hanna, Stoke on Trent, United Kingdom, p.A4326**
- P581** **Effect of Weight Gain on Asthma Exacerbations/E. Verghese, Z. Zia, M. Ayache, Cleveland, OH, p.A4327**
- P582** **Impact of Weekend Admission on Mortality in Acute Asthma Exacerbation: A Nationwide Analysis/M. Al Khateeb, H. Liswi, Fort Lee, NJ, p.A4328**
- P583** **Effect of ICS/LABA Controller Therapy on Airway Cold Responsiveness in Asthma Patients/J.M. Perelman, A.B. Pirogov, A.G. Prikhodko, Blagoveshchensk, Russian Federation, p.A4329**
- P584** **Single Nucleotide Polymorphisms of TRPM8 Gene as Predictors of Quality of Life in Asthma Patients with Cold Airway Hyperresponsiveness/N.L. Perelman, Blagoveshchensk, Russian Federation, p.A4330**
- P585** **Systematic Literature Review of Treatments Used for Refractory or Unexplained Chronic Cough in Adults/V. Bali, P. Kardos, C.P. Page, P. Rogliani, L. Calzetta, A. Adriano, A. Byrne, D. Nagarwalla, A. Adeyemi, A. Frederickson, J. Schelfhout, North Wales, PA, p.A4331**
- P586** **Risk Factors of Persistent Chronic Cough/V. Bali, R.S. Zeiger, Y. Zhou, F. Xie, J. Stern, M. Schatz, J. Schelfhout, W. Chen, North Wales, PA, p.A4332**
- P587** **Trends in Prevalence of Chronic Obstructive Pulmonary Disease (COPD) Among Adults, National Health Interview Survey, 1998-2018/K. Watson, S.A. Carlson, Y. Liu, A.G. Wheaton, J. Croft, K. Greenlund, Atlanta, GA, p.A4333**
- P588** **COPDGene 2019: Change in COPD Classification Over Time/G.L. Kinney, K. Young, E.A. Regan, K. Lowe, M.F. Ragland, Y. Li, E. Austin, J.D. Crapo, J.E. Hokanson, Aurora, CO, p.A4334**
- P589** **A Retrospective Observational Study to Investigate the Prevalence and Patient Profile in Chronic Cough Cohort Identified Using Claims Database in China/K. Lai, L. Chen, K.S. Lao, F. Yi, K. Xia, Guangzhou, China, p.A4335**
- P590** **U.S. Incidence Rates of Childhood Asthma with Exacerbation/R.L. Miller, C.C. Johnson, A. Chandran, H. Schuh, C.A. Camargo, New York, NY, p.A4336**
- P591** **15-Year Trends in Chronic Obstructive Pulmonary Disease Hospital Admissions in Canada/T.Y. Lee, D.D. Sin, J. Petkau, N. Mangat, L.D. Lynd, J.M. Fitzgerald, M. Sadatsafavi, Vancouver, Canada, p.A4337**
- P592** **An Update from the Irish National Alpha-1 Antitrypsin Deficiency Targeted Detection Programme/T.P. Carroll, R.C. Heeney, O. Cahalane, I. Ferrarotti, G. Kelly, C. Gunaratnam, N.G. McElvaney, Dublin, Ireland, p.A4338**
- P593** **12-Month Follow-Up of Patients Included in the Italian Severe/Uncontrolled Asthma Registry (RItA)/G. Viegi, S. Maio, N. Murgia, S. Tagliaferro, F. Pirona, A. Angino, S. Baldacci, Palermo, Italy, p.A4339**

- P594 Trends in Prevalence, Mortality, and Disability-Adjusted Life-Years Relating to Chronic Obstructive Pulmonary Disease in Europe: 1990-2019/O.** Al Omari, D.C. Marshall, J.D. Saliccioli, R. Goodall, H. Singh, J. Shalhoub, Cambridge, MA, p.A4340
- P595 Causes of Mortality by GOLD Grade Airflow Obstruction in People with Chronic Obstructive Pulmonary Disease in England/H.** Whittaker, K.J. Roithnie, J.K. Quint, London, United Kingdom, p.A4341
- P596 Trends in Resource Utilization for Acute Exacerbations of Chronic Obstructive Pulmonary Disease in the United States/A.V.** Lange, D. Bekelman, I.S. Douglas, A.B. Mehta, Aurora, CO, p.A4342
- P597 Identification of Undiagnosed Chronic Obstructive Pulmonary Data Using Administrative Claims/G.-J.** De Vries, M. Flechet, S. Pauws, R. Priori, Eindhoven, Netherlands, p.A4343
- P598 Demographic Data from a Large Rural/Suburban Population Using PaTH to Develop a Sarcoidosis Cohort/R.C.** Bernstein, A. Anderson, M. Sharp, E.S. Chen, W. Hwang, R. Bascom, Hershey, PA, p.A4344
- P599 Trends in Silicosis, Asbestosis and Pulmonary Fibrosis in Ontario, Canada/V.H.** Arrandale, Y. Zhang, N. Rajaram, A.K. Lau, D.L. Holness, S.M. Tarlo, Toronto, Canada, p.A4345
- P600 Accuracy of Death Certificate Documentation in ILD Patients: Implications on Public Health/M.** Imperio, S. Batra, N. Jeganathan, Loma Linda, CA, p.A4346
- P601 Pneumothorax and the Environment: A Systematic Review and Meta-Analysis of the Impact of Air Pollution and Meteorology/T.** Marx, N. Bernard, S. Kepka, A. Gérazime, F. Mauny, T. Desmettre, Besançon, France, p.A4347
- P602 Comparison of Interstitial Lung Disease Diagnoses in Urban and Rural Areas Among Patients in the Pulmonary Fibrosis Foundation Patient Registry/A.E.F.** Dimmock, E. White, Y. Furuya, E. Freiheit, H.J. Kim, Hershey, PA, p.A5738
- P87 Mapping Trajectories in Severe Prematurity Using Longitudinal Extraction in the NICU/H.M.** Aguilar, R. Kahanowitch, G. Gayoso Liviach, S. Gaviria, E. Chorvinsky, B.S. Bera, M.A. Arroyo Morr, M. Linguraru, G.R. Nino, Washington, DC, p.A4348
- P88 Airflow Obstruction Among Children with Asthma, Bronchopulmonary Dysplasia or Both/L.** Mukharesh, K. Greco, G.S. Sawicki, W. Phipatanakul, J.M. Gaffin, Boston, MA, p.A4349
- P89 MRI-Determined Tidal Volumes, Minute Ventilation, and Cardiac Output in Neonatal Bronchopulmonary Dysplasia/N.R.** Fletcher, N.S. Higano, C.C. Gunatilaka, P.D. Critser, E.B. Hysinger, J.C. Woods, Warrensville Heights, OH, p.A4350
- P90 Do Extremely Low Birth Weight (ELBW) Infants Tolerate Extubation to Neurally Adjusted Ventilatory Assist (NAVA) Better Than Conventional Non-Invasive Positive Pressure Ventilation (NIPPV)?/K.** Louie, S. Amatya, L.A. Parton, Valhalla, NY, p.A4351
- P91 High-Stakes Equipment Safety Issues Among Tracheostomy-Dependent Children at Home/A.** Han, S. Hofman Deyoung, L. Hill, L. Elder, K. Evans, A. Faino, T. Ong, Seattle, WA, p.A4352
- P92 Knowledge and Comfort of Parental Caregivers in Managing Pediatric Tracheostomy-Related Emergencies/R.** Ghosh, D.A. Greene, E.W. Price, D.M. Simon, A.S. Kasi, Atlanta, GA, p.A4353
- P93 Incorporating Telemedicine into an Established Pediatric Home Mechanical Ventilation (HMV) Program/A.** Connelly, S.S. Kun, J. Ellashek, S.L.D. Ward, C.D. Lew, M. Bansal, Los Angeles, CA, p.A4354
- P94 Decoding a Signaling Gene Regulatory Network Behind Bronchopulmonary Dysplasia/F.** Gao, C. Li, S. Smith, N. Peinado, W. Li, G. Kohbodi, P. Minoo, Los Angeles, CA, p.A4355
- P95 Initial Experience with Hyperpolarized Xenon-129 Gas MRI in Neonates with Bronchopulmonary Dysplasia/N.** Higano, N.J. Stewart, S. Mukthapuram, M.M. Willmering, A. Arnsperger, W. Loew, R.F. Schulte, J.M. Wild, J.C. Woods, Cincinnati, OH, p.A4356
- P96 Ventilator Weaning Protocol for Infants with Severe BPD Discharged on Home Ventilator/S.A.S.** Adaikalam, M. Kidwell, S.E. Bauer, V.L. Ackerman, A.I. Cristea, Indianapolis, IN, p.A4357
- P97 High Fidelity Simulation Training in Pediatric Tracheostomy Discharge Teaching/J.** Henningfeld, G. Flanagan, D. Graf, C. Griffith, H. Jacobson, T. Kump, J. Lynn, M.T. Meyer, L. Molentine, T.L. Petersen, T. Wade, K. Yan, L. Zhang, C. Lang, Milwaukee, WI, p.A4358

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
C51 TRACHEOSTOMIES AND BPD
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area B, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P98 Feeding Outcomes at Age 5 After Tracheostomy in Infancy**/E. Stekolchik, A.R. Strang, S. Rani, A.S. Chidekel, K. Halbert, C. Munshi, H. Northam, M.J. Hossain, Wilmington, DE, p.A4359
- P99 MicroRNA Expression in Tracheal Aspirates and Saliva Samples in Extreme Preterm Infants**/R. Siddaiah, L. Emery, A. Donnelly, K. Wisecup, H. Stephens, J. Erking, Y. Imamura Kawasawa, S. Hicks, Hershey, PA, p.A4360
- P100 Polymorphisms of MMP-12, TNF- α , IL-6 Genes in Children with Chronic Bronchopulmonary Diseases**/S.V. Suprun, E. Nagovicina, E. Suprun, G. Evseeva, O. Lebed'ko, N. Abdulina, M. Kuznecova, Khabarovsk, Russian Federation, p.A4361
- P101 Tracheomalacia in Neonates Reduces Delivery of Nebulized Drugs to the Primary Bronchi**/C.L. Mckenzie, C.C. Gunatilaka, Q. Xiao, E. Hysinger, A. Bates, Cincinnati, OH, p.A4362
- P102 Variability in Low-Flow (Standard) Oxygen Delivery by Nasal Cannula Evaluated in Neonatal and Infant Airway Replicas**/M. Sabz, S. Tavernini, K. Pillay, C. Christianson, M. Noga, W. Finlay, H. Rouhani, A. Martin, Edmonton, Canada, p.A4363
- P103 Inhaled Antibiotics in Children with Tracheostomy Tubes: A Descriptive Study**/A. Gipsman, D.I. Craven, Cleveland, OH, p.A4364
- P104 Late Preterm Antenatal Steroid Use and Infant Outcomes in a Single Center**/M.D. Wahl, C.T. Mcevoy, M. Go, Portland, OR, p.A4365
- P105 Dramatically Increased Tracheal Resistive Work of Breathing in a Neonatal Subject with Tracheomegaly**/C.C. Gunatilaka, N.S. Higano, E.B. Hysinger, A. Schuh, Q. Xiao, R.J. Fleck, J.C. Woods, A.J. Bates, Cincinnati, OH, p.A4366
- P106 Standardizing Terminology for Data Sharing in the Pediatric Long-Term Mechanical Ventilator Dependent Population**/L. Kanbar, J. Dexheimer, N.M. Pajor, Cincinnati, OH, p.A4367
- P107 Physical Inactivity Contributes to Skeletal Muscle Deficits and Worse Exercise Performance in Pediatric Pulmonary Hypertension**/C. Avitabile, M. McBride, M. Harris, K. Whitehead, M. Fogel, S. Paridon, B. Zemel, Philadelphia, PA, p.A4368
- P108 A Tracheostomy May Improve Pulmonary Hypertension in Patients with Bronchopulmonary Dysplasia**/T.D. Hicks, J. Cameron, S. Wang, N.P. Iyer, J. Szmuszkovicz, M. Bansal, Los Angeles, CA, p.A4369
- P109 A Proof of Concept Single Institution Descriptive Study of a Multidisciplinary Care Model for Children with Pulmonary Hypertension**/W. Thompson, C. Van Dorn, P. Boesch, S. Pillai, Rochester, MN, p.A4370
- P110 Pulmonary Vasodilator Therapy in Children Born Preterm with Bronchopulmonary Dysplasia (BPD): A Nationwide Study**/I. Jeremiasen, K. Tran-Lundmark, M. Dolk, E. Naumburg, Lund, Sweden, p.A4371
- P111 Long-Term Outcome of Double Aortic Arch in Children: Surgically Repaired Versus Non-Repaired**/S.G. Hamad, M. Sawahreh, A.R.A.M. E'mar, A. Abushahin, M. Abu-Hasan, Doha, Qatar, p.A4372
- P112 Inhaled Corticosteroids Were Associated with a Longer Duration of Home Oxygen in Infants with Bronchopulmonary Dysplasia**/S. Dawson, L.A. D'Andrea, J. Lagatta, Milwaukee, WI, p.A4373
- P113 A Breath of Fresh Air: Parent Perspectives on the Child Experience of Home Ventilation Via Tracheostomy**/H.H. Vo, A.H. Mercer, N.A. Jabre, C.M. Henderson, R.D. Boss, B.S. Wilfond, Seattle, WA, p.A5739
- P114 Continuous Positive Airway Pressure Weaning Guidelines in Preterm Infants: A Quality Improvement Project**/S. Mattikalli, S. Amatya, K. Weller, J. Erking, H. Stephens, K. Wisecup, Hershey, PA, p.A5740
- P115 New Tracheostomy Map**/V. Acharya, Madera, CA, p.A5741

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C52 CYSTIC FIBROSIS AND PCD - CASE REPORTS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area B, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P117 Characteristics of Patients with CF Missed on California Newborn Screen/M. Mcgarry, F. Neemuchwala, M. Chan, N.P. Ly, E. Gibb, San Francisco, CA, p.A4374

P118 High-Frequency Percussive Ventilation in an Intubated Child with Cystic Fibrosis and End-Stage Lung Disease/Z.J. Johnson, M.L. Dowell, J. Palla, Chicago, IL, p.A4375

P119 Puerto Rico, Bronchiectasis and RSPH4A Mutations: What We Have Found!/J.M. Melendez-Montañez, G.I. Maldonado-Casaldud, W. De Jesus-Rojas, Ponce, PR, p.A4376

P120 Clinical Efficacy of Elexacaftor-Tezacaftor and Ivacaftor (Trikafta®) in an Adolescent with Homozygous G85E Cystic Fibrosis/E. Stekolchik, A.S. Chidekel, D. Saul, Wilmington, DE, p.A4377

- P121 Mepolizumab Therapy for Eosinophilic Bronchiectasis in a Young/N.** Krupp, K.M. Kloepper, Indianapolis, IN, p.A4378
- P122 Aquagenic Palmoplantar Keratoderma Leading to a Diagnosis of Cystic Fibrosis/S.** Ballou, K. Richard, K. Wiss, I. St. Onge, F.J. Dy, Worcester, MA, p.A4379
- P123 A Timeline of Radiological and Symptomatic Improvement in Pediatric Post Infectious Bronchiectasis: A Case Report/P.E.** Mishra, A.K. Zaveri, J.B. Taylor, H. Muzumdar, Pittsburgh, PA, p.A4380
- P124 Reversible Airflow Obstruction in Swyer-James-MacLeod Syndrome? An Unusual Combination/F.J.** Dy, I. St Onge, Worcester, MA, p.A4381
- P125 Late Diagnosis of Cystic Fibrosis and Omalizumab Toxicity in a Pediatric Patient with Acute Allergic Bronchopulmonary Aspergillosis and Vocal Cord Dysfunction/I.** Lee, J. Lee, R.B. Moss, Palo Alto, CA, p.A4382
- P126 A Rare Case of Tension Pneumomediastinum in a Pediatric Patient and Its Successful Treatment Using CT Guided Catheter Placement/R.** Mohamed, H. Toma, A. Alneirab, M. Sunduram, A. Shabani, W. Mubarak, M. Abuhasan, Doha, Qatar, p.A4383
- P127 Hemoptysis in a 15-Year-Old: Allergic Bronchopulmonary Aspergillosis in Asthma or in Primary Ciliary Dyskinesia?/D.** Corpus, L. Lazzarini, M. Warren, T.G. Keens, M. Bansal, Los Angeles, CA, p.A4384
- P128 A Challenging Diagnosis of Primary Ciliary Dyskinesia in a Patient Misdiagnosed with Asthma: A Case Report/A.J.** Das, K. Haver, Boston, MA, p.A4385
- P129 A Former Full Term, Now 8 Week Old with Situs Inversus/A.C.** Coates, Portland, ME, p.A4386
- P132 A 12 Year Old Male in Drug Induced Adrenal Crisis/T.** Davis, E.D. Schultz, Fort Worth, TX, p.A4388
- P133 Improved Outcomes in Severe Asthma When Switching from Omalizumab: A Case Series/H.** Zomer, M.Y. Leon, L.A. Conrad, Z. Treyster, Bronx, NY, p.A4389
- P134 Seeing Red: A Case of Peripheral Eosinophilia/M.** Orangias, S.G. Bickel, A.R. O'Hagan, Louisville, KY, p.A4390
- P135 Severe Persistent Asthma with Poor Response to Therapy/K.** Nutty, P. Ham, K. Vali, A. Ruchi, G.F. Perez, Buffalo, NY, p.A4391
- P136 A Life Re-Imagined: A Case for Newborn Screen?/B.A.** Stewart, C. Lauhan, U. Mathur, L. Mellin-Sanchez, M. Lucas, Edinburg, TX, p.A4392
- P137 A Pneumonia as Rare as Hens Teeth/M.A.** Gunnett, W.C. Hoover, Birmingham, AL, p.A4393
- P138 What's the Connection?: A Case Report of Pediatric Pancreaticopleural Fistula/R.** Itani, F. Liley, S.L.D. Ward, Los Angeles, CA, p.A4394
- P139 Aerodigestive Diagnostic Evaluation of Recurrent Croup/A.E.** Biltz, B.D. Kiernan, M. Kazachkov, J. Erkman, E.D. Muise, New York, NY, p.A4395
- P140 Failure to Thrive in a 7 Month Old Infant: Possible Complication of Swyer James Syndrome/K.** Ashby, C.N. Martin, Baltimore, MD, p.A4396
- P141 Pleuro-Peritoneal Shunt for Treatment of Post-Operative Chylothorax Refractory to Medical Management/A.M.** Arenas-Rojas, S.E. Zavaleta, Bucaramanga, Colombia, p.A4397
- P142 A Rare Case of Obstructive Emphysema Due to Endobronchial Tuberculosis in an Infant/P.K.** Sarkar, N. Akand, M. Kamruzzaman, S. Tahura, M. Jahangir Alam, Dhaka, Bangladesh, p.A4398
- P143 Pleuropulmonary Blastoma Presenting as Tension Pneumothorax/B.J.** Burger, M.C. Pertzborn, K.J. Bielasowicz, Z. Ghazala, Little Rock, AR, p.A4399
- P144 Complete Left Lung Opacification Due to an Obstructive Endobronchial Tumor Consistent with Hodgkin Lymphoma on Lung Biopsy/S.** Saxena, C. Thomas, S.K. Avasarala, R.J. Lentz, J.A. Kaslow, Nashville, TN, p.A4400
- P145 What's Common Is Common - Well Not This Time: A Case of Primary Lung Adenocarcinoma in a 15-Year-Old Girl/K.** Yaacoby-Bianu, A. Abramovich, N. Peled, G. Livnat, Haifa, Israel, p.A4401
- P146 A Pediatric Case of Endobronchial EBV-Associated Smooth Muscle Tumor/A.** Chang, A. Constantinescu, New York, NY, p.A4402

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THEMATIC POSTER SESSION

C53 PEDIATRIC PULMONOLOGY POTPOURRI FOR \$500 - CASE REPORTS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area B, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P131 Eosinophilic Granulomatosis with Polyangiitis in a Twelve-Year-Old Boy Receiving Montelukast: A Case Report/H.** Kammouh, S.G. Hamad, S. Magboul, Z.A. Hejji, A. Al-Naimi, K. Zahraldin, Doha, Qatar, p.A4387

- P147** **When Is Wheezing Not Asthma? Near Occlusion Right Main Stem Bronchus by Tumor/E.E. Mchugh, J. Ongkasuwan, M. Silva Carmona, Houston, TX, p.A4403**
- P148** **A Curious Case of a Colossal Carcinoid Tumor/K. Solanki, R. Patel, B. Sopontammarak, A.M. Elabbassi, Mountain Home, TN, p.A4404**
- P149** **Pulmonary Hypertension Associated with Systemic Scleroderma in a Pediatric Patient/T. Isaacs, M.D. Mcdowell, N.P. Varghese, C. Chartan, R. Coleman, T. Vogel, N.M. Villafranco, Houston, TX, p.A4405**
- P150** **A Novel Case of Congenital Lobar Emphysema (CLE) Caused by a Patent Ductus Arteriosus (PDA) Without Associated Ductal-Dependent Congenital Heart Disease/A. Zaveri, P.E. Mishra, J.B. Taylor, H.V. Muzumdar, Pittsburgh, PA, p.A4406**
- P151** **Refractory Hypoxemic Respiratory Failure Secondary to Hepatopulmonary Syndrome in a Pediatric Patient/A. Wannes Daou, A. Miethke, B. Mullanpudi, A.T. Trout, K.L. Jennifer, C. Towe, Cincinnati, OH, p.A4407**
- P152** **Sometimes Recurrent Chest Pain with a History of Pulmonary Embolism Does Not Mean Pulmonary Embolism/S. Al Qataneh, Morgantown, WV, p.A4408**
- P153** **Sleep Disordered Breathing in Infants with a Positive Newborn Screen for Spinal Muscular Atrophy: A Case Series/J. Chiang, K. Sunkonkit, M. Alzaid, H. Gonorazky, R. Amin, Toronto, Canada, p.A4409**
- P154** **Severe Obstructive Sleep Apnea in an Adolescent with Hypernasality, Dysarthria and Muscle Weakness/H. Park, N. Aborawi, L. Delfiner, R. Arens, Bronx, NY, p.A4410**
- P155** **Patient with Hyperacute Allograft Dysfunction After Bilateral Lung Transplantation for Genetic Severe Pulmonary Hypertension/E.E. Mchugh, D.R. Spielberg, S. Das, G.B. Mallory, E. Melicoff-Portillo, Houston, TX, p.A4411**
- P156** **A Child with Academic Difficulties and Snoring, Maybe Not So Unique Presentation of Chiari I Malformation/J. Spear, D.P. Hsu, M.L. Kanney, Houston, TX, p.A4412**
- P157** **A Case of Aspirin Exacerbated Respiratory Disease Presenting Before Age 5/L. Mukharesh, J.R. Brodsky, J.M. Gaffin, T. Laidlaw, A.M.H. Casey, Boston, MA, p.A4413**
- P158** **Multifocal Tuberculosis in 2021: What Place for Genetics?/P. Gourdan, I. Colanic, S. Blanc, A. Fina, M. Baque-Juston, F. Solla, A. Giordano, T. Hubiche, P. Rohrllich, V. Barlogis, J. Bustamante, S. Boisson-Dupuis, L. Giovannini-Chami, Nice, France, p.A4414**

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C54 Haight-Ashbury: The Two Ventricles

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P911** **Role of Apelin in PH-HFpEF/G. Halliday, E. Jheng, A.L. Frump, A. Fisher, T. Cook, Y.C.C. Lai, Indianapolis, IN, p.A4415**
- P912** **Role of CNPY2 in Mediating Skeletal Muscle-Pulmonary Vasculature Crosstalk in PH-HFpEF/J.-R. Jheng, A.L. Frump, G. Halliday, T. Cook, A. Fisher, M. Simon, Y.C.C. Lai, Indianapolis, IN, p.A4416**
- P913** **Pulmonary Hypertension Due to Heart Failure with Preserved Ejection Fraction in Rats/G. Hubesch, C. Dewachter, G. Vegh, P. Jaspers, J.-L.E. Vachieri, K. McEntee, L. Dewachter, Bruxelles, Belgium, p.A4417**
- P914** **TRPA1 Dependent Signaling in Cardiac Dysfunction and Pulmonary Hypertension/K. Malkmus, J. Schaeffer, F. Knoepp, J. Uhl, L. Schaffelhofer, L. Kummer, A. Erb, W. Seeger, T. Gudermann, A. Dietrich, N. Weissmann, S. Kraut, M. Brosien, Giessen, Germany, p.A4418**
- P915** **17 β -Estradiol, Via Era, Prevents NLRP3 Activation in Right Ventricular Function Impairment in Rats/R. Sobrano Fais, E. Mickler, J. Li, A. Walts, A.L. Frump, T. Lahm, Denver, CO, p.A4419**
- P916** **Hemodynamic Characterization of Right Ventricular Dysfunction in Cirrhotic Patients Undergoing Liver Transplantation/A. Rajaratnam, A. Amanzai, M. Sejjal, A.M. Abo-zed, S. Malik, F.A. Shah, I. Al Ghouleh, Pittsburgh, PA, p.A4420**
- P917** **Challenging the PCWP Hypothesis: Reducing PCWP Does Not Improve Exertional Dyspnea in Patients with Heart Failure with Preserved Ejection Fraction and Obesity/B.N. Balmain, A.R. Tomlinson, J.P. MacNamara, S. Sarma, M. Morris, R.B. Moran, M. Payne, M. Samels, B.D. Levine, T.G. Babb, Dallas, TX, p.A4421**
- P918** **Mechanical Remodeling of the RV and PA in PH/S. Neelakantan, A. Vang, P. Nicely, G. Choudhary, R. Avazmohammdi, College Station, TX, p.A4422**
- P919** **Right Ventricular Capacitance in Pulmonary Arterial Hypertension and Heart Failure with Preserved Ejection Fraction/H.T. Oakland, L. Sugeng, P. Joseph, D. Izzi, F. Zalik, A. Raza, R. Amendola, P.M. Heerd, I. Singh, New Haven, CT, p.A4423**

- P920** **Impact of Comorbid Depression on Hospitalizations and Outcomes of Non Group 1 Pulmonary Hypertension Patients with Obstructive Sleep Apnea and Heart Failure with Preserved Ejection Fraction: “Depression Paradox”?**/B. Rizvi, A. Jain, N. Ghadge, M.C. Buhl Leon, F. Nunez Guzman, R. Desai, Fresno, CA, p.A4424
- P921** **The Impact of Atrial Fibrillation on In-Hospital Outcomes in Patients with Obesity Hypoventilation Syndrome/V.** Reyes Pinzon, P. Khamooshi, C.-Y. Kang, N. Haghani Rad, H. Shaka, Chicago, IL, p.A4425
- P922** **Tacrolimus for Prevention of Right and Left Ventriculo-Arterial Coupling Changes in Experimental Brain Death/A.** Belhaj, L. Dewachter, M. Rimmelink, B. Rondelet, Yvoir, Belgium, p.A4426
- P923** **Evaluation of a Deep Learning Algorithm and Phonocardiography for Detecting Elevated Pulmonary Artery Systolic Pressure/S.** Ilyas, P.N. Nicely, L. Guo, L. Pung, E.K. Asiedu, F.V. Lima, A.E. Saltman, G. Choudhary, Providence, RI, p.A5742
- P924** **A Novel Model of Pulmonary Hypertension Due to Left Heart Disease, Caused by Pulmonary Vein Banding in Male Wistar Kyoto Rats/J.** Münsks, A. Sydykov, B. Assmus, T.K. Antoine, P. Dorfmueller, B. Kojonazarov, N. Weissmann, R.T. Schermuly, Giessen, Germany, p.A5743
- P925** **Tricuspid Annular Plane Systolic Excursion (TAPSE) in Prognosis and Diagnosis of Pulmonary Embolism (PE)- A Systematic Review and Meta-Analysis/P.** Saluja, N. Gautam, Little Rock, AR, p.A5744
- P929** **Cracking the Coagulation Case in PAH with Extracellular Vesicles/D.** Lachant, A. Light, D. Haight, N. Mackman, R.J. White, Rochester, NY, p.A4429
- P930** **Utilizing Tracheal Aspirate-Derived Mesenchymal Stromal Cells to Explore the Pulmonary Vascular Abnormality in Congenital Diaphragmatic Hernia/Y.** Bai, G.M. Amonkar, P. Lerou, X. Ai, Boston, MA, p.A4430
- P931** **Fluid Shear Stress and Endothelial Transcriptomics in Pulmonary Arterial Hypertension/S.G.** Rayner, C.J. Mandrycky, P.J. Leary, W.A. Altemeier, S.A. Gharib, Y. Zheng, Seattle, WA, p.A4431
- P932** **Longitudinal Analysis of Three Major Risk-Associated Transcriptomic Subgroups Within the IPAH Classification/S.** Karotis, E. Jammeh, E.M. Swietlik, C.J. Rhodes, N. Errington, R. Thompson, J. Wharton, G. Coghlan, J. Lordan, P. Corris, L.S. Howard, R.A. Condliffe, D. Kiely, A.C. Church, J. Pepke-Zaba, M. Toshner, J. Wort, S. Gräf, N.W. Morrell, M. Wilkins, D. Wang, A. Lawrie; Sheffield, United Kingdom, p.A4432
- P933** **Dysregulation of the Long Noncoding RNA Xist in Male Pulmonary Arterial Hypertension/B.** Carman, V. Bernard, D. Predescu, S. Qin, H. Singh, M.W. Geraci, B. Mokhlesi, S.A. Predescu, Chicago, IL, p.A5745
- P934** **Inhibition of Soluble Adenylyl Cyclase Blocks STAT1 Activation in Caveolin-1 Deficient Primary Human Lung Vascular Endothelial Cells/K.** Hersi, L.-Y. Chen, M.A.H. Siddique, S. Gairhe, K.S. Awad, S. Wang, R.L. Danner, J.M. Elinoff, Bethesda, MD, p.A5746

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C55 NOB HILL: CELLULAR ORIGINS OF PULMONARY VASCULAR DISEASE

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.**P927** **Packaging and Release Mechanism for Cyclic Adenosine Monophosphate (cAMP) Enriched Extracellular Vesicle (EV)/A.** Bhadra, N.N. Bauer, Mobile, AL, p.A4427**P928** **Cyclic Adenosine Monophosphate (cAMP) Enriched Extracellular Vesicle (EV) Signaling as an ‘Extracellular Compartment’ in Pulmonary Hypertension/A.** Bhadra, J.L. Hewes, C. Zhou, J.Y. Lee, N.N. Bauer, Mobile, AL, p.A4428

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C56 COW HOLLOW: PRECLINICAL MODELS OF PULMONARY HYPERTENSION

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.**P936** **Succinate Receptor Gpr91 Knockout Attenuates Hypoxic Pulmonary Hypertension in Mice/P.P.** Jain, M. Xiong, N. Lai, J. Chen, A. Makino, J.X.-J. Yuan, Ottawa, Canada, p.A4433**P937** **The Role of Estrogen Receptor Alpha During Lung Development Under Hypoxic Conditions in a Rat Model/N.** Severyn, R. Tepper, T. Lahm, Indianapolis, IN, p.A4434

- P938 Omega-3 Fatty Acid Expression Attenuates Chronic Hypoxia-Induced and Smoke-Induced Pulmonary Hypertension**/J. Schaeffer, M. Gierhardt, O. Pak, K. Malkmus, S. Kraut, S. Hadzic, N. Schupp, D. Bonthu, S. Reiche, R. Savai, A. Ghofrani, F. Grimminger, W. Seeger, N. Weissmann, M. Hecker, N. Sommer, Giessen, Germany, p.A4435
- P939 The Role of Mitochondrial Cytochrome Oxidase Subunit 4 Isoform 2 (Cox4i2) in Acute Pulmonary Oxygen Sensing**/A.K. Nolte, I. Wittig, O. Pak, M. Hüttemann, S. Scheibe, F. Knoepp, I. Henneke, C. Garcia, F. Grimminger, A. Ghofrani, R.T. Schermuly, W. Seeger, R. Brandes, N. Weissmann, K. Giehl, N. Sommer, Giessen, Germany, p.A4436
- P940 Rasa3 Expression Is Differentially Regulated in Pro-Inflammatory and Hypoxic Pulmonary Hypertension Models In Vitro and In Vivo**/C.C. Prohaska, M. Teixeira Gomes, Y. Bai, A.D. Lockett, N.M. Jones, A. Carneiro, R.F. Machado, Indianapolis, IN, p.A4437
- P941 R213G and Vascular Deficient Extracellular Superoxide Dismutase (EC-SOD) Variants Have Differential Effects on Interstitial Macrophage Expansion During Pulmonary Hypertension**/C.V. Lewis, A. Allawzi, C.V. Sul, L. Hernandez-Lagunas, C. Delaney, C. Mickael, E. Nozik, Aurora, CO, p.A4438
- P942 Loss of Vascular EC-SOD Is Associated with Worse RV Hypertrophy and Decreased Mitochondrial Content in a Model of Pulmonary Hypertension**/D. Colon Hidalgo, N. Dee, H. Elajaili, L. Hernandez, M. Jordan, J. Posey, C. Delaney, E. Nozik, Aurora, CO, p.A4439
- P943 Rodatristat Ethyl Monotherapy and Combination with Ambrisentan Reverses Incidence of Vascular Occlusions to Baseline Normoxic Levels in the Rat SUGEN-Hypoxia Model of Pulmonary Arterial Hypertension**/M. Palacios, S. Wring, Cary, NC, p.A4440
- P944 Experimental Schistosoma Japonicum-Induced Pulmonary Hypertension**/B. Kassa, M.H. Lee, R. Kumar, C. Mickael, L. Sanders, R.M. Tuder, M. Mentink-Kane, B.B. Graham, San Francisco, CA, p.A4441
- P945 Effect of Subacute Angiotensin II Elevations on Sphingolipid Levels and Lung Injury in Mice**/C. Cornell, J.M. Poczobutt, E. Berdyshev, N. Egersdorf, H.W. Chu, K. Kopf, B. Babbs, R. Kolesnick, I. Petrache, Denver, CO, p.A5747

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C57 PRESIDIO: ENDOTHELIAL CELLS IN PULMONARY HYPERTENSION

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P947 Hypoxia Downregulates Hemin Induced Necrotic Pulmonary Artery Endothelial Cell Death**/J. Gonzales, K. Holbert, D.R. Fraidenburg, Chicago, IL, p.A4442
- P948 Targets of miR-155 in Human Lung Microvascular Endothelial Cells: Implications for PAH**/R. Yu, A.S. Ambade, P.M. Hassoun, R.L. Damico, Baltimore, MD, p.A4443
- P949 Acidosis Prevents the Intracellular Domain of Carbonic Anhydrase IX from Activating the PI3K/Akt Signaling Pathway in Pulmonary Microvascular Endothelial Cells**/R.P. Stevens, M. Alexeyev, N. Kozhukhar, V. Pastukh, T. Stevens, J.Y. Lee, Mobile, AL, p.A4444
- P950 CARMIL1 Expression Alters Pulmonary Endothelial Barrier Function Following Inflammatory Injury**/P. Belvitch, C. Humpal, R. Demeritte, J.G.N. Garcia, S.M. Dudek, Chicago, IL, p.A4445
- P951 Human Pulmonary Artery Endothelial Cells Isolated from Patients with Pulmonary Hypertension Exhibit Anoikis Resistance**/S. Subedi Paudel, N. Singh, K. Cox, M. Pereira, D.T. Tambe, E.O. Harrington, T. Stevens, C.E. Ventetuolo, Mobile, AL, p.A4446
- P952 PFKFB3 Mediates Pulmonary Microvascular Endothelial Cell Death Under a Hypoxic and Fructose-Rich Environment**/R.P. Stevens, M. Cancel, T. Stevens, J.Y. Lee, Mobile, AL, p.A4447
- P953 Comparing Dynamic Ca²⁺ Signaling Profiles Activated from Two Different Pathways in Pulmonary Microvascular Endothelial Cells**/P. Sen, M. Taylor, Mobile, AL, p.A4448
- P954 CES1 Deficiency Is Associated with Oxidative Stress Mediated Endoplasmic Reticulum/Mitochondrial Dysfunction in Pulmonary Endothelial Cells**/S.S. Agarwal, A. Chakraborty, E. Shamskhov, D.F. Condon, K. Suresh, M. Rabinovitch, M.R. Nicolls, V. De Jesus Perez, Palo Alto, CA, p.A4449

- P955 Human Pulmonary Artery Endothelial Cell Culture Success Rates from Routine Right Heart Catheterizations/K. Cox-Flaherty, G. Baird, R. DiGregorio, J.R. Klinger, C.J. Mullin, M. Pereira, N. Schmitz, N. Singh, M.E. Whittenhall, E.O. Harrington, C.E. Ventetuolo, Providence, RI, p.A4450**
- P956 Single-Cell Metabolic Imaging Reveals a Slc2a3/RhoA-Dependent Glycolytic Burst in Motile Endothelial Cells/D. Wu, D. Harrison, T. Szasz, C.-F. Yeh, A.Y. Melliton, R.-T. Huang, T.-P. Shentu, Z. Zhou, G. Mutlu, J. Huang, Y. Fang, Chicago, IL, p.A5748**
- P957 Soluble Signals to Improve Endothelial Integrity in the Lung/Y. Yuan, M.S.B. Raredon, Q. Yuan, T. Obata, H. Qian, D.D. Wu, N. Kaminski, L.E. Niklason, New Haven, CT, p.A5749**

BASIC • TRANSLATIONAL**THEMATIC POSTER SESSION****C58 RICHMOND: SMOOTH MUSCLE CELLS AND FIBROBLASTS IN PULMONARY VASCULAR DISEASE****9:30 a.m. - 3:45 p.m. MOSCONE CENTER****Area K, Hall F (North Building, Exhibition Level)****Viewing:** Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P959 Combined Inhibition of Histone Deacetylases and Bromodomain Proteins Normalizes Persistent Activation of Pulmonary Hypertensive Adventitial Fibroblasts/H. Zhang, A. Laux, M. Li, X.-D. Liu, N.W. Morrell, C.-J. Hu, K.R. Stenmark, Aurora, CO, p.A4451**
- P960 Pericyte Morphological Change in Flow-Induced Pulmonary Hypertension by Left Lung Pneumonectomy/T. Klouda, H. Kim, J. Kim, G.A. Visner, K. Liu, B. Raby, K. Yuan, Boston, MA, p.A4452**
- P961 SIRT3 Regulates Mitochondrial Function of Adventitial Fibroblasts in Pulmonary Hypertension/M. Li, L. Plecítá-Hlavatá, E. Dobrinskikh, A. Laux, H. Zhang, C.-J. Hu, K.R. Stenmark, Aurora, CO, p.A4453**
- P962 Mitochondrial Dysfunction Associated with Loss of WWOX Expression in PSMC/M. Teixeira Gomes, R.B. Polidoro, Y. Bai, B.R. Cooper, R.F. Machado, Indianapolis, IN, p.A4454**

- P963 Treprostinil Exposure Broadly Alters Expression of RNA Processing and Stress Response Genes in Pulmonary Artery Smooth Muscle Cells from Subjects with Pulmonary Arterial Hypertension/N.J. Shelburne, N. Fortune, J. West, A.R. Hemnes, Nashville, TN, p.A4455**
- P964 The Sphk1/S1P/S1PR2 Signaling Axis Activates the Inflammasome and Promotes Pyroptosis in PSMCs/Y. Bai, M. Teixeira Gomes, A. Carneiro, C.C. Prohaska, R.F. Machado, Indianapolis, IN, p.A4456**

CLINICAL**THEMATIC POSTER SESSION****C59 POTRERO HILL: CASE REPORTS IN PULMONARY HYPERTENSION****9:30 a.m. - 3:45 p.m. MOSCONE CENTER****Area K, Hall F (North Building, Exhibition Level)****Viewing:** Posters will be on display for entire session **11:15-1:15****Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P966 Mitomycin Induced Pulmonary Veno-Occlusive Disease/Z. Bauer, M. Schloop, A.M. Abdul Hameed, R.L. Awdish, K. Thavarajah, Detroit, MI, p.A4457**
- P967 Excipient Lung Disease Complicated by Pulmonary Capillary Hemangiomatosis/H. Boucekkine, J.E. Zuckerman, R. Saggari, A. Monteiro, Los Angeles, CA, p.A4458**
- P968 Pulmonary Arterial Hypertension in Proteus Syndrome/C. Vahdatpour, S.S. Kalra, C. Eagan, H.M. Alnuaimat, A. Ataya, Gainesville, FL, p.A4459**
- P969 Pulmonary Hypertension Secondary to Hyperviscosity in a Patient with Myelodysplastic Syndrome/Myeloproliferative Neoplasm Overlap Syndrome/O. Salamo, B. Zafar, S.A. Faiz, I.C. Mira-Avendano, Houston, TX, p.A4460**
- P970 A Rare Case of Decompensated Heart Failure Causing Complete Compression of the Left Mainstem Bronchus/S. Gould, C.K. Hwe, K. Woo, D. Hsia, N. Yee, Torrance, CA, p.A4461**
- P971 Reverse Bernheim Phenomenon - Always a Conundrum/L.A. Wulff, M. Islam, R. Restrepo Jaramillo, K. Patel, J.D. Herazo-Maya, D. Bandyopadhyay, Tampa, FL, p.A4462**
- P972 When "Pulseless Disease" Involves the Pulmonary Artery: A Rare Case of Takayasu Arteritis Causing Pulmonary Hypertension/M.E. Richert, L.M. Forbes, S. Gu, D.B. Badesch, Aurora, CO, p.A4463**

- P973 A Rare Case of Recurrent Chylothorax from Superior Vena Cava Stenosis/A.** Korzhuk, M. Sirangi, Y.-J. Chen, O.N. Nwaobasi, A. Avula, K. Misner, Harrisburg, PA, p.A4464
- P974 Asymptomatic Unilateral Pulmonary Artery Atresia in a Patient with Stage 4 Cancer/H.** Channa, P. Krishnan, Shreveport, LA, p.A4465
- P975 Delayed Presentation of Recurrent Pulmonic Stenosis/F.** Kan, S. Pyskir, S. Randhawa, S.J. Evans, Honolulu, HI, p.A4466
- P976 Uncover a Variant of Tetralogy of Fallot with Pulmonary Stenosis in a 64-Year-Old Male with Pulmonary Hypertension/Y.-J.** Chen, K. Yari, T. Saleem, Harrisburg, PA, p.A4467
- P977 Permissive Systemic Hypertension in the Management of Eisenmenger Syndrome in a Patient with Patent Ductus Arteriosus/B.** Korb, San Jose, CA, p.A4468
- P978 Coincidence or Causative: Unique Imaging in a Patient with Pulmonary Arterial Hypertension Due to Congenital Heart Disease/S.H.** Friedman, M. Veglia, D. Gregg, R.G. Argula, Charleston, SC, p.A4469
- P979 Friend or Foe? Role of Embryonic Remnant in Adult Life/R.** Gorthi, V. Halani, R. Subramaniam, R. Farhat, St. Louis, MO, p.A4470
- P980 Symptomatic Pulmonary Vein Stenosis After Catheter Ablation for Paroxysmal Atrial Fibrillation: A Case Report/A.** Mehta, A. Perumbeti, J. Thomas, J. Dabu, Rancho Mirage, CA, p.A4471
- P981 Pulmonary Arterial Hypertension and Pregnancy at 2640 Meters Above Sea Level/C.** Villaquiran-Torres, R. Dueñas-Villamil, C. González-Avilés, J.D. Botero Bahamon, D. Saa, J. Silva, Bogotá, Colombia, p.A4472
- P982 Status Asthmaticus-Induced Takotsubo Cardiomyopathy/K.** Patel, M. Pillai, P. Kariyanna, S. McFarlane, Brooklyn, NY, p.A4473
- P983 A Chain Reaction: Systemic Ventricularization from Severe Tricuspid Valve Regurgitation/B.** Hyun, S.P. Sears, Portland, OR, p.A4474
- P984 Myopathy - A Forgotten Manifestation of Beriberi/A.** Kainat, N.U. Ain, B. Agarwal, McKeesport, PA, p.A4475
- P985 Acute Hypoxemic Respiratory Failure Due to Post-Operative Acute Decompensated Heart Failure Following Ross Procedure for Severe Aortic Stenosis/S.** Simeone, K. Bhandari, M.S. Godfrey, Farmington, CT, p.A4476
- P986 Excess Prostacyclin Syndrome in Patients with Pulmonary Arterial Hypertension Treated with Chronic Parenteral Prostacyclin Therapy: Case Reports/P.** Martinez Ceren, S. Wu, T. Fernandes, D.G. Papamatheakis, D.S. Poch, J. Yang, S. Lombardi, C. Rodriguez, N.H. Kim, La Jolla, CA, p.A4477
- P987 Nontraumatic Subdural Hematoma: A Cautionary Tale of Anticoagulation with Parenteral Prostacyclin Therapy/D.** Roto, R.J. White, D. Lachant, Rochester, NY, p.A4478
- P988 To Drain or Not to Drain: Hemodynamic Characterization of Tamponade in PAH/N.** Habib, N. Sher, A. Tandon, S. Kubba, M. Insel, A. Chatterjee, M. Seckeler, F.P. Rischard, Phoenix, AZ, p.A4479
- P989 Questioning the Janus Kinase (JAK) Inhibitors!/H.** Hussain, S. Faryad, D. Taneja, Peoria, IL, p.A4480
- P990 Treatment of COVID-19 Pneumonia and Acute Respiratory Distress with Ramatroban, a Thromboxane A₂ and Prostaglandin D₂ Receptor Antagonist: A 4-Patient Case Series Report/M.L.** Ogletree, R. Kulshreshtha, A. Agarwal, A. Agarwal, K.C. Chiang, A. Gupta, Nashville, TN, p.A4481

CLINICAL

THEMATIC POSTER SESSION

C60 ZEBRAS V. HORSES: UNUSUAL LUNG INFECTIONS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area C, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P159 Not All That Glows Is Malignant: Actinomyces as a Rare Mimic of Lung Cancer/S. Ekhekar, R. Muthusami, R. Orme, N. Ahmad, Telford, United Kingdom, p.A4482

P160 Nocardia Farcinica in a Patient with Silicosis Presenting as a Pseudo-Malignancy/K. Ebeid, M. Abdullah, R. Frants, Johnson City, NY, p.A4483

P161 Disseminated Toxoplasmosis Presenting as Acute Vasodilatory Shock, Multi-Organ Failure, and Acute Hypoxic Respiratory Failure Following Hematopoietic Stem Cell Transplant/P. Hantzidiamantis, S. Greissman, S. Golob, D.K. Manson, M. O'Donnell, New York, NY, p.A4484

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THEMATIC POSTER SESSION

C61 BREAKING THE MOLD

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area C, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

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- P197 Chronic Pulmonary Aspergillosis Occurring Post Treatment of COVID-19 Pneumonia with Tocilizumab/A.O. Adetiloye, K. Ghosh, C. Villavicencio, M.R. Velasquez, M. Oliva, V. Delgado Lazo, N. Trenard, A. Poor, New York, NY, p.A4518**
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THEMATIC POSTER SESSION

C62 EXPANDING OUR INSIGHT INTO COVID-19

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area D, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session**11:15-1:15****Discussion: 11:15-12:15** authors will be present for individual discussion**12:15-1:15** authors will be present for discussion with assigned facilitators.

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- P297 Pulmonary Function Testing in Recovered Covid-19 Patients/S.** Copen, Los Angeles, CA, p.A4587
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- P303 Alterations in the Covid-19 - Associated Proteome Relative to Length of Hospital Stay/A.F.** Suffredini, S. Gairhe, S.M. Kanth, E. Aboye, J.A. Huapaya, C. Demirkale, C. Barnett, J. Kovacs, P. Torabi-Parizi, Bethesda, MD, p.A5757
- P304 The Effect of Covid-19 on Spontaneous Pneumothorax/D.** Davis, A. Barbera, O. Sobowale, K. Rosever, K. Homa, K. Jacklin, P. Reyes, W. Wills, D. Nelson, A. Bugajski, Lakeland, FL, p.A5758
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- P308 Variation in Lung Function in Pediatric and Adolescent Population Post SARS-COV-2 Infection: Pediatric Pulmonary Practice Experience/M.** Rashed, S. Choudhary, A. Mock, M. Akerman, M. Pirzada, Mineola, NY, p.A5762
- P309 Covid-19 Outcome: A One-Year Follow-Up Study of Patients Recovered from Covid-19 Infection at Lung Center of the Philippines/M.A.G.** Donguines, P. Guadalupe, R. Ibanez, J.R. Gonong, Quezon city, Philippines, p.A5763
- P310 Predictors for Severity of Coronavirus Disease 2019 (Covid-19) Pneumonia in Patients Admitted at a Tertiary Hospital in Cebu City, Philippines: A Retrospective Single Center Cohort Study/R.M.E.** Llanes, K.N. Mayol, M.T.A. Cañete, N.W.C. Salces, Cebu, Philippines, p.A5764
- P311 Risk Factors for Mortality of Covid-19 Confirmed Cases Admitted at Lung Center of the Philippines/M.E.** DE Vera, G. Ombao, V.S. Delos Reyes, Quezon City, Philippines, p.A5765
- P312 A Phase 2 Multicenter, Randomized, Controlled Study to Evaluate the Efficacy and Safety of Reparixin in Hospitalized Adult Patients with COVID-19 Pneumonia/E.** Gavioli, G. Landoni, L. Piemonti, P. Grossi, S. Toya, E.M. Minnella, M. Allegretti, F. Mantelli, Boston, MA, p.A5766
- P313 Biomarker Levels Concur with a Risk Stratification Criteria in Covid-19 Pneumonia, a Role for a Prognostic-Tool for Identification of Clinical Deteriorators/T.W.** Higenbottam, L. Wiffen, A. Chauhan, L. D'Cruz, T. Brown, J.A. Bernstein, J. Meollman, D. Ghosh, Worthing, United Kingdom, p.A5767
- P314 SPRINTER: A Randomized, Double-Blind, Placebo-Controlled, Phase 3 Trial to Determine the Efficacy and Safety of Inhaled Interferon Beta-1a (SNG001) for the Treatment of Patients Hospitalized Due to COVID-19 (NCT04732949)/P.** Monk, T. Wilkinson, J. Brookes, T. Batten, V. Tear, M. Mankowski, F. Gabbay, D. Davies, C. Brightling, M. Kraft, R. Djukanovic, S. Holgate, Southampton, United Kingdom, p.A5768

- P315** **Bebtelovimab, Alone and Together with Bamlanivimab and Etesevimab, as a Broadly Neutralizing Monoclonal Antibody Treatment and a Slow Intravenous Push Option for Ambulatory COVID-19/M.** Williams, M. Dougan, L. Farmer Macpherson, N. Kallewaard, D. Patel, M. Hufford, L. Wietecha, R. Gottlieb, Indianapolis, IN, p.A5769
- P316** **Oral Covid-19 Antiviral Candidate LAU-7b Demonstrates 100% Reduction of the Risk of Progression to Mechanical Ventilation and Death in Hospitalized Moderate-to-Severe Covid-19 Patients/J.-M. Houle, R. Saleh, B. Meisenberg, A.M. Hirsch, T.C. Lee, F. Marquis, K.S. Miller, R. Pislariu, P. Colin, I. Kianicka, S. Bezzaoucha, D. Potvin, D. Radzioch, L.C. Lands, Montreal, Canada, p.A5770**

CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
C63 SLEEP GEMS: CASE REPORTS FROM THE WORLD OF SLEEP MEDICINE
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area J, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P897** **A Rare Case of Narcolepsy Following SARS-CoV-2 Infection/P.** Deshpande, M. Thomas, L. Tran, R. Sampath, D.R. Clark, Morganton, NC, p.A4589
- P898** **A Case of Rapid Eye Movement Sleep-Related Bradyarrhythmia Syndrome with Severe Obstructive Sleep Apnea Syndrome/P.A.** Dela Cruz, Quezon City, Philippines, p.A4590
- P899** **Case Series: Evaluation of Sleep Disordered Breathing in Third Trimester High Risk Obstetrics Women/C.** Won, E. Montague, L. Skinger, New Haven, CT, p.A4591
- P900** **A Case of Obstructive Sleep Apnea Presenting with Increased Intracranial Pressure in Type 1 Chiari Malformation/K.** Garagozlo, K.D. Graw-Panzer, New York, NY, p.A4592
- P901** **A Case of Idiopathic Pulmonary Fibrosis and Obstructive Sleep Apnea Treated with High Flow Nasal Cannula/G.** Zuccarini, A. Esposito, P. Prosperi, A. Spacone, Pescara, Italy, p.A4593
- P902** **Being on the Wrong Side: A Case of Trepopnea During Pap Titration/M.J.** Mendez Santana, Y.Y. Greenstein, Newark, NJ, p.A4594

- P903** **An Incidental Finding of Hypoxemia in a Child Leads to a Rare Diagnosis/S.H.** Rizvi, A. Shakkottai, E. Basora, Dallas, TX, p.A4595
- P904** **Dexmedetomidine as a Potential Cause of Central Sleep Apnea/A.** Balavenkataraman, N. Gopal, J.E. Moss, V. Arunthari, B. Colaco, Jacksonville, FL, p.A4596
- P905** **Continuous Positive Airway Pressure Treatment for Treatment of Cheyne-Stokes Respiration Occurring in Conjunction with Obstructive Sleep Apnea (OSA) - A Case Series/N.A.** King, K. Workman, K.M. Sundar, Salt Lake City, UT, p.A4597
- P906** **ROHHAD Syndrome Spectrum in Adult: A New Patogenic Variant/A.** Ortega-Gonzalez, R. Perea-Rozas, A. Martinez-Garcia, F. Rodriguez-Argente, A. Ortega-Moreno, Talavera de la Reina, Spain, p.A4598
- P907** **Prazosin: What a Nightmare/A.M.** Westbrook, W. Healy, Augusta, GA, p.A4599
- P908** **COVID-19 and Central Sleep Apnea/V.** Geedigunta, S. Dosala, M. Bachan, Z. Khan, Bronx, NY, p.A4600
- P909** **Obstructive Sleep Apnea and Sudden Cardiac Death/A.J.** Duval, A. Berman, Newark, NJ, p.A4601
- P910** **A Novel Case of COVID Infection Exacerbating Upper Airway Resistance Syndrome/K.P.** Acosta, C.W. Akabusi, E. Matayeva, Poughkeepsie, NY, p.A4602

BASIC • TRANSLATIONAL
THEMATIC POSTER SESSION
C64 LUNG VASCULAR BIOLOGY AND MECHANISMS OF PULMONARY ARTERIAL HYPERTENSION
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area K, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P992** **Secreted Protein Acidic and Rich in Cysteine Regulates Vascular Cell Function in Pulmonary Hypertension/C.** Veith, M. Wujak, I. Vartürk-Özcan, S. Hadzic, S. Kraut, C.-Y. Wu, M. Gredic, M. Heimbrodt, J. Wilhelm, O. Pak, F. Weisel, M. Brosien, W. Seeger, G. Kwapiszewska, N. Sommer, N. Weissmann, Giessen, Germany, p.A4603
- P993** **Inhibition of Src-Family B Kinases Promotes Pulmonary Artery Endothelial Cell Dysfunction/A.M.** Andruska, M.K. Ali, X. Tian, E. Spiekerkoetter, Stanford, CA, p.A4604

- P994 Plasma-Derived Small Extracellular Vesicles from Hypoxic Calves Drive Pro-Inflammatory and Metabolic Reprogramming in Macrophages/S. Kumar, M. Li, H. Zhang, S. Riddle, B.A. McKeon, S. Chaudhary, C. Coughlan, S.C. Yadav, M.G. Frid, R.D. Brown, K.C. Hansen, K.R. Stenmark, Aurora, CO, p.A4605**
- P995 Nicotinamide Phosphoribosyltransferase Activates the Mitochondrial Unfolded Protein Response to Promote Pulmonary Arterial Endothelial Cell Proliferation/A.D. Lockett, M. Teixeira Gomes, J. Saliba, R.F. Machado, Indianapolis, IN, p.A4606**
- P996 Chronic Exposure to Methamphetamine Induces Pulmonary Arterial Hypertension in Male Rats/A. Kumar, B. Krishnamachary, A. Mahajan, L. Chen, N.E. Goeders, R.E. Walter, K.S. Murnane, N.K. Dhillon, Kansas City, KS, p.A4607**
- P997 Transcriptomic and Proteomic Analysis of the Platelet-Derived Growth Factor (PDGF) Response in Pulmonary Vascular Smooth Muscle Cells from Patients with Pulmonary Arterial Hypertension: Implication of the N-Methyl-D-Aspartate Receptor (NMDAR)/F.K.K. Akoumia, Le Plessis Robinson, France, p.A4608**
- P998 Pulmonary Hypertension: Analysis of Pathophysiological Changes in PCLS/C. Martin, T. Schott, K. Pruin, S. Suleiman, A. Rieg, Aachen, Germany, p.A4609**
- P999 HIF Stabilization Causes Mitochondrial Dysfunction in Lung Microvascular Endothelial Cells/R. Belecanech, N. Philips, X. Yun, H. Jiang, K. Suresh, L.A. Shimoda, Baltimore, MD, p.A4610**
- P1000 Analysis of microRNA Cargo in Circulating Extracellular Vesicles from HIV Infected Individuals with Pulmonary Arterial Hypertension/A. Mahajan, S. Gunewardena, A. Abraham, B. Krishnamachary, A. Kumar, N.K. Dhillon, Kansas City, KS, p.A4611**
- P1001 Binding Affinity of Treprostinil to Rat Recombinant Prostanoid Receptors IP and EP2/T.L. Nguyen, A.J. Plaunt, V. Malinin, D. Cipolla, W. Perkins, R.W. Chapman, M.R. Corboz, Bridgewater, NJ, p.A4612**
- P1002 Administration of Treprostinil to the Basolateral Surface but Not the Apical Surface of Human Bronchial Air-Liquid Interface Epithelial Cells Induces Release of Prostaglandin E2/T.L. Nguyen, V. Malinin, D. Cipolla, W. Perkins, R.W. Chapman, M.R. Corboz, Bridgewater, NJ, p.A4613**
- P1003 Empagliflozin Improves Mitochondrial Biogenesis and Attenuates Proliferation of Microvascular Endothelial Cells in Pulmonary Arterial Hypertension/K. Yoshida, X. Pan, H.J. Bogaard, Amsterdam, Netherlands, p.A4614**
- P1004 Oleic Acid Attenuates the Hemin Toxicity in Human Endothelial Cells/A. Carneiro, N.M. Jones, M. Teixeira Gomes, R.F. Machado, Indianapolis, IN, p.A4615**
- P1005 Design and Validation of a Parallel Plate Flow Chamber for Investigating Wall Shear Stress-Induced Second Messenger Signals in the Vascular Endothelium/J. Knighten, T. Aziz, M.S. Taylor, C.M. Francis, Mobile, AL, p.A4616**
- P1006 Alternate Splicing in the Transcriptional Response to Hypoxia/J.T. Roberts, X.F. Mallory, H.W. Bass, G.T. Daly, D. Houserova, R.J. Langley, G.M. Borchert, V.M. Pastukh, M.N. Gillespie, Mobile, AL, p.A4617**
- P1007 MicroRNA-1 Regulates an Endothelial Gene Network Controlling Permeability and Alveolar Cell Death/A. Korde, M. Haslip, M. Chioccioli, A. Khan, S. Mehta, J. Pober, R. Pierce, S. Takyar, New Haven, CT, p.A5771**

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C65 COPD: PRE-CLINICAL MODELS AND MECHANISMS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

P437 Transfer of microRNA Through Extracellular Vesicles Propagate Airway Epithelial Cells Senescence in COPD/J. Devulder, J.R. Baker, L. Odqvist, L.E. Donnelly, P.J. Barnes, London, United Kingdom, p.A4618

P438 Effect of Chronological Age and Cigarette Smoke Exposure on Airway Epithelial Barrier Function/K.O. Nwozor, Q. Chen, Y. Yang, M. Van Den Berge, T.-L. Hackett, C.-A.A. Brandsma, I.H. Heijink, Vancouver, Canada, p.A4619

P439 p73 Is Suppressed by Cigarette Smoke and Reduced in the Lungs of Patients with Chronic Obstructive Pulmonary Disease/B.W. Richmond, C.B. Marshall, B.D. Lehmann, V.V. Polosukhin, T.S. Blackwell, J.A. Pietenpol, Nashville, TN, p.A4620

P440 Involvement of Parkin-Mediated Mitophagy in the Pathogenesis of COPD-Related Sarcopenia/A. Ito, M. Hashimoto, J. Tanihata, S. Matsubayashi, R. Sasaki, S. Fujimoto, H. Kawamoto, N. Watanabe, T. Kadota, Y. Fujita, S. Ito, D. Takekoshi, S. Minagawa, T. Numata, H. Hara, J. Araya, M. Saito, K. Kuwano, minato-ku, Tokyo, Japan, p.A4621

- P441 Lymphatic Thrombosis and Impaired Lymph Drainage in Cigarette Smoke-Associated Emphysema/H.** Outtz Reed, B. Summers, K. Kim, Z. Khan, S. Thangaswamy, C.C. Clement, J. McCright, K. Maisel, A.M.K. Choi, L. Santambrogio, New York, NY, p.A4622
- P442 Cigarette Smoke Causes Forkhead Box Protein P1 (FoxP1) to Be Ubiquitinated and Degraded in Lung Epithelial Cells Resulting in a Dysregulated Endoplasmic Reticulum Stress Response/A.** Maloy, A. Andreas, D. Chandra, Pittsburgh, PA, p.A4623
- P443 Abnormal Iron Metabolism as a Marker for Alveolar Macrophage Heterogeneity and Dysfunction in Chronic Obstructive Pulmonary Disease/W.Z.** Zhang, K. Kim, D. Redmond, E. Perez, S.M. Cloonan, New York, NY, p.A4624
- P444 Targeting S100A9 Signaling Protects Lung Function in Alpha-1 Antitrypsin Deficiency/B.** Jundi, A.D.J. Lora, J. Perez, B. Perez Gandara, C. Mueller, P. Geraghty, Brooklyn, NY, p.A4625
- P445 Exosomal miR122, a Potential Prognostic Marker and Therapeutic Target in COPD/G.** Kaur, K.P. Maremanda, M.A. Campos, H.S. Chand, F. Li, N. Hirani, M.A. Haseeb, I. Rahman, Rochester, NY, p.A4626
- P446 Novel Single Cell Analysis of microRNA Levels in Response to Oxidative Stress and in COPD Using Microfluidic Technology/V.** Ho, J.R. Baker, K.R. Willison, D.R. Klug, P.J. Barnes, L.E. Donnelly, London, United Kingdom, p.A4627
- P447 Type II Pneumocytes Accumulates Hyperacetylated Histone H3.3 in Smokers and Chronic Obstructive Pulmonary Disease Subjects/C.A.** Barrero, F. Wang, M.C. Rico, M.L. Florez, B. Kosmider, K. Bahmed, G.J. Criner, Philadelphia, PA, p.A4628
- P448 CEACAM6 Impedes the HO-1-Mediated Defence Against Nitrosative/Oxidative Stress in COPD/C.-Y.** Wu, S. Hadzic, R.C. Dartsch, O. Pak, J. Wilhelm, M. Wujak, N. Sommer, M. Brosien, R. Zhang, I. Alkoudmani, B. Witte, F. Pederse, H. Watz, R. Voswinkel, R.P. Brandes, A. Guenther, H.-A. Ghofrani, R.T. Schermuly, F. Grimminger, W. Seeger, N. Weissman, p.A4629
- P449 Extracellular S100A9-Mediated Secretion of Matrix Metalloproteinase 3 Does Not Contribute to Smoke-Induced Loss of Lung Function/A.D.J.** Lora, S. Park, B. Jundi, S. Alam, P. Lafortune, M. Ploszaj, J. Reece, B.A. Soto, A.J. Dabo, P. Geraghty, Brooklyn, NY, p.A4630
- P450 Defective Phagocytosis in COPD Macrophages Is Improved by Mitochondrial Antioxidants Without Alteration in Mitochondrial Function/R.** Wysoczanski, J.R. Baker, P. Fenwick, Y. Alexandrov, C. Dunsby, P. French, P.J. Barnes, L.E. Donnelly, London, United Kingdom, p.A4631
- P451 Synthetic Oligos Derived from mtDNA-Encoded Non-Coding RNAs as Potential Therapeutic Agents in Restoration of Mitochondrial Bioenergetics/T.L.** Joseph Mathuram, D.M. Townsend, V.J. Lynch, I. Bederma, Z.-W. Ye, J. Zhang, R. Jobava, M. Hatzoglou, Y. Perry, A. Blumental-Perry, Buffalo, NY, p.A4632
- P452 Sphingolipid Regulation of Lysosomal Fitness in Human Lung Microvascular Endothelial Cells During Homeostasis and Cigarette Smoke Exposure/E.** De Boer, B. Babbs, K. Schweitzer, N. Egersdorf, E. Berdyshev, S. Majka, I. Petrache, Aurora, CO, p.A4633
- P453 Cigarette Smoking Is a Secondary Cause of Folliculin Loss/X.** Li, Y. Lai, Z. Lane, H. Strollo, K. Tanimura, C. Zou, S.D. Shapiro, Y. Jiang, T. Nyunoya, Pittsburgh, PA, p.A4634
- P454 Cigarette Smoke-Induced Airspace Disease in Mice Develops Independently of HIF-1 α Signaling by Leukocytes/P.** Hume, J. McClendon, K. Kopf, J. Harral, J.M. Poczobutt, A. McCubbrey, B.J. Smith, P.M. Henson, S.M. Majka, I. Petrache, W.J. Janssen, Denver, CO, p.A4635
- P455 The Effect of HuR on Airway Epithelial GPX-1 Expression/T.** Feng, A.J. Dabo, P. Geraghty, O. Evgrafov, R.F. Foronjy, Brooklyn, NY, p.A4636
- P456 A High Concentration of HNP Impairs Macrophage Differentiation and Function in AATD Individuals/J.** Lee, Y. Lu, N. Mohammad, R. Oshins, M.L. Brantly, Gainesville, FL, p.A4637
- P457 COPD Macrophages Show Reduced Clearance of Senescent Airway Epithelial Cells/S.** Hassibi, J.R. Baker, P.J. Barnes, L.E. Donnelly, London, United Kingdom, p.A4638
- P458 Changes to Platelet Phenotype Triggered by Elastase-Induced Lung Damage in a Murine Model of Emphysema/C.** Gustafsson, R.T. Amison, C.P. Page, S.C. Pitchford, London, United Kingdom, p.A4639
- P459 Secretion and Retention of Z AAT in Response to SARS-CoV-2 Infection and Similar Stimuli/O.F.** Mcelvaney, D.D. Fraughen, T.P. Carroll, M. Herron, M. Casey, L. Alhaddah, E.P. Reeves, O. Mcelvaney, R.C. Heeney, M.P. Murphy, A.J. Rostron, J. Scott, J. Simpson, N.G. Mcelvaney, Dublin, Ireland, p.A4640
- P460 Cigarette Smoke Regulates Endothelial ACE2 Expression in the Lung/D.D.** Xing, V. Lin, Y. Wu, G.A. Payne, C. McNicholas, J.M. Wells, Birmingham, AL, p.A4641
- P461 Suppression of the Protein Phosphatase 2A 2C B Subunit (PPP2R2C) Enhances Immune Responses in Human Bronchiole Small Airway Epithelial Cells/O.** Ukponmwan, A.J. Dabo, P. Geraghty, R.F. Foronjy, Brooklyn, NY, p.A4642

- P462 Intratracheal Induction of Lung Senescence by Doxorubicin to Evaluate Senolytics/C.T. Cottage, H. Bolt, J.R. Connor, R. Lemaire, S. Hawkins, A. Berlin, A. Migneault, Gaithersburg, MD, p.A4643**
- P463 Study on the Role of Haptoglobin in Chronic Obstructive Pulmonary Disease/W.-Y. Chow, C.-L. Chen, S.-C. Ho, New Taipei City, Taiwan, p.A4644**
- P464 Soluble Guanylate Cyclase Stimulators Reverse In Vitro the Effects of Cigarette Smoke Through Normalization of the c-Jun N-Terminal Kinase (JNK) Pathway in Pulmonary Artery Smooth Muscle Cells/A. Bosacoma Armora, Y. Roger, A. Veja, I. Blanco, O. Tura-Ceide, J.A. Barbera, V.I. Peinado, Barcelona, Spain, p.A4645**
- P465 Epithelial Actin Cytoskeleton Dysregulation Is Causal to Lung Pathology in Chronic Obstructive Pulmonary Disease/M. Burnim, B. Ghosh, A. Lagowala, C. Swaby, V.K. Sidhaye, Baltimore, MD, p.A4646**
- P466 α -7 Nicotinic Acetylcholine Receptor (α -7 nAChR) Agonists Are Efficacious in a Novel Ferret Model of AECOPD/S.V. Raju, D. Stanford, J.L. Tipper, L.W. Rasmussen, A. Allen, K.S. Harrod, Birmingham, AL, p.A4647**
- P467 Identification of a New IgG mAb Format with Enhanced Complement Mediated Effector Function and Extended Half Life/A. Digiangdomenico, A. Dippel, R. Varkey, A. Lidwell, L. Zhuang, V. Godfrey, Z. Bhuiyan, N. Mody, K. Rosenthal, A. Barnes, M.M. Patnaik, E. Boger, C. Tkaczyk, B. Sellman, W. Brailsford, M. Marelli, Gaithersburg, MD, p.A4648**
- P468 TRPV4 Identifies Phagocytic Macrophages and May Promote Phagocytosis in Both Healthy and COPD Cells/P. Fenwick, J.R. Baker, C.K. Koss, F. Ramirez, P.J. Barnes, K.C. El Kasmi, L.E. Donnelly, London, United Kingdom, p.A4649**
- P469 Autocitrullination of PAD4 Inhibits Efferocytic Clearance of NETs in COPD/R. Suroliya, F.J. Li, K.G. Dsouza, P. Singh, C.T. Stephens, Z. Wang, H. Zeng, V. Antony, Birmingham, AL, p.A4650**
- P470 COPD Airway Epithelial Cells Show TLR2 Desensitization Due to Reduced IRAK-1 Expression/U. Sajjan, Philadelphia, PA, p.A4651**
- P471 Addressing Accelerated Ageing in the Alpha-1 Antitrypsin Deficient Immune System/M.P. Murphy, M. Herron, O.F. Mcelvaney, D. Fraughen, L. Al-Haddah, M. Casey, O.J. Mcelvaney, T.P. Carroll, N.G. McElvaney, Dublin, Ireland, p.A4652**
- P472 MiR-150-5p Modulates Pulmonary Inflammation and Secretory Mucin Expression Associated with Cigarette Smoke-Induced Chronic Obstructive Pulmonary Disease /H.S. Chand, D. Devadoss, M. Manevski, B. Moukette, S. Kawaguchi, M.N. Sapulveda, N.P. Barupala, H.J. Unwalla, I. Rahman, G.M. Borchert, I.-M. Kim, Miami, FL, p.A4653**

- P473 Type 1 Diabetes Leads to Decline in Lung Function and Restrictive Pulmonary Defects/S.S. Park, M. Mai, M. Ploszaj, I. Garcia-Arcos, P. Geraghty, Brooklyn, NY, p.A4654**

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C66 COPD: GENETICS, GENOMICS, AND EPIGENETICS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

- Viewing:** Posters will be on display for entire session **11:15-1:15**
- Discussion:** **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.
- P475 Aberrant Mesenchymal Signaling in the COPD Lung/R. Brewster, N. Neeharika, J.E. McDonough, T. Adams, J.C. Schupp, L.E. Niklason, M.S.B. Raredon, N. Kaminski, I.O. Rosas, M. Sauler, New Haven, CT, p.A4655**
- P476 Comparative Transcriptomics Analysis of Ferret, Mouse and Human COPD Models Reveals Genes Dysregulated in human COPD Uniquely Common to Ferret COPD Model/S.S. Hussain, Y.J.K. Edwards, E.F. Libby, D. Stanford, S.A. Byzek, J.E. Peabody Lever, S.V. Raju, M.-L. McDonald, S.M. Rowe, Birmingham, AL, p.A4656**
- P477 Functional Microbiomic Signatures Underlying COPD: A Topographical, Genomic, and Transcriptomic Analysis/B. Isaacs, M. Chung, M. Holub, C.R. Barnett, E. Ghedin, L.N. Segal, I. Sulaiman, New York, NY, p.A4657**
- P478 Differentially Correlated Molecular Pathways with Hedgehog Interacting Protein in Human and Mouse Lungs/J.H. Yun, S. Han, J. Platig, A.X. Zhou, J. Lu, Boston, MA, p.A4658**
- P479 Validation of a Bronchial Airway Gene Expression Signature for Rate of FEV1 Decline/Y. Koga, M. Morris, M. Fleming, F. Duan, D. Ding, G. Liu, H. Liu, S. Zhang, H. Marques, K.A. Steiling, J.D. Campbell, A. Spira, E. Billatos, M.E. Lenburg, Boston, MA, p.A4659**
- P480 Splice Quantitative Trait Loci (sQTLs) in Whole Blood and Lung Tissue/A. Saferali, W. Kim, J. Yun, Z. Xu, R. Chase, M.H. Cho, P. Castaldi, C.P. Hersh, Boston, MA, p.A4660**
- P481 MicroRNA's Contained in Exhaled Exosomes Are Representative of Deep Lung Bronchial Fluid microRNA's in Humans/S.D. Spivack, M. Mitchell, O. Loudig, K. Ye, M. Shi, A. Sadoughi, C. Shah, T. Siddiqui, A. Okoroza, Bronx, NY, p.A4661**

- P482 Integrating Proteomics, Transcriptomics and Genetics in COPD Lung Tissue Samples**/Y.-H. Zhang, J. Morrow, P. Castaldi, S. Lutz, C.P. Hersh, M.H. Cho, M. Hoopmann, M. Midha, R. Moritz, E.K. Silverman, Boston, MA, p.A4662
- P483 An In Vivo Genetic Screen of Lung Function Candidate Genes Using Tissue Specific RNAi in Drosophila Melanogaster**/E. Szamek, I. Sayers, M. Georgiou, Z. Markus, Nottingham, United Kingdom, p.A4663
- P484 Identified Drug Repurposing Targets for Chronic Obstructive Pulmonary Disease Using a Systems Biology Approach**/C.A. Barrero, F. Wang, Philadelphia, PA, p.A4664
- P485 Enhanced mTOR Activity in CRISPR/Cas9 Gene-Edited PIZ Alpha-1 Antitrypsin Hepatocytes**/Y. Lu, J. Lee, C. Money Penny, N. Mohammad, A. Aranyos, M.L. Brantly, Gainesville, FL, p.A4665
- P486 Genetic Regulators of Sputum Mucin Concentration Revealed by GWAS and Their Associations with Chronic Bronchitis and Acute Exacerbations of COPD**/S.N. Kelada, E. Van Buren, G. Radicioni, W.K. O'Neal, H. Dang, S. Kasela, S. Garudadri, J.L. Curtis, M.K. Han, J.A. Krishnan, E.S. Wan, E.K. Silverman, A.T. Hastie, V.E. Ortega, T. Lappalainen, S. Christenson, Y. Li, M.H. Cho, M. Kesimer, Chapel Hill, NC, p.A4666
- P487 Variants in the FoxP1 Gene Are Associated with Changes in Lung Function and Loss of FoxP1 Protein Increases Secretion of Matrix Metalloproteinases and Inflammatory Mediators by Lung Epithelia**/A. Andreas, A. Maloy, Y. Zhang, D. Chandra, Pittsburgh, PA, p.A4667
- P490 Anti-CELA1 KF4 Antibody Prevents Emphysema in Multiple Mouse Models**/B.M. Varisco, N. Smith, R. Joshi, Q. Fan, R. Schuman, A. Porollo, M. Batie, Cincinnati, OH, p.A4669
- P491 MAP Kinase Mediated Cross-Talk Between Macrophages and Pulmonary Artery Smooth Muscle Cells Is Essential for Tobacco Smoke-Induced Pulmonary Vascular Remodeling**/M. Gredic, C.-Y. Wu, S. Hadzic, O. Pak, R. Savai, A. Weigert, A.U. Guenther, R.P. Brandes, R.T. Schermuly, F. Grimminger, W. Seeger, N. Sommer, S. Kraut, N. Weissmann, Giessen, Germany, p.A4670
- P492 A Live Biotherapeutic Blend Alleviates Neutrophilic Inflammation in Models of COPD**/C.V. Lal, T. Nicola, W. Wenger, G. Rezonzew, X. Xu, A. Gaggar, Birmingham, AL, p.A4671
- P493 Airway Epithelial JAK-STAT Gene Signatures Identify a Cluster of COPD Patients with Increased Blood Neutrophils**/Z. Jevnikar Rojnik, G. De Palo, E. Baturcam, L. Israelsson, L. Öberg, D. Muthas, K. Ostridge, A. Platt, M.G. Belvisi, K.J. Staples, T. Wilkinson, Gothenburg, Sweden, p.A4672
- P494 No Lung Regeneration Detected for Up to 1 Year After Single Elastase Challenge Is Used to Induce Emphysema in Mice**/J.E. Phillips, K. Wilson, A. Gomez, X. Zhang, Thousand Oaks, CA, p.A4673
- P495 Discrimination of Two Airway Diseases by miRNAs in Exhaled Breath Condensate: A Pilot Study**/B.R. Pattnaik, S. Bangaru, N. Bhatraju, J. Tak, D. Rai, S. Kashyap, U. Verma, G. Yadav, G. Yadav, R.S. Dhaliwal, R. Guleria, A. Agrawal, A. Mohan, New Delhi, India, p.A4674
- P496 Extracellular Histone H33 Induced Platelets Activation**/C.A. Barrero, M.L. Florez, G.J. Criner, M. Rico, Philadelphia, PA, p.A4675
- P497 Steroid Resistance Following Acute Exacerbations of COPD with Respiratory Failure**/J. Zakrajsek, H. Bell, F. Diaz del Valle, M.R. Zamora, J.S. Lee, T.L. Phang, A.A. Ginde, T.H. Kiser, J. Kim, H. Kim, A.N. Gerber, R.W. Vandivier, Aurora, CO, p.A4676
- P498 Degradation of Elastin in Emphysema Is Exacerbated by Peptidyl Arginine Deiminase Activity**/M.P. Murphy, M. Zieger, D.J.L. Hunt, M. Henry, P. Meleady, C. Mueller, N.G. McElvaney, E.P. Reeves, Dublin, Ireland, p.A4677
- P499 Differential DNA Methylation in Lower Airways Epithelial Cells Associate with Lung Function and CT Scan-Based Lung Structure in SPIROMICS**/L.M. Reynolds, C.D. Langefeld, A.C. Bishop, T.D. Howard, E.R. Bleecker, G.A. Hawkins, I. Barjaktarevic, S.P. Bhatt, R.P. Bowler, R.G. Barr, C.B. Cooper, D. Couper, M.K. Han, N.N. Hansel, R.E. Kanner, V. Kim, F.J. Martinez, W.C. Moore, W.K. O'Neal, R. Paine, S. P. Peters, B. M. Smith, P. Woodruff, E.A. Hoffman, S. Christenson²⁵, Y. J. Huang, D. A. Meyers, J. L. Curtis, V. E. Ortega; Winston-Salem, NC, p.A4678

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C67 COPD: TRANSLATIONAL SCIENCE

9:30 a.m. - 3:45 p.m. MOSCONE CENTER

Area F, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session 11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P489 Impaired FGF10 Signaling Is Involved in the Development of Pulmonary Parenchymal and Vascular Remodeling**/S. Hadzic, C.-Y. Wu, M. Gredic, S. Kraut, B. Kojonazarov, J. Wilhelm, M. Brosien, M. Seimetz, A. Guenther, N. Sommer, F. Grimminger, H.A. Ghofrani, R.T. Schermuly, W. Seeger, E. El Agha, S. Bellusci, N. Weissmann, Giessen, Germany, p.A4668

P500 Cytokine Regulation by Alpha 1 Antitrypsin Therapy: A Pathway Analysis of a Pilot Clinical Trial/P. Geraghty, M.A. Campos, New York, NY, p.A5772

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C68 LUNG CANCER: BASIC MECHANISMS

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area I, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15**

Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

P713 Detection of a Macrophage Population with Distinct Gene Expression in Patients with Checkpoint Inhibitor Pneumonitis/M.I. Ghanbar, A. Wally, R. Wang, J. Brahmer, J. Naidoo, J. Thiboutot, H.J. Lee, L.B. Yarmus, D.J. Feller-Kopman, S. Yegnasubramanian, F.R. D'Alessio, K. Suresh, Baltimore, MD, p.A4679

P714 Examining the Impact of Endothelial Bone Morphogenetic Protein Receptor 2 (Bmpr2) Loss on BMP9-Associated Angiogenesis in a Mouse Model of Metastatic Breast Cancer/J.A. Harry, K. Lavery, V. Hoskin, D.V. Cole, M. Mitchell, Y. Gao, P.A. Greer, M.L. Ormiston, Kingston, Canada, p.A4680

P715 miRNA Profiling in Exhaled Breath Condensate for Distinguishing Lung Cancer from COPD: A Pilot Study/A. Mohan, B.R. Pattnaik, S. Bangaru, N. Bhatraju, J. Tak, D. Rai, U. Verma, S. Kashyap, R. Guleria, A. Agrawal, G. Yadav, R.S. Dhaliwal, New Delhi, India, p.A4681

P716 The Impact of Fibrotic Extracellular Matrix on Patient-Derived Lung Tumor Organoids/A.L.J. Van Der Velden, P.T. Neilan, N. Dirks, E. Hoffman, J. Faber, D.J. Weiss, C.M. Kinsey, Burlington, VT, p.A4682

P717 Investigations on the Potential Role of Tripartite Motif 34 (TRIM34) Gene Expression in Lung Cancer Tumorigenesis/K.D. Chaudhari, A. Golani, N. Nagariya, D. Rami, V.T. Vasu, Vadodara, India, p.A4683

P718 Involvement of Caspase-11 and AIM2 Inflammasome in Smoking-Induced COPD and Lung Adenocarcinoma/C. Colarusso, M. Terlizzi, A. Pinto, R. Sorrentino, Fisciano, Italy, p.A4684

P719 Exhaled Proteomics Is Feasible in Humans, with Smoking and Lung Cancer Signatures Possible/S.D. Spivack, M. Shi, A. Sadoughi, C. Shah, A. Okoroza, S. Sidoli, Bronx, NY, p.A4685

P720 Exhaled Eicosanoid Metabolomics Suggest Oxidized Lipids/Eicosanoids Are Detectable in Lung Cancer Cases/S.D. Spivack, M. Shi, A. Sadoughi, C. Shah, A. Okoroza, T. Siddiqui, Y. Qui, I.K. Kurland, Bronx, NY, p.A4686

P721 Single Nucleus RNA-seq Reveals Monocarboxylate Transporter-2 (MCT2) Cellular Heterogeneity and Regulatory Networks in a Murine Model of Lung Cancer/A. Khalyfa, Z. Qiao, H. Liu, L. Coghill, D. Gozal, Columbia, MO, p.A4687

P722 Bronchial Field Progenitor Basal Cells Show Methylome-Wide Characteristics Reflective of Lung Cancer Case-Control, Age, and Smoking Status/K. Batbayar, K. Ye, S. Waldman, A. Marsh, M.K. Shi, T. Siddiqui, M. Suzuki, A. Desai, D. Patel, J. Patel, J.B. Dobkin, A. Sadoughi, C. Shah, Y. Peter, J. vjig, S.D. Spivack, Bronx, NY, p.A4688

P723 Loss of Folliculin in Lung Mesenchyme but Not in Epithelia Causes Pulmonary Cystic Lesions/W. Shi, L. Chu, Y. Luo, H. Chen, H.-J. Wang, J. Chiu, D. Khabibullin, E. Henske, Los Angeles, CA, p.A4689

P724 Development of a Quantitative Structure Analysis Relationship Model for the Prediction of Epidermal Growth Factor Tyrosine Kinase Inhibitor/N.A. Mianto, A. Sanjaya, I.P. Pratomo, J. Zaini, Jakarta, Indonesia, p.A4690

P725 Combinations of Grape Seed Extract and Milk Thistle Extract Synergistically Down-Regulate Exosome Component 9 in Lung Cancer/J.T. Mao, B. Xue, L. Lundmark, W. Burns, L. Massie, Albuquerque, NM, p.A4691

P726 Differential Activity of Sphingosine-1-Phosphate in Physiological and Pathological Conditions: Its Role in Lung Cancer/M. Terlizzi, C. Colarusso, A. Pinto, R. Sorrentino, Fisciano, Italy, p.A4692

P727 Insulin-Like Growth Factor 1 Receptor Promotes Metastatic Tumor Initiation and Progression in the NSCLC Tumor Microenvironment/J.M. García Pichel, I.P. Lopez, S. Piñeiro-Hermida, M. Canalejo, C.M. Gotera Rivera, J.J. Sola, A. Roncero Lázaro, G. Peces-Barba, C. Ruiz-Martínez, E. Alfaro-Arnedo, Logroño, Spain, p.A4693

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C69 OCCUPATIONAL AND ENVIRONMENTAL EXPOSURES: MODELS AND MECHANISMS9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area G, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion: 11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.**P604 London Subway PM₁₀ Increases Pneumococcal Adhesion to Respiratory Cells/L.** Miyashita, G. Foley, J.M. Grigg, London, United Kingdom, p.A4694**P605 A Breathing Human Alveolus-on-Chip Model to Study Inhaled Nanoparticle-Induced Lung Inflammation/A.** Sengupta, N. Roldan, J. Stucki, N. Hobi, O. Guenat, Bern, Switzerland, p.A4695**P606 Environmental Low Dose Cadmium Contributes to Household Allergen Regulated ANO1 and MUC5AC Expression/P.** Singh, F.J. Li, R. Surolia, K.G. Dsouza, C. Stephens, W. Zheng, H. Zeng, V. Antony, Birmingham, AL, p.A4696**P607 The Effect of FGF10 Haploinsufficiency on Airway Structure, Particle Deposition and Pollution Uptake in Diesel- Exposed Mice/C.** Sack, W.A. Altemeier, T. Kavanagh, N.N. Hansel, N.E. Alexis, D. An, M. Krueger, A.M. Manicone, C. Bauer, R. Beichel, J.D. Kaufman, B.M. Smith, R.W. Glenny, Seattle, WA, p.A4697**P608 Developmental Exposure of Male Mice to Particulate Matter Induces Liver Transcriptional Changes Consistent with Activation of Pathways Involved in Cirrhosis Later in Life/A.Y.** Meliton, R. Cetin-Atalay, P.S. Woods, K. Sun, Y. Tian, R.B. Hamanaka, G.M. Mutlu, Chicago, IL, p.A4698**P609 Effect of Nepal Cook Stove Smoke Exposure on Human Bronchial Epithelial Cell Gene Expression and DNA Methylation/P.** Rajasekar, R. Hall, B. K C, P.S. Mahapatra, S.P. Puppala, D.A. Thakker, J. MacIassac, D. Lin, M. Kobor, C.E.R. Bolton, I. Sayers, I.P. Hall, R.L. Clifford, Nottingham, United Kingdom, p.A4699**P610 Lung Inflammation Characteristics Differ Between the Sexes in Agricultural Respiratory Exposures/K.** Merkowsky, U.S. Pandher, D. Schneberger, B. Thompson, G.K. Aulakh, B. Singh, S. Kiryuchuk, Saskatoon, Canada, p.A4700**P611 Hyaluronan Regulation of AT2 Cell Proliferation at the Terminal Airway Following Ozone Exposure Is Age Dependent/A.** Vose, A. Birukova, C.E. Barkauskas, R.M. Tighe, Durham, NC, p.A4701**P612 Environmental Heavy Metals Exacerbate Lower Respiratory Tract Infections via Regulation of PPAR γ /J.L.** Larson-Casey, L. Gu, V.B. Antony, A.B. Carter, Birmingham, AL, p.A4702**P613 Ozone-Induced Airway Neutrophilia Is Mast Cell-Independent in Mice/W.C.** Bennett, X. Kong, K.M. Larson, Z. German, S.J. Chadwick, C.M. Jania, J. Frisbee, S.A. Schworer, S.L. Tilley, Chapel Hill, NC, p.A4703**P614 Succinate Dehydrogenase Is Required for Particulate Matter-Induced IL-1 β Production in Macrophages/P.S.** Woods, K.A. Sun, A.Y. Meliton, O.R. Shamaa, R. Cetin-Atalay, R.B. Hamanaka, G.M. Mutlu, Chicago, IL, p.A4704

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C70 NEW STUDIES OF LUNG FIBROSIS9:30 a.m. - 3:45 p.m. **MOSCONE CENTER**

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session **11:15-1:15****Discussion: 11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.**P1009 The Intradermal Hypochlorous Acid-Treated Mouse Does Not Recapitulate Key Features of Systemic Sclerosis/A.** Morozan, U. Fujii, J. Chronopoulos, M. Lora, J.G. Martin, I. Colmegna, Montreal, Canada, p.A4705**P1010 Analysis of Forced Vital Capacity (FVC) Trajectories in Idiopathic Pulmonary Fibrosis (IPF) Identifies Four Distinct Clusters of Disease Behaviour/H.** Fainberg, R. Allen, L. Kraven, P.L. Molyneaux, J. Oldham, W. Fahy, J. Porte, G. Saini, M. Karsdal, D.J. Leeming, I. Triguero, E. Oballa, I. Noth, A.U. Wells, E. Renzoni, T. Maher, L.V. Wain, I. Stewart, J. Jenkins, London, United Kingdom, p.A4706**P1011 Vascular Pruning and Pulmonary Function Decline in Patients with Systemic Sclerosis-Associated ILD/C.Y.** Zhou, J. Gomez-Arroyo, R. Jandarov, N. Gupta, F.X. McCormack, J.M. Elwing, R.S. Amin, G. Mylavarapu, Cincinnati, OH, p.A4707**P1012 Therapeutic Biomarker Discovery in Idiopathic Pulmonary Fibrosis (IPF) Through Proteomic Analysis of Precision-Cut Lung Slice (PCLS) Supernatants/M.C.** An, S. Ho, V. Rao, P. Wolters, S. Turner, J. Schaub, M. Decaris, South San Francisco, CA, p.A4708

- P1013 PD-L1 Mediates Lung Fibroblast to Myofibroblast Transition Through Smad3 and GSK3beta/Beta-Catenin Signaling Pathways/G. Qian, C. Sunil, O. Adeyanju, A. Parker, S.K. Huang, M. Ikebe, T.A. Tucker, S. Idell, X. Guo, Tyler, TX, p.A4709**
- P1014 Diagnostic Accuracy of Chest Radiography for Detecting Fibrotic Interstitial Lung Disease/S. Ghodrati, J.V. Pugashetti, M. Kadoch, A. Ghasemiesfe, J. Oldham, Sacramento, CA, p.A4710**
- P1015 Histopathology and Molecular Characterisation of a Model Designed in Mice for the Study of Chronic Pulmonary Fibrosis and Acute Exacerbation/E. Boncoeur, C.-H. Yegen, L. Haine, D. Marchant, J.-F. Bernaudin, C. Planès, N. Voituron, Bobigny, France, p.A4711**
- P1016 The Efficacy and Safety of Pinoцемbrin in a Sheep Model of Bleomycin-Induced Pulmonary Fibrosis/H.B. Derseh, J.Q.D. Goodger, J.-P.Y. Scheerlinck, S.S. Chrisan, I.E. Woodrow, E. Palombo, R. Bischof, A. Cumming, K. Snibson, Parkville, Australia, p.A4712**
- P1017 Deep Learning Improves Sensitivity of UIP Classification on CT/S.M. Humphries, D. Thieke, A. Notary, A. Oh, J.H. Chung, M.E. Strek, A.L. Olson, N.M. Patel, D.A. Lynch, Denver, CO, p.A4713**
- P1018 Bleomycine-Induced Pulmonary Fibrosis Alters the Functioning of the Respiratory Neural Network and Abolished the Ventilatory Regulation to Hypoxia and Hypercapnia in Mice/N. Voituron, C.H. Yegen, D. Marchant, C. Planes, E. Boncoeur, Bobigny, France, p.A4714**
- P1019 A Study to Compare Baseline Functional Residual Capacity and Forced Vital Capacity as a Predictor of Mortality and Hospitalization In a Cohort of Mild to Moderate Interstitial Lung Disease/O.R. Gomez Rojas, E. Naeem, F. Ionescu, E. Castillo, G.B. Nair, Royal Oak, MI, p.A4715**
- P1020 Modulation of the Intestinal Tight Junction Reduces Lung Fibrosis in an Animal Model for Idiopathic Pulmonary Fibrosis: The Role of Intestinal Microbiome Gut-Lung Axis in Idiopathic Pulmonary Fibrosis/N. Barak, M. Bryant, S. Appajosyula, P. Griffin, Raleigh, NC, p.A4716**
- P1021 Three-Dimensional Spatial Organization of Fibrotic Tissue: An Agent-Based Model/D. Casey, J. Herrmann, B. Suki, J.H.T. Bates, Burlington, VT, p.A4717**
- P1022 Generation of a Mouse Bleomycin Model of Lung Fibrosis by Way of Ventilator-Assisted Aerosol Delivery/A. Robichaud, J.M. Loube, S.L. Collins, M.R. Horton, O. Schmid, W. Mitzner, Montreal, Canada, p.A4718**
- P1023 Therapeutic Effect of Semaglutide on Pulmonary Function and Fibrosis in a Bleomycin-Induced and Spirometry-Confirmed Mouse Model of IPF/M.J. Feigh, D. Oro, A.M. Arraut, A. Graver Petersen, Horsholm, Denmark, p.A4719**
- P1024 Outcomes of 12 Months of Treatment with Co-Trimoxazole in Patients with Idiopathic Pulmonary Fibrosis: A Systematic Review and Meta-Analysis/W. Khokher, S. Iftikhar, N. Kesireddy, A. Beran, S. Bhuta, S.-E. Malhas, C. Burmeister, D. Patel, Z. Abuhelwa, W. Sayeh, R. Rashid, A. Malik, H. Ali, Toledo, OH, p.A4720**
- P1025 DOCK2 Deficiency Attenuates Lung Injury Associated with Chronic High-Fat and High-Fructose Diet-Induced Obesity/X. Guo, O. Adeyanju, C. Sunil, S.K. Huang, S.-Y. Chen, T.A. Tucker, S. Idell, G. Qian, Tyler, TX, p.A4721**
- P1026 Characterization of Patient-Specific Metrics of Airway Deformation and Histopathology to Assess the Impact of Inhaled Toxicants on Lung Tissue in Idiopathic Pulmonary Fibrosis (IPF)/Z. Bitzer, M. Kim, S. Royce, S. Borhan, P. Go, R. Mahraj, N. Rassaei, J. Ultman, M. Vogt, J.E. Bourke, R. Bascom, A. Borhan, Hershey, PA, p.A5774**

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C71 CARDIOPULMONARY INTERACTIONS IN PH AND OSA

9:30 a.m. - 3:45 p.m.

MOSCONE CENTER

Area K, Hall F (North Building, Exhibition Level)

Viewing: Posters will be on display for entire session

11:15-1:15

Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P1028 Sleep Apnea Syndrome and Atherosclerosis: VE-Cadherin as a New Antiatherogenic Target?/O. Harki, S. Bouyon, E. Lemarié, V. Isabelle, J.-L. Pépin, G. Fauray, A. Briancon-Marjollet, Grenoble, France, p.A4722**
- P1029 Natural Killer Cell TGFβ Signalling Influences Pulmonary Vascular Development and Pathological Vascular Remodelling in a Mouse Model of Pulmonary Arterial Hypertension/K. Coyle, M. Ratsep, K. Lavery, M.M. Vandenbroek, L.R. Hilton, M. Mitchell, Y. Deng, D.J. Stewart, E. Vivier, M.L. Ormiston, Kingston, Canada, p.A4723**
- P1030 Simplified Daytime Approach in OSAH Phenotyping/L. Pini, R. Magri, G. Levi, L. Zambelli, M. Ciarfaglia, J. Giordani, C. Tantucci, Brescia, Italy, p.A4724**

- P1031 Positional Obstructive Sleep Apnea in Patients with Atrial Fibrillation/P.L. Stafford, E. Harmon, K. Bilchick, S. Mazimba, N. Akoum, C. Klein, W. Tzeng, Y. Cho, Y. Cho, Y. Kwon, Charlottesville, VA, p.A4725**
- P1032 Clinical and Physiological Relevance of Computational Studies of Obstructive Sleep Apnea: A Systematic Literature Review/P. Hartfield, R. Sparapani, B.T. Woodson, J. Rhee, G. Garcia, Milwaukee, WI, p.A4726**
- P1033 Inhalation of GR127935 Inhibits Sumatriptan-Induced Enhancement of Apneic Reflexes in Anesthetized Rats/N.-J. Chan, Y.S. Lin, C.-C. Hsu, Taipei, Taiwan, p.A4727**
- P1034 Atrial Ectopic Burden in Patients with New Onset Paroxysmal Atrial Fibrillation and Obstructive Sleep Apnea/C. Humphreys, K. Murase, C.-H. Lin, C.M. Horvath, O.D. Lyons, Toronto, Canada, p.A4728**
- P1035 Denuding Endothelium in the Pulmonary Artery Modulates the Smooth Muscle Constriction Response to Purinergic Signaling/P. Robichaud, Ann Arbor, MI, p.A4729**
- P1036 Partitioned Respiratory Mechanics in an Ovine Model of Congenital Heart Disease with Increased Pulmonary Blood Flow/J. Soares, G.W. Raff, J.R. Fineman, S.A. Datar, Davis, CA, p.A4730**
- P1037 Bioactivation of Sudaxine, an Agent That Increases Minute Ventilation Without Reversing Analgesia in Narcotic-Treated Animals/J.M. Krasinkiewicz, D. Hubbard, A. Masters, H. Gaston, S.J. Lewis, J.N. Bates, L. Smith, B. Gaston, Indianapolis, IN, p.A4731**
- P1038 Differential Effects of Carvedilol and Clenbuterol in Bleomycin-Induced Pulmonary Hypertension in Mice/P. Shivshankar, W. Wang, S. Collum, C. Wilson, A.M. Peters, W. Bi, H. Karmouty-Quintana, Houston, TX, p.A4732**
- P1039 Inhibitory Effect of Sulfur Dioxide Inhalation on Hering-Breuer Inflation Reflex in Mice: Role of 4-AP-Sensitive Potassium Channels/N.-J. Chan, C.-C. Hsu, Y.S. Lin, L.-Y. Lee, Lexington, KY, p.A4733**
- P1040 Quantitative Effects of Ansa Cervicalis Stimulation on Pharyngeal Collapsibility in Obstructive Sleep Apnea/Y. Li, A.R. Schwartz, D. Zealear, D.T. Kent, Nashville, TN, p.A5775**
- P1041 RKER-012 Therapy Prevented Increased Pulmonary Arterial Pressure and Right Ventricle Hypertrophy in a Rat Model of PAH/K. Babbs, C. Materna, F. Fisher, J. Seehra, J. Lachey, Lexington, MA, p.A5776**

BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
C72 WATER UNDER THE BRIDGE: SESSIONS IN PLEURAL DISEASE
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area I, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session

11:15-1:15
Discussion: 11:15-12:15 authors will be present for individual discussion

12:15-1:15 authors will be present for discussion with assigned facilitators.

- P729 The Silent Solitary Fibrous Tumor/S.M. Upson, B.A. Bixby, Tucson, AZ, p.A4734**
- P730 A Case of a Solitary Fibrous Tumor of the Pleura/M.Z. Munir, S. Rehmani, H. Zhang, Waterbury, CT, p.A4735**
- P731 Lymphoid Variant of Hypereosinophilic Syndrome Presenting with Recurrent Pleural Effusions/M. Wazirali, S. Raju, Cleveland, OH, p.A4736**
- P732 Congo Red Effusions: A Rare Cause of Pleural Disease/J. Fouad, K.T. Bramley, New Haven, CT, p.A4737**
- P733 Lung Adenocarcinoma Presenting as a Loculated Pleural Effusion in a Patient with HIV/AIDS/K.C. Guice, S. Lander, J. Agee, K.M. Muddassir, Memphis, TN, p.A4738**
- P734 Refractory Malignant Chylothorax Secondary to Diffuse Large B-Cell Mediastinal Lymphoma/M. Weaver, J.A. Bradley, U.A. Gauhar, Louisville, KY, p.A4739**
- P735 A Rare Case of Multiple Myeloma with Pleural Metastasis/K.I. Juico, Quezon City, Philippines, p.A4740**
- P736 Pleural Plasmacytomas in a Patient with Multiple Myeloma Relapse/H. Alataby, A. Al Tkrit, C.P. Seneviratne, M. Omballi, Toledo, OH, p.A4741**
- P737 The Hidden Jewel, What Lies Under the Surface of a Pleural Based Mass/J. Caletine, M.T. Scinico, B.M. Walsh, Danville, PA, p.A4742**
- P738 A Rare Case of Invasive Sarcomatoid Mesothelioma Causing Spontaneous Tumor Lysis Syndrome and Shock/E. Santo, A. Deengar, M. Zutler, Farmington, CT, p.A4743**
- P739 An Enlarging Pleural-Based Mass in a Patient with NF1/L. Phan, A. Shengelia, New York, NY, p.A4744**
- P740 Dasatinib Induced Infected Chylothorax. The First Reported Case/M. Mohammed, M. Abdelrahim, Cleveland, OH, p.A4745**
- P741 A Hidden Pleural Effusion: Urinothorax/J.J. Adams Chahin, M. Hernandez-Puig, H. Oliveras-Cordero, J. Barletta-Farias, A. Ortiz-Gomez, San Juan, PR, p.A4746**

- P742 Lymphocytic Effusions and Interstitial Infiltrates/D.** Rees, A. Wilhelm, Jackson, MS, p.A4747
- P743 A Case of Plasmablastic Lymphoma Presenting as Pleural Effusion/A.** Hickey, S. Fedyna, P. Madahar, J. Amengual, New York, NY, p.A4748
- P744 Concurrent BAP1-Preserved and BAP1-Mutated Malignant Mesothelioma Clones/L.H.** Vu, Rochester, MN, p.A4749
- P745 Indwelling Pleural Catheter First Colombian Experience/J.D.** Botero Bahamon, J.I. Lasso Apráez, C. Villaquiran-Torres, C.A. Celis-Preciado, M.J. Fernández, M.N. Serrano, Bogota, Colombia, p.A4750
- P746 Impact of a Dedicated Pleural Clinic on Indwelling Pleural Catheter Related Outcomes: A Retrospective Single Center Experience/K.** Malcolm, E.J. Seeley, Y.B. Gesthalter, San Francisco, CA, p.A5777

BEHAVIORAL • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION
C73 THE TERRIBLE Ts: SESSIONS IN THE MEDIASTINUM
9:30 a.m. - 3:45 p.m.
MOSCONE CENTER
Area I, Hall F (North Building, Exhibition Level)
Viewing: Posters will be on display for entire session **11:15-1:15**
Discussion: **11:15-12:15** authors will be present for individual discussion
12:15-1:15 authors will be present for discussion with assigned facilitators.

- P748 Diffuse Large B-Cell Lymphoma Presented as a Pulmonary Nodule/W.** Hadid, R.I. Bechara, Augusta, GA, p.A4751
- P749 Usual Presentation of an Unusual Lymphoma/K.** Nangrani, A. Kumari, K.P. Dang-Ho, M. Li, S. Miller, L.N. Gerolemou, Brooklyn, NY, p.A4752
- P750 Tick or Tack? Recurrence of Pulmonary Mucosa-Associated Lymphoid Tissue (MALT) Lymphoma Following Lyme Disease/J.** Lizalek, P. Aylward, D. Berkheim, Omaha, NE, p.A4753
- P751 Management of Acute Intraoperative Cardio-Respiratory Collapse in a Patient with a Huge Anterior Mediastinal Mass/S.C.** Majety, K. Daruwalla, S. Savarkar, P. Ranganathan, V.P. Patil, Mumbai, India, p.A4754
- P752 Spindle Cell Thymic Carcinoma Presenting as Anterior Mediastinal Mass and Deep Vein Thrombosis in a 59 Year Old Male: A Case Report/K.M.** Bartolome, R.D.R. Bayot, M.E.B. Limpin, A.G. Banzon, Quezon City, Philippines, p.A4755
- P753 An Unusual Presentation of Hodgkin's Lymphoma/M.V.** Shah, S. Chandna, U. Bhagat, K.J. Raj, New Brunswick, NJ, p.A4756
- P754 Mediastinal Tumor Mixed with Mediastinal Tuberculosis: A Rare Case Report/L.** Madison, M.I. Nugraha, M. Elhidsi, R. Baginta, E. Syahrudin, East Jakarta, Indonesia, p.A4757
- P755 Ultrasound Features of Mediastinal Cyst Masquerading as Right Lower Paratracheal Lymph Node in a Patient with History of Lung Cancer/L.F.** Meza, V.S. Pulivarthi, J. Jacob, M. Arif, A.R. Halawa, A.I. Saeed, Phoenix, AZ, p.A4758
- P756 Marginal Zone B-Cell Lymphoma Presenting as a Solitary Pulmonary Nodule/J.** Sandhu, E. Weston, V. Kaul, Syracuse, NY, p.A4759
- P757 Incidental Finding of Mediastinal Mass to Determine if PET Scan Is a Valuable Diagnostic Mode/O.S.** Bawa, J. Childers, A. Vangara, S.S. Ganti, Harlan, KY, p.A4760
- P758 A Rare Variant of a Rare Primary Pulmonary Lymphoma/Y.** Balboul, A. Singh, M. Cui, J.T. Guevarra, D. Steiger, A. Shujaat, New York, NY, p.A4761
- P759 Extranodal Marginal Cell Lymphoma Presenting as Chronic Multi Lobar Pneumonia/K.** Arndt, M. Taleb, Toledo, OH, p.A4762
- P760 Unilateral Upper Extremity Thrombosis with Typical Chest Pain as the First Presentation of Metastatic Necrotic Thymoma/C.H.** Vyas, A. Al-Alwan, V. Singh, S. Nelluri, H. Fichadiya, P. Lee, Long Branch, NJ, p.A4763
- P761 Recurrent Functional Paraganglioma in Middle and Posterior Mediastinum with Chronic Diarrhea Symptoms: A Case Report/F.** Segnini, J.E. Rodriguez Fernandez, C.A. Segnini Alvarado, S. Contreras Paez, Bogota, Colombia, p.A4764
- P762 Necrotic Mediastinal Mass in a Drug User; Squamous Cell Carcinoma of Unknown Primary Tumor/H.-B.** Um, Newark, NJ, p.A4765
- P763 Grey Zone Lymphoma in the Lungs: A Rare Presentation/D.** Zakri, V. Saracino, C.W. Hughes, M. Kousha, Detroit, MI, p.A4766
- P764 A (Lympho)cyte to See: Simultaneous Gastric and Pulmonary MALT Lymphomas/J.** Whealdon, T. Demirci, L. Benes, A. Basavaraj, K. Hena, New York, NY, p.A4767
- P765 Primary Pulmonary MALT Lymphoma A.K.A BALT Lymphoma: A Case Report/F.A.** Nitol, F.L. Das Gracias, F. Imtiaz, C.A. Thurm, Jamaica, NY, p.A4768
- P766 Angioimmunoblastic T-Cell Lymphoma- A Tissue Diagnosis on Transbronchial Lung Biopsy/V.** Halani, R. Subramaniam, R. Gorthi, E. Charbek, St. Louis, MO, p.A4769

- P767 MALTing Away: A Rare Case of Primary Pulmonary Lymphoma with Complete Necrosis of the Right Middle Lobe**/T. Wong, G.S. Horng, San Francisco, CA, p.A4770
- P768 A Rare Finding of Concomitant Squamous Cell Cancer and Diffuse Large B Cell Lymphoma of the Lung**/C.S. Davila-Chapa, U. Zaheer, I. Shaukat, K. Beedupalli, Shreveport, LA, p.A4771
- P769 Cholesterol in the Mediastinum: A Rare Finding on Lymph Node Biopsy**/A. Ahmed, J. Anwar, L.E. Stawovy, J. Gelman, S. Deskins, E. Rojas, V. Badami, S. Hadique, Morgantown, WV, p.A4772
- P770 Bronchial Artery Pseudoaneurysm Misdiagnosed as Malignant Mediastinal Mass**/D.A. Lakhani, C. Kim, Morgantown, WV, p.A4773



INTERNATIONAL CONFERENCE

San Francisco, CA



Tuesday Mid-day, May 17

11:30 a.m. – 1:00 p.m

ATS PLENARY SESSION

MOSCONE CENTER

Room 3000/3002/3004 (West Building, Level 3)



The Plenary Session will feature a keynote address by **J. Randall Curtis, MD, MPH**; a past ATS president (2009-2010). Dr. Curtis is the director of the Cambia Palliative Care Center of Excellence at UW Medicine at the University of Washington. He is also the A. Bruce Montgomery-American Lung Association endowed chair in pulmonary and critical care medicine and UW professor of medicine. He is an expert in critical care, palliative care, and pulmonary medicine.

Dr. Curtis earned his MD from Johns Hopkins University. He first went to UW as an intern and resident and completed his fellowship in pulmonary and critical care medicine. During his fellowship, he also completed the Robert Wood Johnson Clinical Scholars Program and earned an MPH from the UW School of Public Health. He is listed in "The Best Doctors in America."

The Plenary Session also will include the ratification of the 2022-2023 slate of officers as well as remarks from outgoing president **Lynn Schnapp, MD, ATSF**, and incoming president **Greg Downey, MD, ATSF**.

In addition, three Respiratory Health Awards will be presented, including:

Outstanding Educator:

Ilene M. Rosen, MD, MSCE, Philadelphia, PA

Research Innovation and Translation Achievement Award:

Colin E. Sullivan, MD, PhD, Sydney, NSW, Australia

Outstanding Clinician:

Shazia M. Jamil, MD, ATSF, La Jolla, CA

The Plenary Session is generously sponsored by GSK.

[Click Here to Access the Program Itinerary and Add Tuesday Sessions and Presentations to Your Calendar](#)

PEDIATRIC CLINICAL CORE CURRICULUM

CME Credits Available: 1

MOC Points Available: 1

PCC3 PEDIATRIC CLINICAL CORE CURRICULUM

Education Committee

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

Pediatric pulmonary and critical care physicians who work in a clinical setting and are currently engaged in maintenance of certification

Objectives

At the conclusion of this session, the participant will be able to:

- identify diagnostic and management strategies, including pulmonary function testing and appropriate ventilation strategies, for pediatric neuromuscular diseases;
- describe new and evolving treatments for pediatric neuromuscular diseases;
- characterize the use of palliative care consultation to guide physicians, patients, and families through challenging care decisions that occur in pediatric neuromuscular disease cases.

The goal of the core is to support clinicians who are engaged in maintenance of certification activities by providing updates on subjects included in recertification requirements. The Pediatric Core Curriculum symposia promote lifelong learning and the enhancement of the clinical judgment and skills essential for practicing pediatrician.

Chairing: J.E. Gross, MD, PhD, Denver, CO
C. Okorie, MD, MPH, Palo Alto, CA

Moderators: J.E. Gross, MD, PhD, Denver, CO
M. Mccown, DO, Takoma Park, MD

12:00 Palliative Care in Neuromuscular Disorders: An Approach to Guiding Patients and Families Through Care Decisions


L. Treat, MD, Aurora, CO

12:30 Discussion

MEDICAL EDUCATION SEMINAR

CME Credits Available: 1.5

ME103 MEDICAL EDUCATION SEMINAR SERIES: INTEGRATING EVIDENCE-BASED MEDICINE INTO CLINICAL TEACHING

 Pre-registration and additional fees required. Attendance is limited.

Member: \$100

LMIC Member: \$70

Assembly on Behavioral and Health Services Research

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 101-102 (South Building, Street Level)

Target Audience

This session is of interest to all educators who supervise direct patient care and want to improve their ability to teach learners of all levels the application medical literature to patient care scenarios.

Objectives

At the conclusion of this session, the participant will be able to:


- employ techniques for accessing best-available evidence in real-time within the clinical setting;
- effectively integrate evidence based medicine into bedside teaching;
- identify strategies for overcoming anticipated barriers to teaching evidence based medicine.

In this interactive one-hour session, a framework for searching, appraising, and applying best medical evidence to solve clinical queries in real time at the bedside will be presented along with strategies to teach trainees this important topic. Alternating between didactics and small-group breakout discussions, audience members will have the opportunity to explore various strategies to address challenging aspects of using and teaching evidence-based medicine. Clinical case examples will be used to facilitate an exchange of ideas and practices with and between audience members.

Faculty: L.K. Vande Vusse, MD, MSCE, Seattle, WA
E.R. Camac, DO, Philadelphia, PA
L. Hinkle, MD, Indianapolis, IN

MEET THE EXPERTS

CME Credits Available: 1

 Pre-registration and additional fees required. Attendance is limited.
Member: \$100 LMIC Member: \$70.

12:15 p.m. - 1:15 p.m. MOSCONE CENTER

- ME38 MANAGEMENT OF SCLERODERMA RELATED LUNG DISEASE IN 2022**
A. Kumar, MD, Houston, TX
A. Perelas, MD, Richmond, VA
Room 50/62 (South Building, Lower Mezzanine)
- ME39 OPTIMAL MANAGEMENT OF FULMINANT INTERSTITIAL LUNG DISEASES PRESENTING WITH ACUTE RESPIRATORY FAILURE**
S.-A. Whittaker Brown, MD, MPH, Baltimore, NY
Room 52/54/56 (South Building, Lower Mezzanine)
- ME40 BEYOND THE HYPE: USING MACHINE LEARNING TO IMPROVE CARE IN CRITICAL ILLNESS**
M.M. Churpek, MD, MPH, PhD, ATSF, Madison, WI
Room 58/60 (South Building, Lower Mezzanine)
- ME41 UPDATE ON BURN PIT LEGISLATION AND ADVOCACY**
A.M. Szema, MD, ATSF, South Setauket, NY
Room 70/72 (South Building, Lower Mezzanine)
- ME42 PRAGMATIC TARGETING OF SLEEP APNEA ENDOTYPES AND PHENOTYPES**
R.J. Thomas, MD, Boston, MA
Room 74/76 (South Building, Lower Mezzanine)

 **ATS 2022**
INTERNATIONAL CONFERENCE
San Francisco, CA

Tuesday Afternoon, May 17

[Click Here to Access the Program Itinerary and Add Tuesday Sessions and Presentations to Your Calendar](#)

ADULT CLINICAL CORE CURRICULUM

CME Credits Available: 1.5

MOC Points Available: 1.5

CC4 PULMONARY CLINICAL CORE CURRICULUM

Education Committee

2:15 p.m. - 3:45 p.m. MOSCONE CENTER

Hall E (North Building, Exhibition Level)

Target Audience

Practicing internists, subspecialists, registered nurses and advanced practice providers in pulmonary, critical care, and sleep medicine who work in a clinical setting and are currently engaged in maintenance of certification.

Objectives

At the conclusion of this session, the participant will be able to:

- identify a diagnostic approach to interstitial lung diseases including granulomatous diseases and IPF;
- characterize pulmonary manifestations of autoimmune disorders;
- describe therapeutic options for progressive fibrotic lung disease.

The goal of the core is to support clinicians who are engaged in maintenance of certification activities by providing updates on subjects that are not only included in recertification requirements, but also are timely and relevant to clinical practice in 2022. The ATS Clinical Core Curriculum Symposia focus on key topics in the areas of Pulmonary, Critical Care, and Sleep Medicine. The topics are aligned with corresponding MOC Medical Knowledge modules. This symposium is intended to help clinicians stay up to date with important information

relevant to their medical practices, and to provide an opportunity for clinicians to evaluate their individual knowledge and skills while earning MOC Medical Knowledge points.

Chairing: G.W. Garrison, MD, Burlington, VT
J.L. Cho, MD, Iowa City, IA

Moderators: G.W. Garrison, MD, Burlington, VT
M.M. Hayes, MD, ATSF, Boston, MA
B. Coruh, ATSF, FCCP, Seattle, WA

2:15 Idiopathic Pulmonary Fibrosis
A.O. Adegunsoye, MD, MS, Chicago, IL

2:45 Therapeutic Options in Progressive Fibrotic Lung Disease
R. Hallowell, MD, Boston, MA

3:15 Discussion

This session and the International Conference are supported by independent medical educational grants from

Boehringer Ingelheim Pharmaceuticals, Inc., Genentech, Inc.

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BASIC • CLINICAL • TRANSLATIONAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

C82 CHRONIC BRONCHITIS: BIOLOGIC UNDERPINNINGS, CLINICAL IMPLICATIONS AND THERAPEUTIC OPPORTUNITIES

Assembly on Clinical Problems

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3-4 (South Building, Exhibition Level)

Target Audience

providers of lung health, including pulmonologists, interventional pulmonologists, trainees, respiratory therapists and nurses, as well as basic, translational and clinical research investigators with interests in airway biology and disease

Objectives

At the conclusion of this session, the participant will be able to:

- understand the pathobiology of chronic bronchitis, especially as it relates to airway mucin concentrations and mucus transport in the lung;
- describe the epidemiology and clinical implications of chronic bronchitis based on data from various longitudinal observational cohorts;
- appreciate the potential of several promising pharmacologic and interventional bronchoscopic therapies in chronic bronchitis.

Current and former smokers with and without airflow obstruction commonly experience debilitating symptoms of chronic bronchitis. However, despite the high prevalence of chronic bronchitis and its poor long-term prognosis, targeted treatment options remain limited. Recent evidence points to an improved understanding of the pathobiology of chronic bronchitis and identifies novel potential therapeutic targets. This session will describe the airway biology underpinnings of chronic bronchitis, review the clinical implications of chronic bronchitis in individuals with and without airflow obstruction, and highlight promising pharmacologic and interventional therapies for patients with chronic bronchitis.

Chairing: W.W. Labaki, MD, MS, Ann Arbor, MI
N. Putcha, MD, Baltimore, MD

2:15 Introduction to Session

2:18 Airway Mucins: At the Core of the Pathobiology in Chronic Bronchitis
M. Kesimer, PhD, MSci, Chapel Hill, NC

2:33 Questions and Answers

2:39 Not Just a Symptom: Clinical Implications of Chronic Bronchitis in Patients With and Without Airflow Obstruction
M.K. Han, MD, MS, ATSF, Ann Arbor, MI

2:54 Questions and Answers

3:00 Time for Precision Medicine: Pharmacologic Therapeutic Targets in Chronic Bronchitis
F.J. Martinez, MD, MS, New York, NY

3:15 Questions and Answers

3:21 Inside the Airways: The Potential of Bronchoscopic Interventions in Chronic Bronchitis
V. Kim, MD, ATSF, Philadelphia, PA

3:36 Questions and Answers

3:42 Concluding Remarks

This session and the International Conference are supported by an independent medical educational grant from Insmid Incorporated.

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CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1.5

C83 CAN WE TRANSPLANT THIS PATIENT?

Assembly on Clinical Problems

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 7-8 (South Building, Exhibition Level)

Target Audience

Providers of lung health; lung transplant providers

Objectives

At the conclusion of this session, the participant will be able to:

- recognize and learn about opportunities and pitfalls of transplanting patients with HIV;
- gain understanding about the assessment of frailty and impact on LTx candidate selection;
- learn about the impact of recreational and medical cannabis use on LTx candidacy.

The contraindications to lung transplant have been evolving over the last several years, with transplant centers “pushing the envelope”. This pro-con debate will discuss controversial topics in lung transplant candidacy—reviewing the evidence, opportunities and pitfalls in these situations.

Chairing: S. Sehgal, MBBS, Cleveland, OH
M.M. Budev, DO, MPH, Cleveland, OH

- 2:15 Should Cannabis Use Be a Contraindication to Transplant? YES**
M.M. Budev, DO, MPH, Cleveland, OH
- 2:25 Should Cannabis Use Be a Contraindication to Transplant? NO**
E.D. Lease, MD, FCCP, Seattle, WA
- 2:40 Should HIV Infection Be a Contraindication to Transplant? YES**
A. Kumar, MD, Houston, TX
- 2:55 Should HIV Infection Be a Contraindication to Transplant? NO**
C. Koval, MD, Cleveland, OH
- 3:10 Should Frailty Be a Contraindication to Transplant? YES**
M. Venkata Subramani, MD, Cleveland, OH
- 3:25 Should Frailty Be a Contraindication to Transplant? NO**
C.C. Kennedy, MD, Rochester, MN
- 3:40 A Patient's Perspective**
N. Lee, Oyster Bay, NY

BEHAVIORAL • CLINICAL

CRITICAL CARE TRACK

CME Credits Available: 1.5

C84 SEPSIS CARE: FINDING THE SWEET SPOT ON EARLY INTERVENTION

Assemblies on Critical Care; Behavioral and Health Services Research; Clinical Problems; Nursing

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3020/3022/3024 (West Building, Level 3)

Target Audience

Clinicians, trainees, nurses, and pharmacists who care for sepsis patients; healthcare leaders and administrators; individuals involved in sepsis research, quality improvement, advocacy, policy, or antibiotic stewardship

Objectives

At the conclusion of this session, the participant will be able to:

- apply data supporting early antibiotic and fluid treatment in sepsis, associated controversies, and potential adverse effects of efforts to optimize early sepsis treatment. This objective will provide an evidence base for improved clinical practice;
- identify barriers to prompt treatment for sepsis patients. This objective will help attendees improve care delivery for sepsis for patients at their institutions;
- apply and adapt novel strategies to deliver high-quality sepsis care. This objective will help attendees find innovative methods to ensure high-quality care for sepsis patients.

International guidelines and government mandates have emphasized early treatment for septic patients. In particular, observational studies show sepsis outcomes worsen for every hour effective antibiotics are delayed. Controversy persists, however, regarding this central premise, fluid resuscitation targets, and treatment timing. Recent guidelines and policy statements have advocated more personalized treatment goals and relaxing treatment metrics. This session will review the current evidence, new and updated guidelines, and controversies regarding early sepsis care, discuss potential adverse effects of prioritizing early treatment (especially during a viral sepsis pandemic), and evaluate the barriers to rapid treatment initiation and potential methods to overcome them.

Chairing: I.D. Peltan, MD, MSc, Salt Lake City, UT
H.C. Prescott, MD, MSc, Ann Arbor, MI
V.X. Liu, MD, MS, Oakland, CA

- 2:15 Early Sepsis Treatment Saves Lives: Truth, Hype and Consequences**
H.C. Prescott, MD, MSc, Ann Arbor, MI
- 2:30 COVID-19, Non-Bacterial Sepsis, and Sepsis Subgroups: One Size Fits None?**
N.J. Meyer, MD, MS, Philadelphia, PA
- 2:42 Sepsis Mandates: The View From Ground Zero**
T.M. Osborn, MD, MPH, St. Louis, MO
- 2:57 Why Do We Struggle to Implement Rapid Sepsis Treatment?**
I.D. Peltan, MD, MSc, Salt Lake City, UT
- 3:09 High-Quality Sepsis Care in Lower Resource Settings**
L.A. Gorordo Delsol, MD, Mexico City, Mexico
- 3:21 Interprofessional Teams, Sepsis, and the of Implementation**
D.K. Costa, PhD, RN, Ann Arbor, MI
- 3:33 Can We Help Clinicians Make Better Decisions Faster?**
J.R. Carr, MD, Salt Lake City, UT

CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C85 LOCATION, LOCATION, LOCATION-SPECIFIC ENVIRONMENTAL TRIGGERS OF PEDIATRIC ASTHMA

Assemblies on Pediatrics; Allergy, Immunology and Inflammation; Environmental, Occupational and Population Health; Health Equity and Diversity Committee; Pediatric Assembly Advocacy Committee

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Target Audience

Pediatric and adult pulmonologists, residents, fellows, clinical and translational researchers, epidemiologists, allied health professionals

Objectives

At the conclusion of this session, the participant will be able to:

- understand how specific environmental triggers of asthma may be unique and/or distinct to different micro-environments where children spend time (i.e. home vs. school vs. outdoor play);
- identify potential targets for intervention related to location-specific exposures both at the individual patient level for clinicians and at a more global level for epidemiologists, clinician scientists, and child advocates;
- address how unique locations of environmental asthma triggers can be associated with health disparities.

Pediatric asthma is characterized by episodic exacerbations that are often triggered by environmental exposures. Triggers are often distinct within specific locations (e.g. home vs. school vs. in-transit) and high-risk populations of children may be uniquely impacted by location-specific exposures. This symposium will focus on how distinct, location-specific environmental exposures (i.e. aeroallergens and air pollution) contribute to asthma morbidity, personal risk factors and potential mitigation strategies. Attention will be given to variations in exposures unique to different populations world-wide, the impact of systemic racism on exposures within specific communities and the role of clinicians as advocates for improved air quality.

Chairing: S. Lovinsky-Desir, MD, MS, New York, NY
J.M. Gaffin, MD, Boston, MA
G. Chew, ScD, Atlanta, GA

2:15 Asthma Disparities: At the Intersection of Place, History, and Environment

E.C. Matsui, MD, MHS, Austin, TX

2:30 Asthma, Allergies, and Air Pollution in the School Environment

W. Phipatanakul, MD, Boston, MA

2:45 Exposures on the Go! The Role of Air Pollution Exposure During Childhood Activity and Play

S. Lovinsky-Desir, MD, MS, New York, NY

3:00 Is the Air at Home Safe to Breathe? The Impact of Indoor and Outdoor Air Quality on Respiratory Health in Rural and Indigenous Pediatric Populations

D.K. Radhakrishnan, MS, MD, Ottawa, Canada

3:15 Not All Microenvironments Are the Same: A Global Perspective on Differences in Exposure and Asthma

J.M. Grigg, MD, London, United Kingdom

3:30 Advocating for Clean Air for Children

J. Rice, MHS, Baltimore, MD

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BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C86 BIG DATA AT THE BEDSIDE IN CRITICAL CARE: THE GOOD, THE BAD, THE UGLY

Assemblies on Critical Care; Behavioral and Health Services Research; Clinical Problems; Nursing, Pediatrics

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

All healthcare workers with an interest in bioinformatics and big data; researchers and clinicians caring for critically-ill patients; administrators interested in building a more equitable digital health platform

Objectives

At the conclusion of this session, the participant will be able to:

- define the state-of-the-art innovations in data that are likely to influence bedside clinical practice in the near future.
- understand and define the driving factors and consequences of a lack of diversity in data, and how it can limit innovation and have deleterious effects on patient care;
- define the structural biases in digital health and their consequences in the emerging innovations in artificial intelligence.

Big data analysis and machine learning algorithms are increasingly being used in critical care research. The implementation of big data projects into tangible clinical tools has so far been scarce. In this symposium, experts in the field will discuss the early successes of machine learning in critical care medicine and also areas where the field is currently coming up short. Healthcare workers attending this

symposium will get insights into state of the art innovations that are likely to change their future practice and aide decision-making. We will also discuss some of the challenges in data-sharing, implementation, and equity that need to be met before these powerful tools can realise their potential as clinical adjuncts.

Chairing: P. Sinha, MB BCh, PhD, St Louis, MO
M.M. Churpek, MD, MPH, PhD, ATSF, Madison, WI

2:15 Data as the New Oil: How Multi-Modal Data Sharing will Revolutionize Critical Care
L. Bastarache, MS, Nashville, TN

2:30 Expert-Level Automation for Critical Illness Diagnosis
M.W. Sjoding, MD, Ann Arbor, MI

2:45 Real-Time Phenotyping for Personalized Care
P. Sinha, MB BCh, PhD, St Louis, MO

3:00 Multidimensional Workforce for Multidimensional Data
Speaker To Be Announced

3:15 Rage Against the Machine: Biased Algorithms and the Ugly Underbelly of Data
M. McCradden, PhD, MHSc, Toronto, Canada

3:30 Machine Learning System Implementation: Taking Modelling to Bedside
M.M. Churpek, MD, MPH, PhD, ATSF, Madison, WI

BASIC • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C87 THE DYNAMIC AIRWAY EPITHELIUM: REGULATION OF IMMUNE RESPONSES IN ASTHMA

Assemblies on Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology; Respiratory Structure and Function

2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 3006/3008 (West Building, Level 3)

Target Audience

Junior and senior pulmonary investigators and clinicians interested in airway epithelial cell biology and lung immunology and how this translates to patient care

Objectives

At the conclusion of this session, the participant will be able to:

- discuss and apply the latest knowledge addressing the cutting edge techniques of the airway epithelium to identify its diverse cell populations;

- discuss how the airway epithelium interacts with immune cells and regulates immune responses to infection in the setting of the asthma exacerbation;
- apply knowledge as to how the airway epithelial response to type 2 immune regulates type 2 inflammation in asthma and modulates patient outcomes.

This session will discuss the state of the art with regard to the diverse populations of the airways epithelium, their interactions with immune cells and regulation of immunologic responses to infection and type 2 inflammation in asthma, and how this translates to patient outcomes.

Chairing: M. Kraft, MD, ATSF, Tucson, AZ

2:15 The Dynamic Airway Epithelium: Far from an Innocent Bystander
M. Kraft, MD, ATSF, Tucson, AZ

2:30 Use of Single Cell Transcriptomics to Identify Novel Airway Epithelial Cell Populations
M. Kotas, MD, PhD, San Francisco, CA

2:55 Interaction of the Airway Epithelium with Type 2 Inflammation in Asthma
N. Barrett, MD, Chestnut Hill, MA

3:20 The Airway Epithelium as an Active Participant in Regulating Viral Infection in Asthma
H.W. Chu, MD, Denver, CO

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BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C88 MICROBIAL CO-INFECTIONS IN THE LUNG AND WHAT TO DO ABOUT THEM

Assemblies on Pulmonary Infections and Tuberculosis; Clinical Problems

2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 215-216 (South Building, Level 2)

Target Audience

Pulmonary scientists and clinicians seeking to gain insights into complex lung infections with multiple organisms, including molecular aspects of how co-infection can alter disease pathophysiology, and how co-infection can complicate treatment

Objectives

At the conclusion of this session, the participant will be able to:

- apply new knowledge to explain how the presence of more than one pathogen in the lung can alter disease progression and require changes in therapies, thus improve outcomes for patients;
- better diagnose whether the presence of pathogen (e.g. NTM or fungi) in the lung represent true infections to be treated, or colonizers to monitor;
- describe new findings about co-infections and also delineate identified gaps of knowledge in the area of co-infections that require additional research in order to improve patient outcomes.

This symposium will address complexities of diagnosing and treating co-infections in the lung. It will highlight how microbes in polymicrobial infections differ in their pathophysiology, virulence, and treatment sensitivity as compared to the same species in solo infections. We will cover clinical considerations of pulmonary co-infections (including diagnostic challenges, determining which species cause disease vs which are bystanders, and how to treat pulmonary co-infections) and molecular mechanisms that trigger changes in microbial pathogenesis when two microbes interact in the lung. Speakers will discuss co-infections in acute pneumonia and chronic lung disease, and the special categories of fungal co-infection, NTM co-infection, and co-infections in people with COVID19.

Chairing: K.B. Hisert, MD, PhD, Denver, CO
C.S. Dela Cruz, MD, PhD, ATSF, New Haven, CT
B. Jones, MD, MSc, Salt Lake City, UT
M. Ferrer, PhD, Barcelona, Spain

2:15 Session Introduction

2:20 Novel Technologies for Diagnosis of Lung Infections
R.P. Dickson, MD, Ann Arbor, MI

2:35 Co-Infections and the Host Response in Non-COVID-19 Pneumonia
R.G. Wunderink, MD, Chicago, IL

2:55 Polymicrobial Infections in Chronic Lung Disease
J. Bomberger, PhD, Pittsburgh, PA

3:15 Fungal Co-Infections
C.A. Hage, MD, ATSF, Indianapolis, IN

3:30 Presence of NTM: Is it Co-Infection or a Colonizer?
S.H. Kasperbauer, MD, Denver, CO

BEHAVIORAL • CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C89 PRIORITIES FROM A JOINT-SOCIETY ATS POLICY STATEMENT ON PALLIATIVE CARE IN SERIOUS RESPIRATORY DISEASE

Assemblies on Behavioral and Health Services Research; Nursing

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3014 (West Building, Level 3)

Target Audience

International, inter-professional group of clinicians (nurses, respiratory therapists, pharmacists, physicians, social workers) and investigators from pulmonary and palliative care who care for patients with serious respiratory disease

Objectives

At the conclusion of this session, the participant will be able to:

- discuss the fundamental principles of palliative care including symptom management and conducting goals of care discussions;
- describe innovative solutions to equitably integrate primary and secondary palliative care early in the care continuum among patients with serious respiratory disease;
- define critical training and research priorities for palliative care in pulmonary medicine across multiple domains.

Our multiphase work over the past several years in ATS has demonstrated a critical need for early palliative care for people living with serious respiratory disease and their caregivers. In June 2021, we convened a virtual, international, and inter-professional committee of pulmonary and palliative care clinicians, researchers and patient stakeholders from multiple societies to develop an official ATS policy statement on palliative care for adults with respiratory disease. This session highlights the key findings from that meeting, including presentations from a diverse group of committee facilitators on fundamental principles, priorities, and next steps for improved integration of palliative care in pulmonary medicine.

Chairing: D.R. Sullivan, MD, MA, MRes, Portland, OR
L.F. Reinke, PhD, APRN, BC, ATSF, Salt Lake City, UT
A.S. Iyer, MD, MSPH, Birmingham, AL

2:15 Fundamental Principles of Palliative Care in Respiratory Disease and Highlights from the Policy Statement
D.R. Sullivan, MD, MA, MRes, Portland, OR

2:23 Stakeholder Engagement: A PAR Perspective on Palliative Care in Serious Respiratory Disease
L. Gershon, PAR, Palo Alto, CA

2:33 Engaging Caregivers as Critical Members of the Care Team
K.O. Lindell, PhD, RN, ATSF, Charleston, SC

- 2:41 Health Disparities and Equitable Access to Palliative Care in Pulmonary Medicine**
T. Fasolino, PhD, FNP-BC, ACHPN, Clemson, SC
- 2:49 The Ins and Outs of Respiratory Disease: Comprehensive Symptom Management**
N.E. Smallwood, MBBS, MSCE, PhD, BMedSci, Melbourne, Australia
- 2:57 Innovative Palliative Care Delivery Models**
R.A. Mularski, MD, MS, ATSF, Portland, OR
- 3:05 It's the Journey Not the Destination: Goals of Care/Advance Care Planning in Respiratory Disease**
A.E. Turnbull, DVM, MPH, PhD, Baltimore, MD
- 3:13 Methodologies, Models, and Measurements: Research Priorities in Palliative Care**
C.E. Cox, MD, MPH, MHA, Durham, NC
- 3:21 Hoping for the Future While Planning for the Worst: Palliative Care in States of Emergency**
A. Wilkinson, PhD, Joondalup, Australia
- 3:29 Pallipulm, The New Frontier: Integrating Palliative Care in Pulmonary Medicine through Primary Palliative Care**
A.S. Iyer, MD, MSPH, Birmingham, AL
- 3:37 Questions and Answers**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C90 MORE THAN MAKING UP FOR LOST TIME: CAREER DEVELOPMENT AFTER COVID-19

Assemblies on Behavioral and Health Services Research; Critical Care; Education and Training Committees; Members in Transition and Training (MITT) Committee

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2014/2016 (West Building, Level 2)

Target Audience

Individuals, organizations, and agencies involved in the training, mentorship, career development, recruitment, retention, and funding of early career pulmonary, critical care, and sleep clinicians and scientists

Objectives

At the conclusion of this session, the participant will be able to:

- characterize the impact of the pandemic on career development for individuals in pulmonary, critical care, and sleep medicine and;
- identify solutions to mitigate the impact of the pandemic on trainees and early career professionals, with particular attention to underrepresented groups in medicine and women;

- determine priorities for strengthening our field and our pipeline of early career professionals against future catastrophic events.

A diverse pipeline is essential to the Society's mission to advance research, clinical care, and public health. Pre-existing threats coupled with COVID-19's collateral effects on trainees and early career faculty have risked an entire generation's professional development, with outsized effects on racial and ethnic minorities, women, and other underrepresented groups in medicine. This session will detail pre-existing challenges facing early career individuals and how the pandemic exacerbated these, as identified through recent research. The speakers will then present evidence-based strategies for addressing these consequences to secure the future of our field.

Chairing: A.J. Admon, MD, MPH, MSc, Ann Arbor, MI
S.K. Cribbs, MD, MSCR, ATSF, Decatur, GA

- 2:15 More Than Just Making up for Lost Time: Career Development After COVID-19**
A.J. Admon, MD, MPH, MSc, Ann Arbor, MI
- 2:20 Moving Forward After COVID-19: The Transition Out of the Pandemic for Trainees**
J.K. Krishnan, MD, MBA, MSc, New York, NY
- 2:35 How to Build a Diverse Pipeline of PCCM Clinicians Going Forward?**
N. Thakur, MD, MPH, San Francisco, CA
J.C. Celedon, MD, DrPH, ATSF, Pittsburgh, PA
- 3:05 How Institutions Can Support Professional Recovery After COVID**
S.K. Cribbs, MD, MSCR, ATSF, Decatur, GA
- 3:20 How Funders Are Adapting to Recent Challenges to Strengthen Early Career Development**
Q. Lu, PhD, Bethesda, MD
- 3:35 Moving Forward: A Facilitated Discussion**
L. Kawano-Dourado, MD, Sao Paulo, Brazil

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1.5

C91 THE FUNCTIONAL IMPACT OF CELLULAR SENEESCENCE ON LUNG DISEASE OVERARCHING PATHOLOGICAL PROCESSES: FIGHTING A COMMON ENEMY

Assemblies on Respiratory Structure and Function; Allergy, Immunology and Inflammation; Clinical Problems; Pulmonary Circulation; Respiratory Cell and Molecular Biology; Thoracic Oncology

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Target Audience

Scientists and physician scientists interested in understanding how senescence in the lung guides lung repair and regeneration and how this disruption contributes to mechanisms that influence homeostasis and disease in the lungs

Objectives

At the conclusion of this session, the participant will be able to:

- learn the gaps in our knowledge about the functional impact of increased senescence on pathological changes underlying chronic lung disease;
- understand and define the importance of researching the functional impact of senescence to elucidate its role in lung pathology, as this is crucial to make the next step towards senescence targeting treatment strategies;
- gain understanding and learn the current state of the development of senescent targeting strategies and their potential to treat patients with lung diseases.

Higher levels of cellular senescence have been demonstrated in chronic lung disease. Accumulation of senescent cells can be detrimental to tissue function and targeting senescent cells has shown promising effects. To improve our understanding of how these senescent targeting drugs work and to which cell types in the lung we need to target these drugs, more insight is needed into the functional impact of senescent cells in chronic lung disease. Therefore, the experts presenting in this symposium will provide insight into the contribution of cellular senescence and the role of SASP to specific pathological processes and cell types involved in chronic lung diseases, with a focus on ECM dysregulation by lung fibroblasts and disturbed alveolar repair by alveolar epithelial cells. In the end, the potential benefits of senescence targeting treatments in these specific pathological processes in chronic lung disease will be discussed.

Chairing: R.R. Woldhuis, PhD, Groningen, Netherlands
D. Lagares, PhD, MSc, Boston, MA

- 2:15 Session Introduction**
R.R. Woldhuis, PhD, Groningen, Netherlands
- 2:25 Cellular Senescence as a Driver of Extracellular Matrix Dysregulation**
C.A. Brandsma, PhD, Groningen, Netherlands
- 2:45 Impact of Cellular Senescence on Lung Regeneration and Alveolar Repair**
M. Lehmann, PhD, Neuherberg, Germany
- 3:05 The Future for Targeting Cellular Senescence in Chronic Lung Disease**
J.L. Kirkland, MD, PhD, Rochester, MN
- 3:25 General Discussion**

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: N/A

C92 SCIENCE AND INNOVATION BREAKTHROUGHS IN LUNG HEALTH AND DISEASE: EMPHASIS ON RNA BIOLOGY

Assemblies on Respiratory Structure and Function; Allergy, Immunology and Inflammation; Clinical Problems; Pulmonary Circulation; Respiratory Cell and Molecular Biology; Thoracic Oncology

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2001/2003 (West Building, Level 2)

Target Audience

The program will discuss general topics of interest to a broad group of researchers and physicians interested in lung health and disease

Objectives

At the conclusion of this session, the participant will be able to:

- learn new findings about the application of innovative RNA sequencing technologies (single cell sequencing, spatial transcriptomics) to human lung health and disease;
- learn new findings about the role of mRNA vaccines in preventing severe viral pneumonias;
- contextualize the novel observations presented on each topic, identify their impact on lung health and disease, and consider applications to lung health beyond those presented.

The recent employment of cutting-edge RNA sequencing technologies to study lung tissues has resulted in a substantial growth in our understanding of lung disease. In parallel, the COVID-19 pandemic has led to the rapid implementation of mRNA vaccines. This symposium will focus on the recent insights into lung disease afforded by new and rapidly evolving RNA technologies, and will explore the human host response to mRNA vaccines and how this contributes to the prevention of severe viral illness. After the course, participants will better understand novel concepts that we hope will translate to an improved understanding of human lung disease.

Chairing: S. Christenson, MD, MS, San Francisco, CA
L.J. Quinton, PhD, Worcester, MA
T.J. Mariani, PhD, Rochester, NY

2:15 Metatranscriptomics to Study Host-Pathogen Interactions in the Lung

C. Langelier, MD, PhD, San Francisco, CA

2:45 mRNA Vaccine Technology and the Human Host Response

A. Carfi, PhD, Moderna, Cambridge, MA

3:15 The Single Cell Atlas in Human Lung Health and Disease
Y. Xu, PhD, Cincinnati, OH

CLINICAL

MINI SYMPOSIUM

C93 CLINICAL TRIALS IN CHRONIC LUNG DISEASE2:15 p.m. - 3:45 p.m. **MOSCONE CENTER****Room 11-12 (South Building, Exhibition Level)**

Chairing: M.T. Dransfield, MD, Birmingham, AL
M. Wijsenbeek, MD, PhD, Rotterdam, Netherlands
R.M. Burkes, MD, MS, Cincinnati, OH

Oral Presentations:

- 2:15 Home High-Flow Nasal Cannula Oxygen Therapy for Stable Hypercapnic Chronic Obstructive Pulmonary Disease Patients: A Randomized Controlled Trial/T. Horie, K. Tomii, K. Nagata, Maebashi, Japan, p.A4774
- 2:25 **Stepping Down from Triple Inhaled Therapy to a LABA/LAMA Fixed-Dose Combination: Data from the German Real-Life DACCORD COPD Cohort/C.** Vogelmeier, H. Worth, R. Buhl, C.-P. Criée, E. Gückel, P. Kardos, Marburg, Germany, p.A4775
- 2:35 **Eliapixant in Refractory Chronic Cough: The 12-Week, Randomized, Double-Blind, Placebo-Controlled, Phase 2b PAGANINI Study/P.** Dicpinigaitis, A.H. Morice, J. Smith, M.R. Sher, M. Vaezi, L. Guilleminault, A. Niimi, U. Krahn, R. Saarinen, P. Vieira Pires, M. Wosnitza, L. Mcgarvey, Bronx, NY, p.A4776
- 2:45 **Phase I Characterization of the Novel Cathepsin C Inhibitor BI 1291583/P.** Badorrek, C. Diefenbach, H. Kögler, A. Eleftheraki, D. Sarubbi, F. Seitz, R. Sennewald, J.M. Hohlfeld, Hannover, Germany, p.A4777
- 2:55 **Brensocatic for the Treatment of Non-Cystic Fibrosis Bronchiectasis (NCFBE): Number Needed to Treat (NNT) and Number Needed to Harm (NNH)/J.D.** Chalmers, M.L. Metersky, J. Feliciano, C. Fernandez, A. Teper, A. Maes, M. Hassan, A. Chatterjee, Dundee, United Kingdom, p.A4778
- 3:05 **Rituximab versus Cyclophosphamide for the Treatment of Connective Tissue Disease Associated Interstitial Lung Disease (RECITAL): A Multi-Centre Randomised Controlled Trial/T.M.** Maher, V. Tudor, P. Saunders, M. Gibbons, S. Fletcher, H. Parfrey, C.P. Denton, E. Renzoni, M. Kokosi, A.U. Wells, D. Ashby, M. Szigeti, P.L. Molyneaux, Los Angeles, CA, p.A4779
- 3:15 **Insights from the ADVOCATE Study: Respiratory Tract Involvement in Patients with ANCA-Associated Vasculitis in a Randomized, Double-Blind, Placebo-Controlled, Phase 3 Trial of Avacopan/U.** Specks, D.R.W. Jayne, P.A. Merkel, Rochester, MN, p.A4780

3:25 **Online Mindfulness Based Cognitive Behavioral Therapy for Fatigue in Patients with Sarcoidosis: A Randomized Controlled Trial/V.** Kahlmann, C.C. Moor, S.J.J. van Helmond, R.L. Mostard, M.L. van der Lee, J.C. Grutters, M.S. Wijsenbeek, M. Veltkamp, Rotterdam, Netherlands, p.A4781

3:35 **Safety and Efficacy of BLU-5937 in the Treatment of Refractory Chronic Cough from the Phase 2b Soothe Trial/J.** Smith, L. Mcgarvey, S.S. Biring, A.H. Morice, M.R. Sher, P. Dicpinigaitis, M. Blaiss, S. Lanouette, L. Harvey, R. Yang, J. Shaw, M. Garin, C.M. Bonuccelli, Manchester, United Kingdom, p.A5778

CLINICAL

MINI SYMPOSIUM

C94 THE ROAD TO RECOVERY TAKES MANY PATHS: OUTCOMES AFTER CRITICAL ILLNESS2:15 p.m. - 3:45 p.m. **MOSCONE CENTER****Room 3001/3003 (West Building, Level 3)**

Chairing: H.E. Faust, MD, MS, Madison, WI
M.E. Mikkelsen, MD, MSCE, Aurora, CO

Featured Speaker:

2:15 **Doing Better for Those We Save: Investing in Critical Illness Survivor Care/T.L.** Eaton, Ann Arbor, MI

Oral Presentations:

- 2:25 **One-Year Trajectories of Cognitive Impairment and Quality of Life in Critically Ill COVID-19 Survivors/D.J.** Douglas, K.S. Wolfe, M.S. Stutz, S.D. Pearson, P. Lecompte-Osorio, J. Lin, C. Ward, C. Thompson, P. Herbst, A. Pohlman, J.B. Hall, J.P. Kress, B.K. Patel, Chicago, IL, p.A4782
- 2:35 **CANCOV - Canadian**
- 2:45 **Post-ICU Care Is Transitional Care: A Qualitative Content Analysis of Stakeholder Perspectives on Barriers and Facilitators of Quality Post-ICU Care Delivery/L.P.** Scheunemann, E.M. Motter, P.T. Eisenhauer, P.S. Kim, N. Gandhi, T.D. Girard, C.F. Reynolds, N.E. Leland, Pittsburgh, PA, p.A4784
- 2:55 **Association Between Palliative Care Needs and Long-Term Psychological Distress Symptoms Among Family Members of ICU Patients/C.E.** Cox, J. Gu, D.C. Ashana, E.H. Pratt, K. Haines, J. Ma, A. Parish, M.K. Olsen, M.S. Al-Hegelan, J.N. Katz, D. Casarett, R.W. Harrison, C. Naglee, Y.A. O'Keefe, A. Frear, I.L. Riley, K.S. Johnson, S.L. Docherty, Durham, NC, p.A4785

- 3:05 Hospital Readmission for Acute Respiratory Failure Survivors Across 5 Academic U.S. Sites/B.** Seth, P. Kota, P. Kadiri, S. Bose, H. Carmichael, C.M. Sevin, S. Beesley, J.C. Jackson, S.M. Brown, D.M. Needham, V. Dinglas, Baltimore, MD, p.A4786
- 3:15 Patient and Caregiver-Derived Health Service Improvements for Better Critical Care Recovery/K.J.** Haines, N. Leggett, E. Hibbert, T. Hall, L. Boehm, R. Bakhru, A. Bastin, B.W. Butcher, T.L. Eaton, W. Harris, A. Hope, J. Jackson, A. Johnson, J. Kloos, K. Korzick, P.I. Mactavish, J. Meyer, A. Montgomery-Yates, T. Quasim, A. Slack, D. Wade, M. Still, G. Netzer, R. O. Hopkins, M. Mikkelsen, T. Iwashyna, J. McPeake, C. Sevin, Melbourne, Australia, p.A4787
- 3:25 Prevalence and Predictors of Long-Term Decision Regret in ICU Surrogate Decision Makers/S.** Andersen, R. Butler, P. Buddadhumaruk-Sun, J. Chang, R. Arnold, D.C. Angus, D.B. White, Pittsburgh, PA, p.A4788
- 3:35 Disability, Frailty, and Outcomes After Hospitalization for Covid-19: Results from the PETAL Network BLUE CORAL Study/C.T.** Hough, E.S. Caldwell, I.D. Peltan, S.J. Gundel, R.M. Baron, S. Sahetya, T.J. Iwashyna, B.T. Thompson, Portland, OR, p.A5779

BASIC • CLINICAL**MINI SYMPOSIUM****C95 WORLD TRADE CENTER 20TH ANNIVERSARY SYMPOSIUM****2:15 p.m. - 3:45 p.m. MOSCONE CENTER****Room 201-202 (South Building, Level 2)**

Chairing: S. Ahmad, PhD, Birmingham, AL
S. Kwon, DO, MPH, New York, NY
J. Wisnivesky, MD, DrPH, New York, NY

Featured Speaker:

2:15 9/11 Disease Pathogenesis: Past, Present and Future /A. Nolan, New York, NY

Oral Presentations:

- 2:25 World Trade Center Particulate Matter-Induced Cardiorespiratory and Vascular Dysfunction (CaRVD) and Obstructive Airways Disease/S.** Kwon, G. Crowley, M. Liu, R. Zeig-Owens, A. Mueller, D.J. Prezant, A. Nolan, New York, NY, p.A4789
- 2:35 World Trade Center (WTC) Exposure Community Survivors with Uncontrolled Lower Respiratory Symptoms: Molecular Clustering Analysis/G.** Grunig, N. Durmus, Y. Zhang, S. Pehlivan, Y. Wang, K. Doo, K.I. Berger, M. Liu, Y. Shao, J. Reibman, New York, NY, p.A4790

- 2:45 Utilization of Allergy and Immunology Services Among Rescue Workers Exposed to the World Trade Center Disaster/D.L.** Caruana, G.T. Smith, P.H. Huang, A.M. Szema, New Haven, CT, p.A4791
- 2:55 Alveolar Macrophages and Epithelial Cells Express RAGE in a Murine Model of WTC-Particulate Matter Exposure/A.** Veerappan, M. Sunseri, I.R. Young, A. Nolan, New York, NY, p.A4792
- 3:05 The Microbiome of Inflammation and Nutrition: World Trade Center FIREHOUSE RCT/J.** Kim, R. Lam, W. Phillips, S. Kwon, G. Crowley, D.J. Prezant, A. Nolan, New York, NY, p.A4793
- 3:15 Lung Cancer Characteristics in Women in the World Trade Center Environmental Health Center/N.** Durmus, S. Pehlivan, Y. Zhang, Y. Shao, A. Arslan, E. Shum, J. Reibman, New York, NY, p.A4794
- 3:25 Investigation of EEG Markers of Disturbed Sleep in World Trade Center (WTC) Rescue and Recovery Workers and Volunteers/A.E.** Mullins, A. Parekh, B. Castillo, D.H. Kim, R. Schoenholz, K. Black, S.-E. Lu, D. Rapoport, R. de la Hoz, J. Sunderram, I. Ayappa, New York, NY, p.A4795
- 3:35 A Prospective Longitudinal Assessment of Nutrition in the FDNY World Trade Center-Exposed Cohort: An Update/R.** Lam, S. Kwon, G. Crowley, R. Zeig-Owens, A. Mueller, D.J. Prezant, A. Nolan, New York, NY, p.A4796

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL**MINI SYMPOSIUM****C96 BEST IN PEDIATRICS****2:15 p.m. - 3:45 p.m. MOSCONE CENTER****Room 3005/3007 (West Building, Level 3)**

Chairing: T.A. Laguna, MD, MSci, Chicago, IL
B.T. Kopp, MD, MPH, ATSF, Columbus, OH

Oral Presentations:

- 2:15 17q12-21 Asthma Risk Genes Interact with Early Life Nasal Microbiota to Increase Risk of Childhood Wheeze/K.** Mccauley, A. Morin, K. Lee, K.V. Lynch, D.W. Fadrosh, P. LeBeau, A. Calatroni, L.B. Bacharier, M. Kattan, G.T. O' Connor, R.E. Wood, C. Ober, D.J. Jackson, J.E. Gern, S. Lynch, San Francisco, CA, p.A4797

- 2:25 Vitamin C Supplementation to Pregnant Smokers Improves Offspring Forced Expiratory Flows Through 5 Years of Age: Follow-Up of a Randomized Trial/C.T. Mcevoy, L. Shorey-Kendrick, K. Milner, M. Cunningham, J. Harris, B. Vuylsteke, C. Tiller, J. Brownsberger, H. Titus, D. Schilling, J. Stewart, D. Gonzales, K. MacDonald, A. Vu, B. Park, E. Spindel, C. Morris, R.S. Tepper, Portland, OR, p.A4798**
- 2:35 Absence of IL-33 or Areg Results in Loss of Cilia in Organotypic Airway Epithelial Cell Cultures and Increased Hyperoxic Injury in In Vivo and Ex Vivo Models of BPD/L.C. Eldredge, R. Kulkarni, C.W. Frevert, S.F. Ziegler, J.S. Debley, Seattle, WA, p.A4799**
- 2:45 Hyperoxia Exposure Produces Indirect Lung Injury by Altering Antimicrobial Peptide Production and the Microbiota of the Newborn Small Intestine/K.A. Willis, P. Jain, T. Nicola, A.S. Abdelgawad, C. Ren, B. Halloran, W. Qi, C. Adegboye, C.V. Lal, A. O'Connell, N. Ambalavanan, T. Jilling, Birmingham, AL, p.A4800**
- 2:55 Asthma as a Risk Factor for Hospitalization in Children with COVID-19: A Nested Case-Control Study/K.M. Gaietto, M. Culler Freeman, L.A. DiCicco, S. Rauenswinter, J.R. Squire, Z. Aldewereld, J. Iagnemma, B. Campfield, D. Wolfson, T. Kazmerski, E. Forno, Pittsburgh, PA, p.A4801**
- 3:05 Global Metabolomic Profiling of the Lower Airways in Children with Cystic Fibrosis/J.B. O'Connor, M. Mottlowitz, B.D. Wagner, T.A. Laguna, Chicago, IL, p.A4802**
- 3:15 Multiple Breath Washout Testing to Identify Pulmonary Chronic Graft versus Host Disease in Children After Haematopoietic Stem Cell Transplantation/J.H. Rayment, R.A. Sandoval, J.P. Roden, K.R. Schultz, Vancouver, Canada, p.A4803**
- 3:25 The Impact of Vaping on Lung Function and Nasal Epithelial Gene Expression in Adolescents/S. Comodore, C. Liu, N. Perez, M.H. Cruse, V.L. Smith, F. Holguin, P. Valverde, K. Kechris, S. Sharma, Bloomington, IN, p.A4804**

Featured Speaker:

- 3:35 Research Diversity: Empowering Your Career and Those Around You/B.T. Kopp, Columbus, OH**

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BASIC • TRANSLATIONAL

MINI SYMPOSIUM

C97 NORTH BEACH: EXPERIMENTAL PULMONARY HYPERTENSION

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 209-211 (South Building, Level 2)

Chairing: S. Bonnet, PhD, MSc, Quebec City, Canada
E. Nozik, MD, Aurora, CO
H.J. Ford, MD, Chapel Hill, NC
S. Umar, MD, PhD, Los Angeles, CA

Oral Presentations:

- 2:15 Overexpression of Pericyte HIF2a Exacerbates Hypoxia Induced Pulmonary Hypertension and Right Ventricular Hypertrophy/H. Kim, Y. Liu, J. Kim, T. Klouda, C.-J. Hu, W. Tian, X. Jiang, J. Wu, K.R. Stenmark, M.R. Nicolls, V. De Jesus Perez, B.A. Raby, K. Yuan, Boston, MA, p.A4805**
- 2:25 ATP Citrate Lyase Orchestrates Metabolic and Epigenetic Modifications in Pulmonary Arterial Hypertension/C. Romanet, A. Bourgeois, Y. Grobs, T. Shimauchi, T. Yokokawa, K. Habbout, S.-E. Lemay, M. Orcholski, G. Mkannez, S. Breuils-Bonnet, K. Shimauchi, S. Provencher, O. Boucherat, S. Bonnet, Québec, Canada, p.A4806**
- 2:35 Skeletal Muscle SIRT3 Deficiency-Mediated LOXL2 Secretion in Remote Pulmonary Vascular Remodeling and PH-HFpEF/Y.C.C. Lai, J.-R. Jheng, Y. Bai, K. Noda, G. Halliday, J. Huot, A. Bonetto, D. Goncharov, E.A. Goncharova, M. Simon, M. Rojas, R.F. Machado, M.T. Gladwin, Indianapolis, IN, p.A4807**
- 2:45 Pharmacologic Neuromodulation Targeting Neuroinflammation as a Novel Right Ventricular Specific Therapeutic Strategy for Pulmonary Hypertension-Induced Right Ventricular Failure/A. Razee, S. Banerjee, S. Umar, Los Angeles, CA, p.A4808**
- 2:55 RUNX1 Is Required for the Development of Pulmonary Arterial Hypertension/O. Liang, E.-M. Jeong, M. Pereira, E.-Y. So, M. Del Tatto, S. Wen, M. Dooner, C.E. Ventetuolo, P.J. Quesenberry, L. Zhao, M.R. Wilkins, J.R. Klinger, Providence, RI, p.A4809**
- 3:05 The Proteoglycan Endocan Is Associated with Residual Pulmonary Hypertension After Pulmonary Endarterectomy and Promotes Smooth Muscle Cell Proliferation and Migration in Chronic Thromboembolic Pulmonary Hypertension/G.A. Heresi, X. Li, M. Tong, B. Hu, R.A. Dweik, M.A. Olman, Cleveland, OH, p.A4810**

- 3:15 HNRNPA2B1: An RNA Binding Protein That Regulates Pulmonary Arterial Hypertension Phenotype of Smooth Muscle Cells/G.** Ruffenach, L. Medzikovic, L. Aryan, L. Min, M. Eghbali, Los Angeles, CA, p.A4811
- 3:25 Therapeutic Potential of Elastin Stabilization to Re-Establish Pulmonary Arterial Biomechanical Competences and Ameliorate Pulmonary Hypertension Due to Left Heart Disease/M.M.** Kucherenko, P. Sang, J. Yao, T. Gransar, S. Dhital, J. Grune, S. Simmons, L. Michalick, D. Wulsten, M. Thiele, O. Shomroni, F. Hennig, R. Yeter, N. Solowjowa, G. Salinas, G. Duda, V. Falk, N. Vyavahare, W. Kuebler, C. Knosalla, Berlin, Germany, p.A4812
- 3:35 Three-Dimensional Deep-Tissue Imaging of the Right Ventricle Reveals Adaptive Reconstruction of the Capillary Network in Right Heart Failure/K.** Ichimura, F. Zhang, M. Boehm, A.M. Andruska, S. Reddy, M. Kheyfets, R. Metzger, E.F. Spiekerkoetter, Palo Alto, CA, p.A4813

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

C98 DEEP PHENOTYPING FOR SLEEP APNEA THERAPY SUCCESS

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 2018/2020 (West Building, Level 2)

Chairing: B.A. Edwards, PhD, Melbourne, Australia
S.A. Sands, PhD, Boston, MA
S. Op De Beeck, PhD, MSc, BSc, Wilrijk, Belgium

Oral Presentations:

- 2:15 Drive Versus Pressure Contributions to Genioglossus Activity in Obstructive Sleep Apnea/L.** Gell, D. Vena, K. Grace, A. Azarbarzin, L. Hess, N. Calianese, L. Taranto-Montemurro, D. White, A. Wellman, S.A. Sands, Boston, MA, p.A4814
- 2:25 Adverse Pregnancy Outcomes of Airflow Limitation During Sleep: Nulliparous Pregnancy Outcomes Study Monitoring Mothers-to-Be (nuMoM2b)/R.M.** Alex, D. Mann, A. Azarbarzin, D. Vena, L. Gell, A. Wellman, S. Redline, S.A. Sands, Boston, MA, p.A4815
- 2:35 Variability of Physiologic Traits Determined by Phenotyping Using Polysomnography on Consecutive Nights/T.** Tolbert, A. Parekh, A. Mullins, R. Osorio, I. Ayappa, D.M. Rapoport, New York, NY, p.A4816
- 2:45 Polysomnographic Airflow Shapes and Site of Collapse During Drug-Induced Sleep Endoscopy/S.** Op De Beeck, D. Vena, D. Mann, A. Azarbarzin, L. Gell, E. Van De Perck, R.M. Alex, M. Deltjens, M. Willems, J. Verbraecken, D.A. Wellman, O.M. Vanderveken, S.A. Sands, Wilrijk, Belgium, p.A4817

- 2:55 Effect of Hypoglossal Nerve Stimulation on Hypoxic Burden and Sleepiness: Secondary analysis of the STAR trial/G.P.** Labarca, S. Op De Beeck, D. Vena, S.A. Sands, D.P. White, S.S. Redline, A. Wellman, P.J. Strollo, A. Azarbarzin, Boston, MA, p.A4818
- 3:05 Combination Pharmacological Therapy Targeting Multiple Mechanisms of Sleep Apnea/S.A.** Sands, L.B. Hess, S. Bertisch, J. Collet, L.K. Gell, N. Calianese, D. Vena, A. Azarbarzin, L. Taranto-Montemurro, A. Wellman, S. Landry, L. Thomson, S. Joosten, G.S. Hamilton, B.A. Edwards, Boston, MA, p.A4819
- 3:15 THN3: A Randomized, Controlled Trial of Targeted Hypoglossal Nerve Stimulation for Obstructive Sleep Apnea/A.R.** Schwartz, O. Jacobowitz, S.A. Mickelson, M.B. Miller, A. Oliven, V. Certal, M.L. Hopp, D.H. Winslow, T.C. Huntley, N.E. Nachlas, D.W. Eisele, M.B. Gillespie, B.H. Weeks, E.G. Lovett, J. Shen, A. Malhotra, J.T. Maurer, Philadelphia, PA, p.A5780

Featured Speaker:

- 3:25 Endotypes and Phenotypes - Are They Clinically Useful?/R.L.** Owens, La Jolla, CA

CLINICAL

MINI SYMPOSIUM

C99 I SCREAM, YOU SCREAM, WE ALL SCREAM FOR LUNG CANCER SCREENING: A TASTE OF THE COMPONENTS

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 205-206 (South Building, Level 2)

Chairing: L. Sakoda, PhD, MPH, Oakland, CA
E. Billatos, MD, Boston, MA

Oral Presentations:

- 2:15 Procedure Utilization in a National Cohort of Patients Undergoing Lung Cancer Screening/H.** Smith, E. Schneider, N.T. Tanner, Charleston, SC, p.A4820
- 2:25 Association of Socioeconomic Status with Adherence to Annual Lung Cancer Screening/R.Y.** Kim, K.A. Rendle, N. Mitra, C.A. Saia, C. Neslund-Dudas, R.T. Greenlee, A.N. Burnett-Hartman, S.A. Honda, M.J. Simoff, M.M. Schapira, R. Meza, D.P. Ritzwoller, A. Vachani, Philadelphia, PA, p.A4821

- 2:35** **Racial Differences Among Newly Screen-Eligible Individuals in a Centralized Lung Cancer Screening Program**/C.S. Shusted, B.M. Ruane, E. Muse, L. Emeigh-McBride, B. Jackson, R. McIntire, C. Zeigler-Johnson, N. Evans, G.C. Kane, H.-S. Juon, J.A. Barta, Philadelphia, PA, p.A4822
- 2:45** **Delays in Recommended Follow-Up After High-Risk Findings in Lung Cancer Screening** /A. Ahmed, M. Snidarich, D. Hippe, K.A. Crothers, M. Triplette, Seattle, WA, p.A4823
- 2:55** **Integrated Tobacco Treatment Counseling and Nurse Navigation for Participants in a Centralized Lung Cancer Screening Program**/J.A. Barta, K.-Y. Wen, B.M. Ruane, E. Muse, L. Emeigh-McBride, C.S. Shusted, B. Jackson, G.C. Kane, N.R. Evans, R.K. McIntire, C. Zeigler-Johnson, H.-S. Juon, Philadelphia, PA, p.A4824
- 3:05** **Tailoring Shared Decision Making for Lung Cancer Screening (LCS) in People with HIV (PWH)**/K.A. Crothers, M. Brown, J.Z. Budak, R. Perrin, M.A. Snidarich, M. Triplette, Seattle, WA, p.A4825
- 3:15** **Predictors of Smoking Cessation in Lung Cancer Screening: A Secondary Analysis of the National Lung Screening Trial**/N. Thomas, R. Ward, N.T. Tanner, A. Rojewski, B. Toll, M. Gebregziabher, G.A. Silvestri, Aurora, CO, p.A4826
- 3:25** **Smokers Undergoing Lung Cancer Screening with Diagnosed COPD Suffer the Highest Mortality Including Similar Cardiovascular Mortality as Diabetic**/R.J. Scott, R.P. Young, G.D. Gamble, G.A. Silvestri, Auckland, New Zealand, p.A4827
- 3:35** **Accepting Social E-Cigarette Behaviors Among Fraternity Members Found Utilizing Egocentric Network Analysis**/A.C. Welch, M.S. Patterson, C.L. Wilshire, H. Kathuria, C. Gilbert, J.A. Gorden, Seattle, WA, p.A4828
- 601** **Clinical Burden of Chronic Rhinosinusitis with Nasal Polyps in Patients with Severe Eosinophilic Asthma: A Post Hoc Analysis of Data from MENSA and COSMOS**/S. Smith, R.G. Price, M.R. Mollo, P. Howarth, S.W. Yancey, C. Cavaliere, Durham, NC, p.A4829
- 602** **Clinical Predictors of Biological Treatment Failure in Patients with Severe Eosinophilic Asthma**/A.E. Reihman, R. Pomponio, R. Peterson, M. Cruse, A. Hills, K. Likosky, M.K. Yamamura, F. Holguin, S. Sharma, Aurora, CO, p.A4830
- 603** **Effectiveness of Anti-IL4R Therapy Following Suboptimal Response to Anti-IL5/5R Therapy in Severe Eosinophilic Asthma**/T. Mason, A.P. Hearn, G. d'Ancona, M. Fernandes, L. Green, C. Roxas, L. Thomson, J. Dhariwal, A.M. Nanzer, D.J. Jackson, London, United Kingdom, p.A4831
- 604** **Sputum Eosinophils Are Better Than Blood Eosinophils to Identify Super-Responders to Anti-IL5**/S. Gerday, C. Moermans, F. Guissard, V. Paulus, M. Henket, R. Louis, F. Schleich, Liege, Belgium, p.A4832
- 605** **Exploring the Effect of Anti-IL5 Therapy on Sputum Eosinophils in Children with Asthma**/G. Wilson, Q. Liu, J. Knight, C. Visness, M. Villarreal, M. Gill, R.S. Gruchalla, A.H. Liu, M. Kattan, G.N. Hershey, A. Togias, P.M. Becker, M.C. Altman, W. Busse, D.J. Jackson, R. Montgomery, G. Chupp, New Haven, CT, p.A4833
- 606** **Mepolizumab Treatment Leads to Clinical Remission in Patients with Severe Eosinophilic Asthma: Results from the Real-World REDES Study**/C. Domingo Ribas, I. Pavord, R.G. Price, P. Howarth, J. Oppenheimer, L. Heaney, H. Nagase, E. Pizzichini, D. Banas Conejero, F. Gardiner, Barcelona, Spain, p.A4834
- 607** **Long-Term Efficacy of Benralizumab in Patients with Severe Asthma Directly Transitioning from the ANDHI Double-Blind to the ANDHI in Practice Open-Label Extension Substudy**/T. Harrison, R. Katial, N.L. Lugogo, A. Burden, J. Kwiatek, R. Louis, Nottingham, United Kingdom, p.A4835
- 608** **The Impact of Comorbidities and Clinical Characteristics on Real-World Mepolizumab Effectiveness in Patients with Severe Asthma: Results from the REALITI-A Study**/G.L. Chupp, L.G. Heaney, G. Pelaia, T. Welte, C. Almonacid Sanchez, J.K. Lee, A. Maxwell, R.G. Price, R.W. Jakes, R. Alfonso Cristancho, P. Howarth, G. Brusselle, New Haven, CT, p.A4836
- 609** **The Impact of Comorbid Nasal Polyps on Real-World Mepolizumab Effectiveness in Patients with Severe Asthma: Results from the REALITI-A Study**/M.C. Liu, D. Bagnasco, A. Maturi, C. Pilette, R.G. Price, A.C. Maxwell, R. Alfonso Cristancho, R.W. Jakes, S. Yang, P. Howarth, A.S. Cheema, Baltimore, MD, p.A4837

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C101 EXPANDING THE USE OF ASTHMA BIOLOGICS AND OTHER NOVEL THERAPEUTICS TO ADDITIONAL PATIENT POPULATIONS

2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 2005/2007 (West Building, Level 2)

Poster Viewing **2:15-2:45**

Discussion **2:45-3:45**

Chairing: P. Akuthota, MD, ATSF, La Jolla, CA
J.L. Gomez, MS, MD, ATSF, New Haven, CT

- 610 Real-World Evidence of Steroid-Sparing Effect of Mepolizumab in EGPA/I.** Simpson-Shelton, P. Akuthota, La Jolla, CA, p.A4838
- 611 The Safety, Pharmacokinetics, and Pharmacodynamics of TD-8236, an Inhaled pan-JAK Inhibitor: Results from Part C of a First-in-Human Study in Participants with Moderate to Severe Asthma/N.D.** Pfeifer, T. Nguyen, D.A. Lombardi, K. Colley, W. Yates, E. Kaufman, R.A. Graham, D.L. Bourdet, B. Leaker, D. Singh, South San Francisco, CA, p.A4839
- 612 Dupilumab Shows Long-Term Improvements in Lung Function Parameters in Patients With Asthma With and Without Comorbid Chronic Rhinosinusitis and/or Nasal Polyposis/A.** Menzies-Gow, P. Berger, A.T. Peters, P. Kuna, K.F. Rabe, A. Altincatal, B. Ortiz, M. Djandji, S. Siddiqui, Y. Deniz, J.A. Jacob-Nara, P.J. Rowe, London, United Kingdom, p.A4840
- 613 Relation Between Fractional Exhaled Nitric Oxide Reductions and Efficacy Outcomes in Patients with Asthma Treated with Dupilumab/W.** Busse, I.D. Pavord, Y. Deniz, T.B. Casale, S.E. Wenzel, J. Corren, J.M. Fitzgerald, N. Daizadeh, A. Jagerschmidt, S. Harel, B. Ortiz, M. Djandji, N. Crikelair, J.A. Jacob-Nara, P.J. Rowe, Madison, WI, p.A4841
- 614 Long-Term Efficacy of Dupilumab in Patients with Oral Corticosteroid-Dependent Asthma With and Without Comorbid Chronic Rhinosinusitis and/or Nasal Polyps/P.** Berger, A. Menzies-Gow, A. Peters, P. Kuna, K.F. Rabe, A. Altincatal, B. Ortiz, M. Djandji, S. Siddiqui, Y. Deniz, J.A. Jacob-Nara, P.J. Rowe, Pessac, France, p.A4842
- 615 Dupilumab Efficacy in Patients with Uncontrolled, Moderate-to-Severe Asthma with Elevated Type 2 Biomarkers and Fixed Airflow Obstruction/N.A.** Hanania, M. Castro, E.D. Bateman, I.D. Pavord, A. Papi, J.M. FitzGerald, J.F. Maspero, C. Katelaris, D. Singh, N. Daizadeh, N. Pandit-Abid, B. Ortiz, E. Laws, J.A. Jacob-Nara, P.J. Rowe, Y. Deniz, D.J. Lederer, M. Hardin, S. Siddiqui, Houston, TX, p.A4843
- 616 Identification of Patients with Uncontrolled, Moderate-to-Severe Asthma with High Sleep Disturbance and Efficacy of Dupilumab in This Subgroup: Post-Hoc Analysis from LIBERTY ASTHMA QUEST/J.F.** Maspero, S. Shafazand, J. Cole, I.D. Pavord, W.W. Busse, J. Msihid, R. Gall, X. Soler, S. Siddiqui, A. Khan, L. De Prado Gomez, J.A. Jacob-Nara, Buenos Aires, Argentina, p.A4844
- 617 Dupilumab Improved Health-Related Quality of Life in Asthma Patients with Comorbid Chronic Rhinosinusitis: QUEST Study/C.** Hopkins, K. Buchheit, E. Heffler, N. Cohen, H. Olze, A. Khan, J. Msihid, S. Siddiqui, S. Nash, J.A. Jacob-Nara, P. Rowe, Y. Deniz, London, United Kingdom, p.A4845
- 618 Pharmacokinetics and Effect on Type 2 Biomarker Levels of Dupilumab Weight Tiered-Based Dose Regimens in Patients Aged 6 to 11 Years with Uncontrolled, Moderate-to-Severe Asthma/D.J.** Jackson, L.B. Bacharier, L. Sher, C. Domingo Ribas, N. Papadopoulos, B.D. Modena, N. Li, C. Xia, S. Harel, K. Wolfe, M. Kamal, R. Gall, N. Amin, L. Mannent, E. Laws, P.J. Rowe, J.A. Jacob-Nara, Y. Deniz, D.J. Lederer, M.E. Hardin, C. Xu, Madison, WI, p.A4846
- 619 Asthma Is Associated with Increased Serum and Sputum Levels of Rheumatoid Arthritis Related Autoantibodies Compared to Normal Controls/S.** Matson, X. Shi, C. Lugo, J. Cascone, E. Worth, J.S. Boomer, M. Castro, K. Demoruelle, Kansas City, KS, p.A4847
- 620 Nasal Polyps Are a Predictor of Complete Response in Patients with Severe Asthma and Treatment with Benralizumab/A.** Padilla-Galo, B. Valencia, M. Pérez-Morales, G.E. González-Angulo, N. González-Flrido, C. Oliveira, Málaga, Spain, p.A4848
- 621 Assessment of Biologic Therapy Dosing Schedules and Duration of Efficacy in Severe Asthma: A Pilot Study/M.G.** Trigiani, M.H.H. Khan, M. Watson, K.R. Chapman, Toronto, Canada, p.A4849
- 622 Single Center Outcomes of Biological Agents for Asthma and Effects on Weight/E.S.** Randhawa, J. Randhawa, K.V. Shenoy, Philadelphia, PA, p.A4850
- 623 Comparison of Video-Coached Remote Spirometry with In-Person Spirometry in Patients with Severe Asthma Participating in the NHLBI PrecISE Network/P.** Akuthota, A. Ivanova, T. Song, M. Castro, J.M. Gaffin, W. Phipatanakul, L.B. Bacharier, E.R. Bleecker, S.C. Erzurum, J.V. Fahy, B. Gaston, M. Kraft, E. Israel, W.C. Moore, M.C. Peters, S.J. Szeffler, M.E. Wechsler, S.E. Wenzel, S.R. White, J. Bach, R. K, p.A5781
- 624 Towards Clinical Remission in Severe Asthma: An Analysis of Patients Treated with Benralizumab in the Phase 3b ANDHI Trial/T.** Harrison, R.E. Louis, J. Kwiatek, P. Papeleu, D. Cohen, N. Keeling, R. Katial, Nottingham, United Kingdom, p.A5782

BEHAVIORAL • CLINICAL

POSTER DISCUSSION SESSION

C102 USING ANALOG OR TECHNOLOGY TOOLS TO EVALUATE AND INTERVENE TO IMPROVE HEALTHCARE DELIVERY2:15 p.m. - 3:45 p.m. **MOSCONE CENTER**

Room 3009/3011 (West Building, Level 3)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: S.R. Kher, MD, Boston, MA
V.G. Press, MD, MPH, ATSF, Chicago, IL

- 901 The Relationship Between Chronic Lung Disease Diagnosis and the Susceptibility to Using E-Cigarette Use Adults: The Moderation Effects of Behavioral and Environmental Factors/M.M. Alqahtani, P. Hendricks, Birmingham, AL, p.A4851**
- 902 Behavioral Impact on E-cig/Vape Use After a Brief 15-minute Education/A. Kandhola, T. Williams, N. Daher, D. Lopez, L. Tan, A. Alismail, Loma Linda, CA, p.A4852**
- 903 Use of Technology Among Patients with Chronic Obstructive Pulmonary Disease Who Currently Smoke: A Mixed Methods Evaluation/A.C. Melzer, H. Hagedorn, D. Nelson, A. Kaplan, J. Wisdom, M. Campbell, S.S. Fu, Minneapolis, MN, p.A4853**
- 904 Resource Use, Costs and Clinical Outcomes among COPD Patients Who Initiate Therapy with Tiotropium/Olodaterol or Fluticasone Furoate/Umeclidinium/Vilanterol/S. Sethi, S. Palli, L. Bengtson, E. Buysman, B. Clark, A. Sargent, A. Shaikh, G.T. Ferguson, Buffalo, NY, p.A4854**
- 905 The Relationship Between Self-Reported Productivity and Digitally-Captured Short-Acting Beta-Agonist (SABA) Use in Asthma/L. Kaye, V. Vuong, M.A. Barrett, E. Boers, T.W. Guilbert, San Francisco, CA, p.A4855**
- 906 Assessment of Medication Adherence and the Association with Healthcare Resource Utilization and Costs Among HealthPrize Enrolled COPD Patients/J. Elder, Ridgefield, CT, p.A4856**
- 907 An Implementation Study of AMAZE™: An Asthma Disease Management Platform/J. Alladina, P.P. Moschovis, H. Gandhi, D.D. Carstens, E. Bacci, K. Cutts, K. Coyne, T.B. Kinane, Boston, MA, p.A4857**
- 908 One Size Does Not Fit All: Adding Granularity to COPD Self-Management/M.V. Benzo, P. Novotny, R. Benzo, Rochester, MN, p.A4858**
- 909 Engagement in Health Coaching and Self-Management Abilities in COPD/M.V. Benzo, S. Kelpin, B. Werneburg, M. Clark, P. Novotny, J.P. Hoult, R. Benzo, Rochester, MN, p.A4859**
- 910 Rapid Retooling of a Community Health Worker Program for Asthma and COPD During the SARS CoV-2 Pandemic in New York City/R. Din, L. Simpson, C. Garcia, T. Mata, P. Ma, R. Gasner, S. Brown, A. Fisher, A. Kolbasovsky, R. Florsheim, J. Langton, J. Reibman, New York, NY, p.A4860**
- 911 The Cost-Effectiveness of Telehealth versus In-Person PAP Set-Up for Patients with Sleep Apnea/N. Jambulingam, A.M. Ryden, M.R. Zeidler, Los Angeles, CA, p.A4861**
- 912 Implementation of Standardized Care Path for COPD Exacerbations/U. Majumdar, C.F. Cuivillier Padilla, A. Attaway, U.S. Hatipoglu, Cleveland, OH, p.A4862**
- 913 “Give Us More of a Chance to Participate in Decision Making”: A Qualitative Study Evaluating a Treatment Decision Support Tool and Patients’ Decision Making Experiences/D.R. Sullivan, S.E. Golden, N.G. Disher, K.C. Vranas, K.B. Eden, N.F. Dieckmann, C.G. Slatore, Portland, OR, p.A4863**
- 914 Implementation of a Clinical Decision Support Tool for Improving Adherence to Lung Protective Ventilation Strategies/R.J. Logue, J.P. Bedruz, S. Cammarata, C. Tanabe, N.I. Rao, S. Klahn, D.B. Gotur, C.J. Cortes, A. Zainab, Houston, TX, p.A4864**
- 915 An Automated Population Screening Tool to Identify Depression Among People Living with Chronic Lung Disease Using Structured and Unstructured Clinical Data/G.E. Weissman, T.E. Kmiec, J. Puhl, N.S. Bishop, J.A. Silvestri, S. Sewell, A. Crane-Droesch, A. Summer, L.H. Ungar, R.A. Hubbard, R.L. Ashare, S.D. Halpern, J.L. Hart, Philadelphia, PA, p.A4865**
- 916 Prototype ORACLE Score Validation in NOVELTY: Predicted versus Observed Asthma Exacerbation Rates/S. Couillard, S. Peterson, T. Bengtsson, M. Van den Berge, D.B. Price, R.W. Beasley, M. Sadatsafavi, C. Janson, L. Belton, M. Fagerås, H. Muellerova, I.D. Pavord, Sherbrooke, Canada, p.A4866**
- 917 The BAN Score: A Novel Anthropometry Based Screening Tool for Obstructive Sleep Apnea/I. Aiyer, P.T. Taweeseedt, S.R. Surani, Blairstown, NJ, p.A4867**
- 918 Predictive Value of the STOP BANG Questionnaire and the Epworth Sleepiness Scale for the Diagnosis of Obstructive Sleep Apnea in a Resource Limited Setting/O.A. Ekeke, S.K. Dede, O.T. Ojo, O.B. Ozoh, Lagos, Nigeria, p.A4868**

- 919 Evaluation of Daily Laboratory-Based Acute Physiology Score, Version 2 (LAPS2) to Predict 30-Day In-Hospital Mortality Among Intensive Care Unit Patients/R. Kohn, N.E. Ingraham, S. Scott, B. Bayes, W. Wang, T. Tran, G.L. Anesi, G.E. Weissman, S.D. Halpern, R.A.A. Dudley, M.P. Kerlin, Philadelphia, PA, p.A4869**
- 920 A Novel Method for Assessing Goal-Concordant Care Among Patients with Serious Illness/C.L. Auriemma, A. Song, J. Han, A. Bain, L. Walsh, S.D. Halpern, K.R. Courtright, Philadelphia, PA, p.A4870**
- 921 Use of the Electronic Health Record to Determine Nurse-Patient Assignments in the Intensive Care Unit/K.A. Riman, B.S. Davis, J.B. Seaman, J.M. Kahn, Pittsburgh, PA, p.A4871**
- 922 Big Data Approach to Predicting Lung Cancer in a Younger, Real World Cohort/U. Chandran, J. Reps, R. Yang, A. Vachani, I. Kalsekar, Titusville, NJ, p.A4872**
- 923 Sensitivity and Specificity of the Visual Smartboard for the Recognition of Sepsis in Admitted Patients at the Hamilton General Hospital/J.M. Zapata -Canivilo, M. Jabora, M. Bradshaw, F. Sheikh, A. Fox-Robichaud, Hamilton, Canada, p.A4873**
- 924 Clinical Impact of a Sepsis Alert System Using the Epic Sepsis Prediction Model/A.R. Schertz, S.A. Smith, K.M. Lenoir, K.W. Thomas, Winston Salem, NC, p.A4874**
- 925 Bringing Respiratory Education for Improved Adherence and Technique Home Through E-Interventions for Self-Management (BREATHES) - Preliminary Results/P. Zajac, N. Munger, N. Kappel, V.G. Press, Chicago, IL, p.A4875**
- 102 Investigating Clinical Characteristics and Biomarkers of Sarcoidosis Patients with Obstructive Respiratory Physiology/D. Vanderhoef, N. Marka, N. Kapur, D.M. Perlman, M. Bhargava, Minneapolis, MN, p.A4877**
- 103 Diagnostic and Therapeutic Practices for Neurosarcoidosis Patients in the United States: A Nationwide Registry Study/B.N. Alzghoul, Y.S. Al-Zamer, M. Younis, S.S. Al-Horani, H.M. Alzghoul, M.B. Akhdar, G.N. Al-Majali, T. Shivas, T. Al-Hakim, M. Buchanan, Y. Zayed, D.C. Patel, Gainesville, FL, p.A4878**
- 104 Investigation of Efficacy of Antimycobacterial Therapy on Sarcoidosis FVC 3-6 Months After Treatment Cessation/W.P. Drake, B. Bellevia, D.A. Culver, R.P. Baughman, E.D. Crouser, G.R. Bernard, Nashville, TN, p.A4879**
- 105 Genotype-Phenotype-Relationships in Sarcoidosis/J. Muller-Quernheim, J.C. Schupp, S. Freitag-Wolf, B. Frye, G. Zissel, C. Grohé, J. Milanowski, P. Rottoli, S. Schreiber, A. Dempfle, Freiburg, Germany, p.A4880**
- 106 Role of Serum Soluble Interleukin-2 Receptor Level in the Diagnosis of Sarcoidosis: A Systematic Review and Meta-Analysis/S. Gupta, S.M. Farooqui, M. Parmar, R.P. Padappayil, S. Daouk, Oklahoma City, OK, p.A4881**
- 107 Sarcoidosis: Restriction Doesn't Tell the Entire Story/M. Sharp, A.V. Pulapaka, K.J. Psoter, M.N. Eakin, E.S. Chen, S.C. Mathai, A. Balasubramanian, N.A. Gilotra, J. Chrispin, R. Bascom, R.C. Bernstein, R.A. Wise, D.R. Moller, M.C. McCormack, Baltimore, MD, p.A4882**
- 108 Exploring the Presence of Eosinophils in Sarcoidosis/A. Pulapaka, E. Chen, K. Psoter, M. Eakin, A. Balasubramanian, N. Gilotra, J. Chrispin, S.C. Mathai, R. Bascom, R. Bernstein, R.A. Wise, D.R. Moller, M.C. McCormack, M. Sharp, Baltimore, MD, p.A4883**
- 109 Artificial Intelligence Powered Spirometry Enables Early Detection of Interstitial Lung Disease/K. Ray, T. Coenegrachts, S. Van Steenberghe, A. Halilovic, J. Maes, L. De Sadeleer, W.L.H. Janssens, M. Topalovic, Leuven, Belgium, p.A4884**
- 110 Screening for Interstitial Lung Disease Using Natural Language Processing/W. Leon, J.V. Pugashetti, J. Oldham, Sacramento, CA, p.A4885**
- 111 Time to Interstitial Lung Disease Diagnosis Is Accelerated in Tobacco Smokers/D.J. Douglas, N.M. Garcia, R. Strykowski, C.T. Lee, I. Ventura, R. Guzy, R. Jablonski, R. Vij, J.H. Chung, M.E. Streck, A.O. Adegunsoye, Chicago, IL, p.A4886**

CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C103 IT'S NOT JUST ABOUT IPF

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 9-10 (South Building, Exhibition Level)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: P.L. Molyneaux, MRCP(UK), MBBS, BS(Hons), London, United Kingdom
J. Kim, MD, MS, Charlottesville, VA
M.L. Salisbury, MD, MS, Nashville, TN

- 101 Differentiating Sarcoidosis from Healthy Subjects and Sarcoidosis Subtypes Using Immune Response and Metabolic Proteins/N. Kapur, S.M. Leach, D. Vanderhoef, B. Thyagarajan, E.D. Crouser, L.A. Maier, M. Bhargava, D.M. Perlman, Minneapolis, MN, p.A4876**

- 112 Clarifying the Pathway to an Accurate Diagnosis of Interstitial Lung Disease: Results from a Modified Delphi Survey in the US/A.** Hajari Case, S. Beegle, D.L. Hotchkin, T. Kaelin, H.J. Kim, A.J. Podolanczuk, M. Ramaswamy, C. Remolina, M.M. Salvatore, C. Tu, T.P. Whelan, J. De Andrade, Atlanta, GA, p.A4887
- 113 Phenotypic Characteristics of Fibrotic Hypersensitivity Pneumonitis by Machine Learning Consensus Clustering/T.** Petnak, W. Cheungpasitporn, C. Thongprayoon, T. Moua, Bangkok, Thailand, p.A4888
- 114 Radiologic Features and Clinical Outcomes in Usual Interstitial Pneumonia and Fibrotic Hypersensitivity Pneumonitis Guideline-Defined Patterns/D.** Marinescu, B. Zheng, A.W. Wong, C. Hague, N. Muller, J. Mayo, T. Sedlic, J. Ellis, J. Leipsic, A.-M. Bilawich, D. Murphy, J. Wright, A. Churg, C. Ryerson, Vancouver, Canada, p.A4889
- 115 Clinical Utility of a Standardized HP Exposure Questionnaire/H.** Barnes, D. Chambers, C. Grainge, T.J. Corte, S.A. Bastiampillai, S. Frenkel, G. Westall, H.R. Collard, I. Glaspole, Melbourne, Australia, p.A4890
- 116 Guideline-Defined Usual Interstitial Pneumonia and Fibrotic Hypersensitivity Pneumonitis Patterns and their Radiologic and Clinical Consensus Diagnosis Correlates in Multidisciplinary Discussion/D.** Marinescu, B. Zheng, A.W. Wong, C. Hague, N. Muller, J. Mayo, T. Sedlic, J. Ellis, J. Leipsic, A.-M. Bilawich, D. Murphy, J. Wright, A. Churg, C.J. Ryerson, Vancouver, Canada, p.A4891
- 117 Real-Life Performance of the New Hypersensitivity Pneumonitis Diagnostic Criteria in a Tertiary Referral Center/O.** Freund, T. Perluk, B. Tiran, T. Hershko, S. Ben Ami, A. Unterman, Tel Aviv, Israel, p.A4892
- 118 Comparison of CHEST and ATS/JRS/ALAT Guidelines in Diagnosing Hypersensitivity Pneumonitis/J.** Gu, Y.-C. Huang, Durham, NC, p.A4893
- 119 Total Surface Area of Pulmonary Cysts Better Predicts the Diffusion Capacity of the Lung By Carbon Monoxide Than Volume-Based Cyst Score in Patients with Lymphangioleiomyomatosis/B.P.** Matthew, A. Lebron, Y.-C. Chen, M. Pirooznia, S. Rollison, T.A. Worthy, A.M. Jones, P. Julien-Williams, M.Y. Chen, J. Moss, H. Wen, Bethesda, MD, p.A4894
- 120 Impact of Age, Menopause and mTOR Inhibitor Use on Spontaneous Pneumothoraces in Lymphangioleiomyomatosis/E.** Cortinas, E.J.-A. Koprás, J. Liu, N. Gupta, Cincinnati, OH, p.A4895
- 121 Susceptibility Loci for Fibrotic Interstitial Lung Disease and Development of Fibrosis 3 Months After Severe COVID-19 Infection/D.** Marinescu, A.W. Wong, A. Shah, C. Hague, D. Murphy, J.S.W. Yang, J. Johnston, J. Leung, C. Carlsten, C.J. Ryerson, Vancouver, Canada, p.A4896
- 122 Persistent Pneumonitis Post-COVID19: Description and Risk Factors/J.** Sellares Torres, S. Cuerpo Cardeñosa, F. Hernandez-Gonzalez, I. Cobo, M. Benegas, J.R. Francesqui Candela, A. Lopez-Giraldo, M.R. Faner, S. Suarez, V. Torres, A. Salazar, N. Soler, A.M. Muñoz, S. Prieto, A. Vlaga, L.Y. Bravo, E. Ruiz, M. Molina Molina J.A. Barbera, S. Marcelo, A. Soriano, J. Badia1, J. Garcá-a-Aymerich, O. Sibila, A. Agusti, Barcelona, Spain, p.A4987
- 123 A Phase 2 Trial of INOpulse in Patients with Sarcoidosis Associated Pulmonary Hypertension (SAPH) Requiring Supplemental Oxygen/E.L.** Parsley, R.P. Baughman, J.I. Stewart, S. Aryal, P.P. Fernandes, P. Shah, S.D. Nathan, Warren, NJ, p.A5783

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

C104 CHANGE IS HAPPENING AT A RAPID RATE: ARDS AND MECHANICAL VENTILATION, GO

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 3016/3018 (West Building, Level 3)

Viewing 2:15-2:45

Summaries/Discussion 2:45-3:45

Chairing: M.M. Hayes, MD, ATSF, Boston, MA
C.S. Calfee, MD, MSCR, San Francisco, CA
E. Fan, MD, PhD, Toronto, Canada

1001 Immunosuppression May Modify Performance of Biomarker-Based ARDS Phenotype Classifiers/H.M. Giannini, C.V. Cosgriff, T.A. Miano, A.R. Weisman, C. Ittner, B.J. Anderson, T.K. Jones, T.G. Dunn, R.S. Agyekum, M.G.S. Shashaty, C.S. Calfee, P. Sinha, J.P. Reilly, N.J. Meyer, Philadelphia, PA, p.A4898

1002 A Two-Hit Model of Sepsis Plus Hyperoxia Causes Lung Permeability and Inflammation/J.A. Bastarache, K. Smith, J.J. Jesse, N.D. Putz, J.E. Meegan, A.M. Bogart, K. Schaaf, S. Ghosh, C.M. Shaver, L.B. Ware, Nashville, TN, p.A4900

1003 Dynamic Interaction Between Positive End Expiratory Pressure and Pronation Therapy Among Progressive Stages of Lung Injury Using Electrical Impedance Tomography in a Pig Model of Acute Respiratory Distress Syndrome/K.T. Martin, Y. Xin, A. Lenart, M. Petrov, J. Shen, K. Rozenberg, L. Staelin, T. Kim, U. Sidhu, P. Shah, S. Bathula, K. Reutlinger, M. Staley, P. Delvecchio, J. Barakat, S. Sarfaraz-Khan, C.A. Morais, R. Rizi, L. Berra, M. Cereda, Philadelphia, PA, p.A4901

- 1004 Reversible Sepsis Induced Diaphragm Dysfunction in Mechanically Ventilated Patients/M.** Dres, M. Lecronier, B. Jung, N. Molinari, J. Pinot, S. Jaber, T. Similowski, A. Demoule, Paris, France, p.A4902
- 1005 Distribution of the Intensity of Spontaneous Breathing Effort During Mechanical Ventilation/M.A.** Iftikhar, J. Dianti, J. Wong, M. Long, S. Fard, M. Umer, L. Del Sorbo, N.D. Ferguson, E. Fan, E.C. Goligher, Toronto, Canada, p.A4903
- 1006 Trends in Patients at Risk for Prolonged Mechanical Ventilation, 2011-2019/A.** Law, W. Tian, Y. Song, J. Stevens, A.J. Walkey, Boston, MA, p.A4904
- 1007 Thoracic Fluid Content (TFC) Changes Predict Dynamic Fluid Responsiveness in Septic Shock Patients: Secondary Analysis of Fluid Responsiveness Evaluation in Sepsis Hypotension and Shock (FRESH)/I.S.** Douglas, J. Sahatjian, L. Hayward, D. Hansell, Denver, CO, p.A4905
- 1008 Negative-Pressure-Assisted Ventilation Improves Pulmonary Shunt in a Moderate-ARDS Preclinical Model/E.** Rohrs, T. Bassi, M. Nicholas, J. Wittmann, M. Ornowska, K. Fernandez, S. Reynolds, New Westminster, Canada, p.A4906
- 1009 Transvenous Diaphragm Neurostimulation Reduces Mechanical Power in a Ventilated Preclinical Moderate-ARDS Model/E.** Rohrs, T. Bassi, M. Nicholas, J. Wittmann, M. Ornowska, K. Fernandez, S. Reynolds, New Westminster, Canada, p.A4907
- 1010 Electrical Impedance Tomography Displays Ventilation and Perfusion Mismatch with Pronation in an Animal Model of Late-Stage Lung Injury/K.T.** Martin, Y. Xin, A. Lenart, M. Petrov, J. Shen, K. Rozenberg, S. Humayun, L. Staelin, T. Kim, U. Sidhu, P. Shah, S. Bathula, K. Reutlinger, M. Staley, P. Delvecchio, J. Barakat, S. Sarfaraz-Khan, C.A. Morais, R.R. Rizi, L. Berra, M. Cereda, Philadelphia, p.A4908
- 1011 ARDS Mediates the Association Between Early Plasma sRAGE Concentrations and Mortality in Sepsis/T.K.** Jones, J.P. Reilly, T.A. Miano, B.J. Anderson, A.R. Weisman, H.M. Giannini, T.G. Dunn, R.S. Agyekum, C.A. Ittner, M.G.S. Shashaty, R. Feng, N.J. Meyer, Philadelphia, PA, p.A4899
- 1012 WWOX Demonstrates Ancestry-Specific Genetic Associations with ARDS Risk in Sepsis/T.K.** Jones, R. Feng, J.P. Reilly, B.J. Anderson, H.M. Giannini, T.G. Dunn, R.S. Agyekum, C.V. Cosgriff, A.P. Turner, C.C. Ittner, A.R. Weisman, T.A. Miano, M.G.S. Shashaty, N.J. Meyer, Philadelphia, PA, p.A5785
- 1013 Individualized Treatment Effects of Bougie Vs Stylet for Tracheal Intubation/A.** Spicer, M.W. Semler, J.D. Casey, B. Driver, M.E. Prekker, L. Wang, W.H. Self, A.A. Ginde, S.A. Trent, D.B. Page, D.J. Vonderhaar, J.R. West, A.M. Joffe, S.H. Mitchell, K.C. Doerschug, J.P. Galliard, M.R. Whitson, C.R. Barnes, D. Russell, K. Gibbs, T.W. Rice, P. Sinha, M. M. Churpek; Madison, WI, p.A5784
- 1014 The Prognostic Value of Early Measures of the Ventilatory Ratio in the ARDS ROSE Trial/A.** Monteiro, S. Vangala, P. Sinha, K. Delucchi, E.R. Siegel, B.T. Thompson, K. Liu, A. Sapru, M.A. Matthay, Los Angeles, CA, p.A5786
- 1015 Plasma Metabolic Profiles of Hyperinflammatory and Hypoinflammatory ARDS May Implicate Glycolytic Shift/N.** Alipanah-Lechner, E. Mick, L.P.A. Neyton, A. Willmore, A. Leligdowicz, A. Jauregui, H. Zhuo, C.M. Hendrickson, A.D. Gomez, P. Sinha, K.N. Kangelaris, K. Liu, M.A. Matthay, A. Rogers, C.S. Calfee, San Francisco, CA, p.A5787

BASIC • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

C105 CIVIC CENTER: PULMONARY VASCULAR DISEASE

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 303-304 (South Building, Level 3)

Viewing 2:15-2:45

Summaries/Discussion 2:45-3:45

Chairing: T. Lahm, MD, ATSF, Denver, CO
L.A. Shimoda, PhD, Baltimore, MD
J. Aman, MD, PhD, Amsterdam, Netherlands

501 Serum Biomarker Levels and Mortality Across Subtypes of Pulmonary Arterial Hypertension/K. Hirsch, S. Nolley, D.D. Ralph, P.J. Leary, S.G. Rayner, Seattle, WA, p.A4909

502 The Impact of CircTREM1 in Peripheral Blood Monocyte Cells on Prognosis of Idiopathic Pulmonary Arterial Hypertension/P. Yuan, Y.-Y. Sun, Shanghai, China, p.A4910

503 Characteristics of Patients Treated with Balloon Pulmonary Angioplasty at a High-Volume Pulmonary Thromboendarterectomy Center: Single Center USA Experience/J. Yang, D.S. Poch, M. Bautista, T.M. Fernandes, K.M. Kerr, D.G. Papamatheakis, V.G. Pretorius, M.M. Madani, M. Patel, E. Mahmud, N.H. Kim, La Jolla, CA, p.A4911

504 Comparative Effectiveness of Inhaled Treprostinil vs Iloprost in Patients with Pulmonary Arterial Hypertension: An Analysis of U.S. Administrative Claims Data/C.D. Burger, B. Wu, P. Classi, K. Morland, Jacksonville, FL, p.A4912

- 505 **Assessing the Impact of a New Definition of Pulmonary Hypertension in a Cohort of Patients at 5,280 Feet/A.**
Longino, K.R. Mcleod, W. Cornwell, J. Messenger, T.M. Bull, Aurora, CO, p.A4913
- 506 **Selexipag Experience in Patients with Pulmonary Arterial Hypertension Associated with Connective Tissue Disease (PAH-CTD): Real-World Experience from EXPOSURE/S.P. Gaine, P. Escribano, A. Muller, R. Klement, S. Söderberg, T.J. Lange, Dublin, Ireland, p.A4914**
- 507 **Improved Survival for Systemic Sclerosis Associated Pulmonary Arterial Hypertension in the Last Decade/H.J. Hassan, M. Naranjo, T. Houston Harris, A. Balasubramanian, C. Simpson, T.M. Kolb, R. Damico, S.C. Mathai, P.M. Hassoun, Baltimore, MD, p.A4915**
- 508 **Hemodynamics and Survival in Systemic Sclerosis-Associated Pulmonary Hypertension/H.J. Hassan, M. Naranjo Tovar, T. Houston Harris, A. Balasubramanian, C. Simpson, T.M. Kolb, R.L. Damico, S.C. Mathai, P.M. Hassoun, Baltimore, MD, p.A4916**
- 509 **Cardiac Index: A Misleading Parameter in Risk Assessment of Systemic Sclerosis-Associated Pulmonary Arterial Hypertension/H.J. Hassan, M. Naranjo Tovar, T. Houston Harris, A. Balasubramanian, C. Simpson, T.M. Kolb, R.L. Damico, S.C. Mathai, P.M. Hassoun, Baltimore, MD, p.A4917**
- 510 **Evolving Metabolism Predicts Development of Pulmonary Arterial Hypertension in Systemic Sclerosis/C. Simpson, R. Harlan, A. Roux, S. Aja, D. Graham, A. Shah, L. Hummers, S.C. Mathai, P.M. Hassoun, R.L. Damico, Baltimore, MD, p.A4918**
- 511 **Deep Learning-Based Automated Workflow for the Interpretation of the Echocardiogram for the Presence of LV Dysfunction and Probability of Pulmonary Hypertension/J. Tromp, B. Claggett, M. Frost, M. Iversen, N. Prasad, M. Petrie, J. Ezekowitz, S. Solomon, Singapore, Singapore, p.A4919**
- 512 **Pulmonary Artery Calcification in Pulmonary Hypertension Due to Left Heart Disease/S. Liu, M.M. Kucherenko, P. Sang, Q. Li, J. Yao, I. Alesutan, J. Voelkl, C. Knosalla, W.M. Kuebler, Berlin, Germany, p.A4920**
- 513 **The Effects of Oxygenation on Acute Vasodilator Challenge in Pulmonary Arterial Hypertension/M. Rockstrom, T.M. Bull, Aurora, CO, p.A4921**
- 514 **Cardiac Effort Provides a Reproducible Remote Assessment of 6-Minute Walk Test/D. Lachant, A. Light, E. Kennedy, M. Lachant, R.J. White, Rochester, NY, p.A4922**

- 515 **Pre-Operative NT-pro-BNP Is a Strong Predictor of Pre-Operative Hemodynamics and Post-Operative Complications After Pulmonary Thromboendarterectomy in Patients with Operable Chronic Thromboembolic Pulmonary Hypertension/E.A. Keiler, K.M. Kerr, N.H. Kim, M.M. Madani, D.G. Papamatheakis, D.S. Poch, V. Pretorius, J.Z. Yang, T.M. Fernandes, La Jolla, CA, p.A4923**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

C106 FIRE TB LIVES ON

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 207-208 (South Building, Level 2)

- Viewing** **2:15-2:45**
- Summaries/Discussion** **2:45-3:45**
- Chairing:** M. Farhat, CM, MD, MSc, Boston, MA
P. Nahid, MD, MPH, San Francisco, CA
- 301 **A Nine-Gene Blood-Based Signature Meets the World Health Organization Target Product Profiles for Diagnosis of Active Tuberculosis and Predicting Progression from Latent to Active Disease/S. Gupta, A.M. Rao, M. Scott, V. Crudu, T.C. Rodwell, D. Catanzaro, A. Catanzaro, P. Khatri, Palo Alto, CA, p.A4924**
- 302 **Targeting PD-1 Rescues Protective T Cell Response to Promote Bacillary Clearance and Modulate Efflux Pump Expression of Mycobacterium Tuberculosis/D. Mitra, S. Chakraborty, A. Saurabh, P. Sanyal, Delhi, India, p.A4925**
- 303 **Prevention of Relapse in Category I Treated Pulmonary Tuberculosis Patients With and Without Vitamin D3 Supplementation: A Double Blinded Randomized Control Clinical Trial/S. Sinha, H. Thukral, I. Shareef, S. Dhooria, D. Behera, S. Bala, R. Sarin, R. Singla, B. Singh, R. Pandey, New Delhi, India, p.A4926**
- 304 **Using Iterative Codesign to Develop a Digital Adherence Technology for Tuberculosis Patients in Uganda/C.A. Berger, D. Patel, L. Ibarra, G. Somaratne, A. Kityamuwesi, J. Ggita, L. Kunihiro Tinka, A. Sanyu Nakate, A. Katamba, A. Miller, S. Burkot, P. Dewan, A. Sammann, A. Cattamanchi, San Francisco, CA, p.A4927**
- 305 **Accuracy of Oral Swab Testing Using Xpert MTB-RIF Ultra for Tuberculosis Diagnosis/A.O. Andama, T. Reza, D. Jaganath, J. Mulondo, F. Semitala, E. Wobudeya, M. Swomitra, W. Worodria, G. Whitman, G. Cangelosi, A. Cattamanchi, Kampala, Uganda, p.A4928**

- 306 **Comparative Results of QuantiFERON-TB Test and Skin Test with Recombinant Tuberculosis Allergen (Diaskintest) in Children/M.** Lozovskaya, N. Nikiforenko, A. Shorina, J. Yarovaya, E. Vasilyeva, L. Klochkova, Saint-Petersburg, Russian Federation, p.A4929
- 307 **The Changing Pattern of Disseminated Tuberculosis in Canada: a 30-Year Conventional and Molecular Epidemiologic Study/Y.** Huang, R. Long, G. Ferrara, A. Lau, Edmonton, Canada, p.A4930
- 308 **Pulmonary Fibrosis and Collagen Deposition in TB Disease/S.** Auld, P. Maenetje, N. Mofokeng, J. Daniel, S.B. Montes, S. Digumarthy, M. Le Fur, P. Caravan, M.-D.-T.W. Vangu, C. Dickens, T. Dix-Peek, C. Tiemessen, D. Schramm, G. Churchyard, R. Wallis, H. Kornfeld, G. Bisson, Atlanta, GA, p.A4931
- 309 **Latent TB Infection in the Outpatient Clinic/S.** Velamakanni, P.N. Krupka, D. Fraulino, S. Levine, Farmington, CT, p.A4932
- 310 **Successful, Concurrent Treatment of a Patient with Pulmonary Tuberculosis and Hepatitis C Infection Using Therapeutic Drug Monitoring/A.** Alexis, D. Ashkin, C.A. Peloquin, M. Ninneman, R. Rico Tresgallo, Miami, FL, p.A4933
- 311 **Could It Be...TB? Miliary Tuberculosis Complicated by Recurrent Pneumothoraces and Hemophagocytic Lymphohistiocytosis in an HIV Negative Patient/B.A.** Shukr, H. Abdulla, Detroit, MI, p.A4934
- 312 **Constrictive Pericarditis in Patient with Disseminated Isoniazid-Resistant Tuberculosis Without HIV Coinfection/M.A.** Izquierdo, J.R. Lutz Peña, J.L. Galindo Pedraza, J. Carrillo, Bogota, Colombia, p.A4935
- 313 **Chronic Alcohol Exposure Impairs Alveolar Macrophage Effector Function and Heme Oxygenase-1 Expression in Response to Mycobacterium Tuberculosis/G.W.** Wigger, D. Khani, S. Auld, X. Fan, D.M. Guidot, B.S. Staitieh, Atlanta, GA, p.A4936
- 314 **Definitions of Disseminated Tuberculosis Based on Mortality/Y.** Huang, R. Long, G. Ferrara, A. Doroshenko, A. Lau, Edmonton, Canada, p.A5788
- 315 **Nine Months of Delamanid, Linezolid, Levofloxacin, and Pyrazinamide for the Treatment of Fluoroquinolone-Sensitive Multidrug-Resistant Tuberculosis (Treatment Shortening of MDR-TB Using Existing and New Drugs, MDR-END): A Phase II/III, Multicenter, Random/J.-J.** Yim, J. Mok, M. Lee, Seoul, Korea, Republic of, p.A5789

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C107 IMMUNOCOMPROMISED LUNG DISEASE, HIV, AND BEYOND

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 203-204 (South Building, Level 2)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: B.S. Staitieh, MD, Atlanta, GA
E.F. Attia, MD, MPH, Seattle, WA

201 **Cytokine-Based Predictive Model of Pulmonary Function Trajectories in People Living with HIV/I.** Konstantinidis, T. Lovelace, R. DeSensi, P.V. Benos, K.M. Kunisaki, C. Rinaldo, A. Morris, S.M. Nourai, Pittsburgh, PA, p.A4937

202 **Factors Associated with Abnormal Lung Function in Adolescents With and Without HIV in Nairobi, Kenya/L.E.** Ellington, E. Maleche-Obimbo, M. Rosenfeld, T.E. West, C.J. McGrath, J. Lukorito, C. Njiru, A. Cagle, S. Eskander, G. Kicska, B.L. Guthrie, M.H. Chung, K.A. Crothers, E.F. Attia, Seattle, WA, p.A4938

203 **Multiple Pneumonia Episodes Are Associated with Worsening DLco Impairment in HIV-Infected Patients/A.** Bates, J. Fitzpatrick-Collins, K. Gardner, M. Zhang, M. Tercero Paz, S. Bhide, A. Jan, R. Abelman, K. Byanova, L. Huang, San Francisco, CA, p.A4939

204 **Outcomes of Patients with Systemic Sclerosis Admitted for Aspiration Pneumonitis Analysis of the National Inpatient Sample/J.M.** Pescatore, M.M. Rivera, W.D. Davis, E. Akuna, I. Asemota, J. Sanchez, S.-S. Kannayiram, Chicago, IL, p.A4940

205 **Airflow Limitation and Radiographic Evidence for Emphysema in People with HIV/K.** Harrington, B.S. Staitieh, J.A. Colasanti, M.L. Nguyen, J. Prevot, A. Aneja, K. Desai, V.C. Marconi, S. Auld, Atlanta, GA, p.A4941

206 **Comparison of Outcomes Among Solid Organ Transplant Recipients with SARS-CoV-2 Infection/K.M.S.A.** Nada, E. Polychronopoulou, G. Sharma, A.G. Duarte, Galveston, TX, p.A4942

207 **Impact of Non-Tuberculous Mycobacterial Infection on Bronchiolitis Obliterans Syndrome and Mortality in Lung Transplant Recipients/B.H.** Lashari, N. Van Der Rijst, N. Sullivan, T. Thakur, K. Shenoy, Philadelphia, PA, p.A4943

208 **Hypoxic Respiratory Failure Due to Pneumocystis Jiroveci and Cytomegalovirus Co-Infection in a Severely Immunocompromised Patient/B.** Chinai, D. Kim, New Brunswick, NJ, p.A4944

- 209 A Dangerous Double Act: A Case of Pulmonary Aspergillus and Nocardiosis Coinfection in an Orthotopic Heart Transplant Patient/Z. Chandler, R. Sharma, T. Deol, N. Najjar, C. Isache, Jacksonville, FL, p.A4945**
- 210 Isolated Low Diffusion Capacity (isoDLco) Is Associated with Breathlessness and Decreased Energy and Activity in People with HIV/K. Byanova, J. Fitzpatrick-Collins, S. Bhide, A. Jan, C.K. Farr, M. McGing, P. Hunt, K.A. Crothers, L. Huang, San Francisco, CA, p.A4946**
- 211 Evolving COVID-19 Outcomes Among Lung Transplant Recipients During the Second Surge in New York City, a Single Center Experience/K. Laothamatas, J. Hum, L.J. Benvenuto, L. Shah, H.S. Grewal, M. Pereira, J. Scheffert, M. Carroll, M. Nolan, G. Reilly, P. Lemaitre, B. Stanifer, J. Sonett, F. D'Ovidio, H.Y. Robbins, S.M. Arcasoy, New York, NY, p.A4947**
- 212 High Incidence and Mortality of COVID-19 Among Patients with Haematological Malignancies: An Observational Study in Santander, Colombia/Y. Ortiz-Martínez, J.E. Fajardo-Rivero, T. Mendoza-Herrera, C. Ruiz-González, D. Moreno-Moreno, Y. Masías-León, M. Mogollón-Vargas, A.J. Rodríguez-Morales, Bucaramanga, Colombia, p.A4948**
- 213 A Clinical and Diagnostic Challenge in a Lung Transplant Recipient with Overwhelming BK Viremia/M.T. Olson, B. Buddhdev, H. Mohamed, A. Arjuna, Phoenix, AZ, p.A4949**
- 214 Pseudomembranous Tracheobronchitis Due to Pseudomonas Aeruginosa in a Patient with Cystic Fibrosis During Lung Transplant Surveillance Bronchoscopy/K. Bruening, M. Malta, B.P. Young, R.J. Schilz, S.K. Avasarala, T. Panchabhai, Cleveland, OH, p.A4950**
- 215 Why the Transplanted Lung? A Case of Unilateral Covid-19 Pneumonia in the Setting of Single Lung Transplant/K.L. Smith, A. Quadri, M. Megri, Huntington, WV, p.A4951**
- 216 Disseminated Exophiala Infection in an Immunocompromised Patient/P. Shin, A.M. Gonzales, K.M.N. Le, Round Rock, TX, p.A4952**
- 217 Outcomes of SARS-CoV-2 Infection in Solid Organ Transplant Recipients/K.M.S.A. Nada, E. Polychronopoulo, G. Sharma, A.G. Duarte, Galveston, TX, p.A4953**
- 218 The Diagnostic Conundrum in an Immunocompromised Patient with Dyspnea/H. Jain, G. Singh, K. Gada, I.G. Amzuta, Syracuse, NY, p.A4954**
- 219 Disseminated Verruconis Gallopava Infection in a Patient with History of Renal Transplant and Hemophagocytic Lymphohistiocytosis (HLH)/R. Joshi, M. Narkhede, Birmingham, AL, p.A4955**
- 220 A Rare Case of Concurrent Chronic Pulmonary Aspergillosis and Pulmonary Coccidioidomycosis Infection in an Immunocompromised Host/S. Singh, H.B. Singh, E. Gill, M.A. Fayed, Fresno, CA, p.A4956**
- 221 HIV Associated COPD Is Characterized by Greater Small Airways Dysfunction on CT/S. Raju, A. Gearhart, N. Brown, M.B. Drummond, R.H. Brown, G.D. Kirk, M.C. McCormack, Baltimore, MD, p.A4957**
- 222 HIV Infection Upregulates EMAP II in Lungs of Humanized Mice/R. Elmergawy, A. Schneider, E. Suarez, C. Matthias, S. Almodovar, Indianapolis, IN, p.A4958**

CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

C108 THE IMPACT OF REHABILITATION ON MIND AND BODY

2:15 p.m. - 3:45 p.m.

Room 2009/2011 (West Building, Level 2)

Viewing 2:15-2:45

Summaries/Discussion 2:45-3:45

Chairing: C.Y. Tang, DPT, Penrith, Australia
M. Spruit, PT, PhD, Horn, Netherlands

701 Hospital Rehabilitation Using Elastic Bands Provides Early Improvements and Maintenance of Endothelial Function in Patients with Acute Exacerbation of Chronic Obstructive Pulmonary Disease (AECOPD): a Randomized Controlled Trial/N. Leonardi, E.Z. Kabbach, N.S. Schafausser, A.D. Heubel, A.C. Sentanin, V. Castello-Simoes, V.A.P. Di Lorenzo, A.B. Silva, R.G. Mendes, Sao Carlos, Brazil, p.A4959

702 Understanding the Use of a High Frequency Airway Oscillating Device for Patients with Chronic Obstructive Pulmonary Disease- A Qualitative, Focus Group Study/E. Daynes, L. Houchen-Wolloff, A.C. Barradell, N.J. Greening, S.J. Singh, Leicester, United Kingdom, p.A4960

703 Patient Perceptions of a Web-Based Physical Activity Intervention for COPD: A Mixed-Methods Study/S.A. Robinson, S. Sliwinski, M. Mongiardo, R.S. Wiener, S. Shimada, M. Moy, Bedford, MA, p.A4961

704 Prospective Out-Patient Study of Pulmonary Rehabilitation for Long COVID: Pilot Study/M.R. Windt, L. Flanagan, H. Mullaney, North Hampton, NH, p.A4962

705 Feasibility of Software Enabled Virtual Pulmonary Rehabilitation Program/S. Flynn, S. Cornelison, W. Pu, J.A. Ohar, Altadena, CA, p.A4963

- 706 Nasal Pillows Interface for Improved Breath Detection and Oxygen Delivery from Portable Oxygen Concentrators/A.R. Martin, C. Christianson, Edmonton, Canada, p.A4964**
- 707 Mindfulness in Motion: A Mindfulness Based Intervention in Pulmonary Rehabilitation to Improve Self-Efficacy in Chronic Respiratory Disease/K. Black, M. Klatt, J. Varelmann, N. Harrison, M. Mitchell, J. Caputo, S. Bretz, O. Gabram, P. Diaz, Columbus, OH, p.A4965**
- 708 Novel Characterization of Blood Oxygen Saturation During Home Exercise Over a 12-Week Mobile Health Intervention in Women with Lymphangioleiomyomatosis (LAM) and Relationship to Training Variables and Outcomes/M.B. Brown, M.L. Kelly, C. Child, H. Sizelove, P. Kim, M. Garvin, J. Williams, H. Cai, S. Luo, A. Wise, Y. Lynch, L.A. Ho, Seattle, WA, p.A4966**
- 709 A Randomised Control Study on the Effect of Pranayama in Improving Pulmonary Function in Children with Mild to Moderate Asthma/S. Ankana Halli Ramu, D. Vidyasagar, A. Krishnamoorthy, A. Panduranga, Bengaluru, India, p.A4967**
- 710 The Effect of Domiciliary High Flow Nasal Cannula Treatment on Walking Distance in Patients with Interstitial Lung Disease, a Pilot Study/U.M. Weinreich, C. Burchardt, J. Huremovic, Aalborg, Denmark, p.A4968**
- 711 YES-IPF Trial (Yoga Effect on Quality-of-Life Study Among Patients with Idiopathic Pulmonary Fibrosis): A Prospective Randomized Trial by Virtual Means During COVID-19 Pandemic 2020-2021 in Seattle, USA/S. Kadura, J. Bendiit, A. Anand, M. De Quadros, M. Hobson, M. Biswas, B. Collins, L. Ho, K. Brieske, K. Rinaldi, J. Muhamad, J. Hayes, C. Spada, M. Bairwa, G. Raghu, Seattle, WA, p.A4969**
- 712 Sirolimus Therapy Reduces the Rate of Decline in Exercise Capacity Measured by Cardiopulmonary Exercise Testing and Six Minute Walk Testing in Patients with Lymphangioleiomyomatosis (LAM)/A.M. Jones, A. Taveira-DaSilva, M. Stylianou, J. Moss, Bethesda, MD, p.A4970**
- 713 Self-Managed Music-Guided Exercise Intervention Improved Upper and Lower Extremity Muscle Strength and Adherence for ICU Survivors - A Pilot Randomized Controlled Study/Z. Liang, H. Hilary, K. Sena Moore, T.B.D. Ferreira, M. Ji, J. Signorile, Miami, FL, p.A4971**
- 714 One-Year Quality of Life and Neuromuscular Outcomes in a Clinical Trial of Early Mobilization/B.K. Patel, K.S. Wolfe, S.B. Patel, K. Dugan, C. Esbrook, A. Pawlik, M. Teele, C. Kemple, E. Zeleny, A. Pohlman, J.B. Hall, J.P. Kress, Chicago, IL, p.A4972**

- 715 Pulmonary Rehabilitation in Post-Covid-19 Patients Improves Lung Function and Mechanics and Skeletal Muscle, and Immune Response/M.A.R.B. Rangel, R. Moraes Ferreira, A. Silva Reis, R. Albertini, S. Cesar Ferreira, R. Cesar Ferreira Alves, W. Simoes Fernandes, C. Frison, R.P. Vieira, Sao Jose dos Campos, Brazil, p.A5790**

BASIC • TRANSLATIONAL

POSTER DISCUSSION SESSION

C109 PULMONARY FIBROSIS: MOVING FORWARD WITH GENETICS AND SEQUENCING

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER

Room 212-214 (South Building, Level 2)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: J. Kropski, MD, Nashville, TN
Y. Zhang, PhD, Pittsburgh, PA
S. Han, MD, MPH, Chicago, IL
Y. Aschner, MD, Aurora, CO
D.N. O'Dwyer, BM BCH, BMedSci, PhD, Ann Arbor, MI

401 MUC5B Is an Endotype-Dependent Expression Quantitative Trait Locus in Idiopathic Pulmonary Fibrosis/A.J. Ghosh, M. Moll, B.D. Hobbs, W. Kim, P. Castaldi, E.K. Silverman, M.H. Cho, I.V. Yang, C.P. Hersh, Syracuse, NY, p.A4973

402 The Idiopathic Pulmonary Fibrosis-Associated SNP rs35705950 Is Transcribed in a MUC5B Promoter Associated Long Non-Coding RNA (AC061979.1)/I. Enekwa, R. Neatu, G. Fois, M. Frick, S.A. Moschos, Newcastle-Upon-Tyne, Tyne & Wear, United Kingdom, p.A4974

403 Single Nuclei RNA Sequencing of Differentially Affected Regions in IPF Lungs Suggests a Central Role of Aberrant Basaloid Cells in Disease Progression/J.C. Schupp, G. Clair, T. Adams, J.E. McDonough, J. Flint, N. Kothapalli, L. De Sadeleer, A. Justet, J. Melchior, V. Paurus, H. Olson, G. Deluiliis, F. Ahangari, Z. Bar-Joseph, X. Yan, J. Ding, W.A. Wuyts, B. Vanaudenaerde, N. Kaminski, Hannover, Germany, p.A4975

404 Lung Transplantation for Idiopathic Pulmonary Fibrosis Enriches for Individuals with Telomere-Mediated Disease/J.K. Alder, R. Sutton, C. Iasella, S.M. Nouraei, R. Koshy, S. Hannan, E. Chan, X. Chen, Y. Zhang, M. Brown, I. Popescu, M. Veatch, S. Saul, A. Berndt, B. Methe, A. Morris, J.M. Pilewski, P. Sanchez, M.R. Morrell, S.D. Shapiro, K.O. Lindell, K. Gibson, D., p.A4976

- 405 Differential IPF Associated Gene Expression and DNA Methylation Changes in Human Airway and Parenchymal Fibroblasts/P. Rajasekar, A.L. Lagan, J. Patel, B. Barksby, R.A. Burgoyne, J. MacIsaac, D.T.S. Lin, S.T. May, M. Castellanos-Urbe, M.S. Kobor, T.-L. Hackett, A.J. Halayko, A. Knox, A. Fisher, L. Borthwick, R.L. Clifford, Nottingham, United Kingdom, p.A4977**
- 406 Interactive Web-Based Lung Cell Atlases Lower Barriers to Transcriptomic Data Sharing, Mining and Dissemination/C. Cosme Jr., J. Flint, N. Neumark, N. Kothapalli, A. Balayev, T. Adams, J.C. Schupp, J.E. McDonough, X. Yan, M. Sauler, N. Kaminski, New Haven, CT, p.A4978**
- 407 Multi-Omic Signatures of Sarcoidosis in Bronchoalveolar Lavage Cells/I.R. Konigsberg, N.W. Lin, S.-Y. Liao, C. Liu, K. MacPhail, M.M. Mroz, E.J. Davidson, L. Li, L.A. Maier, I.V. Yang, Aurora, CO, p.A4979**
- 408 Single-Cell Analysis of Airway and Alveolar-Derived Progenitors During Recurrent Injury-Repair/J. Kropski, C.L. Calvi, A.S. McCall, J.J. Gokey, T.S. Blackwell, Nashville, TN, p.A4980**
- 409 Epigenetic Upregulation of KCNMB1 and BK Channel Activity in Systemic Sclerosis-Related Interstitial Lung Disease/A. Scruggs, E. Tsou, J. Varga, S. Huang, Ann Arbor, MI, p.A4981**
- 410 A CD44/Brg1/PRMT5 Nuclear Complex Epigenetically Represses the RBL1 Tumor Suppressor Gene Promoting IPF Mesenchymal Progenitor Cell Self Renewal/A. Jbeli, L. Yang, H. Xia, P.B. Bitterman, C.A. Henke, Minneapolis, MN, p.A4982**
- 411 Epigenetic Regulation by O-GlcNAc Alters Anti-Fibrotic Gene Expression in IPF Fibroblasts/Q. Wu, J. Zhou, E.S. Helton, S. Vang, J.W. Barnes, Y.Y. Sanders, Birmingham, AL, p.A4983**
- 412 LungGENIE: The Lung Gene Expression and Network Imputation Engine/A.J. Ghosh, J. Hess, C.P. Hersh, S. Glatt, Syracuse, NY, p.A4984**
- 413 Fibrosome: Single-Cell RNAseq Integration Identifies Common Cell Types in the Fibrotic Milieu Across Different Organs/S. Poli De Frias, L.D. Quesada, F. Poli, D. Celli, W. Roque, Miami Beach, FL, p.A4985**
- 414 A Probabilistic Graphical Model for Understanding Cellular Dynamics in Idiopathic Pulmonary Fibrosis Progression/J. Ding, Y. Zheng, J.C. Schupp, T. Adams, F. Ahangari, X. Yan, P. Hasen, Z. Bar-Joseph, L. De Sadeleer, J.E. McDonough, B.M. Vanaudenaerde, W.A. Wuyts, N. Kaminski, Montreal, Canada, p.A4986**
- 415 Multiomic Sequencing Implicates TWIST1 as a Key Positive Regulator in Idiopathic Pulmonary Fibrosis Myofibroblast Differentiation/E. Valenzi, H. Bahudhanapati, T. Tabib, J. Tan, J. Sembrat, D.J. Kass, R.A. Lafyatis, Pittsburgh, PA, p.A4987**
- 416 Non-Fibrotic Central Lung Gene Expressions Associate with Myofibroblasts Activity in Idiopathic Pulmonary Fibrosis/Y. Huang, R. Guzy, S.F. Ma, J. Kim, C. Bonham, C.M. Hogaboam, A.I. Sperling, I. Noth, Charlottesville, VA, p.A4988**
- 417 Multi-Omics Integration Reveal Sex and Strain Based Differences in Mouse Lung/J. Fernandes, K. Dunigan-Russell, H. Zhong, V. Lin, M. Silverberg, P. Vitiello, V. Tran, D.P. Jones, L.K. Rogers, T.E. Tipple, Oklahoma City, OK, p.A4989**
- 418 Toll-Like-Receptor 5 Protects Against Pulmonary Fibrosis by Reducing Lung Dysbiosis/Y. Sakamachi, A. Solis, C.G. Johnson, S. Hussain, D.N. O'Dwyer, S. Mehta, C. Trempus, S.Y. Thomas, P. Karmaus, D.A. Schwartz, N. Kaminski, Y. Zhang, I.V. Yang, P.L. Molyneaux, D. Kass, K.F. Gibson, S. Garantziotis, Research Triangle Park, NC, p.A4990**
- 419 Deconvolution of Spatial Transcriptomic Allows to Predict the Spatial Location of Each Cell Type of Interest in the Fibrotic Lung/A. Justet, T. Adams, A. Balayev, T. Bärnthaler, C. Cosme Jr, J.E. McDonough, J. Flint, J.C. Schupp, A. Zhao, J. Deluiliis, F. Ahangari, X. Yan, N. Kaminski, New Haven, CT, p.A4991**
- 420 Single-Cell Sequencing Analysis of Allograft-Derived Mesenchymal Cells Reveals Distinct Fibrotic Gene Expression Differences/L. Lu, N.M. Walker, J. Welch, V.N. Lama, Ann Arbor, MI, p.A4992**
- 421 Basal-Like Cells Cultured from Peripheral Fibrotic Lung Tissue Show Transcriptomic Differences to Airway Basal Cells/P. Khan, S. Blumer, J. Roux, S. Savic, L. Knudsen, D.D. Jonigk, M.P. Kuehnel, M. Tamm, K.E. Hostettler, Basel, Switzerland, p.A4993**
- 422 Resolving the Cellular Programs of Lung Aging in Pulmonary Fibrosis at Single-Cell Resolution/J. Schniering, M. Lehmann, M. Ansari, M.C. Melo Narvaez, C.H. Mayr, Y. Chen, N.J. Lang, A. Agami, B. Hooshiar Kashani, I. Angelidis, M. Koenigshoff, F. Theis, H.B. Schiller, Munich, Germany, p.A5791**
- 423 Construction and Validation of the Prognostic Value of Lipid Related Microenvironment Gene Signature in Idiopathic Pulmonary Fibrosis/J. Yang, Z. Li, Xinxiang, China, p.A5792**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C110 BRIDGING THE GAPS: SLEEP, NIV, PULMONARY DISEASE, AND COMORBIDITIES

2:15 p.m. - 3:45 p.m.

MOSCONE CENTER


Room 2022/2024 (West Building, Level 2)

Poster Viewing 2:15-2:45

Discussion 2:45-3:45

Chairing: H. Schotland, MD, ATSF, New York, NY
 J. Jun, MD, Baltimore, MD
 R. Schwab, MD, Philadelphia, PA

- 801 Lowering PaCO₂ Using Non-Invasive Ventilation Is Associated with Lower Mortality in Chronic Hypercapnic Respiratory Failure/J.V. Jimenez Ceja, K. Quigg, M. Wilson, W.W. Labaki, P. Choi, Ann Arbor, MI, p.A4994**
- 802 Effect of a Ketogenic Diet on Gas Exchange in Obesity Hypoventilation Syndrome/A. Osman, C. Gu, D. Duan, B. Barron, M. Sowho, D.Y. Kim, L.V. Pham, J.C. Jun, Baltimore, MD, p.A4995**
- 803 Changes in Bicarbonate in Patients at Risk for Obesity Hypoventilation Undergoing Bariatric Surgery/B.W. Locke, C. Addison, S. Mishra, K.M. Sundar, Salt Lake City, UT, p.A4996**
- 804 Pupillary Parasympathetic and Sympathetic Dysfunction in a Longitudinal Congenital Central Hypoventilation Syndrome (CCHS) Cohort from Infancy to Young Adulthood: Potential Biomarker for Intervention Trials/A. Fadl-Alla, M. Winston, C. Rand, T. Chung, K. Reed, L. Kitsis, C. Brogadir, I. Khaytin, S.M. Slattery, D.E. Weese-Mayer, Chicago, IL, p.A4997**
- 805 Long Term Trends in Non-Invasive Ventilation Parameters from Remote Monitoring Amongst Patients with Neuromuscular and Thoracic Restrictive Disease/J.E. Orr, J. Velazquez, K.P. Chen, C. Hawkins, C. Konersman, J. Ravits, D. Lesser, R. Bhattacharjee, A. Malhotra, R.L. Owens, La Jolla, CA, p.A4998**
- 806 Respiratory Arousal Threshold Among Patients with Isolated Sleep Apnea and with Comorbid Insomnia (COMISA)/M. Yanagimori, M.D. Fernandes, M.L. Garcia, P.G. Scudeller, C.R.R. Carvalho, G. Lorenzi-Filho, P. Genta, Sao Paulo, Brazil, p.A4999**
- 807 Insomnia Among Hospitalized Patients and Association with Objective Sleep and Clinical Outcomes/J.M. Neborak, J.C. Rojas, M. Byron, S. Goyal, D.O. Meltzer, V.G. Press, V.M. Arora, Chicago, IL, p.A5000**
- 808 Fatigue in People Living with HIV and Relationship with Sleep Duration, Sleep Timing, and Sleep Disordered Breathing/J. Velazquez, J.E. Orr, C.N. Schmickl, R. Brena, N.-O.A. Bosompra, P.N. DeYoung, A. Malhotra, M. Karris, S. Ancoli-Israel, R.L. Owens, La Jolla, CA, p.A5001**
- 809 Role of Gastroesophageal Reflux and Sleep Disordered Breathing (SDB) in Outcomes of Idiopathic Pulmonary Fibrosis (IPF)/B. Ellis, D. Morris, A. Peterson, D. Pegelow, L. Manietta, M. Borg, S.J. Halliday, R. Gangnon, A. Malik, N.K. Sandbo, M. Teodorescu, Madison, WI, p.A5002**
- 810 The Role of Pulmonary Dysfunction and Sleep Disordered Breathing (SDB) in the Cardiovascular Dysfunction of Patients with Idiopathic Pulmonary Fibrosis (IPF)/D. Morris, A. Peterson, D. Pegelow, L. Manietta, B. Ellis, M. Borg, S. Nagle, S. Halliday, A. Malik, N.K. Sandbo, R. Gangnon, C. Francois, M. Teodorescu, Madison, WI, p.A5003**
- 811 Air Pollution and Control of Obstructive Sleep Apnea by Positive Airway Pressure Therapy: A Retrospective Community-Based Repeated Measures Longitudinal Observational Study/T. Kendzerska, M. Szyszkowicz, J. Villa Alvarez, R. Mallick, C. Carlsten, N. Ayas, C. Laratta, B. Jovic, J. Orach, M. Smith-Doiron, J. Andrade, R. Dales, Ottawa, Canada, p.A5004**
- 812 Sleep and Circadian Rest-Activity Pattern of Critical COVID-19 Survivors in the Long-Term: A 6-Month Follow-Up Study/A. Targa, I. Benítez, A. Moncusí-Moix, R. Vaca, C. Gort-Paniello, O. Minguez, S. Santistevé, P.M. Carmona Arias, G. Torres, G.P. Labarca, J. Caballero, C. Barberà, A. Torres, J. González, D. De Gonzalo-Calvo, F. Barbe, Lleida, Spain, p.A5005**
- 813 Duration of Intermittent Hypoxia Impacts Metabolic Outcomes and Severity of Murine NAFLD/L. Barnes, A. Sanchez Azofra, E.A. Moya, M. Zhang, A. Malhotra, O.A. Mesarwi, La Jolla, CA, p.A5006**
- 814 Association of Obstructive Sleep Apnea with Mechanical Ventilation in Hospitalized SARS-CoV-2 Patients/C.-É. Martel-Pelletier, A. Bartholi, S. Benchekroun, E. Melancon, H.T. Wang, A.-C. Labbé, C. Lavallée, X. Marchand-Sénécal, M. Brosseau, Montreal, Canada, p.A5793**

 **ATS 2022**
INTERNATIONAL CONFERENCE
 San Francisco, CA

Wednesday Morning, May 18

[Click Here to Access the Program Itinerary and Add Wednesday Sessions and Presentations to Your Calendar](#)

MEET THE EXPERTS

CME Credits Available: 1

 Pre-registration and additional fees required. Attendance is limited.

Member: \$100

LMIC Member: \$70.

7:00 a.m. - 8:00 a.m. MOSCONE CENTER

- ME43 DIAGNOSTIC EVALUATION OF ILD PATIENTS**
 S. Sood, MD, MS, Philadelphia, PA
Room 52/54/56 (South Building, Lower Mezzanine)
- ME44 SLEEP DISORDERED BREATHING IN HEART FAILURE: PROPER DIAGNOSIS AND TREATMENT**
 W. Healy, MD, Augusta, GA
Room 58/60 (South Building, Lower Mezzanine)
- ME45 MALIGNANT PLEURAL DISEASES: TRANSLATIONAL RESEARCH TO CLINICAL MANAGEMENT**
 W. Hadid, MD, Augusta, GA
 G. Stella, MD, PhD, Pavia, Italy
 S. Islam, MD, Augusta, GA
Room 70/72 (South Building, Lower Mezzanine)
- ME46 BRONCHIECTASIS: UPDATE ON GUIDELINES AND NEW THERAPEUTICS**
 A.E. O'Donnell, MD, WASHINGTON, DC
 G. Tino, MD, ATSF, Philadelphia, PA
Room 74/76 (South Building, Lower Mezzanine)

10:00 a.m. - 11:00 a.m. MOSCONE CENTER

- ME47 MANAGEMENT OF NON-CF BRONCHIECTASIS: TARGETING INFLAMMATION AND INFECTION**
 C.M. Bojanowski, MD, New Orleans, LA
Room 50/62 (South Building, Lower Mezzanine)
- ME48 PATIENT SELECTION FOR BRONCHOSCOPIC LUNG VOLUME REDUCTION FOR EMPHYSEMA**
 D.-J. Slebos, MD, PhD, Professor, Groningen, Netherlands
Room 52/54/56 (South Building, Lower Mezzanine)
- ME49 SLEEP HEALTH: A NEW FRONTIER OF HARM FROM AIR POLLUTION**
 S. Bose, MD, MPH, NY, NY
Room 58/60 (South Building, Lower Mezzanine)
- ME50 ASSESSING RV FUNCTION USING PRESSURE-VOLUME LOOPS: PRECLINICAL AND CLINICAL APPROACHES**
 R.R. Vanderpool, PhD, Tucson, AZ
 K. Tello, MD, Giessen, Germany
 A.L. Frump, MS, PhD, Indianapolis, IN
 J.M. Elinoff, MD, Bethesda, MD
Room 70/72 (South Building, Lower Mezzanine)
- ME51 INTERSTITIAL LUNG DISEASE RADIOLOGY: INTERPRETING IMAGES TO NARROW YOUR DIFFERENTIAL DIAGNOSIS**
 S. Dua, MBBS, ATSF, New York, NY
Room 74/76 (South Building, Lower Mezzanine)

11:30 a.m. - 12:30 p.m. MOSCONE CENTER

- ME52 MYOSITIS-ASSOCIATED ILD: MANAGING DIAGNOSTIC AND TREATMENT CHALLENGES**
 R. Hallowell, MD, Boston, MA
Room 50/62 (South Building, Lower Mezzanine)
- ME53 IMMUNE CHECKPOINT INHIBITION IN LUNG CANCER PATIENTS CARRYING COVID-19-RELATED FIBROSIS**
 G. Stella, MD, PhD, Pavia, Italy
Room 52/54/56 (South Building, Lower Mezzanine)
- ME54 INCREASING COMPLEXITY OF LUNG TRANSPLANT CANDIDATES: FROM ADVANCED AGE TO BRIDGE FROM ECMO**
 L. Zaffiri, MD, PhD, Durham, NC
Room 58/60 (South Building, Lower Mezzanine)
- ME55 DRUG-INDUCED SARCOIDOSIS**
 A.S. Morantzou, MD, New York, NY
Room 70/72 (South Building, Lower Mezzanine)
- ME56 PREHOSPITAL ANTIBIOTICS FOR SEPSIS: EVIDENCE, CHALLENGES, AND RISKS**
 C. Polito, MD, MS, Atlanta, GA
 D.C. Scarpis, MD, PhD, Toronto, Canada
Room 74/76 (South Building, Lower Mezzanine)

YEAR IN REVIEW

CME Credits Available: 1.5

MOC Points Available: .25

D1 CLINICAL YEAR IN REVIEW 4

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Hall E (North Building, Exhibition Level)

Target Audience

Pulmonary, critical care and sleep providers. The program will discuss general topics of interest to a broad group of providers, inside and outside of these subspecialties. The program is relevant to not only clinicians, but also to researchers and administrators.

Objectives

At the conclusion of this session, the participant will be able to:

- apply new clinical research knowledge to clinical practice;
- learn new findings about key conditions in pulmonary, critical care and sleep;
- have new strategies to manage the care of common conditions in pulmonary, critical care, and sleep.

Clinical Year in Review sessions will include core topics in pulmonary, critical care, and sleep medicine. The goal of the session is to discuss critical state of the art topics and evolving concepts. The learner will be exposed to a carefully curated review of the current literature by emerging leaders in the field. After the course, participants will better understand novel concepts in each specific domain that we hope will translate to improved patient care.

Chairing: J.L. Gomez, MS, MD, ATSF, New Haven, CT
R.J. Shah, MD, MSCE, San Francisco, CA
J.C. Ferreira, MD, PhD, Sao Paulo, Brazil

8:15 Post-ICU Syndromes/Long COVID

K.J. Haines, PhD, BHS, Melbourne, Australia

8:37 Medical Education

S.M. Kassutto, MD, Philadelphia, PA

9:00 Interventional Pulmonology

J. C. Cicens, MD, Cleveland, OH

9:22 ARDS

K.S. Mathews, MD, MPH, MSCR, New York, NY

CLINICAL • TRANSLATIONAL**CLINICAL TOPICS IN PULMONARY MEDICINE**

CME Credits Available: 1

D2 NOVEL INSIGHTS IN ALPHA-1 ANTITRYPSIN DEFICIENCY

Assemblies on Clinical Problems; Respiratory Cell and Molecular Biology

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 7-8 (South Building, Exhibition Level)

Target Audience

clinicians and researchers

Objectives

At the conclusion of this session, the participant will be able to:

- describe new insights into alpha-1 antitrypsin deficiency pathogenesis;
- more appropriately diagnose and manage AATD to improve quality of life or health of the patient;
- define new strategies to treat alpha-1 antitrypsin deficiency.

Alpha-1 antitrypsin deficiency is a genetic condition that results in both a toxic gain-of-function hepatic insult as well as a loss-of-function defect leading to chronic lung disease. This forum will report on new insights into mechanisms of disease pathogenesis, explore new biological and imaging-based biomarkers of disease, detail new therapeutic areas, highlight unique sub-phenotypes, and provide guidance on management of pulmonary and hepatic sequelae of AATD.

Chairing: J.M. Wells, MD, MSPH, Birmingham, AL
C.H. Wendt, MD, ATSF, Minneapolis, MN
M.P. Goldklang, MD, New York, NY

8:15 Patient Perspective: What I'd Like to Know about Alpha-1

J. Hagstrom, B.S., Westchester County, NY

8:20 Proteolysis Meets Cellular Senescence in Alpha-1 with Accelerated Lung Decline

K.A. Serban, MD, Denver, CO

8:40 The Diversity of Pathogenic SERPINA1 Variants and the Influence of Genotype

V.E. Ortega, MD, PhD, ATSF, Scottsdale, AZ

8:53 Modeling ZAAT-Driven Gain-of-Function Toxicity in MZ Heterozygous and ZZ Homozygous Patient iPSC Derivatives

J. Kaserman, MD, Boston, MA

9:06 Advances in Biomarkers: From Blood to Imaging

M.P. Goldklang, MD, New York, NY

9:19 Beyond the Protease-Antiprotease Hypothesis: Modulating Inflammation in AATD
O. Mcelvaney, MD, PhD, MRCPI, Dublin, Ireland

9:32 Novel Therapeutic Approaches in AATD
J.M. Wells, MD, MSPH, Birmingham, AL

CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1

D3 CONUNDRUMS IN CTD-ILD

Assemblies on Clinical Problems; Allergy, Immunology and Inflammation

8:15 a.m. - 9:45 a.m. MOSCONE CENTER

Room 3-4 (South Building, Exhibition Level)

Target Audience

Clinicians caring for patients with CTD-ILD and clinical researchers interested in advancing the field

Objectives

At the conclusion of this session, the participant will be able to:

- gain better understanding of the indications for screening HRCTs in subjects with CTD at risk for ILD;
- understand the role of the anti-fibrotics and anti-inflammatories in the management of CTD-ILD and integrate information into the treatment of these patients;
- recognize and learn the benefits and hurdles to the implementation of multi-center randomized clinical trials in CTD-ILD.

This session will address some of the common conundrums and debates that exist in the field of CTD-ILD by clinicians and will shed light on these critical issues to help clinicians better care for patients suffering from CTD-ILD.

Chairing: J. Solomon, BS, MD, Denver, CO
L. Kawano-Dourado, MD, Sao Paulo, Brazil

8:15 The Emerging Field of CTD-ILD
J. Solomon, BS, MD, Denver, CO

8:20 A Patient's Perspective
S. Okuno, San Diego, CA

8:25 Screening in CTD-ILD: When and For Whom
L. Kawano-Dourado, MD, Sao Paulo, Brazil

8:41 CTD-ILD: Do I Need to Biopsy?
A.O. Adegunsoye, MD, MS, Chicago, IL

8:57 Antifibrotics vs Immunosuppression in CTD-ILD
K.A.M. Johansson, MD, MPH, ATSF, Calgary, Canada

9:13 CTD-ILD During COVID-19: Management and Vaccination
P.M. George, MBBS, BSc, PhD, FRCP, London, United Kingdom

9:29 Trial Design in CTD-ILD: Pearls and Pitfalls
S.K. Danoff, MD, PhD, ATSF, Baltimore, MD

This session and the International Conference are supported by independent medical educational grants from

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BEHAVIORAL • CLINICAL

CRITICAL CARE TRACK

CME Credits Available: 1

D4 BEDSIDE TO WEBSITE: ICU TELEMEDICINE MEETING THE DEMANDS OF THE CHANGING TIMES

Assemblies on Critical Care; Behavioral and Health Services Research; Nursing

8:15 a.m. - 9:45 a.m. MOSCONE CENTER

Room 3020/3022/3024 (West Building, Level 3)

Target Audience

Physicians, nurses and allied health professionals in all stages of their careers who care for critically ill patients. The topics are also appropriate for researchers in critical care and health services research

Objectives

At the conclusion of this session, the participant will be able to:

- understand the evolution to current state of ICU telemedicine including its use during the COVID-19 pandemic;
- recognize the controversy surrounding effectiveness of ICU telemedicine;
- discuss metrics for success and sustainability of ICU telemedicine and future directions.

ICU telemedicine is an innovation that seeks to improve access to quality critical care and mitigate the intensivist shortage that has become most apparent during the COVID-19 pandemic. Hospitals of all sizes and scopes have come to adopt ICU telemedicine over the last decade. More recently, the predictions of ICU telemedicine growth in the post-pandemic world is expected to rise at a rate of 20% annually from 2020-2026. The goal of this session is to provide attendees of the international conference a multi-faceted understanding of ICU telemedicine. After attending this session, participants will be better equipped to objectively evaluate if ICU telemedicine is a feasible and appropriate solution for their individual hospital or hospital system and be well informed regarding knowledge gaps in the field.

Chairing: N.R. Nadig, MD, MSci, ATSF, Chicago, IL
D.W. Ford, MD, Charleston, SC
T.G. Buchman, MD, PhD, Atlanta, GA

8:15 Welcome and Introductions
D.W. Ford, MD, Charleston, SC

- 8:20 Evolution and Effectiveness of ICU Telemedicine and Its Use During the COVID-19 Pandemic**
T. Buchman, MD, PhD, Atlanta, GA
- 8:30 ICU Telemedicine and Healthcare Disparities**
N.R. Nadig, MD, MSci, ATSF, Chicago, IL
- 8:40 The Multidisciplinary Aspects of ICU Telemedicine and Impact on Education**
R. Levine, MD, Miami, FL
- 8:50 Strategies for Successful ICU Telemedicine Implementation and Future Research Needs**
K.C. Vranas, MD, Portland, OR
- 9:00 Return on Investment From ICU Telemedicine and Sustainability**
I. Kopec, MD, St. Louis, MO
- 9:10 Can Palliative Care Be Provided via ICU Telemedicine?**
M.D. Silva, MD, New York, NY
- 9:20 The Future of ICU Telemedicine**
D.W. Ford, MD, Charleston, SC
- 9:30 Panel Discussion/Questions and Answers**
N.R. Nadig, MD, MSci, ATSF, Chicago, IL

BEHAVIORAL • CLINICAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1

D5 THE IMPACT OF FLAVORED NICOTINE PRODUCTS: BIOLOGY, BEHAVIOR AND THE “BAN”

Assemblies on Behavioral and Health Services Research; Environmental, Occupational and Population Health; Thoracic Oncology; Tobacco Action Committee

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 2014/2016 (West Building, Level 2)

Target Audience

Physicians, nurses, trainees, all healthcare professionals, policymakers, public health officials

Objectives

At the conclusion of this session, the participant will be able to:

- understand the role flavored tobacco products have in increasing product uptake and use and in increasing tobacco-related health disparities;
- understand how flavorings directly contribute to the toxic effects of tobacco products, including susceptibility to infection;
- gain insight into the new FDA policy banning flavored tobacco products.

Tobacco dependence continues to be the greatest preventable risk factor for many morbidities, contributing to both the etiology of and worsening of many illnesses. Product flavorings have contributed significantly to tobacco-related health disparities and youth uptake of vaping. This session will discuss the scientific data underlying the restrictions on tobacco product flavoring including implications for personal health and smoking/vaping behavior. The session will conclude with an update from the Director of the FDA Center for Tobacco Products about the new legislation and expected benefits for health.

Chairing: M. Eakin, PhD, Baltimore, MD
I. Jaspers, PhD, Chapel Hill, NC

- 8:15 Biologic Effects of Flavorings: E-Cigs and Mentholated Tobacco**
E. Omaiye, BS, Riverside, CA
- 8:30 Emissions From Novel Electronic Nicotine Delivery Systems and Vulnerability to Airway Infection**
J.M. Grigg, MD, London, United Kingdom
- 8:45 Racial Disparities in Tobacco-Related Diseases: The Role of Menthol**
E.R. Neptune, MD, ATSF, Baltimore, MD
- 9:00 Effects of Flavoring on Tobacco Product Use and Uptake: Implications for Local Policy**
D.J. Upton, MD, MA, ATSF, Albuquerque, NM
- 9:15 FDA Perspective on Flavored Tobacco Products**
P. Callahan-Lyon, MD, Spring, MD
- 9:30 Discussion**

CLINICAL • TRANSLATIONAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1

D6 OBESITY-RELATED ASTHMA: TRANSLATING INTO THE CLINIC

Assemblies on Allergy, Immunology and Inflammation; Clinical Problems; Environmental, Occupational and Population Health; Pediatrics; Respiratory Structure and Function; Section on Genetics and Genomics

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 3006/3008 (West Building, Level 3)

Target Audience

Primary care providers and pulmonary specialists taking care of children and adults with asthma. Basic, translational, and clinical scientists whose research focuses on improving our understanding of obese asthma or the management of this phenotype

Objectives

At the conclusion of this session, the participant will be able to:

- better understand the heterogeneity of obese asthma, including subphenotypes and endotypes related to atopy, systemic inflammation, and metabolic dysregulation; and their impact on asthma management;
- describe and highlight the importance of lifestyle modifications, medical, and surgical weight loss in the management of patients with asthma and obesity;
- discuss new developments in the management of obesity-related asthma and gaps in knowledge to be addressed by ongoing and future research.

Obesity is associated with increased asthma risk and morbidity. In this session, we will review some of the underlying mechanisms of obese asthma, and the importance of recognizing that this complex phenotype is comprised of different sub-phenotypes and endotypes. We will then examine different approaches for the management of patients with obesity and asthma, including lifestyle changes, medical and surgical weight loss, and novel pharmacological approaches. Finally, we will discuss knowledge gaps and future directions in the field.

Chairing: E. Forno, MD, MPH, ATSF, Pittsburgh, PA
A.E. Dixon, MA, BM BCH, ATSF, Burlington, VT

- 8:15 Introduction**
A.E. Dixon, MA, BM BCH, ATSF, Burlington, VT
- 8:20 Lifestyle Interventions, Medical and Surgical Weight Loss in Patients With Obesity and Asthma**
J. Ma, MD, PhD, Chicago, IL
- 8:32 Questions**
- 8:36 Genomics and Metabolomics of Obesity-Related Asthma**
E. Forno, MD, MPH, ATSF, Pittsburgh, PA
- 8:48 Questions**
- 8:52 Endotyping and Phenotyping to Improve Our Understanding and Management of Obese Asthma**
D. Rastogi, MBBS, MS, ATSF, Washington, DC
- 9:04 Questions**
- 9:08 Endotyping and Phenotyping to Improve Our Understanding and Management of Obese Asthma**
D. Rastogi, MBBS, MS, ATSF, Washington, DC
- 9:20 Questions**
- 9:24 Gaps and Future Clinical Research Directions for Obesity-Related Asthma**
F. Holguin, MD, MPH, Aurora, CO
- 9:36 Questions**
- 9:40 Conclusions**
E. Forno, MD, MPH, ATSF, Pittsburgh, PA

This session and the International Conference are supported by an independent medical educational grant from Genentech, Inc.

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CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D7 DIAGNOSING PEDIATRIC OBSTRUCTIVE SLEEP APNEA: CURRENT CONTROVERSIES AND OPPORTUNITIES

Assemblies on Pediatrics; Sleep and Respiratory Neurobiology

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Target Audience

Providers of sleep disorders, respiratory disorders; providers of care for children; administrators overseeing provision of diagnostic services for sleep disorders

Objectives

At the conclusion of this session, the participant will be able to:

- gain knowledge on the benefits and limitations of current diagnostic testing, including issues of access, to decision making for the investigation of pediatric obstructive sleep apnea;
- recognize differences in the pathophysiological mechanism and clinical presentation to better diagnose obstructive sleep apnea in children;
- integrate the role of new technology and digital approaches to diagnostic testing, including consideration of global health and health equity, for children with obstructive sleep apnea.

For children with suspected obstructive sleep apnea (OSA), in-laboratory polysomnography is the standard for the diagnosis of OSA. Advances in physiological monitoring technology and analytic methods, including artificial intelligence, provide options for novel diagnostic modalities. These advances, combined with recognition that pediatric OSA has multiple causes and presentations, mean that personalized approaches are possible. In this symposium, we will explore the benefits and limitations of current methods of identifying OSA and examine novel technology and analytic methods. We will explore how current and novel strategies impact global health and health equity and can shape the future for children with OSA.

Chairing: J.E. Maclean, BSc(Hons), MD, PhD, Edmonton, Canada
R. Amin, MD, Toronto, Canada

8:15 Introduction to the Session
R. Amin, MD, Toronto, Canada

8:25 Identifying Obstructive Sleep Apnea in Infants: What We Know Now and the 2030 Plan
Z. Ehsan, MD, Kansas City, MO

- 8:45 Exploring Phenotypes and Endotypes of Pediatric Obstructive Sleep Apnea: What It Means, Why It Matters**
J.E. Maclean, BSc(Hons), MD, PhD, Edmonton, Canada
- 9:05 Artificial Intelligence Applied to the Pediatric Sleep Laboratory**
A. Bandyopadhyay, MD, Indianapolis, IN
- 9:25 Moving Diagnostic Testing Outside the Pediatric Sleep Laboratory With the Help of New Technology and Artificial Intelligence**
G.R. Nino, MD, Washington, DC

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D8 SICK BY ASSOCIATION: THE PULMONARY VASCULATURE IN CHRONIC LUNG DISEASES

Assemblies on Pulmonary Circulation; Respiratory Cell and Molecular Biology

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 3000/3002/3004 (West Building, Level 3)

Target Audience

Pulmonologists treating ILD and COPD, clinicians treating pulmonary hypertension, researchers in COPD, ILD and pulmonary vascular disease world

Objectives

At the conclusion of this session, the participant will be able to:

- understand the complex interaction between chronic lung diseases, such as COPD/emphysema and interstitial lung disease, and the pulmonary vascular structure and cell function;
- integrate pathobiology, imaging and clinical parameters for a comprehensive understanding of the pulmonary vascular changes in chronic lung diseases;
- understand the evidence and ongoing clinical investigations in clinical assessment and treatment of pulmonary hypertension associated with ILD and COPD.

In this session we explore the latest in the both the scientific understanding of the development of pulmonary hypertension in COPD and fibrotic lung disease as well as the ongoing advances and challenges in the diagnosis and treatment of pulmonary hypertension associated with COPD and ILD. Historic and recent clinical trials, as well as ongoing efforts will be discussed.

Chairing: L. Farkas, MD, Columbus, OH
O.A. Shlobin, MD, Falls Church, VA
F.N. Rahaghi, MD, PhD, Boston, MA

- 8:15 Patient Perspective**
- 8:20 Molecular Mechanisms of Vascular Remodeling in Fibrotic Lung Disease**
M. Eghbali, PhD, Los Angeles, CA
- 8:35 Mechanisms of Vascular Remodeling in COPD and Emphysema**
I. Petrache, MD, ATSF, Denver, CO
- 8:50 Should We Treat Pulmonary Hypertension in the Setting of COPD?**
J.A. Barbera, MD, Barcelona, Spain
- 9:05 Update in the Treatment of Pulmonary Hypertension Associated with Interstitial Lung Disease**
L. Piccari, MD, Barcelona, Spain
- 9:20 Clinical Trial Design and End Points in Pulmonary Hypertension Associated with Lung Disease**
I.R. Preston, MD, Boston, MA
- 9:35 Panel Discussion**
L. Farkas, MD, Columbus, OH

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BASIC • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D9 PRECISION CUT LUNG SLICES: USE AND APPLICATIONS OF AN EX VIVO TECHNIQUE FOR PULMONARY RESEARCH

Assemblies on Respiratory Structure and Function; Respiratory Cell and Molecular Biology

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Target Audience

Basic Researchers, Translational Researchers, Clinician Scientists

Objectives

At the conclusion of this session, the participant will be able to:

- integrate the PCLS method into pulmonary research for diverse applications, thus a broadening of research spectra is achieved;
- better translate basic research results, especially with regards to the use of human PCLS for pulmonary research;

- learn and understand the 3R advantages of PCLS and consider the model as alternative to in vivo experimentation.

The ex vivo technique Precision Cut Lung Slices (PCLS) is a versatile method that allows direct translation of results between animals and humans as well as analysis of various unique endpoints. Thus, PCLS can serve as an approach for validation and a tool for extrapolation to the clinic. In this scientific session, renowned speakers from industry, academia and government will cover the wide array of PCLS applications for pulmonary research.

Chairing: J. Herbert, DVM, PhD, Piscataway, NJ
C. Koziol-White, PhD, New Brunswick, NJ

8:15 Human Precision-Cut Lung Slices: A Potential Model for Detecting Respiratory Sensitization

H. Behrsing, BA, PhD, Gaithersburg, MD

8:30 Using PCLS as a Model to Study Contraction and Relaxation of the Airways

C. Koziol-White, PhD, New Brunswick, NJ

8:45 Translational Benefits of Precision Cut Lung Slices for Chronic Lung Pathologic Processes and Drug Discovery

M. Koenigshoff, MD, PhD, ATSF, Pittsburgh, PA

9:00 Cold Storage of Rat Precision Cut Lung Slices: Applicability in Biomedical Research

T. Wille, Lieutenant-Colonel, MD, PhD, Munich, Germany

9:15 Toxicity of Menthol Containing E-Cigarette Condensates in Precision Cut Lung Slices

J. Herbert, DVM, PhD, Piscataway, NJ

9:30 Pulmonary Hypertension: Vascular Pathophysiological Changes in PCLS

C. Martin, PhD, Aachen, North Rhine-Westphalia, Germany

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D10 THE INTERPLAY BETWEEN HOST MICROBIOME AND LUNG MICROENVIRONMENT IN THE PATHOGENESIS OF COPD AND LUNG CANCER

Assemblies on Thoracic Oncology; Respiratory Cell and Molecular Biology

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 209-211 (South Building, Level 2)

Target Audience

Scientists, clinicians, and physician/scientists who are interested in understanding the interplay between microbiome and inflammatory responses in lung microenvironment and its effect on the COPD and lung cancer progression.

Objectives

At the conclusion of this session, the participant will be able to:

- understand the lung inflammatory microenvironment as well as microbiome;
- link the interplay between the microbiome and immune microenvironment to inflammatory lung diseases and cancer;
- propose novel preventive and therapeutic interventions aimed at treating COPD and lung cancer.

Lung cancer and COPD are among the leading cause of mortality and morbidity worldwide. Recent data provide evidence that the immune microenvironment is a leading player in lung cancer. Emerging evidence also suggests that the host microbiome dynamically interacts, i.e. influences and is affected by, inflammatory and immune microenvironment. However, the role of the microbiome and its interplay with lung microenvironment in the pathogenesis of premalignant conditions (e.g. COPD) and early stages of lung cancer is poorly understood. This interplay and its potential preventive and therapeutic applications will be discussed during this session.

Chairing: S.J. Moghaddam, MD, Houston, TX
S. Sethi, MD, Buffalo, NY

8:15 Microbiome in Respiratory Health and Disease: Gut-Lung Axis

P. Hansbro, PhD, Sydney, Australia

8:33 The Lung Microbiome and Airway Disease

S. Lynch, PhD, San Francisco, CA

8:51 COPD and the Microbiome

S. Sethi, MD, Buffalo, NY

9:09 Effect of Lower Airway Dysbiosis on Lung Cancer Progression

L.N. Segal, MD, New York, NY

9:27 Cigarette Smoke vs E-Cigarette Vapor: Their Effects on Host Microbiome and Lung Immune Microenvironment During Lung Cancer Promotion

S.J. Moghaddam, MD, Houston, TX

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BEHAVIORAL • CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D11 NON-COVID-19 HEALTH IMPACTS OF THE PANDEMIC: APPLYING LESSONS TO IMPROVE RESPIRATORY HEALTH

Assemblies on Behavioral and Health Services Research; Nursing

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 3001/3003 (West Building, Level 3)

Target Audience

All providers of pulmonary, critical care, and sleep medicine, nursing staff, health system administrators, epidemiologists, and other clinical scientists

Objectives

At the conclusion of this session, the participant will be able to:

- describe the impacts of COVID-19 on lung cancer care and lung cancer screening including methods of increasing access amidst a pivot to virtual care;
- define the impact of the pandemic on pediatric and adult outcomes for obstructive lung diseases discuss and ways this information can be applied post-pandemic;
- identify potential equity concerns related to rapid dissemination of technology-based interventions during the COVID-19 pandemic and opportunities to avoid these factors in future intervention implementation.

The direct health effects of COVID-19 have been widely reported, but the pandemic also had wide-ranging impacts on health care access and health outcomes across numerous non-covid health conditions. The impacts of changes in access to health care and health behaviors, such as mask wearing, led to unexpected outcomes-some good and some bad. This session will examine the impacts of COVID-19 on key respiratory health outcomes and examine the underlying causes. Sessions will focus on lessons learned that can support future improvements in pulmonary and critical care, and ways care can be adapted to increase access to care in the future. A particular focus will be placed on the role of the pandemic in widening technology-related health disparities and how health systems can best close these gaps.

Chairing: A.C. Melzer, MD, MS, Minneapolis, MN
A. Volerman, MD, Chicago, IL
A.J. Admon, MD, MPH, MSc, Ann Arbor, MI

8:15 Innovating to Minimize COVID-19 Impacts on Lung Cancer Screening and Outcomes

L.M. Henderson, PhD, Chapel Hill, NC

8:29 Applying Lessons from the Pandemic to Improve Pediatric Asthma Care

S. Lovinsky-Desir, MD, MS, New York, NY

8:43 COPD and Asthma Care in a Pandemic: The Good, the Bad and the Unexpected
N.J. Greening, MBBS, PhD, MRCP(UK), BMedSci, Leicester, United Kingdom

8:57 Equity Concerns Related to Rapid Dissemination of Technology-Based Interventions: Lessons Learned From the COVID-19 Pandemic
V.G. Press, MD, MPH, ATSF, Chicago, IL

9:11 COVID-19 Impacts on Palliative and End of Life Care
D.M. Donesky, PhD, ANP-BC, ATSF, Napa, CA

9:25 Discussion: Q&A

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BASIC • TRANSLATIONAL

MINI SYMPOSIUM

D12 BASIC SCIENCE INSIGHTS INTO MODULATION OF IMMUNE AND INFLAMMATORY PATHWAYS

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 2001/2003 (West Building, Level 2)

Chairing: R.A. Rahimi, MD, PhD, Boston, MA
L.J. Quinton, PhD, Worcester, MA

Oral Presentations:

8:15 CD109 on Dendritic Cells Regulates Airway Hyperreactivity and Eosinophilic Airway Inflammation/Y. Aono, Y. Suzuki, R. Horiguchi, Y. Inoue, M. Karayama, H. Hozumi, K. Furuhashi, N. Enomoto, T. Fujisawa, N. Inui, S. Mii, M. Ichihara, M. Takahashi, T. Suda, Hamamatsu, Japan, p.A5007

8:25 Conventional Dendritic Cell-Mediated ADAM17 Activity Regulates Type2 Airway Inflammation in Asthma/A. Mishra, A.K. Jaiswal, J. Yadav, M. Sandey, A. Suryawanshi, D. Minond, Auburn, AL, p.A5008

8:35 15 Lipoxygenase Linked Mitophagy Promotes Epithelial Cell Mitochondrial Loss in Type-2 Hi Asthma/K. Yamada, C.M. St. Croix, Y. Deng, H.H. Dar, Y.Y. Tyurina, J.B. Trudeau, V. E. Kagan, J. Zhao, S.E. Wenzel, Pittsburgh, PA, p.A5009

8:45 Oxidative Stress Activates Pro-Eosinophilic ccl26 Gene Expression in Airway Smooth Muscle Cells/P.A. Hernandez, C.M. Royer, D. Kim, V. Vo, B. Chu, A. Linderholm, J.P. Capitanio, L.A. Miller, A. Haczku, Davis, CA, p.A5010

- 8:55 Neuromedin U Stimulates Rapid Activation of Type 2 Innate Lymphoid Cells from Mild Asthmatic Subjects/R. Sehmi, A. Nagashima, X. Ju, S. Beaudin, K. Howie, R. Cusack, I. Satia, G.M. Gauvreau, P. O'Byrne, Hamilton, Canada, p.A5011**
- 9:05 Innate Lymphoid Cells Populations in Prednisone Dependent Severe Asthmatics with Differential Inflammatory Profiles in Sputum - Evidence for In Situ Cell Plasticity/X.N. Ju, A. Bhalla, K. Radford, M. Mukherjee, P. Nair, R. Sehmi, Hamilton, Canada, p.A5012**
- 9:15 Silencing RAGE Expression with a Lung-Targeted RNAi Trigger Delivery Platform Suppresses Pulmonary Allergic Inflammation/D.I. Kasahara, A. Nicholas, T. Reed, Z. Trilling, M. Branca-Afrazi, H. Hamilton, J. Hegge, J. Hamilton, T. Pei, E.W. Bush, Madison, WI, p.A5013**
- 9:25 Efficacy of an Anti-IL-4/IL-13 Vaccine in Models of Chronic Allergic Asthma in Mice/L.L. Reber, E. Conde, E. Lamanna, R. Bertrand, B. Balbino, J. Bonnefoy, J. Stackowicz, N. Caillot, F. Colaone, S. Hamdi, R. Houmadi, A. Lose, J. Kamphuis, F. Huetz, L. Guillemainault, N. Gaudenzio, A. Mougel, D. Hardy, J. Snouwaert, B. Koller, V. Serra, P. Bruhns; Paris, France, p.A5014**
- 9:35 The Receptor for Advanced Glycation Endproducts Promotes Severe Neutrophilic Airway Disease via NLRP3 Inflammasome Activation/T.N. Perkins, K.N. Killian, J.L. Kosanovich, M.A. Lipp, K.M. Empey, T.D. Oury, Pittsburgh, PA, p.A5015**
- 8:25 Initiation with Inhaled Long-Acting Anti-Muscarinic Agent (LAMA) Is Associated with Lower Medical Cost and HCRU Compared to Combination of Inhaled Corticosteroid and Long-Acting Beta-Agonists (ICS/LABA) in Patients with Chronic Obstructive Pulmonary Disease/H.I. Kim, C.K. Rhee, K.H. Yoo, Y. Kim, Y.B. Park, S. Lee, D. Lee, Y.I. Hwang, Anyang-si, Korea, Republic of, p.A5017**
- 8:35 Resource Use, Costs and Clinical Outcomes Among COPD Patients Initiated on Tiotropium/Olodaterol or Fluticasone Furoate/Umeclidinium/Vilanterol Based on Exacerbation History/S. Sethi, B. Clark, L. Bengtson, E. Buysman, S. Palli, A. Sargent, A. Shaikh, G.T. Ferguson, Buffalo, NY, p.A5018**
- 8:45 Annual Inhaled Corticosteroid, Short-Acting Beta₂-Agonist and Systemic Corticosteroid Exposure in Adolescents and Adults with Asthma in the United States/N.L. Lugogo, I.A. Gilbert, M. Pollack, H. Gandhi, J. Tkacz, M.J. Lanz, Ann Arbor, MI, p.A5019**
- 8:55 Impact of Systemic Corticosteroid (SCS) Exposure on SCS-Related Complications Among Patients with Asthma in the US/T.C. Corbridge, A. Deb, G. Germain, F. Laliberté, S. MacKnight, M.S. Duh, M. Bogart, Research Triangle Park, NC, p.A5020**
- 9:05 Machine Learning for the Identification of Restriction Without Lung Volume Measurements/A.T. Moffett, M. Kreider, S.D. Halpern, G.E. Weissman, Philadelphia, PA, p.A5021**
- 9:15 Impact of Pulmonary Function Test Race Adjustment on Clinical Outcomes: 10-Year Data Registry Analysis/M. Connolly, P.A. Donohue, R. Palli, S. Khurana, S.N. Georas, Rochester, NY, p.A5022**
- 9:25 Does Vaping Increase Health Service Utilization? A Linked Canadian Community Health Survey and Health Administrative Data Study/T. To, C. Borkhoff, C.-W. Chow, T.J. Moraes, R. Schwartz, E. Terebessy, N. Vozoris, K. Zhang, J. Zhu, Toronto, Canada, p.A5023**
- 9:35 Disparities in Pulmonary Specialist Outpatient Visits Among Individuals with Asthma and COPD in the US/A.W. Gaffney, S. Woolhandler, D.C. Christiani, S. Dickman, D. McCormick, D.U. Himmelstein, Cambridge, MA, p.A5794**

BEHAVIORAL • CLINICAL

MINI SYMPOSIUM

D13 EVALUATING AND TREATING PATIENTS WITH LUNG DISORDERS

8:15 a.m. - 9:45 a.m. MOSCONE CENTER

Room 3014 (West Building, Level 3)

Chairing: S.E. Zaeh, MD, New Haven, CT
L.M. Donovan, MD, MS, Seattle, WA
E.K. Kross, MD, Seattle, WA

Oral Presentations:

- 8:15 In-Hospital Mortality for Acute Exacerbation of Chronic Obstructive Pulmonary Disease in the United States: 2016 to 2019/M. Akanbi, N. Baral, C. Swanson, A. Moughrabieh, D. Meza, R. Kalhan, Flint, MI, p.A5016**

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D14 EMERGING PREDICTORS OF COPD OUTCOMES8:15 a.m. - 9:45 a.m. **MOSCONE CENTER**

Room 11-12 (South Building, Exhibition Level)

Chairing: G.R. Washko, MD, Boston, MA
W.W. Labaki, MD, MS, Ann Arbor, MI
L.M. Paulin, MD, MHS, Lebanon, NH

Featured Speaker

8:15 Imaging for Subtyping and the Assessment of Disease Activity/G.R. Washko, Boston, MA

Oral Presentations:

- 8:25 Progression in Deep Learning Emphysema Grade Predicts Disease Progression and Mortality**/A. Oh, S. Ash, D.A. Lynch, S.M. Humphries, Denver, CO, p.A5024
- 8:35 Airway Mucus Plugs and Mortality in COPD: Findings from the COPD Gene Study**/A.A. Diaz, S. Grumley, H.P. Nath, W. Wang, A.C. Yen, S.J. Kligerman, M. Abozeed, P.P. Manapragada, M.U. Aziz, K. Jacobs, M. Zahid, W.R. Dolliver, J. Orejas, A.N. Ahmed, N.L. Terry, V. Kim, M.H. Cho, R. San Jose Estepar, Boston, MA, p.A5025
- 8:45 Acute Exacerbations Are Associated with Emphysema Progression**/S.P. Bhatt, S. Bodduluri, M.T. Dransfield, J.M. Reinhardt, J.D. Crapo, E.K. Silverman, S.M. Humphries, D.A. Lynch, M.J. Strand, Birmingham, AL, p.A5026
- 8:55 Automated CT Airway to Artery Ratios Are Associated with Future Exacerbations in Smokers with COPD**/A.A. Diaz, W.R. Dolliver, W. Wang, J. Orejas, A. Yen, D.J. Maselli, P. Nardelli, K.A. Young, G.L. Kinney, R. San Jose Estepar, Boston, MA, p.A5027
- 9:05 Harnessing the Proteome in COPD to Identify Individuals Vulnerable to Frequent Exacerbations**/S. Sethi, M. Morris, S. Richman, X. Zhu, S. Shen, S. Qian, M.J. Mammen, J. Qu, G. Broderick, Buffalo, NY, p.A5028
- 9:15 Cardiac Autonomic Function Predicts Incident COPD Hospitalizations in the Atherosclerosis Risk in Communities Study**/D.M. Macdonald, Y. Ji, S. Adabag, A. Alonso, L.Y. Chen, B.E. Henkle, S. Juraschek, F. Norby, P. Lutsey, K.M. Kunisaki, Minneapolis, MN, p.A5029
- 9:25 A Polygenic Risk Score for Smoking Is Associated with Chronic Obstructive Pulmonary Disease and Related Phenotypes Independent of Smoking Exposure**/K.A. Young, M.H. Cho, S.M. Lutz, B.D. Hobbs, J. Ziniti, E.K. Silverman, J.E. Hokanson, M. Moll, Aurora, CO, p.A5030

- 9:35 Combined Effects of Emphysema and Interstitial Feature Progression on Clinical Outcomes in the COPD Gene Cohort**/S. Ash, B. Choi, N.A. Enzer, A. Oh, D.A. Lynch, S.M. Humphries, Boston, MA, p.A5031

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D15 GOOD, BETTER, BEST CARE: WHAT CAN WE?8:15 a.m. - 9:45 a.m. **MOSCONE CENTER**

Room 3005/3007 (West Building, Level 3)

Chairing: C. Polito, MD, MSc, Atlanta, GA
M.P. Kerlin, MD, MS, Philadelphia, PA

Featured Speaker:

8:15 New Insights in Critical Care: From the Bench to the Bedside/E.M. Viglianti, Ann Arbor, MI

Oral Presentations:

- 8:25 Low Positive End-Expiratory Pressure Ventilation Increases Mechanical Power and Pulmonary Neutrophilic Inflammation in an Experimental Model of Moderate to M. Scharffenberg, R. Huhle, J. Severe Acute Lung Injury Wittenstein, X. Ran, Y. Zhang, A. Braune, R. Theilen, L. Maiello, G. Benzi, P. Pelosi, P.R.M. Rocco, M.J. Schultz, T. Koch, J. Kotzerke, M. Gama de Abreu, Dresden, Germany, p.A5032**
- 8:35 Physiological Effects and Safety of Bed Verticalization in Patients with Acute Respiratory Distress Syndrome**/L. Bouchant, J. Audard, G. Arpajou, L. Aupetitgendre, S. Cayot, R. Guérin, C. Verlhac, R. Blondonnet, L. Borao, B. Pereira, J.-M. Constantin, J.-E. Bazin, M. Jabaudon, E. Futier, T. Godet, Clermont-Ferrand, France, p.A5033
- 8:45 Effect of Awake Prone Positioning by Different Oxygen Delivery Systems in Adults Hospitalized with COVID-19**/E.T. Qian, C.L. Gatto, C. Hennessy, C.J. Lindsell, T.W. Rice, Nashville, TN, p.A5034
- 8:55 National Trends and Outcomes for Extra-Corporeal Membrane Oxygenation Use in Morbidly Obese Patients with ARDS** /J. Igwe, G. DeAllie, S. Chandra, S. Davidson, M. Freeman, T. Abe, M.C. Ponce Alvarez, Atlanta, GA, p.A5035
- 9:05 Hyperinflammatory ARDS Is Characterized by Interferon-High, Neutrophil-Predominant Inflammation in the Lower Respiratory Tract**/A. Sarma, S. Christenson, P. Sinha, A. Pisco, A. Leligdowicz, B.S. Zha, J. Wilson, F. Moazed, E.R. Siegel, A. Jauregui, Z. Lyon, R. Ghale, S. Caldera, T. Deiss, P. Hayakawa Serpa, A. Byrne, E. Mick, J. DeRisi, M.A. Matthay, C.M. Hendrickson, M. Krummel, P. Woodruff, D. J. Erle, C. Langelier, C. S. Calfee; San Francisco, CA, p.A50

- 9:15 Alveolar Epithelial Glycocalyx Degradation Mediates Surfactant Dysfunction and Contributes to Acute Respiratory Distress Syndrome/A.N. Rizzo, S. Haeger, K. Oshima, Y. Yang, A.M. Wallbank, Y. Jin, L. McCaig, N. Wickersham, I. Zakharevich, R. Peterson, R. Veldhuizen, B. Smith, L.B. Ware, J.A. Bastarache, E.P. Schmidt, Aurora, CO, p.A5037**
- 9:25 Latent Class Analysis in a Trauma Cohort with Hemorrhagic Shock Identifies Two Distinct Sub-Phenotypes with a Differential Treatment Response to Blood Transfusion Ratios/M.R. Thau, T. Liu, N.A. Sathe, G. O'Keefe, C.E. Wade, E.E. Fox, J.B. Holcomb, W.C. Liles, M.M. Wurfel, P. Bhatraju, E.D. Morrell, Seattle, WA, p.A5038**
- 9:35 The Integrated Stress Response Is Upregulated in Pulmonary Structural and Immune Cells After Cardiopulmonary Bypass in Children/V. Habet, N. Li, G. Charkoftaki, V. Vasilioiu, X. Yan, C. Dela Cruz, R. Pierce, New Haven, CT, p.A5039**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D16 WILDFIRES AND WOODSMOKE

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 201-202 (South Building, Level 2)

Chairing: T.K. Takaro, MD, MPH, MS, Burnaby, Canada
K. Gowdy, BS, MS, PhD, Columbus, OH

Featured Speaker:

- 8:15 Up in Smoke: Risk of Infection, Acute Cardiopulmonary Outcomes, and Psychosocial Stress/J.R. Balmes, San Francisco, CA**

Oral Presentations:

- 8:25 "It Was Pitch Black and Then Everything Went Red": Lived Experiences of a Severe Wildfire Season in Rural British Columbia, Canada/J. Turner, T. Holyk, K.H. Bartlett, P. Camp, Vancouver, Canada, p.A5040**
- 8:35 Wood Smoke Exposure, Health-Related Quality of Life, and All-Cause Mortality: An Epidemiological Study in a Southwestern US Population/S. Bayliss, A. Sood, P.M. Meek, M. Unruh, S. Belinsky, S. Leng, Albuquerque, NM, p.A5041**
- 8:45 Early-Life Exposure to Wildfire Smoke Results in Dysregulated Pulmonary Immune Responses in Rhesus Macaques/D. You, J.A. Bassein, A. Rindy, L.A. Miller, Davis, CA, p.A5042**

- 8:55 Sugars as Wood Smoke Constituents Induce Mucin Gene Expression/D.D. Tassew, J. McDonald, Y. Tesfaigzi, Boston, MA, p.A5043**
- 9:05 Locus-Based Interrogation Identifies a Single Nucleotide Polymorphisms That Regulates Expression of the Glucocorticoid Receptor in Response to Wood Smoke Particles in Airway Epithelial Cells/A. Gupta, S. Sasse, A. Dahlin, L. Sanford, F.S. Gally, R. Dowell, S. Weiss, A.N. Gerber, Denver, CO, p.A5044**
- 9:15 Respiratory Function in Male Apoe^{-/-} Mice Following Controlled Exposure to Simulated Wildland Fire Smoke/J. Matz, M. Eden, P. Garg, M. Gollner, C. Bellini, J.M. Oakes, Boston, MA, p.A5045**
- 9:25 Wildfire Smoke Exposure Increases Circulating Group 2 Innate Lymphoid Cell (ILC2) Number and Serum Eotaxin 2 (CCL24), D-Dimer and Surfactant Protein D (SP-D)/M.J. Teuber, G.K. Sanghar, M. Juarez, G. Echt, K. Tuermer-Lee, T. Tham, P.A. Hernandez, A. Linderholm, T.E. Albertson, A. Haczku, Davis, CA, p.A5046**
- 9:35 Phenotypic Evaluation of Natural Killer (NK) Cells in Response to BNT162b2 mRNA Covid-19 Vaccine During Wildfire Smoke Exposure/G.K. Sanghar, R. Ravindran, M.J. Teuber, P.A. Hernandez, A. Linderholm, G. Echt, K. Tuermer-Lee, M. Juarez, T.E. Albertson, I. Khan, A. Haczku, Davis, CA, p.A5047**

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D17 TOP KNOWLEDGE IN COVID

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 2018/2020 (West Building, Level 2)

Chairing: C. Dela Cruz, MD, PhD, ATSF, New Haven, CT
J.K. Kolls, MD, New Orleans, LA

Oral Presentations:

- 8:15 90-Day Clinical Outcome of Hospitalized Covid-19 Patients Treated with Imatinib/J. Schippers, E. Duijvelaar, P. Smeele, M. De Raaf, S. Blok, A. Vanhove, F. De Man, H.J. Bogaard, J. Aman, Amsterdam, Netherlands, p.A5048**
- 8:25 Oral Imatinib Reduces Mortality in Hospitalized COVID-19 Patients Through Endothelial Barrier Protection and Immunomodulation/J. De Brabander, E. Duijvelaar, J.R. Schippers, P.J. Smeele, J. Duitman, J. Aman, H.J. Bogaard, T. van der Poll, L.D.J. Bos, Amsterdam, Netherlands, p.A5049**

- 8:35** **Transcriptomic Changes in Hospitalised COVID19 Patients Across 29 Days Provide Insight into the Systemic Immune Response and Disease Outcomes: Results from PREDICT-COVID19/M.B. Long, H.R. Keir, Y.H. Giam, H. Abo-Leyah, T. Pembridge, L. Delgado, R. Hull, A. Gilmour, C. Hughes, B.J.M. New, R. Dowey, H. Turton, D. Connell, D. Cassidy, H. Richardson, R. Thompson, A.M. Condliffe, A. Shoemark, J.D. Chalmers, Dundee, United Kingdom, p.A5050**
- 8:45** **Preliminary Analysis of the Association Between Therapeutic-Dose Anticoagulation and Long Term Outcomes from the ACTIV-4a and ATTACC Multiplatform Adaptive Trial of Hospitalized Patients with COVID-19/Y.Y. Greenstein, K. Hubel, V. Venugopal, Y.-H. Lai, J.S. Berger, S.Y. Chang, C. Colovos, F.A. Shah, M. Islam, J.V. Jimenez Ceja, M. Khan, L.Z. Kornblith, P.R. Lawler, M. Gaddh, J. Moisés, R. Morillo Guerrero, W. Nkemdirim, H.R. Reynolds, J. Seijas Amigo, A. Soeiro, L. Wahid, A. Zahra, E. C. Goligher, R. Zarychanski, M. Cushman, M. N. Gong; Newark, NJ, p.A5051**
- 8:55** **COVID19-Related Non-Pharmacologic Interventions Are Associated with Reductions in Hospitalizations for Respiratory Conditions but Not Other Acute Illnesses/R.A. Khanolkar, S. Krawchuk, M.A. Pauls, E. Lang, Calgary, Canada, p.A5052**
- 9:05** **Lung Function and CT Lung Abnormalities at 12 Months After Hospital Discharge for COVID-19/J. Signes-Costa, B. Safont, J. Tarraso, J.A. Carbonell-Asins, E. Fernandez-Fabrellas, J.N. Sancho-Chust, B. Amat Humaran, J.A. Rodriguez Portal, L. Cabanes, A.L. Andreu, S. Herrera, C. Lahosa, J.A. Ros, J.L. Rodriguez-Hermosa, J.B. Soriano, A. Mulet, M. Marin; Valencia, Spain, p.A5053**
- 9:15** **Arming Vesiculovirus with SARS-CoV2 Spike Protein Creates a Murine Model of Severe COVID-19 ARDS/A. Tieu, D. Chwastek, C. Lansdell, T. Jamieson, C. Ilkow, D. Stewart, M. Lalu, Ottawa, Canada, p.A5054**
- 9:25** **A Randomized Double-Blind Placebo-Controlled Trial of Dipeptidyl Peptidase-1 Inhibition in Hospitalized Patients with COVID-19: The STOP-COVID19 Trial/H.R. Keir, M.B. Long, H. Abo Leyah, Y.H. Giam, T. Vadiveloo, T. Pembridge, R. Hull, L. Delgado, M. Band, F. McLaren-Neill, S. Adamson, E. Lahnsteiner, A. Gilmour, C. Hughes, B.J.M. New, D. Connell, R. Dowey, H. Turton, H. Richardson, D. Cassidy, J. Cooper, J. Suntharalingam, L. Diwakar, P. Russell, J. Underwood, A. Hicks, D. P. Dosanjh, E. Sage, D. Dhasmana, M. Spears, R. Thompson, C. Brightling, M. Patel, J. George, A. M. Condliffe, A. Shoemark, G. Maclennan, J. D. Chalmers; Dundee, United Kingdom, p.A5055**
- 9:35** **COVID-19 Case-Fatality Rate Is Associated with State Health Disparity in the United States/Y.-C. Lee, K.-Y. Chang, M. Mirsaedi, Buffalo, NY, p.A5056**

BASIC • TRANSLATIONAL

MINI SYMPOSIUM

D18 NEW INSIGHTS IN FIBROBLAST BIOLOGY AND PULMONARY FIBROSIS**8:15 a.m. - 9:45 a.m.****MOSCONE CENTER****Room 215-216 (South Building, Level 2)**

Chairing: J.C. Horowitz, MD, ATSF, Columbus, OH
 P.J. Sime, MD, FRCP, ATSF, Richmond, VA
 M. Podolsky, MD, New York, NY
 B.D. Southern, MD, Cleveland, OH
 S.B. Montesi, MD, Boston, MA

Oral Presentations:

- 8:15** **Novel Genetic Tools for Fibroblast Subsets Reveal Cthrc1+ Fibroblasts Originated from Alveolar Fibroblasts Are Effector Cells for Collagen Deposition in Lung Fibrosis/T. Tsukui, D. Sheppard, San Francisco, CA, p.A5057**
- 8:25** **WNT-Dependent Lung Fibroblast Activation in Pulmonary Lymphangioleiomyomatosis (LAM)/K. Obraztsova, A.R. Mukhitov, S. Lin, M.C. Basil, J. Carl, M. Morley, A. Babu, E. Cantu, E.E. Morrissey, V.P. Krymskaya, Philadelphia, PA, p.A5058**
- 8:35** **Piezo2 Mechanosensing Is Associated with Lactate Production and Metabolic Reprogramming in Human Lung Fibroblasts/M.A.T. Freeberg, B. Szmoju, S.V. Camus, B. Pinto-Pacheco, T.H. Thatcher, D.I. Walker, P.J. Sime, Richmond, VA, p.A5059**
- 8:45** **Epithelial Deletion of Yap-Taz Promotes Fibroblast Activation and Potentiates Experimental Pulmonary Fibrosis/J.J. Gokey, N.M. Geis, C.J. Taylor, T.S. Blackwell, J. Kropski, Nashville, TN, p.A5060**
- 8:55** **Granzyme K+ T Cells Drive Fibroblast Inflammation in Early, Unclassifiable Interstitial Lung Disease (uILD)/Y. Jeong, H.N. Nguyen, H. Athar, P.G. Gavin, I. Korsunsky, S.J. Mentzer, I.O. Rosas, L.M. Sholl, M. Vivero, A.P. Frei, K. Lassen, S. Raychaudhuri, M.B. Brenner, E.Y. Kim, Boston, MA, p.A5061**
- 9:05** **Lactate Transport Inhibition Therapeutically Reprograms Fibroblast Metabolism in Experimental Pulmonary Fibrosis/D.R. Ziehr, K.J. Leahy, J. Varon, R.M. Baron, E. Kim, R.S. Knipe, W.M. Oldham, Boston, MA, p.A5062**
- 9:15** **Meflin-BMP3b Axis Is a Novel Anti-Fibrotic Pathway Against TGF- β -Induced Lung Fibrogenesis/A. Suzuki, K. Sakamoto, Y. Nakahara, A. Enomoto, J. Hino, A. Ando, M. Inoue, N. Omote, M. Kusaka, J. Fukihara, N. Hashimoto, Nagoya, Japan, p.A5063**

- 9:25** **Impacts of Microfibril-Associated Glycoprotein 1 and 2 Deficiency in Bleomycin-Induced Pulmonary Fibrosis/J.** Koenitzer, S.L. Brody, R.P. Mecham, B.D. Humphreys, Saint Louis, MO, p.A5064
- 9:35** **Ephrin-B2 Neutralizing Antibody Suppresses the SASP in Senescent Fibroblasts and Treats Lung Fibrosis in Aged Mice/R.** Lister, M.-A. Chrysovergi, J.L. Martinez-Torrecuadrada, D. Lagares, Boston, MA, p.A5795

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D19 HOT TOPICS IN SLEEP APNEA TREATMENT: NEW TARGETS, NEW TRIALS, AND PAP RECALL

8:15 a.m. - 9:45 a.m. MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Chairing: S.R. Patel, MD, MS, ATSF, Pittsburgh, PA
B.E. Cade, PhD, Boston, MA

Oral Presentations:

- 8:15** **Impact of Ramelteon and Delirium on Objective Sleep and Circadian Rhythm Measurements in the ICU/R.L.** Owens, S. Bagnic, E. Takata, S. Ancoli-Israel, S. Jaiswal, La Jolla, CA, p.A5065
- 8:25** **Trajectories of Residual Apnea-Hypopnea Index Associated with Mask Changes in Continuous Positive Airway Pressure-Treated Obstructive Sleep Apnea Patients/A.** Midelet, Grenoble, France, p.A5066
- 8:35** **VA's Response to a Large-Scale PAP Therapy Safety Recall: Lessons Learned/K.F.** Sarmiento, B.G. Fields, A. Shamim-Uzzaman, B.N. Palen, W.C. Yarbrough, San Francisco, CA, p.A5067
- 8:45** **DNA Methylation Clocks Reveal Epigenetic Age Acceleration in Obstructive Sleep Apnea Which Is Reversible with Adherent Treatment/R.** Cortese, D. Sanz Rubio, L.K. Gozal, J.M. Marin, D. Gozal, Columbia, MO, p.A5068
- 8:55** **Continuous Positive Airway Pressure, Mandibular Advancement Splints and Alternating Therapy: A Randomized Controlled Trial/M.M.** Hamoda, N. Huynh, P. Rompre, F. Sériès, J.-F. Masse, P. Arcache, S. Gakwaya, Y. Kohzuka, W. Alshhrani, N. Ayas, J.A. Fleetham, F.R. Almeida, Vancouver, Canada, p.A5069
- 9:05** **Continuous Positive Airway Pressure for Cognition in Sleep Apnea and Mild Cognitive Impairment-A Randomised Controlled Pilot Trial/C.M.** Hoyos, N. Cross, Z. Terpening, A.L. D'Rozario, B.J. Yee, H. LaMonica, N. Marshall, R.R. Grunstein, S.L. Naismith, Glebe, Australia, p.A5070

- 9:15** **Dose Response Relationship Between Positive Airway Pressure Adherence and Clinically Important Outcomes in Patients with Obstructive Sleep Apnea/A.** Malhotra, K.L. Sterling, P.A. Cistulli, J.-L. Pépin, J. Chen, S. More, C.M. Nunez, A.V. Benjafeld, La Jolla, CA, p.A5071
- 9:25** **Analysis of Potential Healthy User Effect in Positive Airway Pressure Adherent Patients with Obstructive Sleep Apnea/K.L.** Sterling, K.V. Cole, J. Chen, W. Linde-Zwirble, C.M. Nunez, P.A. Cistulli, J.-L. Pépin, A. Benjafeld, A. Malhotra, San Diego, CA, p.A5072

Featured Speaker:

- 9:35** **Early Cognitive Decline and Dementia: A New Target for Sleep Apnea Therapy/C.M.** Hoyos, Glebe, Australia

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D20 NOT YOUR GRANDFATHER'S CT SCAN: RADIOMICS AND DEEP MACHINE LEARNING FOR PULMONARY NODULES AND LUNG CANCER EVALUATION

8:15 a.m. - 9:45 a.m. MOSCONE CENTER

Room 205-206 (South Building, Level 2)

Chairing: F. Maldonado, MD, Brentwood, TN
M.I. Fukunaga, MD, MSci, Worcester, MA
J.A. Barta, MD, ATSF, Philadelphia, PA

Oral Presentations:

- 8:15** **Looking at the Negative - Using False Positives to Learn How Deep Neural Nets Classify Lung Cancer in CT Images/A.H.P.** Masquelin, N. Cheney, J.H.T. Bates, C.M. Kinsey, Burlington, VT, p.A5073
- 8:25** **Pulmonary Vascular Pruning on Computed Tomography and Risk of Progression of Lung Adenocarcinoma/T.** Litchman, C. de Margerie-Mellon, A.A. Bankier, G.R. Washko, F.N. Rahaghi, R. San Jose Estepar, M.B. Rice, A. Synn, Boston, MA, p.A5074
- 8:35** **Lung Volume at Diagnosis and Overall Survival in Non-Small Cell Lung Cancer Patients/T.** Zhai, D.C. Christiani, Boston, MA, p.A5075
- 8:45** **Computer Aided Nodule Analysis and Risk Yield (CANARY)to Guide the Treatment of Multifocal Lung Adenocarcinoma/F.** Al-Ghoul, S. Saddoughi, G. Stroh, C. Powell, S. Rajagopalan, R. Karwoski, D.A. Wigle, B.J. Bartholmai, T. Peikert, Rochester, MN, p.A5076

- 8:55 Automated Extraction and Longitudinal Analysis of Ground Glass Opacity Features in Lung Cancer Patients Powered by Natural Language Processing/K. Lee, Z. Liu, M. Ma, U. Chandran, I. Kalsekar, B. Laxmanan, M. Li, Y. Mai, C. Gilman, T. Wang, M. Zhang, L. Ai, P. Aggarwal, Q. Pan, W. Oh, E. Schadt, X. Wang, Stamford, CT, p.A5077**
- 9:05 Pulmonary Nodule-Related Emotional Distress 1-2 Months Following Nodule Identification in the Watch the Spot Trial/M.K. Gould, B. Creekmur, E. deBie, C. Kaplan, D. Ritzwoller, J. Steiner, S. Golden, E. Walter, R. Mularski, C. McEvoy, R. Wiener, C. Slatore, Pasadena, CA, p.A5078**
- 9:15 Changes in Management and Outcomes of Patients Screened for Lung Cancer with High-Risk Lung Nodules After Establishment of a Multidisciplinary Lung Nodule Review Board/D.H. Serman, H. Remar, R. Nelson, K. Mangalick, J.L. Bessich, K.A. Braithwaite, M. Haseltine, J. Lara, J.M. Mercado, A.D. Lu, W. Moore, H. Pass, J. Schneider, O. Sinokrot, A. Chachoua, New York, NY, p.A5079**
- 9:25 Do Methods Matter in Diagnostic Yield Assessment in Bronchoscopy? A Simulation-Based Analysis/A. Vachani, F. Maldonado, B. Laxmanan, M. Zhou, I. Kalsekar, P. Szapary, L. Dooley, S. Murgu, Philadelphia, PA, p.A5080**

BEHAVIORAL • CLINICAL

POSTER DISCUSSION SESSION

D21 RISK FACTORS AND PREDICTORS IN CRITICAL ILLNESS AND CHRONIC RESPIRATORY DISEASES

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 303-304 (South Building, Level 3)

Poster Viewing 8:15-8:45

Discussion 8:45-9:45

Chairing: L.C. Myers, MD, MPH, Oakland, CA
T.S. Valley, MD, MSc, Ann Arbor, MI
A.J. Admon, MD, MPH, MSc, Ann Arbor, MI

- 501 Association Between 28-Day Mortality and Cumulative Hospital Caseloads During the First COVID-19 Surge/K. Crane, J. Choi, J.K. Krishnan, D. Pan, L. Lief, K. Hoffman, P. Goyal, E.J. Schenck, New York, NY, p.A5081**
- 502 Demographic Variables Affecting Mortality in ARDS Patients from Cerner Health Facts Database, 2010-2018/G. Jha, N. Panchagnula, A. Anwar, B. Dao, C. Shaw, T. Nguyen, T. Parupudi, T. Dang, S. Kiani, R. Chemitiganti, G. Catalasan, Odessa, TX, p.A5082**

- 503 Factors Associated with Increased Use of Early Prone Positioning for Moderate-to-Severe ARDS During COVID-19/C. Hochberg, K.J. Psoter, M.N. Eakin, D.N. Hager, Baltimore, MD, p.A5083**
- 504 Examining Hospital-Free Days in a Clinical Trial of a Transitional Care Intervention for Patients with Sepsis/M. Kowalkowski, A. Rios, S. Murphy, S.-H. Chou, W. Rossman, T. Hetherington, A. McWilliams, S.P. Taylor, Charlotte, NC, p.A5084**
- 505 The Association Between Median Income and Severity of Pulmonary Hypertension at Diagnosis and Risk at Follow Up in a Public Health Care System/H. Alquraishi, J. Swiston, L. Lee, L. Legkaia, M. Norena, K. Alobaidallah, A. Kapasi, R.D. Levy, N.W. Brunner, Vancouver, Canada, p.A5085**
- 506 Association Between Income and Likelihood of Right Heart Catheterization in Patients with a Diagnosis of Pulmonary Hypertension/E. Schikowski, G. Swabe, S.Y. Chan, J.W. Magnani, Pittsburgh, PA, p.A5086**
- 507 Hemoptysis in Cystic Fibrosis: Not a Red Herring for Worse Health Outcomes/O. Bayomy, K.J. Ramos, T. Hee Wai, S.G. Kapnadak, E.D. Morrell, E.D. Lease, M.L. Aitken, A.L. Stephenson, C.H. Goss, Seattle, WA, p.A5087**
- 508 Correlation of Inpatient and Outpatient Sleep Studies to Determine Risk of Sleep Disordered Breathing/V. Badami, E. Rojas, S.F.Z. Naqvi, S. Aryal, J. Easterling, R. Stansbury, S. Sharma, Morgantown, WV, p.A5088**
- 509 Arterial Stiffness in Patients with OSAS and Its Possible Role in the Development of Comorbidities Associated with It/A. Abdelaziz, E.A. Abdelghany, R. Adel, M. Higazi, A. Kasem, Minia, Egypt, p.A5089**
- 510 Trends in Ventilatory Support for Patients with Idiopathic Pulmonary Fibrosis: 2016-2020/D. Shankar, D. Peterson, A.J. Walkey, A. Law, Boston, MA, p.A5090**
- 511 Correlation of Patient-Reported Outcomes with Disease Subtype and Functional Severity in Fibrotic Interstitial Lung Disease/J.D. Duke, M. Roy, J.P. Hoult, R. Benzo, T. Moua, Rochester, MN, p.A5091**
- 512 Fibrotic Interstitial Lung Disease Survival in a National Canadian Registry/S.R. Ong, C.J. Ryerson, N. Khalil, K.A.M. Johannson, V. Marcoux, M.R.J. Kolb, H. Manganas, D. Assayag, J.H. Fisher, Toronto, Canada, p.A5092**
- 513 Access to Care in Sarcoidosis and the Effects of Demographics on Corticosteroid-Sparing Prescription/S. Keil, G.C. Goobie, G. Swabe, K.F. Gibson, D. Kass*, J.W. Magnani*, Pittsburgh, PA, p.A5093**
- 514 Patterns of Systemic Corticosteroid Exposure and Adverse Health Conditions in US Children with Asthma in Relation to Short-Acting Beta₂-Agonist Utilization/M.J. Lanz, I.A. Gilbert, M. Pollack, H. Gandhi, J. Tkacz, N.L. Lugogo, Coral Gables, FL, p.A5094**

- 515 Impact of Outpatient Follow-Up on Likelihood of Emergency Department Revisit Within 30 Days Following Index Visit for Acute Asthma Exacerbation/E.** Abbott, S. Karwoska Kligler, S. Spadafore, C. Vargas-Torres, M. Lin, New York, NY, p.A5095
- 516 Incidence of Childhood Asthma and Allergic Diseases Among Children and Siblings from the Same Family, A Canadian Cohort Study/T.** To, L. Anderson, C. Birken, C. Borkhoff, S.D.M. Dell, M. Janus, J. Maguire, T.J. Moraes, P. Parkin, P. Subbarao, E. Terebessy, K. Zhang, J. Zhu, Toronto, Canada, p.A5096
- 517 Risk of Hospitalization for Coronavirus Disease 2019 in Patients with Chronic Obstructive Pulmonary Disease/L.C.** Myers, R.K. Murray, B. Donato, V. Liu, P. Kipnis, A. Shaikh, J. Elder, Oakland, CA, p.A5097
- 518 Impact of the COVID-19 Pandemic on Exacerbation Rates in Patients with Asthma and/or Chronic Obstructive Pulmonary Disease in the NOVELTY Study/H.** Muellerova, R. Hughes, B. Fenby, C. Keen Fredriksson, G. de Miquel, C. Emmas, E. Rapsomaniki, C. Erhard, H. Reddel, A. Papi, Cambridge, United Kingdom, p.A5098
- 519 Inhaled Corticosteroids and the Risk of Serious Pneumonia Among Veterans with Misdiagnosed COPD/L.J.** Spece, K. Duan, L.M. Donovan, C. McDermott, L.C. Feemster, M.F. Griffith, B. Weiner, S. Zeliadt, D. Au, Seattle, WA, p.A5099
- 520 Disease Complexity and Prevalence of Comorbidities Among Adults with COPD in the United States/M.** Barrett, V. Vuong, E. Boers, A. Cameron, L. Kaye, C. Woodford, C.M. Nunez, K.L. Sterling, San Diego, CA, p.A5100
- 521 The Significance of Mild Cognitive Impairment and Frailty in 30-Day Readmissions Following an Acute Exacerbation of COPD/J.** Gupta, N. Kappel, L. Witt, W.A. Spacht, M. Huising-Scheetz, S.R. White, V.M. Arora, V.G. Press, Chicago, IL, p.A5101
- 522 Impact of Tobacco Use on Mortality: A Survival Analysis of the Mexican Health and Aging Study/D.** Patiño Hernandez, M.U. Pérez-Zepeda, R. Samper-Ternent, C.A. Cano-Gutiérrez, Bogota, Colombia, p.A5102
- 523 Assessment of Symptoms, Financial Toxicity, and Continued Vaping Following E-cigarette or Vaping Associated Lung Injury (EVALI)/D.P.** Blagev, S.J. Callahan, D. Harris, D. Collingridge, R.O. Hopkins, M.J. Lanspa, Murray, UT, p.A5103
- 524 Prevalence of Mental Health Morbidities in Patients Seeking Tobacco Dependence Management: A Pilot Study/P.** Galiatsatos, M. Oluyinka, A. Ellison-Barnes, R. Schreiber, D. Lansey, T. Cudjoe, E.R. Neptune, N. Kanarek, Baltimore, MD, p.A5104

- 525 Evaluation of Enrollment and Intervention Delivery Across Neighborhood Disadvantage in the Impacts Trial/R.** Hilton, M. Kowalkowski, S.-H. Chou, S.P. Taylor, Winston-Salem, NC, p.A5796

CLINICAL

POSTER DISCUSSION SESSION

D22 ADDRESSING HEALTH DISPARITIES IN LUNG DISEASE

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 207-208 (South Building, Level 2)

- Poster Viewing** 8:15-8:45
- Discussion** 8:45-9:45
- Chairing:** N.N. Hansel, MD, MPH, Baltimore, MD
D.H. Au, MD, MS, ATSF, Seattle, WA
A.K. Baldomero, MD, MS, Minneapolis, MN
- 301 Evaluation of Sex Differences in Clinical Outcomes in People with Cystic Fibrosis Requiring Intravenous Antimicrobial Therapies for a Pulmonary Exacerbation: Sub-Analysis of the STOP2 Cohort/K.** Montemayor, K. Psoter, S. Heltshe, R. Jain, D.B. Sanders, D. VanDevanter, M. Skalland, C. Goss, P.A. Flume, N.E. West, Baltimore, MD, p.A5105
- 302 The Experience of Menopause in People with Cystic Fibrosis/K.** Prochownik, R. Jain, J. Taylor-Cousar, D. Lavage, O.M. Stransky, H.N. Thomas, T. Kazmerski, Pittsburgh, PA, p.A5106
- 303 Sex-Specific Associations of Comorbidity and Pulmonary Disease with Mortality in Chronic Obstructive Pulmonary Disease: Results from COSYCONET/F.C.** Trudzinski, R. Jörres, P. Alter, J. Walter, H. Watz, A. Koch, M. John, M. Lommatzsch, C. Vogelmeier, H.-U. Kauczor, T. Welte, J. Behr, A.L.H. Tufman, R. Bals, F.J. Herth, K. Kahnert, Heidelberg, Germany, p.A5107
- 304 Sex Driven Differences in Patients with Severe Exacerbation of Chronic Obstructive Pulmonary Disease in a Developing Country/K.T.** Centeno Hurtado, C.E. Ruiz González, D. García Bohórquez, Y. Masias Leon, J.D. Criado Villamizar, T. Mendoza Herrera, L.K. Vargas Ramirez, J.E. Fajardo Rivero, Bucaramanga, Colombia, p.A5108
- 305 Sex Differences in Airway Mucus Plugs Among Patients with COPD/J.** Orejas, W.R. Dolliver, R. Elalami, A. Tsao, R. San Jose Estepar, S. Grumley, N. Hrudaya, W. Wang, S.J. Kligerman, P. Manapragada, K. Jacobs, A. Yen, M. Abozeed, M. Aziz, Z. Mohd, A. Ahmed, N. Terry, V. Kim, R. San Jose Estepar, M.H. Cho, A.A. Diaz, Boston, MA, p.A5109

- 306** **Selecting Appropriate Pulmonary Function Test Reference Sex for Transgender Adults to Address Health Disparities: Methods for Data Collection and Interpretation**/E. Fechter-Leggett, B.R. Ansell, R.R. Harvey, K.M. Kidd, D.N. Weissman, Morgantown, WV, p.A5110
- 307** **Association Between Income and Pulmonary Complications in Long-Term Survivors of Blood or Marrow Transplantation (BMT) in the BMT Survivor Study (BMTSS)**/T. Parekh, Y.-I. Kim, R. Ramachandran, M.T. Dransfield, S. Bhatia, Birmingham, AL, p.A5111
- 308** **The Effect of Socioeconomic Inequalities on Morbidity Among Adult Bronchiectasis Patients in NHS Greater Glasgow and Clyde**/E. Johnson, E. McCully, C. Fugaccia, D. Anderson, D. Whitters, Glasgow, United Kingdom, p.A5112
- 309** **Effect of Socioeconomic Status on Tuberculosis Care and Diagnosis in Uganda During the COVID19 Pandemic**/M. Helwig, I. Sekitoleko, M. Bbuye, T. Siddharthan, P.D. Jackson, S. Zawedde Muyanja, Richmond, VA, p.A5113
- 310** **A Decade of Economic Disparity Among Adult Asthma Readmissions in the United States**/P. Khamooshi, N. Haghani Rad, V. Reyes Pinzon, C. Yoonsun Kang, H. Shaka, Chicago, IL, p.A5114
- 311** **Effect of Race on Self-Reported Socioeconomic and Psychosocial Outcomes in Sarcoidosis**/E. Blaize, J.F. Jaber, D.C. Gomez Manjarres, D.C. Patel, Gainesville, FL, p.A5115
- 312** **Race-Sex Differences in Management of Hyperlipidemia Among Participants with COPD in the REasons for Geographic and Racial Differences in Stroke (REGARDS) Cohort**/S. Mallya, J.K. Krishnan, M. Nahid, A.D. Baugh, M.K. Han, K.I. Aronson, P. Goyal, L.C. Pinheiro, S. Banerjee, F.J. Martinez, M.M. Safford, New York, NY, p.A5116
- 313** **Methotrexate Therapy Is Frequently Delayed Among Black Patients with Pulmonary Sarcoidosis Despite Higher Burden of Respiratory Hospitalizations**/R. Strykowski, C.T. Lee, I. Bauer Ventura, R. Jablonski, R. Vij, J.H. Chung, M. Streck, A. Adegunsoye, Chicago, IL, p.A5117
- 314** **Racial Differences in Prevalence and Clinical Characteristics of Asthma-Chronic Obstructive Pulmonary Disease Overlap**/Y.S. Jo, Y.I. Hwang, K.H. Yoo, M.G. Lee, K.S. Jung, K.-C. Shin, H.K. Yoon, D.K. Kim, S.Y. Lee, C.K. Rhee, Seoul, Korea, Republic of, p.A5118
- 315** **Health Disparities Between Rural and Urban Veterans with COPD in the COVID-19 Era**/A. Zanotto, A.K. Baldomero, M. Michalik, C.H. Wendt, Minneapolis, MN, p.A5119

- 316** **Neighborhood-Level Disadvantage Impacts on Lung Function in Patients with Sarcoidosis**/G.C. Goobie, C.J. Ryerson, K.A.M. Johannson, E. Schikowski, N. Khalil, V. Marcoux, D. Assayag, H. Manganas, J.H. Fisher, M.R.J. Kolb, K.F. Gibson, D. Kass, Y. Zhang, K.O. Lindell, S.M. Nouraie, Pittsburgh, PA, p.A5120
- 317** **Disparities in Antifibrotic Utilization Among United States Veterans with Idiopathic Pulmonary Fibrosis**/B. Kaul, J.S. Lee, N. Zhang, H.R. Collard, M.A. Whooley, San Francisco, CA, p.A5797

CLINICAL

POSTER DISCUSSION SESSION

D23 **NOT THE USUAL SUSPECTS: CASE REPORTS IN RARE LUNG DISEASE**

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 9-10 (South Building, Exhibition Level)

- Poster Viewing** 8:15-8:45
- Discussion** 8:45-9:45
- Chairing:** T.J. Huie, MD, Denver, CO
C.A. Merlo, MD, MPH, Baltimore, MD
- 101** **Chylous Diarrhea as Primary Symptom of Lymphangiomyomatosis Successfully Treated with Sirolimus**/M. Arif, D. Buenaventura, D. Razia, S. Tokman, Phoenix, AZ, p.A5121
- 102** **Triple Threat; JRA, LAM & PAH**/S.S. Aleem, S. Aryal, Roanoke, VA, p.A5122
- 103** **Sporadic Lymphangiomyomatosis Without a TSC1 or TSC2 Mutation**/J.L. Sun, L. Chen, C. Wisecup, A. Ghazi, S. Mathai, M. Millard, Dallas, TX, p.A5123
- 104** **A Rare Case of Adult Diagnosis of Congenital Cystic Adenomatoid Malformation**/N. Kika, N. Patel, R. Minkin, Brooklyn, NY, p.A5124
- 105** **Nephrobronchial Fistula and Nephrolithiasis Located in the Lung in a Patient with IgG4-Related Disease**/G.M. Plens, L.S. Tatagiba, G.D.P. Bridi, A.C.P. de Vasconcelos, N.F.D. Silva, G.C.D. Almeida, E.C.T. do Nascimento, F.E. Arimura, A.M. Kawassaki, A.F. Amaral, B.G. Baldi, R.A. Kairalla, Sao Paulo, Brazil, p.A5125
- 106** **IgG4-Related Lung Disease Presenting as Chronic Cough**/A.S. Saini, S. Zajac, D. Morrar, New York, NY, p.A5126
- 107** **Follicular Bronchiolitis Associated with Primary IgG2/IgG4 Deficiency in a Previously Healthy 40-Year-Old Woman**/A. Aqeel, M. Assaad, J.J. Walsh, Sayre, PA, p.A5127

- 108 Copa Syndrome in a 20-Year-Old Man: A Case Report**/F.R. Oliveira, A.D.S. Sciortino, Y. Nascimento, K. Marangoni, N.F.D. Silva, G.C.D. Almeida, A.M. Kawassaki, R.A. Kairalla, Sao Paulo, Brazil, p.A5128
- 109 The Unlikely Duo - Concomitant Celiac Disease in a Patient with ANCA-Associated Vasculitis**/L.H. Vu, Rochester, MN, p.A5129
- 110 The Bugs Were Not to Blame; Granulomatosis with Polyangiitis Camouflaging as a Renal Abscess**/K.S. Nketiah Sarpong, A. Andoh-Duku, P. Pednekar, N. Ding, M. Alam, K. Muralidharan, Bridgeport, CT, p.A5130
- 111 Pulmonary Hemosiderosis Secondary to Venous Congestion of the Lungs Presenting as Diffuse Pulmonary Nodules**/K. Gharaibeh, J. Galvin, N.G. Shah, Baltimore, MD, p.A5131
- 112 Bronchiolitis Obliterans Associated with FLNA Mutation**/J. Keen, H.J. Kim, Minneapolis, MN, p.A5132
- 113 Paget-Schroetter Syndrome Causing a Rare Case of Venous Thoracic Outlet Syndrome**/H. Dalal, J. Saaed, E. Qaja, D. Kung, Poughkeepsie, NY, p.A5133
- 904 Connections Between Sublingual Microscopy, Endothelial Glycocalyx Damage and Septic Mortality in a Single Cohort**/A. Longino, J.A. Hippensteel, E.P. Schmidt, N.I. Shapiro, D.C. Angus, D.M. Yealy, I.S. Douglas, Aurora, CO, p.A5137
- 905 Racial Disparities in Sepsis Admission, an Observational Study Using National Inpatient Sample**/M.H. Yusuf, M. Aldiabat, F. Abdulkarim, M. Yusuf, Bronx, NY, p.A5138
- 906 Serial Metabolomic Analyses in Sepsis-Induced Acute Respiratory Distress Syndrome**/P. Yang, X. Hu, E. Iffrig, G.S. Martin, D.P. Jones, A.M. Esper, Atlanta, GA, p.A5139
- 907 Relationship of Dynamic Point-of-Care Assessment to Fluid Administration and Outcomes in Septic Shock**/A. Holder, T.-H. Chen, T. Wang, Z. Zheng, R. Zhang, N. Austin, S. Smith, A. Newsome Sikora, J.-T. Chen, Atlanta, GA, p.A5140
- 908 The Contribution of Socioeconomic Status to the Effect of Race and Ethnicity on Sepsis-Related Mortality**/N. Panchagnula, J. Garza, T. Dang, S.D. Saragadam, A. Anwar, V.K. Babu, S. Mahmood, M.K. Sidhu, C.F. Matute Martinez, P. Rojas, A. Garcia Fernandez, L. Oud, Odessa, TX, p.A5141
- 909 Norepinephrine Vs Phenylephrine for Heart Rate Control in Patients with Sepsis and Atrial Fibrillation**/A. Law, N.A. Bosch, D. Peterson, A.J. Walkey, Boston, MA, p.A5142
- 910 Temporal Trends of Sepsis-Related Mortality in People with Cancer in the United States, 2008-2017**/T. Dang, J. Garza, S. Saragadam, S. Mahmood, A. Anwar, V. Babu, N. Panchagnula, M. Sidhu, A. Garcia, L. Oud, Odessa, TX, p.A5143
- 911 Suspected Sepsis During Outpatient Clinical Emergencies Is Associated with High Short-Term Mortality**/E. Pani, S. Neefe, L. Meadows, M. Lynch, W. Schweikert, M.G.S. Shashaty, O.J.L. Mitchell, Philadelphia, PA, p.A5144
- 912 Autofluorescent Detection of Cytotoxic Tau as a Putative Point of Care Method**/A. Deweever, C.-S. Choi, V. Pastukh, M.S. Gwin, S.B. Voth, S. Subedi Paudel, A.J. Bauman, N. Kozhukhar, J.Y. Lee, K. Battles, C.M. Francis, S. Leavesley, M. Alexeyev, A. Nelson, M.T. Lin, R. Balczon, T. Stevens, Mobile, AL, p.A5145
- 913 Identification of Conserved Detrimental Host Immune Response Predicts Severity of Bacterial and Viral Infections**/M. Freedman, L. Murphy, H. Zheng, P. Khatri, L. Kalesinskas, Palo Alto, CA, p.A5146
- 914 Identification of Clinically Significant Immunologic Profiles in Patients with Septic Shock**/J. Zhao, B.K. Patel, P. Krishack, M.R. Stutz, S.D. Pearson, J. Lin, P.A. Lecompte-Osorio, K. Dugan, A. Pohlman, J.P. Kress, J.B. Hall, A.I. Sperling, A. Adegunsoye, P.A. Verhoef, K.S. Wolfe, Chicago, IL, p.A5147

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

D24 SEPSIS BIOMARKERS AND OUTCOMES: WHAT CAN WE PREDICT?8:15 a.m. - 9:45 a.m. **MOSCONE CENTER**

Room 3009/3011 (West Building, Level 3)

Poster Viewing 8:15-8:45

Discussion 8:45-9:45

Chairing: T.J. Iwashyna, MD, PhD, Ann Arbor, MI
P. Bhatraju, MD, MSc, Seattle, WA
I.D. Peltan, MD, MSc, Murray, UT

- 901 Aging-Associated Augmentation of Gut Microbiome Virulence Capability Drives Sepsis Severity**/J. Colbert, J. Kirsch, C. Erzen, D. Frank, B. Duerkop, E.P. Schmidt, Aurora, CO, p.A5134
- 902 Circulating miR-210 Levels Are Progressively Increased in More Severe Clinical Sepsis Subtypes**/R. Powell, Y.Y. Tai, J.N. Kennedy, C.W. Seymour, S.Y. Chan, Pittsburgh, PA, p.A5135
- 903 Elevated Plasma Nitric Oxide Consumption in Patients with Sepsis and in Sepsis Non-Survivors**/L.C. Illipparambil, S. Mroczek, T. Maeda, C.R. Robinson, C. Dony, M.L. Malnoske, A. Rovitelli, A.P. Pietropaoli, Rochester, NY, p.A5136

- 915** **Dexmedetomidine Versus Standard of Care for Sedation in ICU Patients with Sepsis: An Updated Systematic Review and Meta-Analysis of Randomized Control Trials**/B. Malik, B. Abdelazeem, M.M.G. Mohamed, P. Savarapu, S. Isa, B. Kheiri, M. Hassan, Flint, MI, p.A5148
- 916** **Association Between Venous and Arterial Blood Gas in Shock**/H.A. Jaliawala, B. Saksouk, T.F. Abdo, H.A. Youness, J.I. Keddissi, Oklahoma City, OK, p.A5149
- 917** **Capturing Phenotypic Manifestations of Severe Pneumonia Through the Human Phenotype Ontology**/F.L. Morales, C. Gao, T. Stoeger, A. Pawlowski, P. Nannapaneni, D.H. Schneider, M. Kang, L.V. Rasmussen, D. Fu, R.G. Wunderink, L.A.N. Amaral, Chicago, IL, p.A5150
- 918** **Predicting Infection in Hospitalized Patients After Trauma**/F. Behzadi, C. Joyce, E. Eguia, S. Kulshrestha, A. Cobb, R. Gonzalez, M.M. Churpek, M. Afshar, Maywood, IL, p.A5151
- 919** **Administration of Angiotensin II Among Adults with Septic Shock in the United States**/E.A. Vail, N.A. Bosch, A. Law, D. Peterson, H.B. Gershengorn, H. Wunsch, A.J. Walkey, Philadelphia, PA, p.A5152
- 920** **ICU Utilization and Outcomes in Patients with Critical Illness Due to Melioidosis**/L. Onofrey, R. Phunpang, A. Yarasai, A. Dulsuk, T. Yimthin, E. Thiansukhon, S. Chaisuksant, K. Tanwisaid, S. Chuananont, C. Morakot, N. Sangsa, S. Chayangsu, W. Silakun, N. Buasi, P. Chetchotisakd, N.P.J. Day, G. Lertmemongkolchai, N. Chantratita, T.E. We, p.A5153
- 921** **The U-Shaped Association Between Peak Glucose Level and Mortality of Critically Ill Sepsis Patients with Diabetes Mellitus: A Retrospective Multicenter Cohort Study**/Y.-H. Tsai, K.-Y. Hung, W.-F. Fang, Kaohsiung, Taiwan, p.A5154
- 922** **Early Metabolic Profiles of Patients with Septic Shock Reveal Distinct Patient Clustering Characterized by Ongoing Metabolic Dysfunction and Differential Mortality**/T.S. Jennaro, M.A. Puskarich, A. Karnovsky, C.R. Evans, A.E. Jones, K.A. Stringer, Ann Arbor, MI, p.A5155
- 923** **Among Critically Ill Patients, Initial Lactate Clearance Is an Unreliable Predictor of Overall Lactate Trajectories and In-Hospital Mortality**/R. Mccallister, R.P. Dickson, M.W. Sjoding, M. Nuppnau, S. Kay, R. Chanderraj, Ann Arbor, MI, p.A5798
- 924** **Trends in Sepsis Mortality and Use of Invasive Interventions**/T. King, L.A. Celi, Y. Jia, S. Hossain, Z. Chen, Boston, MA, p.A5799

- 925** **Application of Parsimonious Algorithms Derived from Latent Class Analysis to Pediatric Patients with Acute Respiratory Failure Identifies a Hyperinflamed Phenotype with Worse Clinical Outcomes**/H.R. Flori, M. Zhang, J. Xie, G. Yang, M.W. Quasney, A. Sapru, C.S. Calfee, K.L. DeLucchi, P. Sinha, M.A.Q. Curley, M. Dahmer, Ann Arbor, MI, p.A5800

BEHAVIORAL • CLINICAL • TRANSLATIONAL
POSTER DISCUSSION SESSION
D25 THE VIEW AHEAD: EXPOSURE ASSESSMENT, COMMUNICATION, AND EARLY LIFE IMPACT
8:15 a.m. - 9:45 a.m.
MOSCONE CENTER
Room 203-204 (South Building, Level 2)
Poster Viewing 8:15-8:45
Discussion 8:45-9:45
Chairing: S. Raju, MD, MPH, Baltimore, MD
 E. Garcia, PhD, MPH, Los Angeles, CA
 D. Gold, MD, Boston, MA

201 **Child Maltreatment, Anxiety and Depression, and Asthma Among British Adults in the UK Biobank**/Y.-Y. Han, Q. Yan, W. Chen, J.C. Celedon, Pittsburgh, PA, p.A5156

202 **Dietary Pattern and Asthma Symptoms Among Young Adults: A Cross-Sectional Analysis from a Sub-Saharan Country**/O.F. Awopeju, O. Awopeju, A. Arawomo, G.E. Erhabor, Ile Ife, Nigeria, p.A5157

203 **Disease Control, Not Severity, Drives Welfare Resource Utilization in Young Adults with Asthma: A 15-Year Nationwide Cohort Study**/K.E.J. Håkansson, V. Backer, C.S. Ulrik, Hvidovre, Denmark, p.A5158

204 **Influence of PM and NO₂ Exposure on the Increased Risk of RSV Hospitalizations in Polish Children**/A.J. Badyda, A. Wrotek, P. Dabrowiecki, P.O. Czechowski, T. Owczarek, T. Jackowska, Warsaw, Poland, p.A5159

205 **Prenatal Exposure to Air Pollution: A Susceptibility Factor to Develop Chronic Obstructive Pulmonary Disease?**/Z. Lu, C. de Franceschi, M. Cazaunau, A. Bergé, E. Al Marj, P. Coll, S. Lanone, Créteil, France, p.A5160

206 **Early Exposure to Nanomaterials: A Risk Factor to Develop Chronic Obstructive Pulmonary Disease?**/Y. Watanabe, J. Bruniaux, C. Buisson, A. Geeverding, B. Angeletti, J. Rose, S. Lanone, Créteil, France, p.A5161

- 207 Associations Between Prenatal Particulate Air Pollution and Lung Function in 6-Month-old Infants/S. Tolani, W. Cowell, M. Minchala, B. Coull, R.J. Wright, A. Lee, New York, NY, p.A5162**
- 208 Cardiac Mechanics and Gene Expression of Pathogen Recognition Pathway Receptors: The Coronary Artery Risk Development in Young Adults (CARDIA) Study/R. Mylvaganam, L. Colangelo, R. Ramasubramanian, B. Thyagarajan, D. Jacobs, M. Gross, R. Kalhan, S. Khan, M.J. Cuttica, Chicago, IL, p.A5163**
- 209 Short-Term Exposure to Precipitation and Respiratory Health in Adolescents/N. Nassikas, S.L. Rifas-Shiman, H. Luttmann-Gibson, A. Stanley Lee, K. Chen, J.C. Blossom, E. Oken, D.R. Gold, M.B. Rice, Boston, MA, p.A5165**
- 210 Ambient Air Pollutant Mixture Exposure in Pregnancy and Early School-Age Lung Function in an Urban Cohort in the Northeastern United States/H.-H.L. Hsu, A. Wilson, Y.-H.M. Chiu, J. Schwartz, A. Just, I. Kloog, R.O. Wright, B.A. Coull, R.J. Wright, New York, NY, p.A5166**
- 211 Facilitating Case-Crossover Studies Using Environmental Protection Agency Data/J. Kelchtermans, F. Mentch, H. Hakonarson, Philadelphia, PA, p.A5167**
- 212 Communicating Respiratory Health Risk Among Children Using a Global Air Quality Index/L. Gladson, K. Cromar, M. Ghazipura, E. Knowland, C. Keller, B. Duncan, Brooklyn, NY, p.A5168**
- 213 Air Quality Indices and Health Risk Communication in Europe. Rapid Review and Recommendations/N. Lazrak, K. Cromar, New York, NY, p.A5169**
- 214 Measuring Air Quality for Advocacy in Africa (MA3): Ambient PM_{2.5} Concentrations Over One-Year in 15 Locations in Eight Sub-Saharan African Countries Using Low-Cost Sensors/B.I. Awokola, G. Okello, R. Dobson, G.A. Amusa, O. Johnson, A. Erhart, K. Mortimer, C. Jewell, S. Semple, Fajara, Gambia, p.A5170**
- 215 Assessing Exposure to Antigens and Endotoxins in First Nations Housing/I. Kamurasi, P. Camp, T. Holyk, K.H. Bartlett, Vancouver, Canada, p.A5171**
- 216 Home Settled Dust Allergen Assessment: Comparison of Technician versus Self-Collection Approaches/N. Diaz, A. Fawzy, K.M. Romero, H. Woo, C. Liu, K. Ladson, M. Lauver, K. Koehler, N. Putcha, Baltimore, MD, p.A5172**
- 217 Developmental Exposure to Wildfire Smoke: A Study of Insurance Claims Data to Assess First Use of Respiratory Medications/R. Dhingra, C. Keeler, B.S. Staley, C. Ward-Caviness, M.E. Rebuli, L. Wei, K.M. Rappazzo, M. Hernandez, A. Chelminski, I. Jaspers, A. Rappold, Chapel Hill, NC, p.A5801**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

D26 THE FUTURE'S BRIGHT: PRIMARY CILIARY DYSKINESIA AND CYSTIC FIBROSIS DIAGNOSTIC AND THERAPEUTIC ADVANCES

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 2005/2007 (West Building, Level 2)

- Poster Viewing 8:15-8:45**
- Discussion 8:45-9:45**
- Chairing:** J.H. Rayment, MD, MSc, Vancouver, Canada
A.J. Shapiro, MD, Montreal, Canada
J.E. Pittman, MD, MPH, Saint Louis, MO
- 601 Building for the Future: Establishment of the Primary Ciliary Dyskinesia Foundation Clinical Registry/M.G. O'Connor, M.W. Leigh, S.D.M. Dell, M. Rosenfeld, C. Kauffman, M. Manion, A.J. Shapiro, Nashville, TN, p.A5173**
- 602 Self-Assembly of Cytoplasmic Motile Cilia Motor Protein Complexes During Ciliogenesis/R.M. Hyland, A.B. Budan Caliskan, W.K. Lee, A. Ustione, D.J. Foust, A. Horani, M.R. Mahjoub, S.L. Brody, St. Louis, MO, p.A5174**
- 603 Progression of Upper Airway Manifestations in Primary Ciliary Dyskinesia Throughout Childhood/I. Dagher, M.W. Leigh, M. Rosenfeld, T.W. Ferkol, S.D. Sagel, S.D.M. Dell, C.E. Milla, K.M. Sullivan, L. Li, F.-C. Lin, M. Zariwala, M.R. Knowles, S.D. Davis, Chapel Hill, NC, p.A5175**
- 604 Correlations Between Human Nasal Cell and Lung Physiology and Therapeutic Response in Cystic Fibrosis Patients, Single Disease-Causing CFTR Mutation Carriers, and Healthy Controls/T.E. Corcoran, C.A. Bertrand, M.M. Myerburg, R.S. Parker, D.J. Weiner, S.A. Frizzell, A. Li, B. Agostini, M. Shapiro, A. Muthukrishnan, N.D. Hages, B.P. Mulhern, J.M. Pilewski, Pittsburgh, PA, p.A5176**
- 605 Relationship Between Genotype/Ultrastructural Defect and Neonatal Respiratory Distress in Primary Ciliary Dyskinesia/A. Barber, A.J. Shapiro, S.D. Davis, T.W. Ferkol, J.J. Atkinson, S.D. Sagel, S.D.M. Dell, K.N. Olivier, C.E. Milla, M. Rosenfeld, L. Li, F.-C. Lin, K.M. Sullivan, M.A. Zariwala, M.R. Knowles, M.W. Leigh, Chapel Hill, NC, p.A5177**
- 606 A Stepwise Genetic Approach for the Diagnosis of Primary Ciliary Dyskinesia in High Consanguineous Populations/D. Gatt, M. Eskin-Schwartz, I. Golan Tripto, E. Levanon, A. Goldbart, O.S. Birk, M. Aviram, Toronto, Canada, p.A5178**

- 607 Moving Toward Personalized Cystic Fibrosis Care: A Workflow for Single-Cell RNA-Sequencing/M.N. Januska, Y. Sun, F. Dekio, M.J. Walsh, New York, NY, p.A5179**
- 608 Short-Term Feasibility and Acceptability of Home Spirometry in Cystic Fibrosis/J. Davis, S. Dahlberg, C. Bacon, P. Marchetti, J. Greenberg, S. Scalia, R. Kaur, G.S. Sawicki, Boston, MA, p.A5180**
- 609 Feasibility and Reliability of Hyperpolarized ¹²⁹Xe MRI in Pediatric Primary Ciliary Dyskinesia/W.B. Wee, B. Zanette, S. Munidasa, S. Braganza, D. Li, M.P. Dumas, J. Au, M. Sawras, E. Stirrat, F.A. Ratjen, G. Santyr, S.D.M. Dell, Toronto, Canada, p.A5181**
- 610 Point of Care Lung Ultrasound in Children with Cystic Fibrosis and Primary Ciliary Dyskinesia/N. Marzook, S. Dubrovsky, L.C. Lands, D. Zielinski, A.J. Shapiro, Montreal, Canada, p.A5182**
- 611 Prevalence of Adverse Childhood Experiences in Children with Cystic Fibrosis/W. Williams, B. Bedford, S.A. McColley, Chicago, IL, p.A5183**
- 612 Age and Host Microbiota Affect the Abundance and Composition of Airway Mucus/A. Livraghi-Butrico, C. Jania, A. Saldana-Montavon, G. Radicioni, L. Morton, E. Waller, M. Kesimer, W. O'Neal, Chapel Hill, NC, p.A5184**
- 613 Prevalence of Monoallelic Variants in the Cystic Fibrosis (CFTR) and Primary Ciliary Dyskinesia (PCD)-Associated Genes in a Nontuberculous Mycobacteria (NTM)-Predominant Bronchiectasis Cohort/K. Avaiya, S. Wasim, K. Kumar, M. Walkiewicz, K.N. Olivier, Bethesda, MD, p.A5185**
- 614 Correlation of Lung Function Using Forced Oscillation Technique with Spirometry in Children Aged (4-18 Years) with Cystic Fibrosis (CF)/S. Singh, M. Singh, J.L. Mathew, Chandigarh, India, p.A5802**
- 1001 Vps34 Is Up-Regulated and Promotes Proliferation and Survival of Smooth Muscle Cells in Pulmonary Arterial Hypertension/Y. Shen, D. Goncharov, L. Jiang, D. Lin, T. Avolio, E. Okorie, A.L. Mora, A. Saiyed, T.V. Kudryashova, E.A. Goncharova, Davis, CA, p.A5186**
- 1002 Hypoxia Signaling and p53 Regulate Expression of Endosomal GTPase RAB7 in Pulmonary Artery Endothelial Cells in PAH/B. Piper, A.R. Bhagwani, J. Hudson, E.A. Goncharova, L. Farkas, Columbus, OH, p.A5187**
- 1003 RAB7 Silencing Induces an Anti-Angiogenic mRNA Signature in Human Pulmonary Artery Endothelial Cells/J. Hudson, K. Shin, A. Pan, M. Ali, A.R. Bhagwani, S. Bogamuwa, B. Piper, P. Yan, E.A. Goncharova, L. Farkas, Columbus, OH, p.A5188**
- 1004 Profiling BMPR2-Derived Endothelial Circular RNAs in Pulmonary Arterial Hypertension/M.M. Vandenbroek, M.C. Sharp, A.L. Theilmann, M.L. Ormiston, Kingston, Canada, p.A5189**
- 1005 CD39-Bearing Extracellular Vesicles Constrain Platelet Purinergic Signaling-Dependent Pulmonary Thrombosis in Sick Cell Disease/T. Brzoska, E.V. Menchikova, T.W. Kaminski, R. Vats, E. Tutuncuoglu, S.P. Tofovic, E.K. Jackson, M.T. Gladwin, P. Sundd, Pittsburgh, PA, p.A5190**
- 1006 CCR2-CCL2 Axis in Hypoxic Pulmonary Hypertension/R. Kumar, B. Kassa, N. Chanana, K. Sharma, T. Palmo, S. Kumar, C. Mickael, M.H. Lee, K.R. Stenmark, R.M. Tuder, Q. Pasha, B.B. Graham, San Francisco, CA, p.A5191**
- 1007 Role of SOX17 Mutations in the Pathogenesis of Pulmonary Arterial Hypertension/D. Yi, B. Liu, Z. Dai, Phoenix, AZ, p.A5192**
- 1008 Use of endothelium-derived extracellular vesicles for delivery of miR-212-5p in the treatment of Sugen/hypoxia-induced severe pulmonary hypertension (PH) in rats/T. Chen, A. Guzman, M. Sun, Q. Zhou, J. Chen, J.U. Raj, Chicago, IL, p.A5193**
- 1009 Paired Related Homeobox 2 (Prrx2) Drives Pulmonary Artery Smooth Muscle Cell (PASMC) Proliferation and Vascular Remodeling in Pulmonary Hypertension: Inhibitory Role of MiR-212-5p/T. Chen, Q. Zhou, A. Alvi, C. Baralt-Torres, A. Mirza, J. Chen, J.U. Raj, Chicago, IL, p.A5194**
- 1010 LITAF Signaling Promotes Pro-Inflammatory Pericyte Signaling and Exacerbates Pulmonary Hypertension in Hypoxic Mice/D.F. Condon, A. Chakraborty, S. Agarwal, H. Patel, N. Auer, A. Sweatt, L. Wang, R.T. Zamanian, S. Amar, K. Yuan, V. De Jesus Perez, Stanford, CA, p.A5195**
- 1011 Identifying Long Non-Coding RNAs That Regulate BMPR2 Signaling in Pulmonary Arterial Hypertension/M.K.K. Ali, A.M. Andruska, K. Schimmel, Y. Liu, V. De Jesus Perez, H. Chang, E.F. Spiekerkoetter, Palo Alto, CA, p.A5196**

BASIC • TRANSLATIONAL

POSTER DISCUSSION SESSION

D27 CASTRO: CELL SURVIVAL, ORGANELLES, AND VESICLES IN THE PULMONARY CIRCULATION

8:15 a.m. - 9:45 a.m. **MOSCONE CENTER**

Room 3016/3018 (West Building, Level 3)

Poster Viewing **8:15-8:45**

Discussion **8:45-9:45**

Chairing: N.N. Bauer, PhD, Mobile, AL
O. Liang, PhD, Providence, RI
P.B. Yu, MD, PhD, Boston, MA

- 1012** **CircCMC1 in Peripheral Blood Mononuclear Cells Impact on Idiopathic Pulmonary Arterial Hypertension**/Y.-Y. Sun, J.-M. Liu, P. Yuan, Shanghai, China, p.A5197
- 1013** **Classical Dendritic Cells Are Determinant in Driving and Maintaining Hypoxia Induced Pulmonary Hypertension**/C. Mickael, L. Sanders, M.H. Lee, R. Kumar, A. Mckee, D. Irwin, D. Swindle, K.R. Stenmark, B.B. Graham, R.M. Tuder, Aurora, CO, p.A5198
- 1014** **Increased Bone Morphogenetic Protein 10 Activity Is Associated with Increased Right Atrial Wall Stress and Disease Severity in Pulmonary Hypertension**/J. Van Wezenbeek, A. Lucia-Valldeperas, J.A. Groeneveldt, G. Sanchez-Duffhues, R. Smal, X. Pan, A. Vonk Noordegraaf, H.J. Bogaard, M.-J. Goumans, F.S. de Man, Amsterdam, Netherlands, p.A5199
- 1015** **Uncovering c-IAP2-Dependent Generation of an Endothelial Survival Memory in Schistosomiasis-Associated Pulmonary Arterial Hypertension**/S.D. Dos Santos Oliveira, E. Erewele, M. Castellon, A. Schwartz, D.L. Williams, N.W. Morrell, M.G. Bonini, C.L.M. Silva, S.E. Lutz, S. Erzurum, R.D. Minshall, Chicago, IL, p.A5200
- 1016** **Pharmacologic Inhibition of Wnt Signaling in a Murine Model of Pulmonary Hypertension Halts Neointimal Growth and Causes Neointimal Lesion Regression in Pulmonary Arteries**/L.C. Steffes, D.N. Cornfield, M.E. Kumar, Palo Alto, CA, p.A5201
- 1017** **Sotatercept Analog RAP-011 Is More Effective Than Praliguat in Improving Pulmonary Hypertension and Reducing Right Ventricular Hypertrophy in a ZSF1 Rat Model of Heart Failure with Preserved Ejection Fraction**/S.R. Joshi, J. Liu, P. Andre, R. Kumar, G. Li, Cambridge, MA, p.A5202
- 1018** **Impact of the Microbiota on the Development of the Pulmonary Vascular Tree in Rats**/F.K.K. Akoumia, Le Plessis Robinson, France, p.A5203
- 1019** **Endothelial Heterogeneity in the Response to Autophagy Drives Vascular Muscularization in Pulmonary Hypertension**/Q. Zhang, N. Yaoita, A. Tabuchi, T. Finkel, S. Verma, S. Timm, M. Ochs, W.M. Kuebler, Berlin, Germany, p.A5204
- 1020** **Structural, Functional, and Single Cell Transcriptomic Age-Related Remodeling of Mouse Proximal Pulmonary Artery**/E.P. Manning, A.B. Ramachandra, C. Cavinato, J.C. Schupp, A. Justet, I. Singh, G. Tellides, T. Gill, N. Kaminski, J.D. Humphrey, New Haven, CT, p.A5205
- 1021** **Neointima Formation in the Chronic Inflammation Model of Pulmonary Hypertension Is T Cell-Dependent**/A.M. Andruska, L. Steffes, A. Khan, E. Spiekerkoetter, M. Kumar, Stanford, CA, p.A5206
- 1022** **The Thromboxane Receptor Antagonist NTP42 Promotes Beneficial Right Ventricular Adaptation and Preserves Right Heart Function in the Pulmonary Artery Banding Model of Pressure Overload**/E. Mulvaney, F. Renzo, P. Mendes-Ferreira, R. Adao, C. Brás-Silva, B.T. Kinsella, Dublin, Ireland, p.A5207
- 1023** **A Tm4sf1-Marked Subpopulation of Endothelial Stem/Progenitor Cells Identified by Lung Single-Cell Omics of Pulmonary Arterial Hypertension**/J. Hong, B. Wong, C. Huynh, B. Tang, S. Umar, X. Yang, M. Eghbali, Los Angeles, CA, p.A5803
- 1024** **Pink1 Deficiency Enhances Pulmonary Vascular Remodeling and Aggravates Hypoxia-Induced Pulmonary Hypertension**/R. Rehman, P.B. Dieffenbach, S. Karuthedath Vellarikkal, K.V.Z. Vera, A.M. Corcoran, A. Arciniegas, J. Shen, H.C. Lam, L.E. Fredenburgh, Boston, MA, p.A5804

BEHAVIORAL • CLINICAL • TRANSLATIONAL
POSTER DISCUSSION SESSION
D28 ASSESSING THE PATHOPHYSIOLOGY AND PSYCHOLOGY OF PATIENTS FOR REHABILITATION
8:15 a.m. - 9:45 a.m.
MOSCONE CENTER
Room 212-214 (South Building, Level 2)
Poster Viewing 8:15-8:45
Discussion 8:45-9:45
Chairing: S.C. Lareau, RN, MS, ATSF, Denver, CO
G. Wesseling, MD, Maastricht, Netherlands

401 **The Underappreciated Connection Between Different Aspects of Muscle and Cardiovascular Function During Exacerbation of Chronic Obstructive Pulmonary Disease**/R.G. Mendes, N.S. Schafuser, M.G. Roscani, D.M. Oliveira Kawakami, A.D. Heubel, E.Z. Kabbach, N. Leonardi, V. Castello-Simoes, V.A.P. Di Lorenzo, A.B. Silva, Sao Carlos, Brazil, p.A5208

402 **Systematic Review of Physical Activity, Sedentary Behaviour and Sleep Among Adults Living with Chronic Respiratory Disease in Low- and Middle-Income Countries**/M. Orme, A. Jayamaha, I. Pina, A. Jones, W. Katagira, B. Girase, Z. Yusuf, L. Wilde, A. Akyzbekov, P. Divall, S.J. Singh, Leicester, United Kingdom, p.A5209

403 **COVID-19 Restrictions Negatively Impact Physical Activity and Health-Related Quality of Life In Elderly Smokers**/D. Baez, R.A. Calmelat, R. Casaburi, H.B. Rossiter, A. Adami, Kingston, RI, p.A5210

- 404 **Reliability, Validity, and Responsiveness of the DEG, a Three-Item Dyspnea Measure/D.** Ha, L. Deng, A.V. Lange, J.J. Swigris, D. Bekelman, Aurora, CO, p.A5211
- 405 **Clinical Implications of Frailty in Hospitalized Patients with Pulmonary Arterial Hypertension/A.** Lokhandwala, T. Da Silva, S. Nourouzpour, J. Man, J. Moric, M. De Perrot, K. Wentlandt, N. Sharif, L.G. Singer, J.T. Granton, D. Rozenberg, Toronto, Canada, p.A5212
- 406 **Standardized Interpretation of Hand Grip Strength Improves Correlation with Functional Impairment and Symptom Burden in COPD Patients/K.** Seibert, B.A. Dolezal, D.T. Hoesterey, J.D. Browne, D. Gomez, N. Saiphoklang, D. Jung, J.E. Phillips, I. Barjaktarevic, C.B. Cooper, Los Angeles, CA, p.A5213
- 407 **Proof of Concept for Deriving Physical Activity (PA) Intensity Levels from Field-Based Walking Tests/M.** Orme, I. Pina, P. Ndagire, L. Latimer, J. Zatloukal, B. Kirenga, S.J. Singh, W. Katagira, Leicester, United Kingdom, p.A5214
- 408 **Sex Differences in Prevalence and Determinants of Anxiety in Patients with COPD Initiating Pulmonary Rehabilitation/A.M.** Yohannes, R. Casaburi, S. Dryden, N.A. Hanania, Azusa, CA, p.A5215
- 409 **Active PAL Monitored Sleep Measures and Self-Reported Symptoms of Depression and Anxiety in Relation to Physical Activity in Patients with Severe COPD/H.** Hansen, C.D. Neale, P. Edelgaard Christensen, C. Have Dall, C.S. Ulrik, N. Godtfredsen, Hvidovre, Denmark, p.A5216
- 410 **Physical Activity (PA) of People Living with Post-Tuberculosis Lung Disease (pTBLD) in Uganda/M.** Orme, I. Pina, P. Ndagire, L. Latimer, J. Zatloukal, B. Kirenga, S.J. Singh, W. Katagira, Leicester, United Kingdom, p.A5217
- 411 **Long-Term Impact in Intensive Care Survivors of Coronavirus Disease-19 (AFTERCOR Study): Preliminary 3-Month Analysis After ICU Discharge/K.** Wildi, G. LiBassi, B. McNicholas, F. Rainieri, S. Forsyth, S.-M. Cho, A. Motos, R. Cabrera, A. Barnett, M. Panigada, S. Colombo, A. Matsuoka, S. Ohshimo, A. Bandera, J.G. Laffey, A. Muscatello, J. Sheehan, D. Battaglini, C. Robba, A. Torres, F. Roche-Campo, C. M. Luna, C. L. Hodgson, A. Burrell, H. Buscher, L. Salazar, M. Mendoza Monsalve, Y. Chia, H. J. Dalton, H. Choi, J. Suen, J. Fraser; Brisbane, Australia, p.A5218

BASIC • TRANSLATIONAL

POSTER DISCUSSION SESSION

D29 MECHANISMS IN LUNG INJURY, REPAIR, AND FIBROSIS

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 2022/2024 (West Building, Level 2)

- Poster Viewing** 8:15-8:45
- Discussion** 8:45-9:45
- Chairing:** P.R. Tata, MSc, PhD, Durham, NC
K.-D. Alysandratos, MD, PhD, Boston, MA
E.F. Redente, PhD, Denver, CO
- 801 **An Unexpected Role of Bcl2 in the Regulation of Unfolded Protein Response and Fibrosis Resolution/C.T.** Jourdan Le Saux, T.-C. Ho, A. Brumwell, J.J. Kathiriya, Y. Wei, V. Auyeung, H.A. Chapman, San Francisco, CA, p.A5220
- 802 **Latent Potential Regeneration of Alveolar Epithelial Cells from Aging Accelerated Mice Model (Zmpste24^{-/-})/Y.** Romero, T. Valdivia, U. Camacho, R. Ramirez, F. Toscano-Marquez, M. Selmán, A. Pardo, Ciudad de Mexico, Mexico, p.A5221
- 803 **TGF- β Signaling Is Implicated in the Initiation of Senescence in the Mouse Lung During Aging/J.** Calyeca, Y.I. Balderas-Martinez, M. Selmán, A. Pardo, Columbus, OH, p.A5222
- 804 **A Novel TRPV4-PI3K γ Interaction Mediates Myofibroblast Differentiation/L.** Grove, M. Mohan, K.D. Singh, S. Abraham, R.G. Scheraga, B.D. Southern, S.V. Naga Prasad, S. Karnik, M.A. Olman, Cleveland, OH, p.A5223
- 805 **Mitochondrial Fission and Bioenergetics Mediate Human Lung Fibroblast Durotaxis/Y.** Zhou, T. Guo, S.-Z. Yang, Y. Zhu, C.-S. Jiang, H. Peng, Birmingham, AL, p.A5224
- 806 **The mTORC2 Pathway Is Critical for Induction of Mesothelial Mesenchymal Transition and Pleural Fibrosis/T.A.** Tucker, S. Owens, W. Qin, A. Jeffers, J.K. Kleam, S. Komatsu, M. Ikebe, S. Idell, Tyler, TX, p.A5225
- 807 **Inhibition of YAP/TAZ Signaling by the FDA Approved Drug Verteporfin Attenuates Fibrosis in Mouse and Human Tissue/N.** Mitash, H.N. Alsafadi, R.H. Pineda, K. Kohler, M. Ishizuka, J. Sembrat, M. Lehmann, R. Chambers, D.E. Wagner, M. Koenigshoff, Pittsburgh, PA, p.A5226
- 808 **Translational Co-Culture Model Reveals Epithelial-Mesenchymal Mechanisms of Lung Fibrosis and Identifies NF κ B as Potential Therapeutic Target/P.** Sieber, A. Schäfer, R. Lieberherr, U. Lüthi, J. Ryge, R. Studer, E.S. White, O. Nayler, Allschwil, Switzerland, p.A5227

- 809 A Potential Therapeutic Peptide for Organ Fibrosis Engages μ PAR And Enolase1 to Promote Its AntiFibrotic Activity/S.** Sharma, T. Watanabe, X.-X. Nguyen, M. Sanderson, C. Feghali-Bostwick, Charleston, SC, p.A5228
- 810 Differential RNAseq Analysis of an Ex-Vivo Human Fibrotic Tissue Slice Model Reveals Dysregulated Genes of Cellular Senescence and YAP/TAZ Signaling in Fibrosis/R.**H. Pineda, N. Mitash, K. Kohler, M.C. Melo Narvaez, J. Sembrat, M. Fangping, M. Lehmann, N. Kaminski, M. Koenigshoff, Pittsburgh, PA, p.A5229
- 811 Extracellular Vesicles Promote the Propagation of Scleroderma-Associated Lung Fibrosis/J.** Mouawad, C. Feghali-Bostwick, Charleston, SC, p.A5230
- 812 Lineage Tracing of Cells Expressing the Mesenchymal Profibrotic Transcription Factor Prrx1 (Paired Related Homeobox Protein 1) in Normal and Fibrotic Lung/M.** Homps-Legrand, M. Jaillet, L. Deneuville, B. Crestani, A. Mailleux, Paris, France, p.A5231
- 813 PRS-220, a Novel Inhalable Therapeutic Intervention for IPF, Targeting CTGF Directly in the Lung/V.**N. Neiens, M. Pavlidou, C. Wurzenberger, E.-M. Hansbauer, C. Wurzenberger, S. Gruener, J. Peper-Gabriel, K. Heinig, T. Jaquin, A. Konitsiotis, J. Morgenstern, G. Matschiner, S. Olwill, Hallbergmoos, Germany, p.A5232
- 814 CKD-506, a Selective HDAC6 Inhibitor, Is a First-in-Class Drug Candidate for the Treatment of Idiopathic Pulmonary Fibrosis (IPF)/S.-J.** Lee, M.C. Kim, J. Baek, D. Suh, J.W. Song, N. Ha, Yongin-si, Korea, Republic of, p.A5233
- 815 Differentiating Characteristics of Cudetaxestat (BLD-0409), a Non-Competitive Autotaxin Inhibitor Under Development to Treat Idiopathic Pulmonary Fibrosis/C.** Wong, X. Xu, W. Yu, M. Kim, D. Kim, M.E. Fuentes, J.-X. Huang, P. Ibrahim, R. Rajagopalan, South San Francisco, CA, p.A5234
- 816 Pharmacological Inhibitors of Integrin $\alpha_v\beta_6$ That Differentially Modulate Protein Conformation Are Similarly Effective at Inhibiting Transforming Growth Factor Beta (TGF- β) Signaling in the Fibrotic Lung/E.** Budi, P. Kotak, S. Ho, V. Rao, C. Chen, P. Wolters, J. Schaub, S. Turner, M. Decaris, San Francisco, CA, p.A5235
- 817 TREM-1 Activation Mediates Air Pollution-Induced Acute Exacerbations of Pulmonary Fibrosis/J.**L. Larson-Casey, L. Gu, S.R. Duncan, A.B. Carter, Birmingham, AL, p.A5236
- 818 Toll-Like Receptor Signaling Mediates Macrophage Collagen Fragment Uptake in the Lung/G.**S. Torres Matias, M.N. Ballinger, J. Leight, Columbus, OH, p.A5237
- 819 Abrogation of the TOM20-TIM23 Pathway Ameliorates NOX4-Induced Mitochondria ROS in Pulmonary Fibrosis/J.** Pandey, J.L. Larson-Casey, L. Gu, C. He, A.B. Carter, Birmingham, AL, p.A5238
- 820 Comprehensive Profiling of Endothelial Cell Surface and Adhesion Molecules in Pulmonary Fibrosis/E.** FlieBer, A. Birnhuber, L.M. Marsh, P. Böhm, K. Hötzenecker, G. Kovacs, H. Olschewski, M. Kreuter, M. Wygrecka, G. Kwapiszewska, Graz, Austria, p.A5239
- 821 Single Cell RNA Sequencing Identifies G-Protein Coupled Receptor 87 as a Novel Basal Cell Marker of Distal Honeycomb Cysts in Idiopathic Pulmonary Fibrosis/Q.** Hu, K. Heinzelmann, M. Ansari, Y. Hu, E. Dobrinskikh, H.M. Ulke, C. Leavitt, C. Mirita, T. Trudeau, M.L. Saal, P. Rice, B. Gao, W.J. Janssen, I.V. Yang, H.B. Schiller, E.K. Vladar, M. Lehmann, M. Königshoff, Munich, Germany, p.A5240
- 822 Effect of Sonic Hedgehog Pathway in Idiopathic Pulmonary Fibrosis/R.** Joshi, J.L. Larson-Casey, C. He, L. Gu, A.B. Carter, Birmingham, AL, p.A5241
- 823 ADRB2 Inhibition Alleviates Pulmonary Fibrosis Through Preventing and Reversing Myofibroblast Differentiation/R.** Wan, L. Wang, H. Lian, P. Yan, M. Zhao, J. Yang, X. Chen, X. Guo, K. Xu, G. Yu, Xinxiang, China, p.A5242
- 824 LysoTracker Uptake Identifies Transitional Epithelial States in Idiopathic Lung Fibrosis/R.** Wasnick, I. Shalashova, J. Wilhelm, A. Khadim, E. El-Agha, C. Ruppert, W. Seeger, S. Bellusci, A.U. Guenther, Giessen, Germany, p.A5243
- 825 IRE1 α Drives Lung Epithelial Progenitor Dysfunction to Establish a Niche for Pulmonary Fibrosis/V.** Auyeung, M. Downey, M. Thamsen, T. Wenger, B. Backes, F. Papa, D. Sheppard, San Francisco, CA, p.A5244

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

D30 THE INJURED LUNG: MECHANISMS AND THERAPEUTIC TARGETS

8:15 a.m. - 9:45 a.m.

MOSCONE CENTER

Room 2009/2011 (West Building, Level 2)

Poster Viewing 8:15-8:45

Discussion 8:45-9:45

Chairing: S. Dua, MBBS, ATSF, New York, NY
A. Lee, MD, MS, New York, NY**701 3D Fibrotic Lung Extracellular Matrix Hydrogels Trigger Pro-Fibrotic Responses in Primary Lung Fibroblasts/M.** Nizamoglu, T. Koster, M. Thomas, W. Timens, C.K. Koss, K.C. El Kasmi, B.N. Melgert, I.H. Heijink, J.K. Burgess, Groningen, Netherlands, p.A5245

- 702 Association of Dynamic and Static Mechanical Energy and Neutrophilic Inflammation in Experimental Acute Lung Injury in Pigs/R.** Huhle, M. Scharffenberg, J. Wittenstein, J. Zhang, X. Ran, A. Braune, T. Koch, J. Kotzerke, M. Gama de Abreu, Dresden, Germany, p.A5246
- 703 Heterogeneous Changes in Airspace Morphometry During Murine Acute Lung Injury/M.** Osovskaya, J. Bilodeaux, A.M. Wallbank, H. Farooqi, B.J. Smith, Greenwood Village, CO, p.A5247
- 704 Treprostinil, an EP-2 Agonist, Decreases Lung Fibroblasts Extra-Cellular Matrix Production in a cAMP Dependent Manner/S.** Orfanos, G. Cao, B.T. Deeney, V. Parikh, R.A. Panettieri, New Brunswick, NJ, p.A5248
- 705 Novel Non-Catalytic FAK Inhibition Downregulates Lung Fibroblast Matrix Production/Y.** Moreno Caro, W. Weiner, L. Naser, W.G. Grischo, M. Kala, L. Hecker, T. Wang, K. Knox, T. Marlowe, Phoenix, AZ, p.A5249
- 706 Discovery of Remodilins - a Novel Class of Small Molecules That Inhibit Myofibroblast Differentiation of Human Lung Fibroblasts and Pulmonary Fibrosis in Mice/B.** Chen, C.Y. Park, L. Diane, E.B. Reed, J. Wang, R. Krishnan, V. Gurchich, S. Byrn, D. Maloney, M. Rosner, N. Prabhakar, J. Nanduri, G.M. Mutlu, R. Amy, S.R. White, B. Laxman, S. Kales, D. Tao, G. Bantukallu, A. Simeonov, M. Muzzio, R. Moellering, J. Huan, p.A5250
- 707 PLN-74809, an Oral, Dual-Selective $\alpha_7\beta_6/\alpha_7\beta_1$ Inhibitor in Phase 2 Clinical Trials for Idiopathic Pulmonary Fibrosis (IPF), Sustainably Reduces Transforming Growth Factor Beta (TGF- β) Activity in the Lungs of Healthy Participants with Once-Daily Dosing/G.P.** Cosgrove, M. Decaris, S. Wong, E. Park, S. Turner, E. Adegbite, E. Lefebvre, South San Francisco, CA, p.A5251
- 708 Plasma Biomarkers of Inflammation and Lung Injury in Obese Surgical Patients Ventilated with Low vs. High Positive End-Expiratory Pressure and Lung Recruitment Maneuvers - A Substudy of the PROBESE Randomized Controlled Trial/M.** Scharffenberg, T. Bluth, J. Wittenstein, R. Huhle, T. Koch, P. Pelosi, M. Schulz, J. Sprung, M. Gama de Abreu, Dresden, Germany, p.A5252
- 709 Delivery of Soluble Klotho cDNA to the Lung Alleviates Acute Lung Injury/J.** Gagan, D.M. Dane, C.C.W. Hsia, Dallas, TX, p.A5253
- 710 PLN-74809, a Dual-Selective Inhibitor of Integrins $\alpha_7\beta_6$ and $\alpha_7\beta_1$, Shows Dose-Dependent Target Engagement in the Lungs of Patients with Idiopathic Pulmonary Fibrosis (IPF)/J.J.** Mooney, K. Morris, S. Jacobs, E. Lefebvre, G.P. Cosgrove, S. Wong, J. Bellini, M. Jurek, S. Turner, M. Decaris, R. Jiron, B. Williams, H. Duan, R. Gunn, G. Rizzo, M. Wardak, H.H. Guo, Stanford, CA, p.A5254
- 711 Comparison of Dynamic Contrast Enhancement Computed Tomography Analysis Models to Characterize Pulmonary Blood Flow in a Pig Model of ARDS/T.** Kim, Y. Xin, K. Martin, H. Song, A. Lenart, S. Gerard, M. Petrov, J. Shen, K. Rozenberg, J. Herrmann, L. Staelin, S. Humayun, P. Shah, U. Sidhu, S. Bathula, K. Reutlinger, M. Staley, P. Delvecchio, J. Barakat, S. Sarfaraz-Khan, I. Duncan, L. Berra, R. Rizi, M. Cereda, Philadelphia, PA, p.A5255
- 712 Effects of Different Levels of Positive End-Expiratory Pressure on Regional Distribution of Pulmonary Perfusion During One-Lung-Ventilation in Pigs/J.** Wittenstein, M. Scharffenberg, J. Fröhlich, C. Rothmann, X. Ran, Y. Zhang, Y. Chai, X. Yang, S. Müller, T. Koch, R. Huhle, M. Gama de Abreu, Dresden, Germany, p.A5256
- 713 The Effect of Training Dataset Composition on Model Predictive Accuracy in Two-Hit Models of Acute- and Ventilator-Induced Lung Injury/B.J.** Smith, J. Bilodeaux, A.M. Wallbank, H. Farooqi, A. Benjamin, Aurora, CO, p.A5257
- 714 Gene-Based Collapsing Genetic Analyses to Identify Rare Protein-Coding Variants Associated with Susceptibility to Idiopathic Pulmonary Fibrosis (IPF): Data from the IPF-PRO Registry/G.** Povysil, J.L. Todd, A.S. Allen, D.F. Dilling, H.J. Kim, M.L. Neely, I. Noth, Z. Ren, L.D. Snyder, M.E. Strek, A. Swaminathan, D. Zhang, C. Hesslinger, T.B. Leonard, D.B. Goldstein, S.M. Palmer, New York, NY, p.A5258
- 715 Aged Ferrets Demonstrate Decreased Whole Lung Mucociliary Clearance at Baseline and Worse Fibrotic Remodeling Following Bleomycin Injury Compared to Young Ferrets/J.E.** Peabody Lever, S.S. Hussain, H. Kim, E.E. Onuoha, M.Q. Sonnier, S. Gowda, D. Stanford, J.P. Kennemur, S.R. Thomas, E. McMillian, S. Samuel, Q. Li, J. Campos-Gomez, S.E. Phillips, S.M. Rowe, Birmingham, AL, p.A5805

 **ATS 2022**
INTERNATIONAL CONFERENCE
 San Francisco, CA



Wednesday Mid-day, May 18

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ADULT CLINICAL CORE CURRICULUM

CME Credits Available: 1.5

MOC Points Available: 1.5

CC5 SLEEP CLINICAL CORE CURRICULUM

Education Committee

10:45 a.m. - 12:15 p.m.

MOSCONE CENTER

Room 2014/2016 (West Building, Level 2)

Target Audience

Practicing internists, subspecialists, registered nurses and advanced practice providers in pulmonary, critical care, and sleep medicine who work in a clinical setting and are currently engaged in maintenance of certification.

Objectives

At the conclusion of this session, the participant will be able to:

- identify disparities of care within sleep medicine and characterize strategies to eliminate or lessen these disparities;
- describe diagnosis and management of narcolepsy, PLM, and RLS;
- characterize effects of jet lag and shift work on circadian rhythm.

The goal of the core is to support clinicians who are engaged in maintenance of certification activities by providing updates on subjects that are not only included in recertification requirements, but also are timely and relevant to clinical practice in 2022. The ATS Clinical Core Curriculum Symposia focus on key topics in the areas of Pulmonary, Critical Care, and Sleep Medicine. The topics are aligned with corresponding MOC Medical Knowledge modules. This symposium is intended to help clinicians stay up to date with important information relevant to their medical practices, and to

provide an opportunity for clinicians to evaluate their individual knowledge and skills while earning MOC Medical Knowledge points.

Chairing: S. Shafazand, MD, MS, ATSF, Miami, FL
 K.A. Dudley, MD, MPH, Cambridge, MA

Moderators: K.A. Dudley, MD, MPH, Cambridge, MA
 M.R. Zeidler, MD, Los Angeles, CA

10:45 When Laughing Makes You Weak: Narcolepsy Diagnosis and Management

K. Maski, MD, MPH, Waltham, MA

11:15 Medical and Psychological Consequences of Insomnia

H.L. Paz Y Mar, MD, Los Angeles, CA

11:45 Jet Lag, Shift Work, and How to Get Along with Your Circadian Rhythm

S. Abbott, MD, PhD, Chicago, IL

DIVISION OF LUNG DISEASES; NHLBI; NIH

L20 NEW FINDINGS FROM THE SUBPOPULATIONS AND INTERMEDIATE OUTCOME MEASURES IN COPD II (SPIROMICS II) STUDY

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 3014 (West Building, Level 3)

Target Audience

Researchers, medical trainees, those with an interest in COPD pathogenesis

Objectives

At the conclusion of this session, the participant will be able to:

- learn about natural history of smokers with respiratory symptoms;
- learn about biomarkers of COPD;
- understand social determinants influence on respiratory outcomes.

SPIROMICS II is an NHLBI-sponsored study that supports the prospective collection and analysis of phenotypic, biomarker, genetic, genomic, and clinical data from subjects with COPD for the purpose of identifying subpopulations and the biological underpinnings of clinical phenotypes in COPD. Participants in this session will learn about the progress in SPIROMICS II including results and analyses of data.

Chairing: L. Postow, PhD, Bethesda, MD
 P. Woodruff, MD, MPH, San Francisco, CA

12:00 SPIROMICS II Update

P. Woodruff, MD, MPH, San Francisco, CA

12:12 The Natural History of Smokers with Symptoms Despite Preserved Spirometry

W. Mckleroy, MD, San Francisco, CA

- 12:24 Utilizing Imaging to Understand Disease Progression**
M.K. Han, MD, MS, ATSF, Ann Arbor, MI
- 12:36 Clinical Relevance of Airway Mucin (MUC5AC and MUC5B) Concentrations in COPD**
G. Radicioni, PhD, Chapel Hill, NC
- 12:48 Before We Can Run: Race, Lung Function and Health Equity**
A.D. Baugh, MD, San Francisco, CA

- 12:20 Distinct Airway Inflammatory Pathways Associated with Exacerbation are Responsive to Modulation by Mepolizumab Therapy in Children**
M.C. Altman, MD, MPhil, Seattle, WA
- 12:40 Eosinophil Surface Heterogeneity Exists Between Pediatric Patients With Severe, Exacerbation-Prone Asthma**
J. Schwartz, MD, PhD, Cincinnati, OH

DIVISION OF ALLERGY, IMMUNOLOGY, AND TRANSPLANTATION; NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASE; NIH

L22 FINDINGS FROM THE MECHANISMS UNDERLYING ASTHMA EXACERBATIONS PREVENTED AND PERSISTENT WITH IMMUNE-BASED THERAPY: A SYSTEMS APPROACH PHASE 2(MUPPITS-2)

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Target Audience

Physicians, nurse practitioners, clinical researchers

Objectives

At the conclusion of this session, the participant will be able to:

- apply the results of phenotype-directed therapy with mepolizumab in urban children and adolescents to clinical practice to better manage moderate to severe asthma;
- describe new findings about the mechanistic pathways which are affected by mepolizumab and the mechanistic pathways which continue to contribute to exacerbations;
- apply to clinical practice knowledge about distinguishing phenotypic characteristics in the circulating eosinophil population that could be utilized to identify asthma patients who might benefit most from eosinophil-depleting strategies.

This session will present the findings from MUPPITS-2 a randomized double blind clinical trial studying the efficacy of mepolizumab in moderate to severe eosinophilic asthma. In addition to the clinical findings, nasal transcriptomics analyses will identify mechanistic pathways leading to exacerbations which were suppressed or unaffected by therapy and eosinophilic heterogeneity and its relation to clinical disease will be discussed.

Chairing: P.J. Gergen, MD, Rockville, MD

- 12:00 Phenotype-directed Therapy with Mepolizumab for Urban Children with Exacerbation-Prone Asthma**
D.J. Jackson, MD, Madison, WI

**NATIONAL INSTITUTES OF HEALTH;
OFFICE OF THE DIRECTOR**

L23 ENVIRONMENTAL INFLUENCES ON CHILD HEALTH OUTCOMES (ECHO): INSIGHTS INTO THE ORIGIN OF AIRWAY DISEASES

12:00 p.m. - 1:00 p.m.

MOSCONE CENTER

Room 2001/2003 (West Building, Level 2)

Target Audience

Providers of maternal and child health; Providers of lung health; Researchers of Developmental Origins of Health a Pediatric Pulmonologists; Environmental researchers and physicians

Objectives

At the conclusion of this session, the participant will be able to:

- learn the epidemiologic characteristics of asthma exacerbation and its determinants;
- learn the impact of prenatal inflammation (e.g., CRP, IL-8) and exposures (e.g., air pollutant exposures on DNA methylation) in asthma and allergic diseases;
- learn state-of-art multi-omics approaches that integrate multi-level omics data in airway diseases.

The NIH-supported Environmental Influences on Child Health Outcomes (ECHO) program supports multiple synergistic, longitudinal studies across the U.S. to investigate how environmental exposures in early life-including physical, chemical, social, behavioral, biological, natural, and built environments-affect child health and development. The multiple cohorts share standardized core data elements from ~50,000 children using common data elements. This session will focus on examples of recent ECHO cohort research that offers insight into mechanisms and pathways of the development of airway diseases and related outcomes in children.

Chairing: C.L.M. Joseph, PhD, Detroit, MI
C.J. Blaisdell, MD, North Bethesda, MD

- 12:00 Overview of the ECHO Program**
C.J. Blaisdell, MD, North Bethesda, MD
- 12:10 U.S. Incidence Rates of Childhood Asthma Exacerbations**
R.L. Miller, MD, New York, NY

12:20 Maternal Prenatal Inflammatory Markers and Childhood Asthma and Atopy

Y.-C. Chen, MD, Boston, MA

12:30 Prenatal to Postnatal Air Pollution Exposure and DNA Methylation in Multiple Cell Types

C. Ober, PhD, Chicago, IL

12:40 Associations Between the Nasal Transcriptome and Childhood Asthma Across Diverse Populations

G.N.K. Hershey, MD, PhD, Cincinnati, OH

12:50 Airway Metatranscriptome Endotypes in Infant Bronchiolitis, Distinct Host Immune Profiles, and Differential Asthma Risks

K. Hasegawa, MD, MPH, MS, Boston, MA

DIVISION OF LUNG DISEASES; NHLBI; NIH**L24 THE PEDIATRIC ADENOTONSILLECTOMY TRIAL FOR SNORING (PATS)****12:00 p.m. - 1:00 p.m.****MOSCONE CENTER****Room 3006/3008 (West Building, Level 3)****Target Audience**

Pediatric sleep clinicians and researchers, clinicians managing sleep-disordered breathing in children.

Objectives

At the conclusion of this session, the participant will be able to:

- better understand risk factors for neuro-behavioral and cognitive impairment, and reduced quality of life in children with MSDB;
- more appropriately refer patients with snoring for adeno-tonsillectomy;
- identify better metrics from polysomnography and clinical history to identify children with snoring-related adverse outcomes.

PATS is a 12 month randomized clinical trial comparing adeno-tonsillectomy to watchful waiting with supportive care for children ages 3-12 yrs. who have snoring without frequent obstructive apneas and oxyhemoglobin desaturation (referred to as "mild sleep disordered breathing" MSDB). MSDB has been linked to behavioral and neurocognitive deficits and often treated with adeno-tonsillectomy. It is not yet known whether adeno-tonsillectomy results in improved health outcomes, and whether there are specific subgroups who experience better or worse outcomes with surgery. Study results from the baseline research examinations will be presented, highlighting novel study design features and the variation in, and risk factors for, MSDB-related adverse behavioral and health outcomes.

Chairing: S.S. Redline, MD, MPH, Boston, MA
M.K. Brown, PhD, Bethesda, MD

12:00 The Design of the Pediatric Adenotonsillectomy Trial for Snoring (PATS)

S.S. Redline, MD, MPH, Boston, MA

12:10 Neurobehavioral Morbidity with Mild Sleep Disordered Breathing

P.K. Yu, MPH, BA, Boston, MA

12:25 Risk Factors for Reduced Quality of Life in Children with Mild Sleep Disordered Breathing

C. Baldassari, MD, Norfolk, VA

12:40 Inter-relationships Among Pediatric Sleep Disordered Breathing, Asthma and Atopy

K.R. Ross, MD, MS, Cleveland, OH

12:55 Discussion

S.S. Redline, MD, MPH, Boston, MA

DIVISION OF LUNG DISEASES; NHLBI; NIH**L25 THE MOLECULAR ATLAS OF LUNG DEVELOPMENT (LUNGMAP), PHASE 2****12:00 p.m. - 1:00 p.m.****MOSCONE CENTER****Room 3001/3003 (West Building, Level 3)****Target Audience**

Providers of lung health, medical fellows in training, and basic and clinical researchers interested in lung biology, developmental biology, pediatric lung disease pathogenesis, bioinformatics, and systems biology

Objectives

At the conclusion of this session, the participant will be able to:

- learn the newest datasets of LungMAP that could inform lung research;
- understand the innovative technologies for molecular profiling, imaging, and data analysis of the developing lung;
- understand how to access and use the LungMAP resources

Molecular Atlas of Lung Development (LungMAP) is an NHLBI-sponsored program. The overall goal of this program is to establish an open-access reference resource by creating a comprehensive molecular atlas of the late-stage developing human lung with data and reagents available to the research community. Speakers will demonstrate how systems biology and bioinformatic approaches can be used to inform processes in development that are recapitulated in disease and repair. The session will illustrate the LungMAP data pipeline which integrates high resolution multi-omics and imaging data.

Chairing: S. Lin, PhD, Bethesda, MD

12:00 Defining and Refining Lung Cell Complexity

J. Planer, MD, PhD, Philadelphia, PA

12:12 Spatially Resolved Transcriptomics to Understand Lung Development and Disease

M. Gu, MD, PhD, Cincinnati, OH

12:24 Single Cell Transcriptomic and Epigenomic Datasets of the Normal and Diseased Developing Human Lung

V.H. Yu, PhD, San Diego, CA

12:36 Spatiotemporal Lung Imaging and Omics
G. Clair, PhD, Richland, WA

12:48 BioRepository for Investigation of Diseases of the Lung (BRINDL): Phase II
G.S. Pryhuber, MD, Rochester, NY

DIVISION OF LUNG DISEASES; NHLBI; NIH

L26 THE NHLBI IPF MODELS CONSORTIUM

12:00 p.m. - 1:00 p.m. MOSCONE CENTER

Room 3005/3007 (West Building, Level 3)

Target Audience

Those with research interests involving the study of idiopathic pulmonary fibrosis.

Objectives

At the conclusion of this session, the participant will be able to:

- learn new findings regarding the pathogenesis of IPF from its onset through disease progression;
- increase awareness among the broader IPF research community of the availability of new and improved model systems to study IPF;
- inform model selection for future research studies that aim to uncover specific IPF disease mechanisms and screen/test drugs or biologics that target IPF.

This session highlights recent scientific advances and collaborative research opportunities brought about by five NHLBI-sponsored studies funded through RFA-HL-20-007: Advancing Novel Research Models to Study Idiopathic Pulmonary Fibrosis that seeks to establish a set of complementary model systems that reproduce essential disease-defining features of human idiopathic pulmonary fibrosis (IPF).

Chairing: M. Craig, PhD, Bethesda, MD

12:00 Surfactant Protein C Mouse Models: A Fit for Purpose Preclinical Platform for Advancing Discovery in and Treatment of Idiopathic Pulmonary Fibrosis
M.F. Beers, MD, Philadelphia, PA

12:12 Validation of an in vitro Model of Progressive Fibrosis that Mimics Idiopathic Pulmonary Fibrosis
B. Gomperts, MD, Los Angeles, CA

12:24 Developing a Patient-Specific Organoid Model of Pulmonary Fibrosis using iPSCs
D.N. Kotton, MD, Boston, MA

12:36 Therapeutic Targeting of MUC5B in a Novel Ferret Model of Idiopathic Pulmonary Fibrosis
S.M. Rowe, MD, Birmingham, AL

12:48 Therapeutic ECM Resorption in Cellular Systems and Precision Cut Lung Slices
D.J. Tschumperlin, PhD, Rochester, MN

ATS 2022 INTERNATIONAL CONFERENCE San Francisco, CA

Wednesday Afternoon, May 18

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ADULT CLINICAL CORE CURRICULUM

CME Credits Available: 1.5

MOC Points Available: 1.5

CC6 SLEEP CLINICAL CORE CURRICULUM

Education Committee

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 2014/2016 (West Building, Level 2)

Target Audience

Practicing internists, subspecialists, registered nurses and advanced practice providers in pulmonary, critical care, and sleep medicine who work in a clinical setting and are currently engaged in maintenance of certification.

Objectives

At the conclusion of this session, the participant will be able to:

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K.A. Dudley, MD, MPH, Cambridge, MA

Moderators: K.A. Dudley, MD, MPH, Cambridge, MA
M.R. Zeidler, MD, Los Angeles, CA

12:45 Twitching Through the Night: PLM and RLS Diagnosis and Management

A.M. May, MD, MS, Cleveland, OH

1:15 Sleep Disparities: What We Know and the Way Forward

C. Jackson, PhD, Research Triangle Park, NC

1:45 Discussion

A. Placeholder, MD, New York, NY

CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1

D82 KEEPING THE ‘HOME’ IN HOME MECHANICAL VENTILATION FOR NEUROMUSCULAR RESPIRATORY FAILURE: TRANSITIONING HOME AND STAYING HOME WITH TELEMEDICINE

Assemblies on Clinical Problems; Pediatrics; Sleep and Respiratory Neurobiology

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 3-4 (South Building, Exhibition Level)

Target Audience

Adult and pediatric pulmonologists, trainees, mid-level providers, respiratory therapists

Objectives

At the conclusion of this session, the participant will be able to:

- recognize hypoventilatory respiratory failure of neuromuscular disease, in acute respiratory failure and complicated by co-morbid pulmonary disorders. Understand use of non-invasive ventilation in acute and chronic neuromuscular respiratory failure;
- understand how to transition from invasive mechanical ventilation to non-invasive ventilation and airway clearance, with needs and monitoring unique to patients with neuromuscular respiratory weakness;
- use multiple newer diagnostic and monitoring modalities to optimize and individualize non-invasive or invasive ventilation in the home, including transcutaneous CO₂ monitoring, home diagnostic sleep testing and cloud-based monitoring capabilities.

Patients with pediatric neuromuscular disorders are surviving into adulthood, and adult-onset neuromuscular disorders are also increasing in

prevalence and survival with advancing technologies in airway clearance and non-invasive ventilation. We will focus on advanced neuromuscular respiratory failure, with the unique focus on the inpatient recognition, and the transition to home-based mechanical ventilation. We will address cloud-based telehealth monitoring, review the role for home CO₂ monitoring and home sleep testing to optimize home-based mechanical ventilation. The final will provide concrete guidance to help Providers navigate the insurance hurdles to ensure the patients get the right care, at the right time in their disease trajectory.

Chairing: K.A. Provost, DO, PhD, FCCP, Buffalo, NY
M. Cao, DO, Stanford, CA
L.F. Wolfe, MD, Chicago, IL

12:45 Critical Touchpoints in Recognition of Neuromuscular Respiratory Failure in Acute Respiratory Failure: Transitioning Hospital to Home

K.A. Provost, DO, PhD, FCCP, Buffalo, NY

1:00 Utilizing Advances in Telehealth Monitoring to Optimize Home Mechanical Ventilation: Optimizing Ventilation, Maximizing Quality of Life and Minimizing

J.E. Orr, MD, La Jolla, CA

1:15 Home CO₂ Monitoring: Optimizing Ventilation in the Home

R. Amin, MD, Toronto, Canada

1:30 Indications for Home Sleep Testing for Optimizing Home Mechanical Ventilation

M. Cao, DO, Stanford, CA

1:45 Navigating the Insurance Guidelines to Get Your Patients the Right Care at the Right Time

L.F. Wolfe, MD, Chicago, IL

2:00 Question and Answer Panel Discussion

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

CLINICAL TOPICS IN PULMONARY MEDICINE

CME Credits Available: 1

D83 THE CURIOUS CASE OF BENJAMIN BUTTON: FIXED AIRFLOW LIMITATION IN YOUNG ADULTS. THE “LOW FLYERS”

Assemblies on Clinical Problems; Pediatrics; Respiratory Cell and Molecular Biology; Respiratory Structure and Function

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 7-8 (South Building, Exhibition Level)

Target Audience

COPD and asthma clinicians, pediatricians, basic scientists working on asthma and COPD

Objectives

At the conclusion of this session, the participant will be able to:

- understand what is the clinical importance of the low flyers and what are the best strategies to approach this category of patients;
- harmonize the pediatric and adult pulmonary approaches to early fixed airflow limitation and the knowledge on the topic;
- understand how asthma can shape into fixed airflow limitation and discuss the best imaging and therapeutic approaches to these individuals who have fixed airflow limitation from a young age.

COPD has always been considered a disease of the elderly. However, in a significant proportion of cases, COPD can develop as a result of lung function deficits that are established by young adult life, with no accelerated decline of lung function thereafter. This session will shed light onto the “low flyers”: a long-overlooked category of individuals with low lung function early in life, and who meet the spirometric criteria for COPD in their young adulthood.

Chairing: G.R. Washko, MD, Boston, MA
F. Polverino, MD, PhD, Houston, TX
J.L. Curtis, MD, ATSF, Ann Arbor, MI

12:45 A Patient’s Perspective
J. Linnell, Viroqua, WI

12:50 Get to Meet the Unusual Suspects: The Low Flyers
S. Dharmage, MD, PhD, Melbourne, Australia

1:02 Multiple Shades of Gray: From Severe Asthma to Early-Onset COPD
R.A. Covar, MD, Denver, CO

1:14 The Pediatrician Perspective. Tackling Airflow Limitation From the First Years of Life to Early Adulthood: Are We Still Behind?
E. Hysinger, MD, MSCE, Cincinnati, OH

1:26 Small Airways and Pathogenesis of Early Fixed Airflow Limitation: Scenes From a Foreseeable Disaster
T.L. Hackett, PhD, ATSF, Vancouver, B.C., Canada

1:38 More Than Meets the Eye: The Role of Imaging in the Longitudinal Follow-Up of Airflow Limitation During the Lifespan
S.P. Bhatt, MD, MSPH, Birmingham, AL

1:50 Treatment Strategies Targeting the Low Flyers: The Ugly, the Bad, and the Good
G.G. Brusselle, MD, PhD, Gent, Belgium

2:02 Questions and Answers

CLINICAL

CRITICAL CARE TRACK

CME Credits Available: 1

D84 CURRENT CONTROVERSIES IN GERIATRIC CRITICAL CARE

Assembly on Critical Care

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 3020/3022/3024 (West Building, Level 3)

Target Audience

Multidisciplinary ICU clinicians, geriatricians and those interested in the overlap between critical care and geriatrics

Objectives

At the conclusion of this session, the participant will be able to:

- more appropriately identify strategies to prognostication particular to critically ill older adults;
- integrate advance care planning to older adults in the ICU;
- integrate the role of age in deciding on ICU therapies.

As the proportion of older adults in the community grows, our ICUs are increasingly seeing a higher number of critically ill geriatric patients. With this, there are a number of potential controversies that arise when caring for older adults with critical illness. In this session, we will directly address some of the most prominent and relevant controversies surrounding prognostication, care preferences and the role of age in influencing receipt of therapies, and propose solutions aimed at helping the bedside clinicians work towards resolution.

Chairing: L.E. Ferrante, MD, MHS, ATSF, New Haven, CT
M. Hua, MD, MS, New York, NY
B. Rochweg, MD, MSCE, FRCPC, Hamilton, Canada

12:45 Does Advance Care Planning Have Any Effect on Reducing High-Intensity Care?
R.S. Morrison, MD, New York, NY

1:00 Should Prognostication in the ICU Be Based on Age, Disability, and Frailty?
R.O. Hopkins, PhD, Provo, UT

1:15 Should Admission to the ICU Be Conditional on a Time-Limited Trial?
T.H. Neville, MD, Los Angeles, CA

1:30 Is It Ethical and Legal to Include Age in Triage Protocols During a Pandemic?
D.B. White, MD, Pittsburgh, PA

1:45 Do Older Adults Respond Differently to ICU Interventions?
B. Rochweg, MD, MSCE, FRCPC, Hamilton, Canada

2:00 Panel Discussion
M. Hua, MD, MS, New York, NY

BASIC • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D85 CHATTER IN THE LUNG MICROENVIRONMENT: HOW CELLULAR CROSSTALKS CONTRIBUTES TO LUNG AGING, CANCER, AND REMODELLING

Assemblies on Thoracic Oncology; Allergy, Immunology and Inflammation; Pulmonary Circulation; Respiratory Cell and Molecular Biology

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 205-206 (South Building, Level 2)

Target Audience

Clinicians and scientists who are interested in understanding the cross talk between cancer and chronic lung disease would benefit from this symposium

Objectives

At the conclusion of this session, the participant will be able to:

- understand the similarities of lung cancer and chronic respiratory diseases;
- understand and identify the cross talk between cancer and chronic lung disease;
- gain understanding on why the influence of common lung cancer comorbidities on the microenvironment will be a key for developing more enhanced lung cancer therapies.

Lung cancer is the primary cause of cancer deaths worldwide. Even though therapies have developed in recent years, lung cancer prognosis often remains poor. One important reason for this circumstance is caused by the various comorbidities that regularly accompany lung cancer. In this context chronic obstructive pulmonary disease (COPD), pulmonary hypertension, heart failure and pulmonary fibrosis are important to mention. A better understanding of the bidirectional interplay of these diseases will allow for better lung cancer treatment options in the future.

Chairing: R. Savai, PhD, Bad Nauheim, Germany

12:45 Chatter in the Lung Microenvironment: How Cellular Crosstalks Contributes to Lung Aging, Cancer, and Remodelling

R. Savai, PhD, Bad Nauheim, Germany

12:50 Organoid Modeling of Early Stage Lung Cancer

C. Kim, PhD, Boston, MA

1:07 Common Language in Idiopathic Pulmonary Fibrosis, Aging, and Cancer

M. Koenigshoff, MD, PhD, ATSF, Pittsburgh, PA

1:24 Cancer and Pulmonary Hypertension: Learning Lessons and Real-Life Interplay

S.S. Pullamsetti, PhD, Bad Nauheim, Germany

1:41 Cellular Dialects in COPD and Lung Cancer

Speaker To Be Announced

1:58 Genetic and Epigenetic Basis for Cellular Crosstalk Associated With Regeneration and Tumorigenesis

P.R. Tata, MSc, PhD, Durham, NC

This session and the International Conference are supported by an independent medical educational grant from Merck & Co.

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CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D86 HEARTH OF THE MATTER: DO HOUSEHOLD AIR POLLUTION INTERVENTIONS IMPROVE HEALTH OUTCOMES?

Assemblies on Environmental, Occupational and Population Health; International Health Committee

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 201-202 (South Building, Level 2)

Target Audience

Environmental health researchers, air pollution researchers, trainees, researchers, and clinicians with an interest in global health and health disparities

Objectives

At the conclusion of this session, the participant will be able to:

- gain understanding of the effects of household air pollution exposures on health across the lifespan;
- learn and provide practical recommendations in the design and conduct of household air pollution interventions and potential challenges with scale-up.

Energy, poverty, and exposure to household air pollution from the burning of solid fuels for cooking are at the heart of health equity policies focused on the poorest communities in the world. Does replacing solid fuel with a cleaner fuel result in lower exposure to household air pollution and improved health outcomes in resource-poor settings? In this session, we detail results from several groundbreaking trials in seven low- and middle-income countries that aimed to mitigate household air pollution exposures and improve health: a key health equity target.

- Chairing:** W. Checkley, MD, PhD, Baltimore, MD
J.R. Balmes, MD, ATSF, San Francisco, CA
P.S. Lai, MPH, MD, ATSF, Boston, MA
- 12:45 Current Understanding of the Health Risks Posed by Household Air Pollution and Gaps in Knowledge**
J. Rosenthal, PhD, Bethesda, MD
- 12:50 Tackling Pediatric Pneumonia by Reducing Air Pollution: Evidence and Practical Recommendations from the Cooking and Pneumonia (CAPS) Trial in Malawi**
K.J. Mortimer, MBBS, PhD, Liverpool, United Kingdom
- 1:05 Prenatal Household Air Pollution Exposure and Lung Function in Offspring: Evidence and Practical Recommendations from Ghana Randomized Air Pollution A**
A. Lee, MD, MS, New York, NY
- 1:20 Effects on Household Air Pollution Exposure Reduction on Birthweight and Maternal Outcomes: Evidence and Practical Recommendations from the Ibadan Intervention Trial in Nigeria**
C.O. Olopade, MD, Chicago, IL
- 1:35 Not Just about Health Outcomes: Evidence and Practical Recommendations from the Cardiopulmonary and Household Air Pollution (CHAP) Trial in Peru**
K. Williams, PhD, Baltimore, MD
- 1:50 Measuring Impacts across the Lifespan: Evidence and Practical Recommendations from the Multi-Country Household Air Pollution Intervention Network (HAP)**
J. Peel, PhD, MPH, Fort Collins, CO
- 2:05 What Have We Learned from Randomized Controlled Trials to Reduce Household Air Pollution?**
W. Checkley, MD, PhD, Baltimore, MD

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D87 THE PRESENT AND FUTURE OF VACCINATION IN RESPIRATORY MEDICINE

Assemblies on Pulmonary Infections and Tuberculosis;
Behavioral and Health Services Research

12:45 p.m. - 2:15 p.m. **MOSCONE CENTER**

Room 215-216 (South Building, Level 2)

Target Audience

Healthcare professionals; researchers in basic, clinical, and translational; trainees

Objectives

At the conclusion of this session, the participant will be able to:

- describe the status of COVID-19 vaccine development, delivery, and impact;
- define and describe current advances in vaccine development for respiratory diseases;
- improve patient health through promotion of vaccination.

Vaccines have had a significant impact on global health, reducing mortality from or even eradicating several devastating infections. However, vaccine-preventable illnesses remain a threat due to low vaccine coverage among adults, with the ongoing SARS-CoV-2 pandemic being no exception. The goal of this session is to highlight the critical need for global vaccination strategies in combating a variety of respiratory illnesses and to emphasize the impact vaccines have on improving overall respiratory health. Multiple perspectives will be represented, including pneumology, infectious diseases, and behavioral and health research.

Chairing: S.J. Bartlett, PhD, Montreal, Canada
A.W. Jones, PhD, Melbourne, Australia

12:45 Introduction

12:46 Developing a Vaccine to the Novel Coronavirus
L. Corey, MD, Seattle, WA

1:05 Vaccine Delivery in the U.S. and Globally
A. Reingold, MD, Berkeley, CA

1:24 Vaccination as a Global Health Intervention
C. Feldman, MD, PhD, DSc, ATSF, Johannesburg, South Africa

1:39 Developing Vaccines to Effectively Combat Respiratory Diseases
J.E. McCombs, PhD, New Orleans, LA

1:54 The Role of Vaccination in Respiratory Medicine: Learning Points Out of the Pandemic
T. Welte, MD, Hannover, Germany

2:09 Discussion/Questions and Answers

BASIC • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 1

D88 DISSECTING LUNG DISEASE DOWN TO A SINGLE-CELL: RECENT SINGLE-CELL RNA SEQUENCING BREAKTHROUGHS IN PULMONARY PATHOGENESIS

Assemblies on Respiratory Cell and Molecular Biology; Allergy, Immunology and Inflammation; Respiratory Structure and Function

12:45 p.m. - 2:15 p.m. **MOSCONE CENTER**

Room 2001/2003 (West Building, Level 2)

Target Audience

Health professionals and life scientists interested in lung disease pathogenesis; trainees in biomedical research interested in single cell profiling studies, bioinformatics, lung disease pathogenesis

Objectives

At the conclusion of this session, the participant will be able to:

- describe recent findings from scRNAseq analyses that improved our understanding of lung disease pathogenesis;
- understand the role and limitations of single cell profiling in the future of clinical pulmonary medicine;
- define emerging single-cell technologies and analytic techniques for the study of lung disease.

Single-cell RNA sequencing (scRNAseq) provides high-throughput RNA profiling at the resolution of individual cells. Recent studies have harnessed this technology to identify novel mechanisms of lung disease pathogenesis. The goal of this symposium is to cover recent breakthroughs in our understanding of lung disease, enabled by the application of single-cell profiling technologies. This session reviews the current landscape of ARDS, cystic fibrosis, asthma, and COPD pathophysiology discoveries through the lens of single-cell profiling. As we review these recent breakthroughs, we will highlight the strengths and limitations of this approach, and discuss emerging technologies that will shape the future of this field.

Chairing: C.J. Britto-Leon, MD, ATSF, New Haven, CT
R.L. Zemans, MD, Ann Arbor, MI

- 12:45 Macrophage Transcriptional Heterogeneity in Acute Lung Injury**
K. Mould, MD, MPH, Denver, CO
- 1:00 Immunologic Cell States in the Asthmatic Lung**
Speaker To Be Announced
- 1:15 Epithelial Cell States and Composition in Cystic Fibrosis**
B. Gomperts, MD, Los Angeles, CA
- 1:30 Transcriptional Profiles of Alveolar Stress in the Emphysematous Lung**
M. Sauler, MD, New Haven, CT
- 1:45 Novel Pathogenic Cell Populations in the Fibrotic Lung**
J. Kropski, MD, Nashville, TN
- 2:00 Overview and Limitations of Emerging Single-Cell Technologies**
Speaker To Be Announced

CLINICAL • TRANSLATIONAL**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 1

D89 WHAT COULD REPLACE THE AHI FOR EVALUATING SLEEP APNEA?

Assembly on Sleep and Respiratory Neurobiology

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 2006/2008 (West Building, Level 2)

Target Audience

Physicians and researchers with clinical and/or research responsibilities in the broad area of sleep disordered breathing

Objectives

At the conclusion of this session, the participant will be able to:

- describe new findings about the limitations of the AHI;
- define new strategies to manage the care of sleep apnea;

To date it has remained difficult to find an optimal physiological metric capturing severity of obstructive sleep apnea (OSA) - desirable for diagnosis, and potentially for predicting response to therapy. The Apnea Hypopnea Index (AHI) is widely used but captures only the occurrence rate of sleep respiratory events. It has been repeatedly observed that the AHI has many conceptual and demonstrable limitations. Through talks that span the domains of ventilatory, hypoxic, and arousal burden in sleep, we will explore the potential of novel metrics that could replace the AHI.

Chairing: D.M. Rapoport, MD, ATSF, New York, NY
C.H. Won, MD, MA, New Haven, CT

- 12:45 Introduction: Limitations of the AHI**
D.J. Gottlieb, MD, MPH, Boston, MA
- 1:00 Ventilatory Burden in OSA**
A. Parekh, PhD, New York, NY
- 1:15 Hypoxic Burden**
T. Leppanen, PhD, Kuopio, Finland
- 1:30 Arousal Burden**
A. Jordan, PhD, Parkville, Australia
- 1:45 Global Clinical Implications of AHI Replacement**
C.H. Won, MD, MA, New Haven, CT
- 2:00 Panel Q&A**

BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Hours Available: 1.5 CME

D90 COVID-19: LESSONS LEARNED AND THE PATH FORWARD

12:45 PM - 2:15 PM

Moscone Center

Room 3001/3003 (West Building, Level 3),

Target Audience

All providers who care for patients will benefit from this session. In addition, those with administrative responsibilities will benefit from hearing about the concerns related to COVID and burnout. Finally, as we will have an international talk, provider who practice global health may be interested in this topic.

Objectives

At the conclusion of this session, the participant will be able to:

- understand the effects of COVID-19 on Wellness and interventions to use in response;
- describe changes in nursing practices with COVID-19 and implications for the future;
- understand the impact of COVID-19 on global public health systems.

This session will discuss provider wellbeing related to COVID as well interventions that can alleviate some of these challenges. In addition, we will discuss the COVID response in Brazil and how the Brazilian health system responded. Finally, we will hear about changes to nursing practices related to COVID that may have implications for future nursing practice.

Chairing: D.M. Boyer, MD, MPHE, Columbus, OH
M. Moss, MD, ATSF, Aurora, CO

12:45 Introduction

D.M. Boyer, MD, MPHE, Columbus, OH

12:48 Lifting Nursing Workforce Restrictions: COVID-19 Policy Approaches and the Path Forward

D.K. Costa, PhD, RN, Ann Arbor, MI

1:08 COVID-19 in Brazil: Lessons Learned

M.P. Dalcolmo, MD, PhD, Rio De Janeiro, Brazil

1:28 Transitioning from Quotas to Empowerment: New Perspectives on Clinical Trial Diversity in the Era of COVID-19

A.J.O. Davis, MD, Madison, WI

1:48 Studying a Creative Arts Therapy Intervention for Health Care Professionals During the COVID-19 Pandemic: Trials and Tribulations

M. Moss, MD, ATSF, Aurora, CO

2:08 Questions and Answers

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D91 OMICS DISCOVERIES IN ALLERGIC AND NON-ALLERGIC INFLAMMATION AND LUNG DEVELOPMENT

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 3006/3008 (West Building, Level 3)

Chairing: S. Sharma, MD, MPH, Aurora, CO
V.E. Ortega, MD, PhD, ATSF, Scottsdale, AZ

Oral Presentations:

12:45 Lung Dysbiosis Is a Feature of Frequent Exacerbating COPD Patients and a Lung Gene Expression Profile of Activated Host Immune Function/D. Choy, J. Mar, A. Chakrabarti, Y. Cao, M. Van den Berge, D.-J. Slebos, W. Timens, C.-A.A. Brandsma, C. Rosenberger, M. Gimbaldston, South San Francisco, CA, p.A5259

12:55 Gene Expression Risk Profiles and Interstitial Lung Abnormalities/M. Moll, B.D. Hobbs, A.A. Menon, A.J. Ghosh, R.K. Putman, T. Hino, A. Hata, E.K. Silverman, J. Quackenbush, P. Castaldi, C.P. Hersh, M. Mcgeachie, D.D. Sin, R. Tal-Singer, M. Nishino, H. Hatabu, G.M. Hunninghake, M.H. Cho, Boston, MA, p.A5260

1:05 Gut and Serum Metabotypes Are Linked to Uncontrolled Asthma in Children from the SysPharmPediA Study/M.I. Abdel-Aziz, A.H. Neerincx, S.J.H. Vijverberg, A. Cecil, J. Lintelmann, M. Witting, S.M. Hauck, S. Hashimoto, M. Gorenjak, A.A. Toncheva, P. Kheiroddin, S. Harner, S. Brandstetter, C. Wolff, O. Sardón-Prado, P. Corcuera-Elosegui, J. Korta-Murua, M. Pino-Yanes, U. PotoĀnik, M. KabeschĀ, A. D. Kraneveld, A.Maitland-van der Zee, Munich, Germany, p.A5261

1:15 Circulating miRNAs Predict Childhood Asthma Exacerbations/A. Tiwari, A. Kho, M. Sun, Q. Lu, C.C. Juan, S.T. Weiss, K.G. Tantisira, M. Mcgeachie, Boston, MA, p.A5262

1:25 Sex-Specific Impact of Intrauterine Smoke Exposure on MicroRNA Expression During Human Lung Development/L. Rosenberg, C. Liu, A. Kho, S.T. Weiss, K. Kechris, S. Sharma, Aurora, CO, p.A5263

1:35 Sex-Specific Differences in MicroRNA Expression During Human Fetal Lung Development/N. Lin, C. Liu, I.V. Yang, L.A. Maier, D.L. Demeo, S. Ye, M.H. Cruse, V.L. Smith, C.A. Vyhldal, K. Kechris, S. Sharma, Aurora, CO, p.A5264

1:45 Associations Between Antenatal Maternal Asthma Status and Placental DNA Methylation/A. Lee, N. Tignor, E. Colicino, P. Wang, W. Cowell, R.J. Wright, New York, NY, p.A5265

1:55 Molecular Networks in Atopic Mothers Impact the Risk of Infant Atopy/M. Schedel, S. Leach, M.J. Strand, T. Danhorn, M. MacBeth, A.V. Faino, A.M. Lynch, V. Winn, L.L. Munoz, S.M. Forsberg, D.A. Schwartz, E.W. Gelfand, P.J. Hauk, Essen, Germany, p.A5266

2:05 Cis- and Trans-eQTM Analysis Reveals Novel Epigenetic Markers of Atopy in Nasal Airway Epithelium/S. Kim, E. Forno, Z. Xu, M. Yue, H.J. Park, Q. Yan, M.L. Manni, E. Acosta-Pérez, G. Canino, W. Chen, J.C. Celedon, Pittsburgh, PA, p.A5267

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D92 TRYING TO NIP IT IN THE BUD: ADVANCES IN UNDERSTANDING INTERSTITIAL LUNG ABNORMALITIES

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 209-211 (South Building, Level 2)

Chairing: A. Podolanczuk, MD, New York, NY
R.K. Putman, MD, MPH, Boston, MA
G. Raghu, MD, Seattle, WA

Oral Presentations:

12:45 Prevalence and Outcomes of Subclinical Interstitial Lung Disease in COPD Gene/J.A. Rose, A.A. Menon, T. Hino, A. Hata, M. Nishino, D.A. Lynch, I.O. Rosas, G.R. Washko, E.K. Silverman, M.H. Cho, H. Hatabu, R.K. Putman, G.M. Hunninghake, Boston, MA, p.A5268

12:55 Endobronchial Optical Coherence Tomography: A Novel Method for the Early Detection of Progressive Fibrosis in Patients with Interstitial Lung Abnormalities/B. Flashner, S. Nandy, S.R. Berigei, B. Roop, R.A. Raphaely, A. Sharma, A. Muniappan, H. Auchincloss, M. Lanuti, C. Morse, C.D. Wright, S. Bender, N.M. Patel, T.B. Leonard, L.P. Hariri, Boston, MA, p.A5269

1:05 Bronchial Epithelial Gene Expression in ILA/A.A. Menon, K. Xu, R.K. Putman, T. Hino, J.A. Rose, E. Billatos, F. Duan, G.T. O'Connor, J. Dupuis, H. Hatabu, M.E. Lenburg, G.M. Hunninghake, Boston, MA, p.A5270

1:15 Accelerated Decline in Peripheral Blood Telomere Length in Persons at Risk for Familial Pulmonary Fibrosis/M.L. Salisbury, G. Ding, C.R. Markin, K. Douglas, P. Wu, J.D. Cogan, D. Mitchell, L.R. Young, J.E. Loyd, L.H. Lancaster, J.A. Kropski, T.S. Blackwell, Nashville, TN, p.A5271

1:25 Blood Leukocyte Levels Are Associated with Radiological Progression of Early Fibrotic ILA Within Five Years/A. Achaiah, P. Lyon, E. Fraser, P. Saunders, R. Benamore, V. Iotchkova, R. Hoyles, L.-P. Ho, Oxford, United Kingdom, p.A5272

1:35 Changes in Immune Cell Populations in the Peripheral Blood of Individuals with Interstitial Lung Abnormalities/A.Y.-T. Zhao, A. Unterman, T.S. Adams, A. Justet, X. Yan, G. Deluiliis, E. Herzog, A. Prasse, I. Buendia-Roldan, A. Pardo, M. Selman, N. Kaminski, New Haven, CT, p.A5273

1:45 Increased Monocyte Count Is Associated with Adverse Outcomes in Interstitial Lung Abnormality (ILA)/J. Shaw, S. Liew, G. Ng Man Kwong, Z. Borrill, C. Hayton, Oldham, United Kingdom, p.A5274

1:55 Subclinical Interstitial Lung Disease in First-Degree Relatives of Patients with Pulmonary Fibrosis/C. Mcgroder, D. Zhang, M. Choudhury, A. Podolanczuk, D.J. Lederer, B. Dsouza, M. Salvatore, C.K. Garcia, New York, NY, p.A5806

2:05 Acute Respiratory Disease Events Associated with Quantitative Interstitial Abnormality Progression in Smokers/B. Choi, A.A. Diaz, R. San Jose Estepar, N.A. Enzer, V. Castro, G.R. Washko, R. San Jose Estepar, S. Ash, Boston, MA, p.A5807

CLINICAL

MINI SYMPOSIUM

D93 ADVANCES IN PRE AND POST LUNG TRANSPLANT CARE: FROM SELECTION TO CLAD

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 11-12 (South Building, Exhibition Level)

Chairing: J.L. Todd, MD, Durham, NC
M.M. Crespo, MD, Philadelphia, PA
S. Weigt, MD, MSCR, Los Angeles, CA

Oral Presentations:

12:45 Disparate Lung Transplant Waitlist Outcomes Among Blood Groups Due to Severity of Illness/S. Greissman, M.R. Anderson, L. Shah, H.Y. Robbins, A.M. DiMango, G. Magda, H.S. Grewal, F. D'ovidio, P.H. Lemaitre, B.P. Stanifer, J. Sonett, M. Leiva-Juarez, J. Costa, S.M. Arcasoy, L.J. Benvenuto, New York, NY, p.A5275

- 12:55 Examining Grouping and Transplant Waitlist Mortality Among Sarcoidosis Patients in the Lung Allocation Score (LAS) Era/S.** Gayen, D.C. Fleitas Sosa, M. Zheng, A.J. Gangemi, H. Zhao, S. Sehgal, G.J. Criner, A.J. Mamary, R. Gupta, Philadelphia, PA, p.A5276
- 1:05 Sarcoid versus COPD Lung Transplant Waitlist Mortality in the Lung Allocation Score (LAS) Era, a National Registry Database Study/D.** Fleitas Sosa, S. Gayen, M. Zheng, H. Zhao, A.J. Gangemi, S. Sehgal, R. Gupta, A.J. Mamary, Philadelphia, PA, p.A5277
- 1:15 Post-Transplant Disparities Amongst Sarcoidosis-Indicated Lung Recipients/J.C.** Brunson, J.F. Jaber, S. Nandavaram, D.C. Gomez Manjarres, D.C. Patel, Gainesville, FL, p.A5278
- 1:25 The Lung Microbiome Predicts Mortality and Response to Azithromycin in Lung Transplant Patients with Chronic Rejection/M.P.** Combs, J. Luth, N.R. Falkowski, D.S. Wheeler, N.M. Walker, J. Erb-Downward, V.N. Lama, R.P. Dickson, Ann Arbor, MI, p.A5279
- 1:35 Indirect Alloimmunity and Extended Cold Ischemia Are Crucial for the Development of Chronic Lung Allograft Dysfunction/H.** Liu, C. Hollauer, K. Zitzler, C. Hagl, S. Michel, A.O. Yildirim, A. Dashkevich, Munich, Germany, p.A5280
- 1:45 Non-Zero Acute Rejection Score in the First-Year Post-Transplant as a Predictor of CLAD/R.S.** Gabarin, N. Belousova, A. Vasileva, L. Levy, E. Huszti, A. Roux, T. Martinu, C.-W. Chow, Toronto, Canada, p.A5281
- 1:55 Bronchoalveolar Lavage Proteome Identifies Differential Signaling in Lung Transplant Recipients With versus Without Bronchiolitis Obliterans Syndrome/E.** Skala, N.S. Sharma, R. Robinson, D. Hayes, A. Ziady, Cincinnati, OH, p.A5282
- 2:05 Distinct Pulmonary Virome Signatures in Lung Transplant Recipients Modulate the Airway Mucosal Immune Responses Leading to Tissue Injury/N.S.** Sharma, M. Bandy, Boston, MA, p.A5283

CLINICAL

MINI SYMPOSIUM

D94 PANDEMIC OUTPUT: ALL THAT IS COVID-19

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 3005/3007 (West Building, Level 3)

Chairing: J. Kruser, MD, MS, Madison, WI
D. Dixit, DP, Piscataway, NJ

Featured Speaker:

- 12:45 Building Back Better: Covid-19 as Springboard for Innovation and Collaboration in ICU Research/** E.C. Goligher, Toronto, Canada

Oral Presentations:

- 12:55 The I-SPY COVID Trial: First Results from an Adaptive Platform Phase 2 Trial for Severe COVID-19/C.S.** Calfee, M. Eklund, T.E. Albertson, S. Auld, J.R. Beitler, P.A. Berger, E.L. Burnham, N.K. Cobb, A. Crippa, B.M. Daniel, A. Discacciati, D.C. Files, E.B. Friedman, S. Gandotra, M.N. Gong, K.T. Khan, J.L. Koff, S.I. Kumar, J.E. Lang, R. Lu, T.R. Martin, M. A. Matthay, N. J. Meyer, A. Moskowitz, T. F. Obermiller, P. A. Robinson, D. Russell, K. W. Thomas, S. Wong, M. M. Wurfel26, R. G. Wunderink, Y. F. Yen, F. A. Youssef, L. J. Esserman, K. D. Liu; San Francisco, CA, p.A5284
- 1:05 Repair of Acute Respiratory Distress Syndrome in COVID-19 by Stromal Cell Administration (REALIST-COVID) Phase 2 Randomised Controlled Trial/E.** Gorman, D.F. McAuley, A.J. Rostron, M. Shankar-Hari, J. Bannard-Smith, A.M. Bentley, D. Brealey, C. Campbell, G. Curley, M. Clarke, A. Dushianthan, P. Hopkins, C. Jackson, K. Kefala, A. Krasnodembskaya, J.G. Laffey, C. McDowell, M. McFarland, J. McFerran, P. McGuigan, G. D. Perkins, J. Silversides, J. Smythe, J. Thompson, W. S. Tunnicliffe, I. D. M. Welters, B. Williams, C. M. O'Kane; Belfast, United Kingdom, p.A5285
- 1:15 Intensive Care Unit and Inpatient Admission for SARS-CoV-2 Infection Is Associated with Lower Forced Vital Capacity at 3 Months/A.** Meservey, N. Navuluri, M.S. Mccravy, S. Morrison, C. Green, S. Martindale, K. Williford, D. Shaz, B.W. Stephenson, A.M. Mathews, C.X. Giovacchini, I.L. Riley, L.G. Que, Durham, NC, p.A5286
- 1:25 ARDS Heterogeneity: A Metabolomics Comparison of Different Causes of ARDS (Covid-19-, H1N1- and Bacterial Pneumonia-Induced ARDS) Show Significant Differences/B.W.** Winston, C.H. Lee, M. Banoei, M. Ansari, U. Trahtemberg, A. Kumar, M. Lou, C. dos Santos, A. Baker, J. Russell, Calgary, Canada, p.A5287
- 1:35 A Multicenter, Randomized, Double-Blind, Placebo-Controlled Trial of Alpha-1 Antitrypsin for ARDS Secondary to Severe COVID-19/O.** Mcelvaney, N. McEvoy, F. Boland, O.F. Mcelvaney, G. Hogan, K. Donnelly, O. Friel, J. Clarke, D. Fraughen, M.P. Murphy, T.P. Carroll, P. Geoghegan, I. Martin-Loeches, N.G. Mcelvaney, G.F. Curley, Dublin, Ireland, p.A5288

- 1:45 Association of Fecal Microbiota Composition and Function with Progression of Respiratory Failure and Death in Patients with COVID-19 Critical Illness/M.R. Stutz, S. Pearson, N. Dylla, E. Littmann, H. Lin, P.A. Lecompte-Osorio, R. Nayak, M. Khalid, J. Boissiere, C. Metcalfe, E. Alder, A. Pohlman, K.S. Wolfe, J.B. Hall, A. Sundararajan, A. Sidebottom, J.P. Kress, E. Pamer, B.K. Patel, Chicago, IL, p.A5289**
- 1:55 The Pharmacokinetics and Safety of the Inhaled pan-JAK Inhibitor Nezulcitinib in Patients with Symptomatic Acute Lung Injury Associated with COVID-19: Results from a Phase 2 Trial/N.D. Pfeifer, C. Thompson, K. Colley, R. Saggari, D. Singh, South San Francisco, CA, p.A5290**

Featured Speaker:

- 2:05 Modern Chest MRI: Shedding Light on Regional Structure and Function/J.C. Woods, Cincinnati, OH**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D95 A STAR IS BORN: NOVEL STEPS TO DIAGNOSE AND TREAT CONGENITAL LUNG DISORDERS

12:45 p.m. - 2:15 p.m. MOSCONE CENTER

Room 2002/2004 (West Building, Level 2)

Chairing: B. Shivanna, MD, DM, PhD, Houston, TX
A.I. Cristea, MD, MS, ATSF, Indianapolis, IN

Oral Presentations:

- 12:45 A Respiratory Probiotic Rescues Neutrophilic Inflammation and Lung Injury in Bronchopulmonary Dysplasia/C.V. Lal, L. Qiao, T. Nicola, N. Wenger, G. Rezonzew, N. Ambalavanan, A. Gaggari, Birmingham, AL, p.A5292**
- 12:55 Perinatal Overactive Adipose Tissue Induces DNA Damage Response, Loss of Alveolar Epithelial Cells Type II (ATII) and Arrest Alveolarization/J. Selle, B. Abend, O. Klymenko, T. Georgomanolis, C. Vohlen, R. Wilke, J. Dötsch, M.A. Alejandro Alcazar, Cologne, Germany, p.A5293**
- 1:05 Transcriptional Characterization Suggests Accelerated Epithelial Differentiation in Trisomy 21 Lungs/S. Danopoulos, S. Bhattacharya, C. Cherry, G. Deutsch, T.J. Mariani, D. Al Alam, Torrance, CA, p.A5294**
- 1:15 Bronchopulmonary Dysplasia Severity Is Associated with a Decreased Expiratory Flow Ratio and Passive Respiratory Compliance at NICU Discharge/B.K. Jordan, K. Parkhotyuk, A. Hoppmann, D. Schilling, C.T. Mcevoy, Portland, OR, p.A5295**

- 1:25 Ipsilateral and Contralateral Lung Function Prior to Repair in Neonatal Congenital Diaphragmatic Hernia via Quantitative Lung MRI/G. Null, D.B. Gandhi, R.J. Fleck, P.S. Kingma, J.C. Woods, N. Higano, Cincinnati, OH, p.A5296**

- 1:35 Impact of Chromosomal Sex versus Gonadal Sex at Single Cell Resolution in Neonatal Hyperoxic Lung Injury: Implications for BPD/K. Lingappan, M. Cantu Gutierrez, A. Cantu-Gutierrez, Philadelphia, PA, p.A5297**

- 1:45 Obstructive Versus Restrictive Lung Disease in Neonatal Bronchopulmonary Dysplasia: Surrogate MRI Metrics Reveal Differences in Clinical Relevance/N. Higano, S. Mukthapuram, E. Hysinger, R.J. Fleck, J.C. Woods, Cincinnati, OH, p.A5298**

- 1:55 Neonatal Lung Mesenchymal Stomal Cells (MSCs) as Early-Life Predictors of Asthma in Survivors of Prematurity/D.R. Vanbeckum, N. Kaciroti, T.X. Cui, A.P. Popova, Ann Arbor, MI, p.A5299**

Featured Speaker:

- 2:05 Modern Chest MRI: Shedding Light on Regional Structure and Function/J.C. Woods, Cincinnati, OH**

CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D96 EMBARCADERO: MACHINES AND DEEP PHENOTYPING OF THE PULMONARY CIRCULATION

12:45 p.m. - 2:15 p.m. MOSCONE CENTER

Room 3000/3002/3004 (West Building, Level 3)

Chairing: E. Brittain, MD, Nashville, TN
F.N. Rahaghi, MD, PhD, Boston, MA
L. Zhao, PhD, Palo Alto, CA
A. Sweatt, MD, Stanford, CA

Oral Presentations:

- 12:45 Early Detection of Pulmonary Arterial Hypertension Using a Pulmonary Hypertension Electrocardiogram Algorithm/H.M. Dubrock, T.E. Wagner, Z.I. Attia, K. Carlson, C.L. Carpenter, S. Awasthi, R.P. Frantz, P.A. Friedman, S.J. Asirvatham, M. Babu, A. Prasad, R. Barve, E. Kogan, D. Quinn, F. Sharifi, M. Villeneuve, M. Selej, V. Sundararajan, N. Khan, S. Kapa, Rocheste, p.A5300**
- 12:55 Deep Phenotyping of Insulin Resistance in Pulmonary Arterial Hypertension/J. Min, R. Goodman, C. Provine, C.L. Archer-Chicko, S. Pugliese, J.A. Mazurek, A. Smith, J.S. Fritz, H.I. Palevsky, S.M. Kawut, N. Al-Naamani, Philadelphia, PA, p.A5301**

- 1:05 A New Clinical Phenotype with Non-Plexiform Vasculopathy and Distinctive Microvessel Remodeling Among Idiopathic Pulmonary Arterial Hypertension Patients/E.J. Nossent, J. Smits, C. Seegers, L. Meijboom, A. Boonstra, K. Tran-Lundmark, J. Aman, F. De Man, H.J. Bogaard, T. Radonic, P. Dorfmueller, A. Vonk Noordegraaf, Amsterdam, Netherlands, p.A5302**
- 1:15 Right Atrial Adaptation to Pressure-Overload in Pulmonary Arterial Hypertension/J. Van Wezenbeek, J.N. Wessels, H.W.M. Niessen, J.T. Marcus, L.J. Meijboom, A. Vonk Noordegraaf, M.-J. Goumans, H.J. Bogaard, F.S. de Man, Amsterdam, Netherlands, p.A5303**
- 1:25 Unsupervised Machine Learning for Identification of Cardiohepatic Syndrome in Pulmonary Arterial Hypertension and Chronic Thromboembolic Pulmonary Hypertension/J.V. Scott, R. McClelland, E. Weinberg, N. Al-Naamani, G. Baird, J. Holmes, J. Moutchia Suh, J. Minhas, D. Appleby, R. Urbanowicz, S.M. Kawut, Pittsburgh, PA, p.A5304**
- 1:35 Identification by Single-Cell Transcriptomic Analysis of a Novel Endothelial Stem Cell Population Mediating Lung Microvascular Regeneration by an Apelin-Dependent Mechanism/N.D. Cober, R. Soares Godoy, D.P. Cook, E. McCourt, Y. Deng, L. Wang, K. Schlosser, K. Rowe, D.J. Stewart, Ottawa, Canada, p.A5305**
- 1:45 Predicting Survival in Pulmonary Arterial Hypertension by Combining Machine Learning and Game Theory - A Platform for Patient Tailored Treatment/V.O. Kheyfets, A. Sweatt, R.T. Zamanian, K.R. Stenmark, Aurora, CO, p.A5306**
- 1:55 Right Atrial Pressure-Volume Analysis in Pulmonary Hypertension/J.N. Wessels, J. de Rover, J. Van Wezenbeek, T. Marcus, L.J. Meijboom, H.J. Bogaard, A. Vonk Noordegraaf, G.J. Strijkers, B.E. Westerhof, F.S. de Man, Amsterdam, Netherlands, p.A5307**
- 2:05 Deciphering a New Phenotype of Pulmonary Arterial Hypertension in Patients Carrying SOX17 Variants/D. Montani, B. Lechartier, B. Girerd, M. Eyries, M.-R. Ghigna, L. Savale, X. Jais, A. Seferian, M. Jevnikar, A. Boucly, M. Riou, J. Traclet, A. Chaouat, M. Levy, J. Le Pavec, E. Fadel, F. Perros, F. Soubrier, M. Remy-Jardin, O. Sitbon, D. Bonnet, M.J. Humbert, Paris, France, p.A5808**

BASIC • TRANSLATIONAL

MINI SYMPOSIUM

D97 MACROPHAGES AND INFLAMMATION IN ACUTE LUNG INJURY

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 2010/2012 (West Building, Level 2)

Chairing: B.B. Moore, PhD, ATSF, Ann Arbor, MI
A. Prakash, MD, PhD, San Francisco, CA
S.J. Denstaedt, MD, Ann Arbor, MI
H.S. Kulkarni, MD, MSc, ATSF, Saint Louis, MO

Oral Presentations:

- 12:45 Hyperferritinemia in COVID-19: A Mechanistic Role for Macrophage Ferritin in Acute Respiratory Distress Syndrome/W.Z. Zhang, W. Simmons, K. Kim, K. Hoffman, D. Redmond, L. Gomez-Escobar, L.E. Haber, P. Goyal, E.J. Schenck, M. Plataki, S.M. Cloonan, New York, NY, p.A5308**
- 12:55 The Inability to Limit Autoimmune Pathology Is Associated with COVID-19 Hospital Fatality/K. Son, R. Jamil, X. Ju, S. Culgin, K. Miyasaki, A. Kennedy, Z. Patel, T. Swindall, S. Banerjee, N. Emami Fard, B. Cowbrough, M. Kjarsgaard, K. Radford, A. Dvorkin-Gheva, W. Alhazzani, R. Sehmi, D.M.E. Bowdish, P. Nair, D. Perri, M. Mukherjee, Hamilton, Canada, p.A5309**
- 1:05 MARCH1 Inhibits Viral Replication and Inflammatory Signaling During Influenza Infection/J.D. Londino, J. Adair, A. Elhance, D. Farkas, R.K. Mallampalli, Columbus, OH, p.A5310**
- 1:15 Light Drives Alveolar Macrophage Death Upon Influenza Infection Enabling the Establishment of Secondary Bacterial Pneumonia/C. Malainou, C. Peteranderl, U. Matt, A.I. Vazquez-Armendariz, J. Better, S. Guenther, M. Looso, H. Schultheis, J. Hoppe, T. Firsching, A. Gruber, W. Seeger, S. Herold, Giessen, Germany, p.A5311**
- 1:25 IL-22 Binding Protein (IL22BP) Prevents Non-Canonical IL-22 Signaling and Reduces Bleomycin Induced Acute Lung Injury/Z. Zhang, D.A. Pociask, New Orleans, LA, p.A5312**
- 1:35 CD163 Expression Defines Unique Murine Interstitial Macrophage Subsets with Distinct Transcriptional Profiles During Homeostasis and Inflammation/P.K. Moore, K.C. Anderson, S.A. Hott, C.M. Moore, W.J. Janssen, A. McCubbrey, Aurora, CO, p.A5313**
- 1:45 A New Role for L-Lactate: Attenuation of Inflammation in Acute Lung Injury/C.U. Vohwinkel, N. Burns, E. Coit, V. Rubio, E. Nozik, R.M. Tuder, Aurora, CO, p.A5314**

- 1:55 CXCL10 Deficiency Protects from Lung Macrophage Invasion and Enables Lung Growth During Acute Injury and Recovery in Experimental Bronchopulmonary Dysplasia/D.V.B. Hirani, F. Thielen, C. Vohlen, P. Haznedar-Karakaya, J. Mohr, R. Wilke, S.V. Koningsbruggen-Rietschel, J. Dötsch, M.A. Alejandro-Alcazar, Cologne, Germany, p.A5315**
- 2:05 Alveolar Stretch Causes Connexin-43 Dependent Macrophage Activation in Mouse Lungs/L. Mthunzi, G.A. Gusarova, M.N. Islam, J. Bhattacharya, New York, NY, p.A5316**

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

D98 TARGETING THE SCAR: MECHANISMS AND TREATMENTS FOR FIBROTIC LUNG DISEASE

12:45 p.m. - 2:15 p.m. MOSCONE CENTER

Room 2018/2020 (West Building, Level 2)

Chairing: R.M. Tighe, MD, ATSF, Durham, NC
I.K. Sundar, BSc, MSc, PhD, Kansas City, KS

Oral Presentations:

- 12:45 Age-Associated Changes in the Human Lung Extracellular Matrix/M.L. Koloko Ngassie, T. Borghuis, M. De Vries, W. Timens, D.D. Sin, D. Nickle, P. Joubert, P. Horvatovich, G. Marko-Varga, R. Gosens, Y.S. Prakash, J.K. Burgess, C.-A. Brandsma, Rochester, MN, p.A5317**
- 12:55 Quantification of Cellular Injury Distribution During the Progression of Ventilator-Induced Lung Injury and Model Inference of Injury Interdependence/C. Mattson, B.J. Smith, Aurora, CO, p.A5318**
- 1:05 Sustained Improvement of Interstitial Lung Disease Following Enzyme Replacement Therapy with Olipudase Alfa in Children and Adults with Chronic Acid Sphingomyelinase Deficiency/K.I. Berger, M. Scarpa, G.A. Diaz, R. Giugliani, R. Lachmann, M.P. Wasserstein, F. Bonella, S.L.F. Walsh, W.A. Wuyts, A. Jessel, A.M. Rawlings, M. Kumar, New York, NY, p.A5319**
- 1:15 Effects of Vitamin D Administration in a Murine Neonatal Model of Acute Hyperoxic Lung Injury/T. Tran, J.L. Davies, R.A. Johnston, H. Karmouty-Quintana, J.L. Alcorn, Houston, TX, p.A5320**
- 1:25 The Relationship Between Alveolar Collapse and Lung Mechanics in an Endotoxin-Induced Acute Lung Injury Model with CNP-miR146a Treatment/A.M. Wallbank, J. Bilodeaux, E. Nozik, K. Liechty, B. Smith, Aurora, CO, p.A5321**

- 1:35 Macrophage-Derived Microvesicles Induce Alveolar Epithelial Cell Death in an In Vitro Stretch Model/R.F. Baldi, S. Soni, B.V. Patel, K.P. O'Dea, M.R. Wilson, M. Takata, London, United Kingdom, p.A5322**
- 1:45 Heterogeneous Changes in Lung Structure and Mechanics in Two-Hit Lung Injury Models/J. Bilodeaux, M. Osovskaya, A.M. Wallbank, H. Farooqi, B.J. Smith, Aurora, CO, p.A5323**
- 1:55 An Epithelial Damage-Induced Repair Response May Be Assessed by a Serological Basement Membrane Collagen Biomarker and Is Related to IPF Progression/J.M.B. Sand, P. Frederiksen, D.J. Leeming, M.A. Karsdal, P.L. Molyneaux, T.M. Maher, R.G. Jenkins, Herlev, Denmark, p.A5324**
- 2:05 Predictors of Persistent Fibrotic-Like Abnormalities in Survivors of Covid-19 Acute Respiratory Distress Syndrome (ARDS)/B. Heyman, J.J. Solomon, J. Ko, D.A. Lynch, S. Raia, R. Condos, New York, NY, p.A5809**

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

D101 TRANSLATIONAL AND BASIC SCIENCE ADVANCES IN PULMONARY FIBROSIS

12:45 p.m. - 2:15 p.m. MOSCONE CENTER

Room 212-214 (South Building, Level 2)

Poster Viewing 12:45-1:15

Discussion 1:15-2:15

Chairing: C. Bonham, MD, Charlottesville, VA
C.L. Vigeland, MD, Chapel Hill, NC

- 401 Functional T Cell Subsets in Idiopathic Pulmonary Fibrosis/A.P.M. Serezani, J. Bazzano, T. Yao, C. Taylor, C. Calvi, M.D. Bacchetta, C.M. Shaver, L.B. Ware, M.L. Salisbury, N. Banovich, P. Kendall, N. Saligrama, J. Kropski, T.S. Blackwell, Nashville, TN, p.A5325**
- 402 Myeloid-Dependent Immunosuppressive Features Drive and Predict IPF Progression/I.E. Fernandez, V. Viteri-Alvarez, F.R. Greiffo, A. Dhavale, M. Frankenberger, O. Eickelberg, J. Behr, Munich, Germany, p.A5326**
- 403 Regulatory T Cells in the Fibrotic Milieu: Ontological Characterization Through Transition of Inflammation to Fibrogenesis in a Sftpc^{173T} Murine Model of Pulmonary Fibrosis/A. Murthy, L. Rodriguez, Y. Tomer, P. Carson, S. Iyer, T. Dimopoulos, J. Katzen, M.F. Beers, Philadelphia, PA, p.A5328**

- 404 **An Exploratory Analysis of Blood Biomarkers in Idiopathic Pulmonary Fibrosis Based on Interim Data from the INJUSTIS Study/F.** Khan, I. Stewart, L. Howard, C. Barber, G. Hearson, S.C. Jones, L. Matthews, G. Saini, S. Johnson, G. Jenkins, Nottingham, United Kingdom, p.A5329
- 405 **Investigating the Pro-Fibrotic Effects of Galectins in Idiopathic Pulmonary Fibrosis - A Potential Role for Glycan-Mediated Interactions with Integrins/J.F.** Calver, G. Harris, R. Lithgo, R. Slack, D. Scott, R.G. Jenkins, A.E. John, Nottingham, United Kingdom, p.A5330
- 406 **Horizontal Transmission of Gut Microbiota Attenuates Lung Fibrosis in Pre-Clinical Models/D.N.** O'Dwyer, J.H. Lipinski, J. Strauss, S. Alam, X. Zhou, S.J. Gurczynski, R.P. Dickson, B.B. Moore, G. Huffnagle, Ann Arbor, MI, p.A5331
- 407 **Identification of Different Lung Immune Phenotypes in Idiopathic Pulmonary Fibrosis (IPF)/T.** Cruz, N. Mendoza, S. Casas-Recasens, F. Hernandez-Gonzalez, N. Albacar, J. Sembrat, M. Rojas, A. Agusti, J. Sellares Torres, M.R. Faner, Barcelona, Spain, p.A5332
- 408 **[64]Cu-FBP8 PET-CT to Detect Ongoing Lung Injury in IPF/J.** Munchel, A.K. Misra, S. Collins, R. Noto, P. Caravan, B. Shea, Providence, RI, p.A5333
- 409 **The Role of CD74 in Bleomycin-Induced Pulmonary Fibrosis/T.** Yang, S.-H. Kim, L. Leng, J. Nouws, R. Bucala, M. Sauler, New Haven, CT, p.A5334
- 410 **Rheumatoid Arthritis Related Antibodies in Idiopathic Pulmonary Fibrosis/D.** Kalafatis, V. Joshua, A.I. Catrina, A. Hensvold, M. Sköld, Stockholm, Sweden, p.A5335
- 411 **Non-Canonical Aryl-Hydrocarbon Receptor Signaling Exacerbates Pulmonary Fibrosis by Augmenting Dendritic Cell and Macrophage Inflammatory Cytokine Output/S.J.** Gurczynski, M. Bame, B.B. Moore, Ann Arbor, MI, p.A5336
- 412 **The Risk of Idiopathic Pulmonary Fibrosis in Inflammatory Bowel Disease/L.** Dahabra, A. Abou Yassine, A. Kassem, M. Assaad, M. Muhammad, S.B.A. Sattar, D. Elsayegh, Staten Island, NY, p.A5337
- 413 **Thermoneutral Housing Attenuates Lung Injury and Fibrosis/D.N.** O'Dwyer, J.H. Lipinski, S.J. Gurczynski, B. Moore, S.P. Hogan, Ann Arbor, MI, p.A5338
- 414 **Immunopathological Mechanisms of Bird Related Hypersensitivity Pneumonitis in an Acute and Chronic Murine Model/S.** Sanchez Diez, M. De Homdedeu, M.J. Cruz, I. Ojanguren, C.E. Romero Mesones, X. Muñoz, Barcelona, Spain, p.A5339
- 415 **Mast Cell-Expressed Membrane Protein 1 (MCEMP1), a Mortality Predictive Gene in Idiopathic Pulmonary Fibrosis (IPF), Is Transcriptionally Regulated by TGF- β and Promotes Phenotypic Changes in Monocyte-Derived Macrophages/C.** Perrot, B. Tourki, A. Arsenault, J.D. Herazo-Maya, Tampa, FL, p.A5340
- 416 **Caveolin Scaffolding Domain (CSD) Peptide LTI-2355 Modulates Phagocytic and Synthetic Activity of Idiopathic Pulmonary Fibrosis (IPF) Myeloid Cells/B.** Creyns, B. Mackenzie, A.L. Coelho, J.B. Windsor, C.M. Hogaboam, Los Angeles, CA, p.A5341
- 417 **Cytokine Profiles for Elucidation of Pathogenesis in Interstitial Pneumonia with Autoimmune Features/E.K.** Joerns, D. Karp, T.N. Adams, U.E. Makris, C.A. Newton, Dallas, TX, p.A5342
- 418 **Interstitial Lung Diseases After Hematopoietic Stem Cell Transplantation: New Pattern of Lung Chronic Graft-Versus-Host Disease?/G.** Archer, I. Berger, L. Bondeelle, C. de Margerie-Mellon, S. Cassonnet, R. Peffault de Latour, D. Michonneau, S. Chevret, A. Bergeron, Paris, France, p.A5343
- 419 **IL10 Polarizes Lung Monocyte Derived Macrophages to a Pro-Fibrotic Phenotype/A.** Bhattacharyya, K. Boostanpour, M. Bouzidi, L. Magee, T. Chen, R. Wolters, P. Torre, S. Pillai, M. Bhattacharya, San Francisco, CA, p.A5344
- 420 **Safety, Tolerability and Pharmacokinetics of BI 1015550 in Healthy Male Subjects/C.** Schlecker, A. Schultz, D. Luedtke, C. Coeck, Ingelheim am Rhein, Germany, p.A5345
- 421 **Safety, Tolerability and Pharmacokinetics of BI 1015550 in Patients with Idiopathic Pulmonary Fibrosis/T.M.** Maher, S. Bossert, M. Evans-Marsi, D.F. Zoz, D. Luedtke, Los Angeles, CA, p.A5346
- 422 **Prevalence of Circulating Growth and Differentiation Factor-15 (GDF15) Elevation Across Disparate Interstitial Lung Diseases/K.** Raffensperger, D. Kass, Y. Zhang, O. Eickelberg, J.K. Alder, A. Straub, Pittsburgh, PA, p.A5347
- 423 **Safety and Efficacy of BI 1015550, a Preferential Inhibitor of Phosphodiesterase 4b, in Patients with Idiopathic Pulmonary Fibrosis: A Phase 2 Trial/L.** Richeldi, A. Azuma, V. Cottin, C. Hesslinger, S. Stowasser, C. Valenzuela, M. Wijsenbeek, D.F. Zoz, F. Voss, T.M. Maher, Rome, Italy, p.A5810
- 424 **Association of Circulating Levels of Natural Antibodies to Oxidation-Specific Epitopes with Lung Function in Fibrotic Interstitial Lung Disease./E.** Otoupalova, E. Faron, J.S. Kim, M. Burdick, Y.M. Shim, J.M. Sturek, Charlottesville, VA, p.A5811

BEHAVIORAL • CLINICAL

POSTER DISCUSSION SESSION

D102 TOPICS IN BEHAVIORAL SCIENCE AND HEALTH SERVICE RESEARCH

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 303-304 (South Building, Level 3)

Poster Viewing

12:45-1:15

Discussion

1:15-2:15

Chairing: R. Buhr, MD, PhD, Los Angeles, CA
K. Duan, MD, Seattle, WA
K.C. Vranas, MD, Portland, OR

- 501 Disparities in Lung Cancer Screening at the Veteran's Health Administration/S.J. Niranjani, J.S. Richman, D.G. Das, N.T. Tanner, M.L. Baskin, M.T. Dransfield, Birmingham, AL, p.A5348**
- 502 Radiation Dosing for Follow-Up CT of Lung Nodules: Have We Made Any Progress?/A. Lindo, S.A. Raza, A. Jatana, R. Pai, A.M. Ahasic, I.D. Weir, Norwalk, CT, p.A5349**
- 503 Pulmonary Embolism Response Team - Improving Outcomes at a Community Hospital/O.S. Mudhar, C. King, J. Chong, P. Khanna, J. DeMellow, Stockton, CA, p.A5350**
- 504 Evaluation of the Overuse of Chest CT Pulmonary Angiography in Patients with a Suspected Pulmonary Embolism and the Potential Role of YEARS Criteria/T.K. Eng, D. Steiger, P. Dharapak, New York, NY, p.A5351**
- 505 Extent and Use of ICS-LABA (Maintenance Only and MART) in Routine Clinical Practice and Associated Clinical and Symptom Unmet Need in the US/W. Zhang, A. Czira, J. Harley, K.J. Rothnie, L. Lee, M. Small, Collegeville, PA, p.A5352**
- 506 Real-World Effectiveness (RWE) of Dupilumab in Reducing Asthma Exacerbations and Use of Inhaled Corticosteroids and Short-Acting β -Agonists/A. Pawar, M.S. Blaiss, B.D. Modena, A.H. Khan, L. De Prado Gomez, A. Nag, Y. Zhang, B. Ortiz, J.A. Jacob-Nara, Cambridge, MA, p.A5353**
- 507 Impact of Initiating Biologics in Patients with Severe Asthma and on Long-Term Oral Corticosteroids or Rescue Steroids (GLITTER)/W. Chen, T.N. Tran, M. Sadatsafavi, N.C.B. Wong, L. Bulathsinhala, E. Garcia Gil, J.M. FitzGerald, R. Murray, D.B. Price, Singapore, Singapore, p.A5354**
- 508 Characteristics and Outcomes of Patients with Severe Eosinophilic Asthma Treated with Benralizumab Enrolled in the Connect 360 Patient Support Programme/T. Morris, S. Ali, J. Hunt, S. Menon, R. Wood, N. Oppermans, C. Diomatari, S. Dube, Luton, United Kingdom, p.A5355**
- 509 Impact of Baseline Asthma Control on Physical Activity and Asthma Outcomes Among Black Women with Asthma/S.M. Nyenhuis, A. Bag, Chicago, IL, p.A5356**
- 510 Fractional Exhalation of Nitric Oxide and Mortality in a National Cohort with Asthma and/or Chronic Obstructive Pulmonary Disease/I.I. Ikwu, L.G. Nicolas, A. Mehari, R. Gillum, Washington, DC, p.A5357**
- 511 Real-World Medication Adherence Trajectories of Nintedanib Among Idiopathic Pulmonary Fibrosis Patients/A.J. Epstein, M. Nili, D. Nunag, A. Olson, B.J. Borah, Milton, MA, p.A5358**
- 512 Perceptions of Genetic Testing: A Mixed-Methods Study of Patients with Pulmonary Fibrosis and Their First-Degree Relatives/A. Grant-Orser, N. Avitzur, J. Morisset, C.D. Fell, K.A.M. Johansson, Calgary, Canada, p.A5359**
- 513 Bronchoalveolar Lavage and Transbronchial Biopsy Findings in Electronic Cigarettes or Vaping Product Use Associated Lung Injury (EVALI): A Multicenter Cohort/S.E. Hernandez, J. Thiboutot, M.M. Wahidi, C.X. Giovacchini, J. De Cardenas, C.A. Meldrum, D. Dibardino, H.M. Giannini, F. Maldonado, L. Roller, L.B. Yarmus, C. Kapp, Baltimore, MD, p.A5360**
- 514 Race/Ethnicity-Specific Latent Classes of Smoking Behavior Are Differentially Associated with All-Cause Mortality: The COPD Gene Study/N. Richmond, K.F. Hoth, C. Wilson, Y. Li, D.L. Demeo, G.L. Kinney, E. Austin, K.A. Young, J.E. Hokanson, Aurora, CO, p.A5361**
- 515 Comparison of Current Smoking Status Based on the Biomarker Cotinine, Two Types of Self-Report, and ICD-10 Codes in the Veterans Health Administration/K.A. McGinnis, M. Skanderson, K.M. Akgun, A.C. Justice, H.A. Tindle, A. Wrona, K. Farah, S. Shahrir, M.S. Freiberg, M.B. Goetz, M.A. Pisani, M.C. Rodriguez-Barradas, K.A. Crothers, West Haven, CT, p.A5362**
- 516 A Primary Care-Based Narrative Exposure Therapy on Patients with Post-Traumatic Stress Disorder Following Intensive Care/J. Gensichen, C. Friemel, K. Schmidt, L. Sanftenberg, J. Dohmann, U.-D. Reips, T. Elbert, Munich, Germany, p.A5363**
- 517 A Self-Guided App-Based Adaptive Coping Skills Training Intervention for Patients with Cardiorespiratory Failure: The Blueprint Pilot RCT/C.E. Cox, S.A. Kelleher, E.H. Pratt, A. Parish, M.K. Olsen, L.S. Porter, Durham, NC, p.A5364**

- 518 **Comparison of Critical Care Fellows' versus Medical Students' Understanding of Clinically Relevant Physiology**/S. Maximous, M. Acho, J.E. Ahari, K. Hawkins, D.B. Jamieson, A.M. Luks, J.T. Poston, N. Seam, N.G. Shah, C.J. Woods, B.W. Lee, Pittsburgh, PA, p.A5365
- 519 **Knowledge of Sleep Medicine Among Pulmonary-Critical Care Fellows**/M. Acho, J.L. Newitt, P.J. Stollo, Ann Arbor, MI, p.A5366
- 520 **Point of Care Ultrasound (POCUS) Assessments in Healthcare Providers: A Comparison of a POCUS Simulator to Standardized Patients**/T. Hossain, M. Janjigian, N. Srisarajvakul-Klein, M. Ghazipura, E. Bondarsky, B. Kaufman, H. Sauthoff, New York, NY, p.A5367
- 521 **BNT162b2 Immunogenicity Among Patients Receiving Methotrexate**/A. Petralia, R. Kashyap, K. Patel, Salem, VA, p.A5368
- 522 **Pneumococcal Vaccination Rates Among Patients with Chronic Obstructive Pulmonary Disease in the United States: Results from the Behavioral Risk Factor Surveillance System 2011-2019**/H. Robertson, T. Litchman, K. Mukamal, Boston, MA, p.A5369
- 523 **Factors Associated with Influenza Vaccination Non-Adherence in a National Veteran Cohort**/A.A. Chen, T. Runels, E. DeRycke, B. Bade, K. Crothers, L. Bastian, I.S. Bazan, M. Farmer, B. Bean-Mayberry, E. Bernstein, C. Brandt, K.M. Akgun, New Haven, CT, p.A5370
- 524 **National Differences in Equitable Distribution of the COVID-19 Vaccine**/A. Hardeman, T. Wong, J.C. Rojas, R. Postelnicu, J.L. Denson, New Orleans, LA, p.A5371
- 525 **Disparities in Influenza Vaccine Coverage in High-Risk Population, 2010-2020**/J.R. Felzer, A. LeMahieu, L.J. Finney Rutten, Y. Juhn, C. Wi, R.M. Jacobson, C.C. Kennedy, Rochester, MN, p.A5372
- 101 **A Case of Endobronchial Valve Single Lobe Treatment of Severe Emphysema in a Patient with Alpha One Antitrypsin Deficiency (AATD) Dominant Right Middle Lobe Emphysema**/M. Masoudi, M. Masoudi, Y.R. Shweihat, F.M. Zeid, Huntington, WV, p.A5373
- 102 **Bronchoscopic Ablation of a Bronchogenic Cyst**/M. Ueoka, W. Kareem, R. Ronaghi, C. Oberg, S.S. Oh, Los Angeles, CA, p.A5374
- 103 **Diagnostic Pleuroscopy Utilizing a Flexible Bronchoscope Inserted Through an Endotracheal Tube in Resource Limited Setting in Sub-Saharan Africa**/J.W. Kagima, A.O. Owuor, J. Kagema, Nairobi, Kenya, p.A5375
- 104 **First Experience in the United States with a Biodegradable Airway Stent in an Adult**/B.D. Tran, G.Z. Cheng, R.J. Miller, M.M. Nobari, J.A. Boys, M.W. Onaitis, San Diego, CA, p.A5376
- 105 **A Case Report Novel Use of Aeriseal System to Convert Collateral Ventilation Status to Enable Bronchoscopic Lung Volume Reduction (BLVR) with Zephyr Valves in a Patient with Severe Emphysema**/G. Levi, S. Uccelli, C. Rocchetti, R. Magri, D. Bottone, F. Quadri, M. Novali, L. Pini, M. Bezzi, Brescia, Italy, p.A5377
- 106 **Endobronchial Valve Placement as Salvage Therapy in the Management of Hemoptysis, A Case Report**/J.W. Frey, M. Postigo, L.R. Pitts, Kansas City, KS, p.A5378
- 107 **The Use of a Personalized T-Tube to Treat Tracheal Stenosis Due to Actinomyces Necrotizing Tracheitis**/G. Senyei, B. Louie, M.M. Nobari, R.J. Miller, J. Boys, P. Weissbrod, T. Guo, G.Z. Cheng, La Jolla, CA, p.A5379
- 108 **Enterococcus Faecalis Empyema as a Rare Complication of Indwelling Pleural Catheter Used in the Management of Chronic Non-Malignant Pleural Effusion**/M. Assaad, R. Meenakshisundaram, F.A. Siddiqui, Sayre, PA, p.A5380
- 109 **Bilateral Pneumothoraces Resolved with a Single Chest Tube: A Case of Buffalo Chest After Liver Biopsy**/S. Patel, A. Singh, D. Lindner, G. Sporn, J. Valle Giler, Naples, FL, p.A5381
- 110 **Treating Persistent Air Leak in COVID-19 with Spiration™ Endobronchial Valves: A Case Series**/B. Stone, R. Semaan, D.G. Dunlap, Pittsburgh, PA, p.A5382
- 111 **The Past, the Present, and Future of Stenting: Two Illustrative Cases**/T. Jahir, S. Hossain, R. Risal, A. Kumari, A. Khan, F. Schmidt, Brooklyn, NY, p.A5383
- 112 **Contained Intrafissural Pneumothorax Following Bronchoscopic Lung Volume Reduction**/M.A. Dirico, T. Daly, T. Zanders, D. Stahlnecker, Bethlehem, PA, p.A5384

CLINICAL

POSTER DISCUSSION SESSION

D103 CASE REPORTS IN INTERVENTIONAL PULMONOLOGY

12:45 p.m. - 2:15 p.m. MOSCONE CENTER

Room 9-10 (South Building, Exhibition Level)

Poster Viewing 12:45-1:15

Discussion 1:15-2:15

Chairing: B.D. Shaller, MD, Stanford, CA
 D. Dunlap, MD, Pittsburgh, PA
 V.K. Holden, MD, Baltimore, MD

- 113 **Endoscopic Occlusion of a Post-Operative Bronchial Stump Dehiscence with a Septal Silicone Button/N.N.** Suleiman, N.A. Kolaitis, M. Russell, S. Hays, B. Trinh, J. Kukreja, Y.B. Gesthalter, San Francisco, CA, p.A5385
- 114 **Successful Treatment of Pleural Effusions in Yellow Nail Syndrome with Thoracoscopy and Pleurodesis/J. Choa,** D. Becnel, New Orleans, LA, p.A5386
- 115 **Stabbed in the Back: A Rare Iatrogenic Hemothorax from Dry Needling/M. Graves, A.J. Ahmed, J. Anwar, L. Stawovy,** E. Rojas, V. Badami, R. Sangani, K. Chapman, S. Hadique, Morgantown, WV, p.A5387

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

**D104 “EVERY BREATH YOU TAKE”:
MANAGING VENTILATION**

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 3009/3011 (West Building, Level 3)

Poster Viewing 12:45-1:15

Discussion 1:15-2:15

Chairing: A. Gallo De Moraes, MD, FACP, Rochester, MN
G.D. Rubenfeld, MD, MSc, Toronto, Canada
R.D. Stapleton, MD, PhD, ATSF, Burlington, VT

- 901 **Impact of Tidal Ventilation on Lung Repair in Ex Vivo Wound Healing Models/C. López-Martínez, P. Martín-Vicente, R. Albillos-Almaraz, I. Lopez-Alonso, R. Rodríguez-García, M. Fernández-Rodríguez, F.E. Fernández Suárez, I. Crespo, S. Exojo-Ramírez, G.M. Albaiceta, L. Amado-Rodríguez, Oviedo, Spain, p.A5388**
- 902 **Physiologic Effects of High Flow Nasal Cannula Compared to Conventional Oxygen Therapy Postextubation: A Randomized Crossover Study/R. Basoalto, L.F. Damiani, Y. Jalil, P. Garcia, D. Carpio, M.C. Bachmann, L. Alegría, V. Oviedo, G. Bugeo, J. Retamal, A. Bruhn, Santiago, Chile, p.A5389**
- 903 **Intensive Care Unit Hyperoxia in Chronic Obstructive Pulmonary Disease Patients Receiving Supplemental Oxygen/P.J. Kramer, A.M. May, Cleveland, OH, p.A5390**
- 904 **Diaphragm Movement During Unassisted Breathing Trials in Prolonged Mechanical Ventilation Tracheostomized Patient/C.-H. Wu, Y.-W. Kuo, F.-C. Lin, Y.-L. Chen, N.-C. Hsu, J.-S. Jerng, H.-D. Wu, Taipei, Taiwan, p.A5391**
- 905 **Diaphragm Neurostimulation with Mechanical Ventilation Attenuates Hippocampal Inflammation in a Moderate-ARDS Porcine Model/T. Bassi, E. Rohrs, K. Fernandez, M. Nicholas, M. Ornowska, J. Wittmann, M. Gani, D. Evans, S.C. Reynolds, Vancouver, Canada, p.A5392**
- 906 **Increased Heart Rate Variability After 12 Hours of Mechanical Ventilation with Diaphragm Neurostimulation in a Moderate-ARDS Porcine Model/T. Bassi, E. Rohrs, K. Fernandez, M. Nicholas, M. Ornowska, J. Wittmann, M. Gani, D. Evans, S.C. Reynolds, Vancouver, Canada, p.A5393**
- 907 **Mechanical Ventilation in Patients with Interstitial Lung Disease and Atrial Fibrillation: a Nationwide Study/A. Liaqat, A. Farooq, S. Kulkarni, B. Foster, P. Patak, S. Tosto, D. Pau, Dothan, AL, p.A5394**
- 908 **The Effect of Sedation with Inhaled Anesthetics on Cognitive and Psychiatric Outcomes in Critically Ill Adults: A Systematic Review/S. Cuninghame, A. Jerath, K. Gorsky, A. Sivajohan, C. Francoeur, D. Withington, L. Burry, M. Slessarev, London, Canada, p.A5395**
- 909 **Propofol-Associated Hypertriglyceridemia, Pancreatitis, and Use of Alternative Sedative Agents/P. Pancholi, S. Lessen, J. Wu, J.-T. Chen, M.N. Gong, A. Moskowitz, Bronx, NY, p.A5396**
- 910 **Successful Tracheostomy Decannulation After Prolonged Mechanical Ventilation in Patients with COVID-19 Disease/M. Saad, F.A. Laghi, J.D. Brofman, N.S. Undevia, H. Shaikh, Milano, Italy, p.A5397**
- 911 **Oxidized Lipid Biomarkers in Patients with Acute Respiratory Failure as Predictors for Hyperoxia Associated Lung Injury/S. Pannu, M.C. Exline, J.W. Christman, G. Brock, B. Klammer, M. Yeager, K.M. Gowdy, N. Parinandi, Columbus, OH, p.A5398**
- 912 **Pediatric Extubation Failure in the Modern Era/F. Kim, C.J. Newth, G. Soto-Campos, J. Palumbo, T. Rice, Grand Rapids, MI, p.A5399**
- 913 **Obesity Paradox in Mechanically Ventilated Patients with Refractory Hypoxemia/S. Gupta, S. Hussain, H.A. Jaliawala, B.R. Brown, H. Wu, R. Bernardo, Oklahoma City, OK, p.A5400**
- 914 **Validation of Machine Learning Algorithms in Predicting PaO₂ from SpO₂ in Mechanically Ventilated Patients/M. Tabary, S. Ren, J. Zupetic, R. DeSensi, S.M. Nouraie, X. Lu, R.D. Boyce, J. Lee, Pittsburgh, PA, p.A5401**
- 915 **Analysis of Lung Protective Ventilation Using Time-Weighted Ventilator Data Extracted from Electronic Health Records/G. Carter, D. Brinton, A. Simpson, C. Terry, D.W. Ford, A.J. Goodwin, Charleston, SC, p.A5402**

- 916 Preliminary Assessment of Respiratory System Elastance Following Nebulisation of Various Electrically Conductive Solutions/G. Li Bassi, C. Ainola, G. Fior, K. Liu, S. Colombo, G. Abbate, K. Sato, N. Sato, D. McGuire, S. Heinsar, S. Livingstone, K. Wildi, C. Morais, M. Passmore, E. Wilson, M. Boquet, A. Torres, J. Suen, J. Fraser, Chermshire, Australia, p.A5403**
- 917 Improvement of Ventilation-Perfusion Mismatch by PEEP Is Correlated with Lung Recruitability in ARDS/T. Mauri, B. Pavlovsky, E. Spinelli, G. Scaramuzza, I. Marongiu, P. Tagliabue, S. Spadaro, G. Grasselli, A. Mercat, A. Pesenti, Milan, Italy, p.A5404**
- 918 Patient Work of Breathing During a Spontaneous Breathing Trial: T-Piece vs CPAP 0 cm H₂O on Ventilator/M. Sameed, R. Chatburn, U. Hatipoglu, Cleveland, OH, p.A5405**
- 919 Achievement of Targeted Sedation Goals Among Mechanically Ventilated Patients Across United States Hospitals/J.M. Rucci, S.R. Jafarzadeh, A.J. Walkey, Boston, MA, p.A5406**
- 920 The Impact of Body Position on the Distribution of Ventilation in Acute Respiratory Distress Syndrome (ARDS)/A.K. Pearce, W.C. McGuire, A.R. Elliott, A. Malhotra, La Jolla, CA, p.A5407**
- 921 Efficacy of Dexmedetomidine Versus Propofol Sedation in Critically Ill Adults Requiring Mechanical Ventilation: A Systematic Review and Meta-Analysis of Randomized Trials/K. Heybati, F. Zhou, S. Ali, J. Deng, Rochester, MN, p.A5408**
- 922 Higher Driving Pressure and Elastance Are Associated with Increased Mortality Among a Heterogeneous Population in a Real World Clinical Setting: A Bi-Center Analysis of EHR Data/C. Terry, A.N. Simpson, D.L. Brinton, D.C. Files, G. Carter, D.W. Ford, A.J. Goodwin, Charleston, SC, p.A5409**
- 923 Impact of Physiologic Determinants on the Effect of Ultra-Low Tidal Volume Ventilation with Extracorporeal CO₂ Removal on Mortality in Patients with Acute Hypoxemic Respiratory Failure/J. Dianti, J. McNamee, A.S. Slutsky, E. Fan, N.D. Ferguson, D.F. McAuley, E.C. Goligher, Toronto, Canada, p.A5812**
- 924 Real-World Evidence of ECCO₂R to Correct Respiratory Acidosis: Analysis of the Hemolung Registry/J. Kimmel, A. May, S.A. Conrad, Pittsburgh, PA, p.A5813**
- 925 Changes in ICU Practices for Mechanically Ventilated Patients Before and During the Covid-19 Pandemic/D. Shankar, A.J. Walkey, N.A. Bosch, A. Law, Boston, MA, p.A5814**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

D105 MYSTERY SOLVED: CURIOUS CASES OF COVID-19

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 2005/2007 (West Building, Level 2)

- Poster Viewing 12:45-1:15**
- Discussion 1:15-2:15**
- Chairing:** P.D. Robinson, MD, MRCPCH, FRACP, PhD, Sydney, Australia
D.S. Bush, MD, New York, NY
- 601 A Collaborative Approach for Removal of Bronchial Casts After SARS-CoV-2 Infection/M.G. Gayoso Liviac, M.D. Tsifansky, Washington, DC, p.A5410**
- 602 Acute Pulmonary Eosinophilia Following Pediatric SARS CoV 2 Infection/J.D. Fett, T. Onarecker, C. Cox, A. Tanritanir, M. Pertzborn, E. Ararat, K. Agoramurthi, K. Day, A. Agarwal, Little Rock, AR, p.A5411**
- 603 Lethal Thyrotoxic Periodic Paralysis Induced by SARS-CoV-2/L.C. Beltran, L.A. Robles, H. Orozco Rodriguez, D.E. Espinoza Barrera, Berwyn, IL, p.A5412**
- 604 ANCA Negative Diffuse Alveolar Hemorrhage Associated with Severe COVID Pneumonia/K. Enzer, J.L. Bloom, L. Cole, M. Loi, P.C. Stillwell, M.A. Brown, Aurora, CO, p.A5413**
- 605 Nonspecific Interstitial Pneumonia Presenting as Progressive Dyspnea and Hypoxemia in a Young Child with History of Burkitt Lymphoma and COVID-19 /B. Wall, J. Curran, E. Albright, C. Zhang, S. Puranik, Indianapolis, IN, p.A5414**
- 606 Recurrent Primary Spontaneous Pneumothorax Masquerading as a Congenital Pulmonary Airway Malformation in a Young Female/C. Swanson, E. Khan, T. Oyetunji, J. Sobrino, Kansas City, MO, p.A5415**
- 607 Curious Case of Pneumothorax in a Child with Severe, Persistent Cough After Covid-19/B.A. Stewart, T. Alleyne, U. Mathur, Edinburg, TX, p.A5416**
- 608 Two Case Reports on Neonatal T-Cell Responses to Intrauterine Respiratory Syncytial Virus (RSV) and Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) Infection in a Prospective Cohort Study in Maternal-Baby Dyads/S.P. Desai, E. Enwono, I. Trinh, A.E. Murrell, A. Agbodji, C. Dugas, R. Satou, S.N. Harris, G. Pridjian, K. Olson, S. Longo, S. Chandra, A. Smira, D. Elliot, J. Robinson, B.M. Gunn, G. Piedimonte, E.B. Norton, New Orleans, LA, p.A5417**

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

D106 NOE VALLEY: CLOTS, COVID, AND LUNG VASCULAR DISEASES

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 3016/3018 (West Building, Level 3)

Poster Viewing 12:45-1:15

Discussion 1:15-2:15

Chairing: E. Schmidt, MD, ATSF, Denver, CO
 J.A. Bastarache, MD, Nashville, TN
 M. Damarla, MD, Baltimore, MD
 S.M. Dudek, MD, Chicago, IL

- 1001 Impaired Stressed Blood Volume Augmentation in Post-COVID-19 Patients/S.M. Savarimuthu, P. Joseph, D.D. Lutchmansingh, J.D. Possick, M. Gulati, M. Cullinan, J. Kreiger, P.M. Heerd, I. Singh, New Haven, CT, p.A5418**
- 1002 Balloon Pulmonary Angioplasty in Chronic Thromboembolic Pulmonary Hypertension: 5- Year Experience from Cleveland Clinic/A. Bhardwaj, A.A. Fawaz, A. Tharwani, A. Bansal, A.M. Goyanes, I. Haddadin, G.A. Heresi, Cleveland, OH, p.A5420**
- 1003 Impact of COVID-19 Pandemic on Care of Pulmonary Hypertension Patients/C.Y. Zhou, S. Sahay, O.A. Shlobin, D.J. Levine, A. Poms, F.J. Soto, L. Melendres-Groves, C.J. Mullin, E. Bossone, V. Balasubramanian, H.A. Memon, D. Kay, S.C. Mathai, K.B. Highland, J.M. Elwing, Cincinnati, OH, p.A5421**
- 1004 Impaired Right Ventricular - Pulmonary Arterial Uncoupling Thresholds in Acute Pulmonary Embolism/A. Khosla, J.L. Gomez, I. Singh, New Haven, CT, p.A5422**
- 1005 Lactic Acid in Acute Pulmonary Embolism Can Add to Risk/D. Sacher, O.A. O'Corragain, T. Thakur, R. Badlani, H. Davis, K.U. Lio, N. Mehta, J. Moore, R. Bashir, V. Lakhter, J. Panaro, G.J. Criner, P. Rali, Philadelphia, PA, p.A5423**
- 1006 COVID-19 and Its Association with the Development of Pulmonary Hypertension: The Potential Role for Pulmonary Vasodilators/R.R. Bollam, F. Mamauag, S.A.A. Zaidi, Pittsburgh, PA, p.A5424**
- 1007 Outcomes of Patients with Acute Pulmonary Embolism Managed with Catheter-Based Therapies as Compared to Medical Therapy at 3-6 Months Follow-Up/N. Kong, M. Acosta, A. Zahid, M. Clarke, K. Teerapuncharoen, R. Bag, J. Paul, Chicago, IL, p.A5425**
- 1008 A Deeper Dive into Acute Pulmonary Embolism (PE): How Histopathological Features May Better Explain the Wide Range of Clinical Symptoms/V. Upadhyay, S. Gayen, A. Aneja, M. Kumaran, R. Bashir, V. Lakhter, J. Panaro, G. Cohen, G.J. Criner, P. Rali, Philadelphia, PA, p.A5426**
- 1009 Enhancement of the Alveolar Actin Fence Abrogates COVID-19 ARDS in Mice/M.N. Islam, G.A. Gusarova, I. Shmarakov, W. Blaner, J. Bhattacharya, New York, NY, p.A5427**
- 1010 C16-Ceramide Elevations in COVID-19-Associated ARDS/I. Petrache, E. Pujadas, A. Ganju, K.A. Serban, I. Bronova, B. Babbs, N. Egersdorf, P. Hume, K. Goel, W.J. Janssen, E. Berdyshev, C. Cordon-Cardo, R. Kolesnick, Denver, CO, p.A5428**
- 1011 Patient with Bone Morphogenetic Protein Receptor Type II (BMP2) Mutation and AVMs Without Pulmonary Hypertension/B. Scarpato, L.M. Keenan, Salt Lake City, UT, p.A5429**
- 1012 MicroRNA-126 Signaling and Targets in COPD and COPD-Pulmonary Hypertension/K. Goel, N. Egersdorf, D. Cao, S.M. Majka, H. Karmouty-Quintana, I. Petrache, Aurora, CO, p.A5430**
- 1013 Deep Learning Approaches to Classify Lung Parenchymal Disease on CT Images/M. Mamalakis, K. Dwivedi, M. Sharkey, S. Alabed, P. Metherall, D. Kiely, A. Swift, Sheffield, United Kingdom, p.A5431**
- 1014 R-spondin 3 Alters Endothelial Cell Function and Contributes to Pulmonary Vascular Remodeling in Hyperactive mTOR Lung Diseases/S. Lin, R. Rue, K. Obratsova, A. Mukhitov, C. Smith, J. Evans, V.P. Krymskaya, Philadelphia, PA, p.A5432**
- 1015 Something to Talc About: The Protective Effect of Chronic Thromboembolism in Foreign Body Angiogrammatosis/A. Astashchanka, S.J. Kligerman, G.Y. Lin, M.M. Madani, D.S. Poch, N.H. Kim, T.M. Fernandes, K.M. Kerr, D.S. Papamatheakis, San Diego, CA, p.A5433**
- 1016 Validation of Automated Right Ventricle to Left Ventricle Ratio (RV/LV Ratio) Measurements in Patients with Acute Pulmonary Embolism (PE)/J. Watchmaker, D. Goldman, R. Korff, B. Marinelli, J. Concepcion, M. Chung, A. Jacobi, R. Lookstein, New York, NY, p.A5434**
- 1017 Pulmonary Vascular Immunohistopathology and Pulmonary Hypertension in COVID-19 Lung Transplant Recipients/D. Gekhman, A. Kumar, L.M. Pandit, M. Ramineni, M.H. Senussi, K. Levett, P.S. Garcha, M. Li, Z. Liu, G. Li, J. Seagraves, I. Rosas, G. Loor, A. Shafii, M. Baz, Houston, TX, p.A5435**

- 1018 Fractal Dimension Estimation Using Box Counting Method to Quantify CT Based Pulmonary Vascular Tree Simplification/A. Tsao, P. Nardelli, A.B. Waxman, R. San José Estépar, G.R. Washko, R. San Jose Estepar, F.N. Rahaghi, Boston, MA, p.A5436**
- 1019 Fully Automatic Cardiac and Great Vessel Segmentation on CT Pulmonary Angiography (CTPA) Using Deep Learning/M.J. Sharkey, K. Karunasaagarar, C. Johns, S. Rajaram, D. Alkhanfar, K. Dwivedi, S. Alabed, P. Metherall, R. Van Der Geest, M. Mamalakis, D. Kiely, A.J. Swift, Sheffield, United Kingdom, p.A5437**
- 1020 Two Stage Intravital Imaging Mouse Model to Assess Venous Thromboembolism in Sickle Cell Disease/T. Brzoska, T.W. Kaminski, E. Tutuncuoglu, M.T. Gladwin, P. Sundd, Pittsburgh, PA, p.A5438**
- 1021 Expression of Viral Entry Proteins and In Vitro Susceptibility of Pulmonary Vascular Endothelium to SARS CoV 2 Infection/A. Long, E. Dougherty, L.-Y. Chen, L. Qi, S. Warner, B. Lafont, N. Lackemeyer, R. Johnson, N. Altan-Bonnet, A. Keshavarz, J.R. Strich, R.L. Danner, J. Taubenberger, J.M. Elinoff, Bethesda, MD, p.A5439**
- 1022 Pulmonary Arterial Hypertension with Dense Pulmonary Infiltrations of IgG4-Positive Plasma Cells/E. Beck, M.M. Cirulis, B.C. Cahill, C.G.G. Elliott, Salt Lake City, UT, p.A5440**
- 1023 Cor Pulmonale Is an Adverse Prognostic Marker in Hospitalized COPD Exacerbation Patients: An Analysis of the National Inpatient Sample Registry/U. Vardar, R. Atluri, A. Shahi, M. Murthi, S. Elfallah, Chicago, IL, p.A5441**
- 1024 Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Mediates Transforming Growth Factor Beta (TGF- β) Hijacking and Immune Dysregulation Through A Novel Gain of Function Mutation in Its Nonstructural 15 (NSP15) Protein/L. Arguinchona, K. Lesterberg, A. Cota-Gomez, K. Jordan, J. Livesay, J. McWilliams, D. Beckham, J.P. Maloney, Aurora, CO, p.A5815**
- Chairing:** N.C. Dean, MD, Murray, UT
P. Escalante, MD, MSc, Rochester, MN
- 201 Engineered Bacteriophage for Treatment of Disseminated Drug Resistant Mycobacterium Abscessus in a Lung Transplant Recipient/S.M. Leonard, A. Friedland, E.K. Maziarz, J.M. Reynolds, K.A. Young, Durham, NC, p.A5442**
- 202 Mycobacterium Africanum Tuberculous Cervical Lymphadenitis in the United States - A Laboratory Dilemma/T. Maeda, P.C. Levy, M.J. Utell, A. Cameron, Rochester, NY, p.A5443**
- 203 What an Actor: Endobronchial Actinomyces Masquerading as Carcinoid Tumor/C. Williams, D. Lindner, D. Huang, Naples, FL, p.A5444**
- 204 A Rare Cause of Nodular Lung Disease/M.A. Amjad, Z. Hamid, Y. Patel, S. Tasnim, S. Ramakrishna, P.O. Ochieng, Scranton, PA, p.A5445**
- 205 A Rare Case of Aspergillus Emyema Thoracis as a Complication of COVID-19 Pneumonia/V. Williams, M. Diamond, P. Shah, Weston, FL, p.A5446**
- 206 A Fatal Case of Pneumocystis Pneumonia Complicated by Trimethoprim/Sulfamethoxazole Induced Drug Rash with Eosinophilia and Systemic Symptoms (DRESS) Syndrome/C.W. Akabusi, N. Chukwu, K.P. Acosta, O. Ajibola, H. Suseelan, Poughkeepsie, NY, p.A5447**
- 207 Disseminated Mycobacterium Avium Complex Infection Mimicking Castleman's Disease in a Patient with Anti-Interferon- γ Autoantibodies: A Case Report/L. Barnes, L. Sullivan, W. Szeto, R.E. Sell, San Diego, CA, p.A5448**
- 208 A Case of Pulmonary Cryptococcosis After Severe COVID-19 Pneumonia/T. Roesch, E. Altneu, D. Mueller, Philadelphia, PA, p.A5449**
- 209 Aspergillus as a Mimicker of Immune Checkpoint Inhibitor-Induced Pneumonitis/P. Dunbar, M.D. Althoff, M.T. Kearns, Aurora, CO, p.A5450**
- 210 An Unusual Cause of Stridor: Herpes Simplex Virus Infection in Setting of Infiltrative Small Lymphocytic Lymphoma/P. Ntiamoah, J.A. Vargas, S. Ondrejka, Cleveland, OH, p.A5451**
- 211 Chronic Polyfungal Pneumonia and Reactive Arthritis After Mild Covid-19 Pneumonia/N.E. Kirsch, T. Thorson, W.N. Johnson, M. Kung, Las Vegas, NV, p.A5452**
- 212 Pulmonary Fibrosis and Fungal Pneumonia as Concomitant Post-Acute Sequelae of COVID-19 in a Fully Vaccinated Patient/J.M. Ramakrishna, V. Khanna, V. Khanam, H. Hannoodde, A. Ghabsha, Rochester, MI, p.A5453**

CLINICAL

POSTER DISCUSSION SESSION

D107 SHOW US WHAT YOU'VE GOT: INTERESTING CASE REPORTS

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 203-204 (South Building, Level 2)

Poster Viewing

12:45-1:15

Discussion

1:15-2:15

- 213 **Double Trouble: Eosinophilic Pneumonia Following SARS-CoV-2 Infection and 5-ASA Treatment**/M. Kuchuk, Hadera, Israel, p.A5454
- 214 **A Tangled Web of COVID-19, Organizing Pneumonia, Pulmonary Emboli, and Reactivation of Pulmonary Coccidioidomycosis: A Case Report**/A.A. Kabadi, S. Dewolf, L.E. Crotty Alexander, La Jolla, CA, p.A5455
- 215 **All That Is Miliary Is Not Tuberculosis: Fatal Disseminated Coccidioidomycosis in an Immunocompetent Patient**/S. Biswas Roy, A.A. Abdalla, J. Fanous, L.J. Wesselius, Phoenix, AZ, p.A5456
- 216 **Achromobacter Xylosoxidans Complicating Mycobacterium Avium Fibrocavitary Lung Disease**/S. Isaac, M.A. Pasha, I. Mehra, S. Isaac, K. Juvvala, A. Lal, K. Chahal, Florence, AL, p.A5457
- 217 **A Fatal Case of Invasive Pulmonary Aspergillosis Post COVID-19 Pneumonia Due to Aspergillus Niger**/Z. Noori, O. Srour, O. Sajdeya, A. Beran, S. Davis, A. Aldhafeeri, F. Safi, Toledo, OH, p.A5458
- 218 **A Case of Refractory Pulmonary Aspergillosis Treated with Micafungin and Liposomal Amphotericin B/W.** Lodhi, N. Ghimirey, R. Wajahat, Parma, OH, p.A5459
- 219 **Disseminated M Abscessus in Lung Transplant**/C. Sriaroon, J. Montero, K. Zeidler, N. Piccicacco, Tampa, FL, p.A5460
- 803 **iPSC-Derived Alveolar Epithelial Type 2 Cells Resemble Their Primary Counterparts and Can Serve as Preclinical Disease Models of Pulmonary Diseases**/K.-D. Alysandratos, C. Garcia de Alba Rivas, C. Yao, P. Pessina, C. Villacorta-Martin, J. Huang, O. Hix, B. Konda, B.R. Stripp, C.F. Kim, D.N. Kotton, Boston, MA, p.A5463
- 804 **CRISPR Interference Screen of Lung Function Susceptibility Genes Reveal the Function of DSP in iPSC-Derived Alveolar Epithelial Cells**/R. Werder, J. Lindstrom-Vautrin, C. Villacorta-Martin, D.N. Kotton, M.H. Cho, A.X. Zhou, A.A. Wilson, Boston, MA, p.A5464
- 805 **Regeneration of Mouse Tracheal Epithelium via Syngeneic Transplantation of Pluripotent Stem Cell-Derived Airway Basal-Like Cells**/M. Ma, B. Thapa, M. Herriges, C. Villacorta-Martin, J. Lindstrom-Vautrin, F.J. Hawkins, D.N. Kotton, Boston, MA, p.A5465
- 806 **Integration of the Induction Method of Human Pluripotent Stem Cells into Respiratory Epithelial Cells and Core-Shell Hydrogel Microfiber Culture Technology**/S. Ikeo, Y. Yamamoto, K. Ikeda, N. Sone, Y. Korogi, T. Hirai, S. Gotoh, Kyoto, Japan, p.A5466
- 807 **Effects of GHRH-R Antagonist MIA-602 or Agonist MR-409 on Human iAT2 Cells Exposed to Cytokines or LPS**/R.M. Jackson, T. Cui, M. Wangpaichitr, A.V. Schally, Miami, FL, p.A5467
- 808 **Generation of Human Alveolar Epithelial Type I Cells from Pluripotent Stem Cells**/C. Burgess, C. Villacorta-Martin, X. Varelas, E.E. Morrissey, D.N. Kotton, Boston, MA, p.A5468
- 809 **An Induced Pluripotent Stem Cell-Based Model to Study Lung Mesenchyme Development and Disease**/A.B. Alber, M. Ma, H.A. Marquez, C. Villacorta-Martin, J. Lindstrom-Vautrin, W. Shi, L. Ikonomou, D.N. Kotton, Boston, MA, p.A5469
- 810 **Smoke Without Fire: E-Liquid Exposure Impairs Cross-Talk Between Human Induced Pluripotent Stem Cell (hiPSC)-Derived Vascular Cell Types Via a Paracrine Mechanism**/M. Ho, M. Ho, C. Librach, Toronto, Canada, p.A5470
- 811 **Transplantation of Mouse Pluripotent Stem Cell Derived Distal Tip-Like Cells Into Immunocompetent Mice**/M. Herriges, J. Lindstrom-Vautrin, C. Villacorta-Martin, D.N. Kotton, Boston, MA, p.A5471
- 812 **In Vivo Regional De-Epithelialization and Recellularization in a Xeno-Transplant Model**/C. Predella, H.-Y. Liu, S. Liang, Y.-W. Chen, G. Vunjak-Novakovic, N.V. Dorrello, H. Snoeck, New York, NY, p.A5472

BASIC • TRANSLATIONAL

POSTER DISCUSSION SESSION

D108 NEW INSIGHTS IN CELL FATE, REGENERATIVE MEDICINE, iPSCs, AND MSCs

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 2022/2024 (West Building, Level 2)

Poster Viewing 12:45-1:15

Discussion 1:15-2:15

Chairing: D.N. Kotton, MD, Boston, MA
M.A. Matthay, MD, San Francisco, CA
C.M. Hendrickson, MD, MPH, San Francisco, CA

801 **A Human Pluripotent Stem Cell System for Profiling and Characterizing Derived MUC5B-Expressing Airway Epithelium of Disease Relevance**/S. Si, F.J. Hawkins, D.N. Kotton, Boston, MA, p.A5461

802 **Disease Modeling of Hermansky-Pudlak Syndrome Type I Using Patient-Specific iPSCs**/T. Suezawa, Shimotsuga-gun, Tochigi, Japan, p.A5462

- 813** **Young Donor Adipose-Derived Mesenchymal Stem Cell Therapy Rescues Bleomycin-Induced Pulmonary Fibrosis in an Aged Mouse Model in Part Through Regulation of microRNAs**/M.K. Glassberg Csete, E.L. Simpson, G.A. Rubio, S.J. Elliot, Phoenix, AZ, p.A5473
- 814** **Mitochondrial Complex I-Driven Respiration Is Necessary for Postnatal Alveolar Epithelial Differentiation**/S. Han, M. Lee, Y. Shin, R. Giovanni, P.A. Reyfman, B. Khuder, G.S. Budinger, N.S. Chandel, Chicago, IL, p.A5474
- 815** **Group 2 Innate Lymphoid Cells Promote Tracheal Epithelial Growth and Repair**/A. Ysasi, B. Thapa, L. Ma, J. Rock, G. Murphy, Boston, MA, p.A5475
- 816** **Understanding Cell State Change in Murine Adult Lung Following Pneumonectomy Injury**/B.R. Thapa, J. Lindstrom-Vautrin, C. Villacorta-Martin, J.R. Rock, D.N. Kotton, Boston, MA, p.A5476
- 817** **Live Imaging the Dynamic Spatiotemporal Behavior of Alveolar Type 2 Cells in Response to Bleomycin Induced Lung Injury**/M. Chioccioli, J.E. McDonough, T. Yang, D. Gonzalez, F. Rivera-Molina, N. Kaminski, M. Sauler, G. Deluliis, New Haven, CT, p.A5477
- 818** **GM-CSF Signaling Deficiency Causes the Arrest of Alveolar Macrophage Differentiation and Perturbs Pulmonary Lymphocyte Homeostasis**/B.C. Trapnell, P.I. Arumugam, C. Williams, D. Read, M. Mantilla, S. Srivatsan, M. Wessendarp, Y. Ma, B.C. Carey, C. Trapnell, Cincinnati, OH, p.A5478
- 819** **Hedgehog Pathway Orchestrates the Epithelial-Mesenchymal Crosstalk During Human Lung Branching Morphogenesis**/R.S. Belgacemi, S. Danopoulos, G. Deutsch, V.C.R. Dormoy, D. Al Alam, Torrance, CA, p.A5479
- 820** **Wnt5a Promotes Alveolar Type 1 Cell Differentiation During Lung Development**/C. Li, N. Peinado, S.M. Smith, J. Zhou, F. Gao, G. Kohbodi, M.K. Lee, B. Zhou, Z. Borok, Y.-W. Chen, P. Minoo, Los Angeles, CA, p.A5480
- 821** **Exploring the Adipocyte Differentiation-Related Protein (Plin2) Cell Lineage During Murine Lung Alveolarization**/S. Khaghani Raziabad, J.A. Rodriguez Castillo, D. Perez Bravo, S. Günther, A. Atzberger, T. Braun, W. Seeger, R.E. Morty, K. Ahlbrecht, Bad Nauheim, Germany, p.A5481
- 822** **Cellular and Molecular Identification of Distinct Glial Cell Populations in Lung by scRNA-seq**/N. Hossain, N. Almanzar, M. Tan, S. Darmanis, C.S. Kuo, Palo Alto, CA, p.A5482
- 823** **Overproduction of MUC5B Impairs the Alveolar Repair in COPD**/Y. Hu, K. Riemondy, B. Gao, J. Hesselberth, M. Koenigshoff, C. Evans, Aurora, CO, p.A5483

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

D109 AIRWAY OF INTEREST: EPITHELIAL AND SMOOTH MUSCLE FUNCTION IN HEALTH AND DISEASE

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 2009/2011 (West Building, Level 2)

- Poster Viewing** 12:45-1:15
- Discussion** 1:15-2:15
- Chairing:** R. Krishnan, PhD, MS, Boston, MA
J.S. Debley, MD, MPH, Seattle, WA
- 701** **IRE1A/ XBP1s Axis of ER Stress Promotes DRP1 Phosphorylation at Specific Serine Residue (S616) and Induces Mitochondrial Fragmentation During Airway Inflammation**/D. Dasgupta, P. Delmotte, S. Mahadev Bhat, Y.S. Han, C.C. Creighton, C. Cortes Botero, G.C. Sieck, Rochester, MN, p.A5484
- 702** **Comparison of Mucolytic Efficacy of MUC-031, a Novel Thiol-Based Mucolytic Agent, and Pulmozyme by Rheology in Ex Vivo Human Cystic Fibrosis Sputum**/L. Gitlin, W. Raymond, A.R. Charbit, A. Sigm, A. Scheffler, A.M. Healy, S. Oscarson, J.V. Fahy, San Francisco, CA, p.A5485
- 703** **Role of Nicotinic Alpha 7 Cholinergic Receptor Chaperones in Airway Smooth Muscle and Asthma**/L. Khalfaoui, N.A. Borkar, S. Venkatachalem, Y.S. Prakash, C.M. Pabelick, Rochester, MN, p.A5486
- 704** **Cc16 Deficiency Is Associated with Impaired Lung Development in Offspring Exposed to Perinatal Cigarette Smoke**/J.J. Rojas-Quintero, Q.-A. Fucci, M.E. Laucho, C.A. Owen, F. Polverino, Boston, MA, p.A5487
- 705** **Functional Rescue of CFTR by Aerosolized Delivery of Optimized CFTR mRNA Using ReCode-LNPs in Primary Human Bronchial Epithelial Cells Derived from Patients with Cystic Fibrosis**/D. Ishimaru, D. Boudko, E.A. Meleshkevitch, M.S. Sidhu, J.R. Poniatowski, P. Gao, T.I. Molla, S.R. Comini, H.E. Lister, M.L. Coquelin, C. Johnson, A. Alfaifi, O.M. Mousa, X. Yu, R.B. Bhattacharjee, D. Liston, J.K. Eby, M. Hennig, R.J. Bridges, P.J. Thomas, V. G. Kharitonov, B. A. Wustman, D. J. Lockhart, M. J. Torres; Menlo Park, CA, p.A5488
- 706** **The Pulmonary Polyunsaturated Fatty Acid Lipidome and Transcriptome Are Dysregulated with Diet-Induced Obesity**/K.M. Gowdy, N. Buddenbaum, R. Virk, A. Al-Shaer, H. Hartzler, M. Behee, M. Armstrong, N. Reisdorph, J. Fenton, E.D. Wallace, B. Ehrmann, J.A. Englert, S.R. Shaikh, Columbus, OH, p.A5489

- 707 Long-Term Effects of SO₂ in the Murine Respiratory System/S.S. Gutor, R.I. Salinas, J.M.R. Bazzano, B.W. Richmond, T.S. Blackwell, V.V. Polosukhin, Nashville, TN, p.A5490**
- 708 Silencing Muc5ac Expression with a Lung-Targeted RNAi Trigger Prevents Allergen-Induced Mucoobstruction and Airway Hyperresponsiveness/A. Nicholas, D.I. Kasahara, L. Nguyen, Z. Trilling, M. Blanca-Afrazi, H. Hamilton, J. Hegge, B.F. Dickey, J.R. Sabater, J. Hamilton, T. Pei, E.W. Bush, Madison, WI, p.A5491**
- 709 Relaxation of Mouse Trachea via Betaionone Activation of Opsin 3/P.D. Yim, New York, NY, p.A5492**
- 710 Cellular Clock Component BMAL1 in the Hyperoxia-Exposed Premature Developing Airway/C.M. Bartman, Y.-H. Fang, L. Nesbitt, B. Roos, C.A. Klapperich, C.M. Pabelick, Y.S. Prakash, Rochester, MN, p.A5493**
- 711 Mucus Properties and Airway Inflammatory Profiles Across the Spectrum of Airways Diseases/E. Cant, M. Bottier, R. Urquhart, A. Gilmour, M. Crichton, D. Cassidy, M. Shuttleworth, H. Keir, J. Huang, A. Shoemark, J.D. Chalmers, Dundee, United Kingdom, p.A5494**
- 712 Optimized Cell-Uptake and Lung Biodistribution for the Intratracheal Administration of Red Fluorescent PLGA Nanocapsules/A. Areny-Balagueró, W. Mekseriwattana, M. Camprubi-Rimblas, A. Roldán, A. Stephany, D. Closa, A. Artigas, A. Roig, Sabadell, Spain, p.A5495**
- 713 Pitavastatin Potentiates Beta2-Agonist Induced Bronchodilation/N. Schaible, R. Guo, E. Phalen, K. Chmiel, X. Ai, Y. Bai, A.A. Zeki, R. Krishnan, Boston, MA, p.A5496**
- 714 Surgical Treatment of Severe Pediatric Tracheobronchomalacia/L. Mukharesh, K. Krone, B. Zendejas, C.J. Smithers, T. Hamilton, L. Frain, E.D. Muise, H. Shieh, R.W. Jennings, G.A. Visner, Boston, MA, p.A5497**
- 715 Nonlinear Tissue Mechanics and Its Contribution to the Frequency Dependence of Resistance in Lung Tissue/A. Tahir, G.N. Maksym, Halifax, Canada, p.A5498**
- 716 Low Dose Heavy Metal Exposure Disrupts Glutamine Catabolism in Airway Branching in Fetal Lung Development/X. Hu, K.H. Liu, J. Ma, Z.R. Jarrell, M.L. Orr, V. Tran, Y.-M. Go, C.J. Marsit, D.P. Jones, C. Wongtrakool, Atlanta, GA, p.A5499**
- 717 Ciliary Dyskinesia Is Increased in Severe Asthma, But Is Not Affected by Chronic Mucus Hypersecretion/C. Kempeneers, N. Bricmont, R. Bonhiver, M. Pirotte, F. Guissard, C. Moermans, M.-C. Seghayé, R. Louis, F. Schleich, Liège, Belgium, p.A5500**
- 718 Role of Adenylate Cyclase 6 in Mucociliary Clearance/Y. Ramananda, K. Arora, K.S. Mun, P. Liyanage, K.A. Wikenheiser-Brokamp, A. Naren, Los Angeles, CA, p.A5501**
- 719 Human Versus Porcine Localized Strain Mechanics/M. Eskandari, C.A. Mariano, S. Sattari, T.M. Nelson, K.A.M. Anduaga, Riverside, CA, p.A5502**
- 720 Small-Molecule Mediated Chemical Knockdown of Muscle RING-Finger Protein 1 (MuRF1) Prevents Diaphragm Dysfunction Induced by Mechanical Unloading Driven by Unilateral Denervation/F. Ribeiro, C. Vieira, S. Labeit, A. Moriscot, Sao Paulo, Brazil, p.A5503**
- 721 Tumor Necrosis Factor Alpha Reduces the Maximum Respiratory Capacity of Mitochondria in Human Airway Smooth Muscle Cells/P. Delmotte, S. Mahadev Bhat, J. Yap, O.A. Ramirez Ramirez, G.C. Sieck, Rochester, MN, p.A5816**

BEHAVIORAL • CLINICAL

POSTER DISCUSSION SESSION

D110 CASES IN THORACIC ONCOLOGY: A LIVELY POSTER DISCUSSION

12:45 p.m. - 2:15 p.m.

MOSCONE CENTER

Room 207-208 (South Building, Level 2)

Poster Viewing 12:45-1:15

Discussion 1:15-2:15

Chairing: Y. Gesthalter, MD, San Francisco, CA
M. Ramsey, MD, Standford, CA

301 An Unusual Case of Accelerated Pulmonary Metastatic Disease in a Patient with Endometrial Carcinoma/F. Figueroa Rodriguez, A.A. Ghauri, S. Gupta, H. Bhardwaj, Oklahoma City, OK, p.A5504

302 Massive Football-Sized Thymoma in a Previously Healthy 44-Year-Old Man/M. Assaad, R. Meenakshisundaram, F.A. Siddiqui, Sayre, PA, p.A5505

303 Deceptive Pulmonary Nodule Imaging in the Setting of Chest Wall Lesions/S. Ely, G.A. Woodard, New Haven, CT, p.A5506

304 From Head to Hilum: Angiosarcoma with Pulmonary Metastasis/T. Salimnia, L.A. Abplanalp, R. Chawla, K. Hughes, R. Ghandchi, M. Weatherhead, S. Dogra, Royal Oak, MI, p.A5507

305 Myelomatous Pleural Effusion. Case Series from the Myeloma Center at the University of Arkansas for Medical Sciences (UAMS)/A.A. Mitma, F. van Rhee, E.G. Kocurek, Little Rock, AR, p.A5508

- 306 **A Ping Pong Ball in My Airway: An Uncommon Endotracheal Tumor**/D. Kulkarni, E.A. Celis, Tampa, FL, p.A5509
- 307 **Bilateral Myelomatous Pleural Effusion as a Sign of Unrelenting Disease**/K.C. Padilla Rodriguez, G.M. Torres Torres, J. Torrens Olan, J.M. Garcia Puebla, C. Quiles Cruz, R. Fernandez, San Juan, PR, p.A5510
- 308 **Isolated Endobronchial Diffuse Large B-Cell Lymphoma- A Rare Presentation**/R. Meenakshisundaram, M. Assaad, A. Karki, J. Lantry, M. Swalih, Sayre, PA, p.A5511
- 309 **A Case of SMARCA4-Deficient Non-Small Cell Lung Carcinoma with Aggressive Clinical Course and Poor Response to Chemotherapy**/N. Khan, P. Jani, B. Zhao, S.H. Jafri, S. Zhang, H. Sun, Houston, TX, p.A5512
- 310 **Organizing Pneumonia Secondary to Eribulin**/V. Chun, R.P. Lau, S.S. Oh, Los Angeles, CA, p.A5513
- 311 **Case Series of Bronchial Adenomas Treated with Cryoablation Therapy**/N.G. Gomez, J.R. Gonong, Quezon City, Philippines, p.A5514
- 312 **Management of a Rare Thoracic Tumor Presenting as an Asthma Mimic**/T.W. Campbell, M.J. Sobieszczyk, W.A. Warren, J.C. Hunninghake, Ft. Sam Houston, TX, p.A5515
- 313 **Sjogren's-Associated Interstitial Lung Disease or Neoplasia: Surgical Cuts Will Cut to the Chase**/A. Karambelkar, M.A. Ghamloush, Boston, MA, p.A5516
- 314 **Massive Intrathoracic Amyloidoma from an Untreated Solitary Plasmacytoma: A Decade in the Making**/L.E. Stawovy, E. Rojas, V. Badami, A. Ahmed, S. Deskins, J. Gelman, J. Anwar, S. Hadique, Morgantown, WV, p.A5517
- 315 **A Case of Endobronchial Lipoma with Severe Secondary Sequelae**/L.V. Burkart, V. Terla, N. Kister, Charleston, WV, p.A5518
- 316 **Four Unique Cases of Non-Small Cell Cancer Transformation to Small Cell Carcinoma**/H.M. Aslam, S. Veeraballi, Z. Saeed, Greenville, NC, p.A5519
- 317 **Rare Case of Mantle Cell Lymphoma Presented as Malignant Pleural Effusion and Pleural Nodules**/Z. Noori, M. Omballi, Toledo, OH, p.A5520
- 318 **Desmoplastic Malignant Mesothelioma: A Difficult Diagnosis**/W.T. Smith, M. Reid, T. Herzog, R. Koubek, Y.-C. Lo, R. Kern, Rochester, MN, p.A5521
- 319 **A Novel Approach to Reducing Disparities in Lung Cancer Screening - A Case in the Mental Health Population**/S. Sahni, K. Ghosh, I. Portillo, A. Poor, N. Trenard, New York, NY, p.A5522

