Welcome to ATS 2019

Welcome to Dallas, TX and the 2019 American Thoracic Society International Conference. The conference, which is expected to draw more than 14,000 investigators, educators, and clinicians, is truly the destination for adult and pediatric pulmonary, critical care, and sleep medicine professionals at every level of their careers.

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 2019 features more than 6,500 original research projects and case reports, 500 sessions, and 800 speakers – participants can attend sessions and special events from early morning to the evening. At ATS 2019 there will be something for everyone.

Don’t miss the following important events:

- **Opening Ceremony** featuring a keynote presentation by Mary E. Klotman, MD, dean of the Duke University School of Medicine and Vice Chancellor for Health Affairs.
- **Eleventh Annual ATS Foundation Research Program Benefit** on Saturday honoring Sharon Rounds, MD with the Foundation’s Breathing for Life Award.
- **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.
- **Presidential Symposium** celebrating the 50th Anniversary of the Division of Lung Diseases (DLD) at the NIH National Heart Lung and Blood Institute.
- **Respiratory Health Awards**, including the Trudeau Medal, Distinguished Achievement Awards, and Amberson Lecture, given by Jahar Bhattacharya, MD, DPhil, Columbia University.
- **ATS Plenary Session** featuring Ed Kashi, an acclaimed photojournalist who will discuss the Role of Photojournalism in Promoting World Health.
- **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 Dallas has to offer.

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ATS 2019 • Dallas, TX
ATS 2019 INTERNATIONAL CONFERENCE
MAY 17-22, DALLAS

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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 12, 2019. For the most current session information, please visit the [online program itinerary](#). 

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For the 2019 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 (resolve) identified faculty conflicts according to procedures overseen by the ATS Ethics and Conflict of Interest Committee.

To access the disclosures made by the faculty of the 2019 International Conference, please go to http://conference.thoracic.org/speakers

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- Sharon D.M. Dell, MD:
  - Novartis (Advisory Committee, Speaker), Trudell, Vertex (Advisory Committee)
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. Continental breakfast and box lunch included. Attendance is limited.

Member: $900 In-Training Member: $675
Non-Member: $1,200 In-Training Non-Member: $775

Registrants must bring a laptop to the course to view the course material.

Assembly on Critical Care
8:00 a.m. - 4:00 p.m. KBHCCD
Room C141 (Level 1)

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;
• 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. If there is sufficient interest, a track will be offered for pediatric intensivists as well, with pediatric intensivists teaching hands-on skills.

Chairing: M.J. Lanspa, MD, MSCR, ATSF, Salt Lake City, UT
X. Monnet, MD, PhD, Le Kremlin-Bic, France

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8:00 Welcome and Introduction to Critical Care Ultrasound: Training and Competency
M.J. Lanspa, MD, MSCR, ATSF, Salt Lake City, UT

8:15 Basic Physics, Artifacts, Knobology
Z. Shaman, MD, Cleveland, OH

8:45 Transthoracic Windows and Views
S. Nikravan, MD, Seattle, WA

9:15 Basic Evaluation of LV Systolic Function, Measurement of Cardiac Output
S. Price, MBBS, London, United Kingdom

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
V.A. Dinh, MD, Loma Linda, CA
E. Teo, MD, Atlanta, GA
P.K. Mohabir, MD, Stanford, CA
L. Rapoport, MD, Santa Clara, CA
A. Sarwal, MBBS, Winston-Salem, NC

Parasternal Window
X. Monnet, MD, PhD, Le Kremlin-Bic, France
Z. Shaman, MD, Cleveland, OH
A. Leibowitz, MD, Boston, MA
L. Grecu, MD, Durham, NC
S. Price, MBBS, London, United Kingdom

Subcostal Window
G.B. Allen, MD, Burlington VT
J. Kasal, MD, Saint Louis, MO
D. Pradhan, MD, New York, NY
S. Nikravan, MD, Seattle, WA
S. Cha, MD, Baltimore, MD

12:00 LUNCH

12:30 Lunch and Clinical Cases I
L. Grecu, MD, Durham, NC

12:45 Chest Ultrasound
P.K. Mohabir, MD, Stanford, CA

1:15 Neurocritical Care Ultrasound and Echo
A. Sarwal, MBBS, Winston-Salem, NC

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
G.B. Allen, MD, Burlington VT
L. Rapoport, MD, Santa Clara, CA
Diastolic Measurements
J. Kasal, MD, Saint Louis, MO
X. Monnet, MD, PhD, Le Kremlin-Bic, France
A. Leibowitz, MD, Boston, MA
S. Nikravan, MD, Seattle, WA
S. Price, MBBS, London, United Kingdom

Cardiac Output
L. Grecu, MD, Durham, NC
V.A. Dinh, MD, Loma Linda, CA
A. Sarwal, MBBS, Winston-Salem, NC
E. Teo, MD, Atlanta, GA
S. Cha, MD, Baltimore, MD

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

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

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PG2 ECMO FOR EXPERIENCED PROVIDERS
CME Credits Available: 6.5

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

| Member: $475 | In-Training Member: $300 |
| Non-Member: $550 | Non-Member: $400 |

Registrants must bring a laptop to the course to view the course material.

Assemblies on Critical Care; Clinical Problems; Nursing; Pediatrics; Pulmonary Circulation; Pulmonary Infections and Tuberculosis
8:00 a.m. - 4:00 p.m.  
Room D166 (Level1)

Target Audience
All clinicians, bedside personnel and ancillary services that deal with severely ill cardiorespiratory patients who require ECMO

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

- gain improved understanding of the EOLIA trial and what it means to ECMO from the PI as well as discussion as to how attendees interpret findings;
- gain understanding of how ECMO can be initiated in cardiac arrest emergencies and cannulation techniques will be addressed.

This postgraduate course is for more advanced practitioners of ECMO or who are expanding ECMO services to more complex patient populations. Both pediatric and adult providers are appropriate (neonatal ECMO will not be a focus). This course will be composed of expert discussion of critical topics and case scenarios and ECMO simulations. All stations will have ECMO circuit equipment, several will have mannekins as well and one will have ultrasound expertise as well. Simulation sessions will deal with advanced scenarios of both ECMO circuit issues as well as complex patient scenarios. Ample time for questions and answers during sims will be provided.

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Chairing: H.J. Dalton, MD, Falls Church, VA
C. Agerstrand, MD, New York, NY

8:00 Welcome and Intro
H.J. Dalton, MD, Falls Church, VA

8:10 PT Populations Receiving ECMO
C. Agerstrand, MD, New York, NY

8:35 After EOLIA: How to Use It in Decision Making
A. Combes, MD, PhD, Clamart, France

9:00 ECPR: Practical Aspects
Speaker To Be Announced

9:25 Economics/How to Handle the Lung?
H.J. Dalton, MD, Falls Church, VA

9:50 Break

10:10 Extubation and Ambulation: Pitfalls to Avoid
D. Brodie, MD, New York, NY

10:35 Anticoagulation: Beyond Heparin
G. Schears, MD, Rochester, MN

11:00 Rapid Fire: Difficult Cases, What Would You Do?
H.J. Dalton, MD, Falls Church, VA

11:30 LUNCH

12:15 Circuit Pressures: How to React and Fix
M. Desai, MD, Falls Church, VA

12:35 Simulation 1: Circuit Pressures
Speaker To Be Announced

12:55 Simulation 2: Hypoxia on ECMO, VV and Femoral VA
C. Agerstrand, MD, New York, NY
M. Robinson, RN, Columbus, OH

1:35 Simulation 3: Transport on ECMO
T. Friedrich, RN, MSN, Rochester, MN
G. Schears, MD, Rochester, MN

2:15 Break

2:30 Simulation 4: Advanced Ultrasound and ECMO
H.E. Callisen, PA, Scottsdale, AZ
B. Patel, MD, Phoenix, AZ

3:10 Simulation 5: ECPR How to Do It
V. Pellegrino, MD, Prahran, Australia
J. Badulak, MD, Seattle, WA

3:50 Simulation 6: Ask the Experts

3:51 Panel Discussion and Wrap Up

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PG3  A RESEARCHER’S GUIDE TO INTEGRATING THE PULMONARY ‘OMICVERSE

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $350  In-Training: $200
Non-Member: $425  In-Training: $300

Registrants must bring a laptop to the course to view the course material.

Assemblies on Allergy, Immunology and Inflammation; Environmental, Occupational and Population Health; Respiratory Cell and Molecular Biology; Respiratory Structure and Function; Section on Genetics and Genomics

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

Target Audience  Lung researchers interested in applying and integrating ‘Omic-based approaches (e.g. transcriptomics, single cell, cistromics, proteomics, metabolomics) to study the lung, including endotype-based approaches to personalizing lung disease treatment

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

• learn new findings and methods with respect to transcriptome and chromatin profiling-based approaches to studying diverse forms of lung disease, including the application and pros/cons of RNA-seq, single cell RNA-seq, PRO-seq and ATAC-seq;
• understand how proteomics and metabolomics are being used to define disease phenotypes, biomarkers, and improve patient care;
• apply and integrate ‘Omic-based approaches to study lung disease;

This session will expose attendees to state of the art practical lectures on key ‘Omic-based methodologies that are transforming our approach to diagnosing, endotyping and treating lung disease. Included in this course will be sessions dedicated to methods for studying the transcriptome, including single cell approaches; ‘Omic based studies of gene regulation and the enhancerome, including ChIP-seq and ATAC-seq; and approaches to characterize the proteome and metabolome in the context of lung disease. After practical overviews of each of these key methods, leading experts will subsequently provide detailed examples of integrated studies in which diverse ‘Omic approaches have been applied together to yield key new insights about lung disease.

Chairing:
A.N. Gerber, MD, PhD, Denver, CO
B.E. Himes, PhD, Philadelphia, PA
R.S. Kelly, MPH, PhD, Boston, MA

8:00  Introduction: The Grand Challenge of Integrating ‘Omic Data to Define Endotypes in Lung Disease
C.P. Hersh, MD, MPH, ATSF, Boston, MA

8:25  Riding the Single Cell Transcriptome to Discover New Cellular Phenotypes in the Lung
T. Desai, MD, MPH, Stanford, CA

9:30  Break

9:45  Generating High Resolution Maps of Airway Enhanceromes with ChIP and GRO-seq
A.N. Gerber, MD, PhD, Denver, CO

10:20  DNA Methylation in Lung Disease: Genomics and Gene Expression
I.V. Yang, BS, PhD, Aurora, CO

10:55  Defining Open Chromatin Using ATAC-seq: Applications to Pulmonary Immune Responses
D.N. Cook, PhD, Durham, NC

11:30  LUNCH

12:25  The Pulmonary Proteome: Tools and Implications
C.H. Wendt, MD, Minneapolis, MN

1:00  The Applications of Metabolomics in the Study of Respiratory Disease
R.S. Kelly, MPH, PhD, Boston, MA

1:35  Commonalities and Common Methods in Diverse ‘Omics Data: A Practical Guide to Analysis
B.E. Himes, PhD, Philadelphia, PA

2:10  Break

2:30  COPD GWAS Meets Proteomics and Everything in Between
R.P. Bowler, MD, PhD, Denver, CO

3:00  A Multipronged ‘Omic-Based ATAC to Define I-L13 Signaling in the Airway
W. Eckalbar, PhD, San Francisco, CA

3:30  Integrating Genomics and the Transcriptome in Asthma: From Gene to Function
B.A. Raby, MPH, MD, Boston, MA

BEHAVIORAL • CLINICAL • TRANSLATIONAL

PG4  FUNDAMENTALS OF WRITING SUCCESSFUL MENTORED CLINICAL RESEARCH GRANTS (FUND ME)

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $400  In-Training: $250
Non-Member: $475  In-Training: $350

Registrants must bring a laptop to the course to view the course material.

Assemblies on Behavioral Science and Health Services Research; Clinical Problems; Critical Care; Nursing; Pediatrics; Pulmonary Infections and Tuberculosis; Sleep and Respiratory Neurobiology; Thoracic Oncology; Members in Transition and Training Committee

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

8:00  Introduction: The Grand Challenge of Integrating ‘Omic Data to Define Endotypes in Lung Disease
C.P. Hersh, MD, MPH, ATSF, Boston, MA

8:20  Harnessing the Power of RNA-seq to Study Lung Disease
S.A. Gharib, MD, Seattle, WA

8:55  Riding the Single Cell Transcriptome to Discover New Cellular Phenotypes in the Lung
T. Desai, MD, MPH, Stanford, CA

9:30  Break

9:45  Generating High Resolution Maps of Airway Enhanceromes with ChIP and GRO-seq
A.N. Gerber, MD, PhD, Denver, CO

10:20  DNA Methylation in Lung Disease: Genomics and Gene Expression
I.V. Yang, BS, PhD, Aurora, CO

10:55  Defining Open Chromatin Using ATAC-seq: Applications to Pulmonary Immune Responses
D.N. Cook, PhD, Durham, NC

11:30  LUNCH

12:25  The Pulmonary Proteome: Tools and Implications
C.H. Wendt, MD, Minneapolis, MN

1:00  The Applications of Metabolomics in the Study of Respiratory Disease
R.S. Kelly, MPH, PhD, Boston, MA

1:35  Commonalities and Common Methods in Diverse ‘Omics Data: A Practical Guide to Analysis
B.E. Himes, PhD, Philadelphia, PA

2:10  Break

2:30  COPD GWAS Meets Proteomics and Everything in Between
R.P. Bowler, MD, PhD, Denver, CO

3:00  A Multipronged ‘Omic-Based ATAC to Define I-L13 Signaling in the Airway
W. Eckalbar, PhD, San Francisco, CA

3:30  Integrating Genomics and the Transcriptome in Asthma: From Gene to Function
B.A. Raby, MPH, MD, Boston, MA
Target Audience
Senior fellows, junior faculty, advanced care nurse practitioners, PhDs interested in pursuing a mentored fellowship or career development award in clinical, translational, health services, or implementation research.

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

- compose a competitive mentored grant award application with an emphasis on innovative research and training plans that highlight the candidate's potential as well as the strength of their mentorship team and institutional environment;
- formulate and articulate integrated training, mentoring, and research plans that outline a clear path forward for future funding and career development;
- gain a better understanding of the grant review process through participation in a mock study section.

Writing mentored research awards can, but doesn't need to be, a daunting endeavor. In this session that combines didactics with hands-on practice, participants will learn fundamental skills needed to develop a competitive mentored clinical research grant proposal, including how to write compelling specific aims and develop integrated research, mentoring, and training plans that outline a clear trajectory to future awards and independence. 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, grant reviewers and program officers from various funding bodies.

Chairing: L.C. Feemster, MSc, MD, Seattle, WA
R.S. Wiener, MD, MPH, Boston, MA
C.H. Weiss, MD, MS, Evanston, IL
V.G. Press, MD, MPH, Chicago, IL

8:00 Introductions
8:25 How Do You Know You Are Ready to Write a Mentored Grant?
B.J. Sheares, MD, MS, New Haven, CT
8:35 What Are Potential Sources of Funding for Mentored Grants?
A. Volerman, MD, Chicago, IL
8:45 Part 1: Tips from Successful Grant Recipients
K.O. Lindell, PhD, RN, ATSF, Pittsburgh, PA
8:55 Part 2: Tips from Successful Grant Recipients
C.H. Weiss, MD, MS, Evanston, IL
9:05 Writing Compelling Specific Aims
R.S. Wiener, MD, MPH, Boston, MA
9:20 Break
9:30 Small Group Breakout: Writing Specific Aims
All Faculty
10:45 Research Plan Basics
D.H. Au, MS, MD, ATSF, Seattle, WA
11:00 Break
11:10 Integrated Career Development and Training Plans
C.R. Cooke, MD, Ann Arbor, MI
11:25 Small Group Breakout: Career Development/ Training Plans
All Faculty
12:45 LUNCH

1:15 Budgets and Justifications
K.A. Riekert, PhD, Baltimore, MD
1:30 Perspectives from an NIH Reviewer
M. Moss, MD, ATSF, Aurora, CO
1:45 Mock Study Section: Chair
M. Moss, MD, ATSF, Aurora, CO
2:05 Mock Grant Review: Primary Reviewer (Grant 1)
S. Zeliadt, PhD, MPH, Seattle, WA
2:15 Mock Study Section: Secondary Reviewer (Grant 1)
T.J. Iwashyna, MD, PhD, Ann Arbor, MI
2:25 Mock Study Section: Primary Reviewer (Grant 2)
M.B. Drummond, MHS, MD, ATSF, Chapel Hill, NC
2:35 Mock Study Section: Secondary Reviewer (Grant 2)
K.A. Riekert, PhD, Baltimore, MD
2:45 Break
2:55 Post-Grant Review: What Happens Next
M. Eakin, PhD, Baltimore, MD
3:10 Moderator: Panel Discussion
J. Bruzzese, PhD, New York, NY
3:50 Wrap-Up

CLINICAL
POSTGRADUATE COURSE
CME Credits Available: 6.5

PG5 THORACIC IMAGING FOR PULMONARY MEDICINE AND CRITICAL CARE PRACTITIONERS

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $350   In-Training Member: $200
Non-Member: $425   In-Training Non-Member: $300
Registrants must bring a laptop to the course to view the course material.

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.  KBHCCD
Room D163/D165 (Level 1)

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;
- improve strategies for the evaluation of solitary pulmonary nodules and for staging lung cancer;
• state the value of a multidisciplinary approach to diagnosis and management of patients with diffuse lung disease in light of new and upcoming recommendations on diagnosis of idiopathic pulmonary fibrosis.

This course will review major aspects of thoracic imaging with presentations targeted towards practitioners in the fields of pulmonary and critical care medicine. Dedicated thoracic radiologists will give case-based reviews focusing on the practical aspects of chest imaging. Presentations will be image rich and focus on key imaging findings, differential diagnoses, and potential pitfalls. Topics will cover a broad range of chest disease and will be relevant to trainees, generalists, and specialists, alike. At the conclusion of the course, learners will have increased knowledge about thoracic imaging and be able to apply this knowledge to their respective practices.

Chairing: J.P. Kanne, MD, Madison, WI  
C.C. Wu, MD, Houston, TX

8:00 Large Airways Diseases  
S. Rossi, MD, Buenos Aires, Argentina

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

9:00 Pleural Disease  
C.C. Wu, MD, Houston, TX

9:30 Break

9:45 Solitary Pulmonary Nodule  
J. Mammarrappailil, MD, PhD, Durham, NC

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

10:45 Pulmonary Infections  
L.H. Ketai, MD, Albuquerque, NM

11:15 Acute Lung Injury  
K. Batra, MD, Dallas, TX

11:45 LUNCH

12:45 Pulmonary Hypertension  
M.D. Martin, MD, Madison, WI

1:15 Break

1:30 Multidisciplinary Approach to Diffuse Lung Diseases  
K.K. Brown, MD, Denver, CO  
S. Hobbs, MD, Lexington, KY  
S.D. Groshong, MD, PhD, Denver, CO

Assemblies on Clinical Problems; Allergy, Immunology and Inflammation; Behavioral Science and Health Services Research; Environmental, Occupational and Population Health; Nursing; Pulmonary Rehabilitation

8:00 a.m. - 4:00 p.m.  
KBHCCD  
Room C140/C142 (Level 1)

Target Audience
Clinicians, nurses, other allied health staff, researchers, investigators in basic and clinic science pertinent to interstitial lung disease, and sponsors for research

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

• accurately diagnose patients with specific forms of interstitial lung disease;

• discuss recent clinical trials in the area of idiopathic pulmonary fibrosis in particular with their patients as well as biomarkers and preclinical interstitial lung abnormalities with patients;

• gain competence in their ability to provide evidence based care to patients with ILD via comprehensive management strategies.

This course will provide an introduction and update on diagnosis and management of the heterogeneous group of interstitial lung diseases (ILDs) of unknown etiology as well ILD in the setting of connective tissue diseases, vasculitis, and environmental exposures. Idiopathic pulmonary fibrosis (IPF), lymphatic disorders, and granulomatous ILD (hypersensitivity pneumonitis and sarcoidosis) are among the diseases that will be discussed. Genetic factors, precision medicine for diagnosis and treatment as well as newer concepts in the pathogenesis of IPF and novel treatment strategies to modulate pulmonary fibrosis will be discussed. Attendees will be updated on evolving enhanced knowledge in the clinical management of patients with ILD. The importance of making an accurate diagnosis will be demonstrated by live interactions with a panel of experts from multiple disciplines confronted with 3-4 cases unknown to them. This will illustrate multidisciplinary diagnosis (MDD) in action. Additional talks will focus on the symptom management for patients with pulmonary fibrosis, preclinical ILD and emerging biomarkers.

Chairing:  
G. Raghu, MD, Seattle, WA  
L. Richeldi, MD, PhD, Rome, Italy  
B. Collins, MD, Seattle, WA

8:00 Introduction  
G. Raghu, MD, Seattle, WA

8:10 ILD Overview  
B. Collins, MD, Kirkland, WA

8:30 Approach to Diagnosis of IPF, Focus on Recent Recommendations  
G. Raghu, MD, Seattle, WA

8:50 Imaging: Clues to Diagnosis and New Tools for Assessing Extent of ILD  
S.L.F. Walsh, MD, PhD, London, United Kingdom

9:10 Histopathology: Differentiating Idiopathic Interstitial Pneumonias from Other Interstitial Pneumonias and Granulomatous ILD  
K.D. Jones, MD, San Francisco, CA

9:30 Preclinical Interstitial Lung Abnormalities: Can Progression Be Prevented?  
A. Podolanczuk, MD, New York, NY
9:50  Break

10:00  Hypersensitivity Pneumonitis: What and Where Is the Antigen; Strategies for Diagnosis and Treatment?
M. Vasakova, MD, PhD, Prague, Czech Republic

10:20  Connective Tissue Disease ILD: Role of Serology in Diagnosis and Role of Immune Modulating Agents for Treatment
A. Fischer, MD, Denver, CO

10:40  Lymphatics in ILD and Beyond
M. Itkin, MD, Philadelphia, United States

11:00  Multidisciplinary Discussions for an Accurate Diagnosis
L.A. Ho, MD, Seattle, WA

12:30  LUNCH

1:30  Lessons from ILD Registries
K.R. Flaherty, MD, Ann Arbor, MI

1:50  Biomarkers in ILD: What Do They Mean and Are They Clinically Relevant?
E.S. White, MD, MS, ATSF, Ann Arbor, MI

2:10  Sarcoidosis: Getting to the Heart of the Matter
M.A. Judson, MD, Albany, NY

2:30  Genetics of Interstitial Lung Disease: IPF and Beyond, What to Tell Your Patients and Their Family Members
N. Kaminski, MD, ATSF, New Haven, CT

2:50  Break

3:00  Reducing Symptoms and Improving Quality of Life for Patients with Fibrotic Lung Disease
K.O. Lindell, PhD, RN, ATSF, Pittsburgh, PA

3:20  Stem Cell Therapy for Fibrotic Lung Disease: Still a Concept While Patients Can Receive “Stem Cell Treatment” Elsewhere?
M.K. Glassberg Csete, MD, Miami, FL

3:40  Idiopathic Pulmonary Fibrosis: Landscape of Current and Novel Treatment in the Horizon
L. Richeldi, MD, PhD, Rome, Italy

PG7  ADVANCING CARE OF SICKLE CELL LUNG DISEASE: A PRACTICAL GUIDE TO PATIENT MANAGEMENT

This session and the International Conference are supported by educational grants from Boehringer Ingelheim Pharmaceuticals, Inc., Mallinckrodt Pharmaceuticals. All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

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Registrants must bring a laptop to the course to view the course material.
11:00 Difficult Cases Discussion 1
A.P. Ruhl, MD, MHS, Bethesda, MD

11:30 Question and Answer Period #2

11:40 LUNCH

12:20 Venous Thromboembolism in SCD
E.S. Klings, MD, Boston, MA

12:45 How I Manage Dyspnea and Hypoxia in SCD
R.F. Machado, MD, Indianapolis, IN

1:10 Why Sleep and Sleep Disordered Breathing Matter in SCD
C.L. Rosen, MD, Cleveland, OH

1:35 Question and Answer Period #3

1:45 Break

1:55 Real World Screening, Evaluation, and Management of Pulmonary Hypertension (PH) in SCD
A.A. Desai, MD, Indianapolis, IN

2:20 Cases from Jamaica: A Pulmonologist’s Approach to SCD in Low-Resource Settings
J.M. Knight-Madden, MBBS, PhD, Kingston, Jamaica

2:45 Difficult Cases Discussion 2
E.S. Klings, MD, Boston, MA

3:10 How I Set Up a Multidisciplinary SCD Pulmonary Clinic
E.S. Klings, MD, Boston, MA
R.T. Cohen, MD, MPH, Boston, MA

3:35 Panel Discussion on Multidisciplinary Sickle Cell Pulmonary Clinics
E.S. Klings, MD, Boston, MA
R.T. Cohen, MD, MPH, Boston, MA

3:50 Questions and Answers and Closing Remarks
A.P. Ruhl, MD, MHS, Bethesda, MD

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

• diagnose different types of pulmonary hypertension, able to differentiate all groups of pulmonary hypertension and prevent misdiagnosis;
• gain new strategies to manage the care of pulmonary hypertension, will know how to manage group 2, 3, 4 and 5 pulmonary hypertension;
• integrate new treatment options in discussing pulmonary hypertension with patient, and review newer treatment options for other groups of Pulmonary Hypertension (ie group 2,3 and 4).

In this session, the audience will learn about the importance of recognizing the different types of pulmonary hypertension and the impact this distinction has on the management of the disease. Speakers will present relevant information from the updated pulmonary hypertension proceedings, published in December 2018.

Chairs:
T. Lahm, MD, Indianapolis, IN
M. Humbert, MD, PhD, Bicetre, France
S. Sahay, MD, Houston, TX

8:00 Introduction
T. Lahm, MD, Indianapolis, IN

8:10 Newer World Symposium Guidelines 2018 on Treatment and Diagnosis of PAH
M. Humbert, MD, PhD, Bicetre, France

8:40 Bench to Bedside: Pathogenesis of Different Types of PH
M. Rabinovitch, MD, Stanford, CA

9:10 Idiopathic PAH: How You Rule Out Other Conditions?
A.R. Tonelli, MD, Cleveland, OH

9:40 Heritable PAH: Is Genetic Testing Necessary
M. Aldred, PhD, Indianapolis, IN

10:10 Break

10:20 PVOD: Why I Know So Little About It?
D. Montani, MD, PhD, Le Kremlin Bicêtre, France

10:50 CHD PAH: Differences Between Types of CHD
V. De Jesus Perez, MD, ATSF, Palo Alto, CA

11:20 CTD PAH: How to Differentiate Group I from III PH
K.M. Chin, MD, Dallas, TX

11:50 LUNCH

12:50 Group 2 PH: How to Prevent Misdiagnosis?
T. Thenappan, MD, Minneapolis, MN

1:15 Group 3 PH: Why the Degree of Precapillary PH Varies?
H.R. Cajigas, MD, Chicago, IL

1:40 How COPD PH Is Different from ILD-PH
R. Raj, MD, Palo Alto, CA

2:00 Treatment of PAH: Updates from the Proceedings
I.R. Preston, MD, Boston, MA

2:25 Break

2:35 PoPH: The Necessary Components for Its Diagnosis
S. Sahay, MD, Houston, TX

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.
Member: $350 In-Training Member: $200
Non-Member: $425 In-Training Non-Member: $300
Registrants must bring a laptop to the course to view the course material.

Assembly on Pulmonary Circulation
8:00 a.m. - 4:00 p.m. KBHCCD
Room C147/C154 (Level 1)

Target Audience
Residents, fellows, pulmonologists, nurse practitioners, physician assistants, cardiologists, early career professionals, nurses
3:00  CTEPH: Risk Factors and Basic Mechanisms of CTEPH: Lesson Learnt from the Proceedings  
I.M. Lang, PhD, Vienna, Austria

3:30  CTEPH: Particularities in Its Diagnosis  
G.A. Heresi, MD, Cleveland, OH

This session and the International Conference are supported by an educational grant from Bayer US.

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PG9  FUNCTIONAL ASSESSMENTS IN LUNG DISEASE: STRENGTH, ACTIVITY AND CARDIOPULMONARY EXERCISE TESTING WITH CASE CONFERENCE

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $350  In-Training Member: $200  Non-Member: $425  In-Training Non-Member: $300

Registrants must bring a laptop to the course to view the course material.

Assemblies on Pulmonary Rehabilitation; Respiratory Structure and Function

8:00 a.m. - 4:00 p.m.  KBHCCD  Room C144-C145 (Level 1)

Target Audience
Current and future directors of cardiopulmonary exercise testing labs or pulmonary rehabilitation programs, attending physicians, exercise physiologists, respiratory therapists, trainees, fellows, and other interested health care providers

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

- understand the physiologic principles underlying cardiopulmonary function, muscle function and physical activity in cardiopulmonary diseases;
- apply and put into practice assessments of cardiopulmonary function, limb and respiratory muscle function and physical activity in cardiopulmonary diseases;
- interpret assessments of cardiopulmonary function, muscle function and physical activity in cardiopulmonary diseases, and use this information to inform diagnosis, prognosis and target therapy.

Dyspnea on exertion and exercise intolerance are major complaints of patients with chronic lung disease. This session will cover three patient assessments that are not tested by resting pulmonary function testing: cardiopulmonary exercise testing (CPET); muscle strength; physical activity and function. The session will combine didactic lectures, a live CPET demonstration and case-based small group discussion. The session is distinct and complementary to the PG course on pulmonary function: delegates are encouraged to attend both to maximize learning opportunities. We will use a team approach to facilitate group discussions, including content experts and CPET/pulmonary rehabilitation medical directors from around the world.
PG10 RESPIRATORY PHYSIOLOGY INTERACTIVE
Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.
Member: $350 In-Training Member: $200
Non-Member: $425 In-Training Non-Member: $300
Registrants must bring a laptop to the course to view the course material.

Assemblies on Respiratory Structure and Function; Critical Care; Pulmonary Circulation
8:00 a.m. - 4:00 p.m. KBHCCD Room C155 (Level 1)

Target Audience
Practicing physicians, advanced practice providers and resident-to-fellow level trainees whose primary clinical focus is pulmonary and critical care medicine

Objectives
At the conclusion of this session, the participant will be able to:
• describe the core principles of respiratory mechanics and apply them in patient care scenarios;
• delineate the core principles of gas exchange, blood gas transport and control of breathing and apply them to diagnose the causes of hypoxemia, hyper- and hypocarbia and impaired oxygen delivery;
• predict changes in key physiologic parameters in response to stresses such as exercise or exposure to hypobaric hypoxia.

Employing principles of active learning and case-based problem solving, this post-graduate seminar will review core principles of respiratory physiology including respiratory mechanics, gas exchange, blood gas transport, control of breathing, the pulmonary circulation and exercise physiology. To enhance learner engagement and knowledge retention, the seminar will utilize a variant of the flipped classroom model in which content is covered using a combination of mini-lectures and interactive activities in small groups throughout the day rather than simply a set of didactic lectures. Learners will build and reinforce knowledge they can use in the care of their patients and their work educating learners about these concepts.

Chairing:
A. Luks, MD, Seattle, WA
B. Coruh, MD, Seattle, WA

8:00 Introduction
B. Coruh, MD, Seattle, WA

8:10 Respiratory Mechanics
K. Hibbert, MD, Boston, MA

8:25 Small Group Learning

9:05 How We Handle Oxygen
J.T. Poston, MD, Chicago, IL

9:20 Small Group Learning

10:00 Break

10:15 How We Handle Carbon Dioxide
A. Luks, MD, Seattle, WA

10:30 Small Group Learning

PG11 CARDIOMETABOLIC OUTCOMES OF OBSTRUCTIVE SLEEP APNEA TREATMENT: FROM EVIDENCE INTO PRACTICE
Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.
Member: $350 In-Training Member: $200
Non-Member: $425 In-Training Non-Member: $300
Registrants must bring a laptop to the course to view the course material.

Assembly on Sleep and Respiratory Neurobiology
8:00 a.m. - 4:00 p.m. KBHCCD Room D162/D164 (Level 1)

Target Audience
Sleep physicians, pulmonary physicians, cardiology physicians, pulmonary, critical care, cardiology and sleep fellows, nurses and all allied health professionals taking care of OSA patients, OSA researchers, graduate and postgraduate students

Objectives
At the conclusion of this session, the participant will be able to:
• describe the pathophysiological effects of OSA on the metabolic and cardiovascular system including autonomic, inflammatory and oxidative stress mechanisms;
• better understand the cardiovascular complications of OSA and the epidemiological evidence that links OSA with various metabolic and CVD outcomes;
• describe the effects of treatment for OSA on metabolic and cardiovascular outcomes based on evidence from the clinical trials as well as the management of OSA with regard to primary and secondary cardiovascular prevention models.

Obstructive sleep apnea (OSA) is a common disorder associated with increased risk for metabolic disorders and cardiovascular diseases (CVD). The first line
treatment of OSA is continuous positive airway pressure (CPAP), which reduces daytime sleepiness and improves quality of life in symptomatic patients. However, the majority of individuals with OSA do not report symptoms, and adherence to CPAP is poor. This course will examine: 1) the pathophysiological effects of OSA on metabolic disorders and CVD, 2) the evidence linking OSA to metabolic disorders and CVD, 3) the implementation of the results of the clinical trials into practice in this area. Each talk will start with one or two cases with questions on management, and the attendees will be asked to press the right choice on the display. All questions will be answered again and discussed at one of the final sessions before the course evaluation.

Chairing: S.S. Redline, MD, MPH, Boston, MA
S. Javaheri, MD, Cincinnati, OH

8:00 Introduction
S. Javaheri, MD, Cincinnati, OH

8:10 Associations Between OSA and Cardiovascular Risk Factors Across Populations
S.S. Redline, MD, MPH, Boston, MA

8:40 Cardiovascular Mechanisms in OSA and Response to Treatment
B. Prasad, MD, Chicago, IL

9:10 Oxidative Stress, Inflammation in OSA and Response to Treatment
S. Ryan, MD, PhD, Dublin, Ireland

9:40 Interactions Between OSA, Obesity, Metabolic Syndrome, Hyperlipidemia, and Response to Treatment
S. Pamidi, MD, Montreal, Canada

10:10 Break

10:30 Association Between OSA and Diabetes Mellitus, and Response to Treatment
E. Tasali, MD, Chicago, IL

11:00 Association Between OSA and Hypertension, and Response to Treatment
J. Pepin, MD, PhD, Grenoble, France

11:30 Association Between OSA and Cardiac Failure, and Response to Treatment
S. Javaheri, MD, Cincinnati, OH

12:00 LUNCH

1:00 Association Between OSA and Cardiac Arrhythmia, and Response to Treatment
R. Mehra, MD, Cleveland, OH

1:30 Association Between OSA and Coronary Artery Disease, and Response to Treatment
Y. Peker, MD, PhD, Istanbul, Turkey

2:00 Association Between OSA and Stroke, and Response to Treatment
K. Yaggi, MD, New Haven, CT

2:30 Break

2:50 Lessons from the SAVE Trial: Future Perspectives
R.D. McEvoy, MD, Adelaide, Australia

3:20 Interactive Panel Discussion: Applying the Literature to Clinical Cases
L.F. Drager, MD, Sao Paulo, Brazil

3:50 Summary and Course Evaluation
S.S. Redline, MD, MPH, Boston, MA
8:05  Biology of Nicotine Addiction: Implication for Tobacco Treatment Strategies  
E.R. Neptune, MD, Baltimore, MD

8:30  Lung Cancer Screening: Challenges in Patient Selection and Implementation  
J. Iaccarino, MD, MSc, Boston, MA

8:55  Biomarkers in Lung Cancer: Are They Ready for Prime Time  
P.P. Massion, MD, Nashville, TN

9:20  Lung Cancer Staging 8th Edition: Special Considerations  
L.T. Tanoue, MD, New Haven, CT

9:45  Break

9:55  Minimally Invasive Surgery for NSCLC: VATS or RATS  
T.A. D’Amico, MD, Durham, NC

10:20  Alternative Treatment for Lung Cancer: Thermal Ablation  
R.D. Suh, MD, Los Angeles, CA

10:45  Alternative Treatment for Lung Cancer: SBRT  
A. Weiner, MD, Chapel Hill, NC

11:10  Tumor Board  
M.P. Rivera, MD, ATSF, Chapel Hill, NC

11:50  LUNCH

12:40  Diagnostic Bronchoscopic Tools Available to the Pulmonologist  
A.V. Gonzalez, MD, MSc, Montreal, Canada

1:05  Therapeutic Bronchoscopic Techniques Available to the Pulmonologist  
F. Maldonado, MD, Nashville, TN

1:30  The Expanding Role of Immunotherapy in the Treatment of Lung Cancer  
M.P. Rivera, MD, ATSF, Chapel Hill, NC

1:55  Treatment of Oligometastatic Disease: Pushing the Envelope to Improve Outcomes  
G.R. Simon, MD, Houston, TX

2:20  Break

2:30  Pulmonary and Cardiac Complications of Immunotherapy  
J.D. Possick, MD, New Haven, CT

2:55  Management of Malignant Pleural Effusions: ATS Guidelines  
D.H. Sterman, MD, ATSF, New York, NY

3:20  Tumor Board  
M.P. Rivera, MD, ATSF, Chapel Hill, NC

This session and the International Conference are supported by an educational grant from AstraZeneca LP.

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**PG1B  CRITICAL CARE ULTRASOUND AND ECHOCARDIOGRAPHY II**

This is part 2 of a two-part course which includes PG1A on Friday, May 17. Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited. See PG1A for course fees.

**Assembly on Critical Care**
8:00 a.m. - 4:00 p.m.  
KBHCCD  
Room C141 (Level 1)

**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;
- able to diagnose alternate etiologies of shock in the critically ill patient.

This is a 2 day post-graduate 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. If there is sufficient interest, a track will be offered for pediatric intensivists as well, with pediatric intensivists teaching hands-on skills.

**Chairing:** M.J. Lanspa, MD, MSCR, ATSF, Salt Lake City, UT  
X. Monnet, MD, PhD, Le Kremlin-Bic, France

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<td>8:25</td>
<td>Vascular Access</td>
<td>M.J. Lanspa, MD, MSCR, ATSF, Salt Lake City, UT</td>
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<td>8:45</td>
<td>Tamponade</td>
<td>G.B. Allen, MD, Burlington, VT</td>
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<td>9:15</td>
<td>Using Ultrasound to Assess Intravascular Volume and Fluid Responsiveness</td>
<td>X. Monnet, MD, PhD, Le Kremlin-Bic, France</td>
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<td>9:45</td>
<td>Ultrasound for Diuresis and Dialysis</td>
<td>E.L. Hirshberg, MD, ATSF, Murray, UT</td>
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<td>10:15</td>
<td>Break</td>
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<td>10:30</td>
<td>Practical Skills Session: Hands-On Stations III</td>
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**Volume Status**
X. Monnet, MD, PhD, Le Kremlin-Bic, France  
J. Kasal, MD, Saint Louis, MO  
E. Teo, MD, Atlanta, GA  
S. Nikravan, MD, Seattle, WA  
S. Cha, MD, Baltimore, MD

**Tamponade Evaluation**
V.A. Dinh, MD, Loma Linda, CA  
G.B. Allen, MD, Burlington VT  
A. Leibowitz, MD, Boston, MA  
P.K. Mohabir, MD, Stanford, CA  
S. Price, MBBS, London, United Kingdom

**Vascular Ultrasound**
A. Sarwal, MBBS, Winston-Salem, NC  
Z. Shaman, MD, Cleveland, OH  
L. Grecu, MD, Durham, NC  
L. Rapoport, MD, Santa Clara, CA  
D. Pradhan, MD, New York, NY

**Abdominal Ultrasonography**
V.A. Dinh, MD, Loma Linda, CA  
1:15  
**Goal Directed Management of Shock Using Echocardiography**  
J. Kasal, MD, Saint Louis, MO  
1:45  
**Incorporating Echocardiography into CPR**  
S. Cha, MD, Baltimore, MD  
2:15  
**Break**

**Practical Skills Session: Hands-On Session IV**
E. Teo, MD, Atlanta, GA  
2:30  
**Echo in Shock and CPR**  
L. Rapoport, MD, Santa Clara, CA  
S. Price, MBBS, London, United Kingdom  
S. Cha, MD, Baltimore, MD  
D. Pradhan, New York, NY  
L. Grecu, MD, Durham, NC

**Abdominal Ultrasound**
A. Sarwal, MBBS, Winston-Salem, NC  
Z. Shaman, MD, Cleveland, OH  
V.A. Dinh, MD, Loma Linda, CA  
G.B. Allen, MD, Burlington VT  
P.K. Mohabir, MD, Stanford, CA

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8:00  
**Vascular Ultrasound: DVT Evaluation**  
L. Rapoport, MD, Santa Clara, CA
PG13 BRONCH DAY 2019: A COMPREHENSIVE, HANDS-ON GUIDE TO BASIC BRONCHOSCOPY, EBUS, AND NAVIGATIONAL BRONCHOSCOPY

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

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<th>Member: $475</th>
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<th>Non-Member: $550</th>
<th>In-Training Non-Member: $400</th>
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Registrants must bring a laptop to the course to view the course material.

Assemblies on Clinical Problems; Critical Care; Pediatrics; Thoracic Oncology
8:00 a.m. - 4:00 p.m.  
KBHCCD Room C147/C154 (Level 1)

Target Audience
Adult and pediatric pulmonologists and intensivists, thoracic surgeons, physicians-in-training, allied health professionals, and 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 to more advanced diagnostic bronchoscopy including linear and radial endobronchial ultrasound, navigational bronchoscopy, endobronchial valve placement for bronchopleural fistula, and the use of endobronchial blockers and cryoprobes in the setting of hemoptysis. 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. Audience Response System will be used during lectures.
This session will provide a comprehensive review of the latest knowledge on asthma pathogenesis, clinical science and therapy. Compared to the 2018 postgraduate course, practical management considerations in asthma will be emphasized. We propose to have a journal club small group breakout.

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

**8:00**
- **Introduction**
  - M. Kraft, MD, ATSF, Tucson, AZ

**8:05**
- **How to Incorporate Biologics into Your Practice**
  - M. Kraft, MD, ATSF, Tucson, AZ

**8:35**
- **Asthma Susceptibility in Children**
  - F.D. Martinez, MD, Tucson, AZ

**9:05**
- **Epithelial Cell-Innate Immune Cell Interaction**
  - B. Lambrecht, MD, PhD, Ghent, Belgium

**9:35**
- **Innate-Adaptive T-Cell Interactions**
  - J.L. Cho, MD, Iowa City, IA

**10:05**
- **Break**

**10:20**
- **Structural Cells in Asthma**
  - J.L. Ingram, PhD, Durham, NC

**10:50**
- **Special Considerations in Severe Asthma**
  - M. Wechsler, MD, MSc, Denver, CO

**11:20**
- **Asthma Exacerbations - Mechanisms and Treatment**
  - L.C. Denlinger, MD, PhD, Madison, WI

**11:50**
- **LUNCH**

**12:50**
- **Obesity and Asthma**
  - N. Lugogo, MD, Ann Arbor, MI

**1:20**
- **Clinical Controversies in Asthma**
  - S.B. Khatri, MD, MS, Cleveland, OH

**2:05**
- **Break**

**2:20**
- **Applying Asthma Endotypes to Real-World Practice**
  - S.E. Wenzel, MD, ATSF, Pittsburgh, PA

**2:50**
- **Difficult Cases I - Adult**
  - P. Akuthota, MD, La Jolla, CA

**3:25**
- **Difficult Cases II - Pediatric**
  - K.R. Ross, MD, MS, Cleveland, OH

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**Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.**

- **Member:** $350
- **In-Training:** $200
- **Non-Member:** $425
- **In-Training Non-Member:** $300

Registrants must bring a laptop to the course to view the course material.

**Assemblies on Allergy, Immunology and Inflammation; Clinical Problems; Pediatrics**

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

**KBHCCD**

**Room C156 (Level 1)**

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**Target Audience**

Pulmonary and allergy physicians, physicians in training, and advanced practice providers who are focused on care of patients with asthma. Clinical, translational, and basic science researchers involved in studies of asthma pathogenesis and therapy.

**Objectives**

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

- improve knowledge on asthma pathophysiology as it applies to management;
- apply asthma endotypes to clinical practice;
- develop new strategies to manage difficult asthma cases.

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This session and the International Conference are supported by educational grants from Genentech Inc., Novartis Pharmaceuticals Corporation, Sanofi Genzyme and Regeneron Pharmaceuticals.

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.
PG15 A CLINICIAN’S GUIDE TO LUNG TRANSPLANTATION

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $350  In-Training Member: $200
Non-Member: $425  In-Training Non-Member: $300

Registrants must bring a laptop to the course to view the course material.

Assemblies on Clinical Problems; Allergy, Immunology and Inflammation; Pulmonary Infections and Tuberculosis

8:00 a.m. - 4:00 p.m.  KBBCCD
Room D162/D164 (Level 1)

Target Audience
Providers who care for patients who have had or may require lung transplantation, this includes transplant and non-transplant focused professionals; providers who are not at a transplant center but who care for patients before and after transplant.

Objectives
At the conclusion of this session, the participant will be able to:
• more appropriately refer potential candidates for lung transplantation;
• become familiar with the short and long-term outcomes, as well as care and management of lung transplant recipients;
• become familiar with current efforts to increase organ donation and utilization.

This session will be a comprehensive review of lung transplantation covering: candidate selection; organ donation and allocation; immunosuppressive medications and management; long and short term outcomes; infections; and pulmonary and non-pulmonary complications. It will include review lectures; case-based presentations; and panel discussions. The goal is to provide a broad foundation for learners seeking greater familiarity and enhanced expertise in this area.

Chairing:
J.D. Edelman, MD, Seattle, WA
S.M. Bhorade, MD, Chicago, IL
A.R. Glanville, MD, MBBS, Sydney, Australia
J. Gottlieb, MD, Hannover, Germany

8:00 Introduction
J.D. Edelman, MD, Seattle, WA

8:15 Guidelines for Lung Transplant Referral and Selection
A.R. Glanville, MD, MBBS, Sydney, Australia

8:50 Lung Donation and Allocation (US)
E.D. Lease, MD, Seattle, WA

9:10 Lung Donation and Allocation (Europe)
J. Gottlieb, MD, Hannover, Germany

9:30 Organ Donation and Allocation Panel Discussion

9:40 Organ Procurement and Preservation
P. Sanchez, MD, PhD, Pittsburgh, PA

10:10 Break

10:25 Pushing the Candidate Envelope
R.M. Kotloff, MD, Cleveland, OH

10:55 Ethical Paradigms and Challenges in Lung Transplantation
E.R. Garrity, MD, MBA, Chicago, IL

11:25 Disease Specific Implications Before and After Transplant
S. Kapnadak, MD, Seattle, WA

11:55 LUNCH

12:45 Pediatric Lung Transplantation
S.C. Sweet, MD, PhD, St Louis, MO

1:10 Immunosuppression: State of the Art
S.M. Bhorade, MD, Chicago, IL

1:35 Infections in Lung Transplant Recipient
S. Husain, MD, MS, Toronto, Canada

2:00 Cellular Rejection, Humoral Rejection, Allo- and Auto-Antibodies
D.J. Levine, MD, San Antonio, TX

2:30 Break

2:45 Complications: Chronic Lung Allograft Dysfunction
J.D. Edelman, MD, Seattle, WA

3:10 Quality of Life and Functional Status Before and After Lung Transplantation
B.M. Hoffman, PhD, Durham, NC

3:35 Medical Challenges Faced by Lung Transplant Recipients
J.D. Edelman, MD, Seattle, WA

PG16 INTERSTITIAL LUNG DISEASE: DELIVERING OPTIMAL, PATIENT CENTERED CARE

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $350  In-Training Member: $200
Non-Member: $425  In-Training Non-Member: $300

Registrants must bring a laptop to the course to view the course material.

Assemblies on Clinical Problems; Allergy, Immunology and Inflammation; Behavioral Science and Health Services Research; Nursing; Pulmonary Circulation; Pulmonary Rehabilitation

8:00 a.m. - 4:00 p.m.  KBBCCD
Room C155 (Level 1)

Target Audience
This session should be broadly relevant to those who provide clinical care for patients with ILD including pulmonary fellows, general pulmonologists, ILD specialists, and advanced care nurses.

Objectives
At the conclusion of this session, the participant will 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
• integrate a holistic and interdisciplinary approach to ILD patient care

This session 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—providing a range of learning methods to reach the largest number of learners.

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

8:00  Introduction
M. Kreider, MD, Philadelphia, PA

8:15  Radiologic Assessment in ILD Diagnosis
S. Hobbs, MD, Lexington, KY

8:45  Pathology: Who Should Get a Biopsy
J. Morisset, MD, Montreal, Canada

9:15  IPF vs Not IPF: Role of Clinical Assessment
M. Porteous, MD, Philadelphia, PA

10:00  Break

10:15  Speed MDD: Pulling It All Together
L.P. Hariri, BS, MD, PhD, Boston, MA
S. Hobbs, MD, Lexington, KY
K.B. Highland, MD, Cleveland, OH
D.E. Antin-Ozerkis, MD, New Haven, CT
L.D. Morrison, MD, Durham, NC

11:30  LUNCH

12:00  IPF Therapies: Who and Which One
L. Richeldi, MD, PhD, Rome, Italy

12:30  Therapies for Connective Tissue Disease Associated ILD
K. Highland, MD, Cleveland, OH

1:00  Symptom Management in ILD
S.K. Danoff, MD, PhD, Baltimore, MD

1:30  Following Patients with ILD After Diagnosis
M. Kreider, MD, Philadelphia, PA

2:00  Controversies in Therapy - NAC, PH, GERD, Stem Cells
J. Oldham, MD, MS, Sacramento, CA

2:45  Break

3:00  Tough Cases: What Would You Do?
V. Cottin, PhD, MD, Bron, France
L. Richeldi, MD, PhD, Rome, Italy
L.D. Morrison, MD, Durham, NC
J. Morisset, MD, Montreal, Canada
D.E. Antin-Ozerkis, MD, New Haven, CT
J. Oldham, MD, MS, Sacramento, CA

This session and the International Conference are supported by an educational grant from Boehringer Ingelheim Pharmaceuticals, Inc.

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.
PG18  TEACHING AND RESEARCHING IN RESOURCE CONstrained SETTINGS: A GUIDE TO GLOBAL PULMONARY CRITICAL CARE MEDICINE

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

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<td>In-Training Non-Member</td>
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Registrants must bring a laptop to the course to view the course material.

Target Audience
Clinicians, researchers, educators, trainees and allied health personnel

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

- learn new findings about research gaps, training needs, and clinical problems relevant to work in resource-limited settings;
- develop strategies to identify funding sources, obtain human subjects approval, navigate infrastructure challenges, and form successful partnerships for clinical, training, or research work in low and middle income countries (LMICs);
- apply principles of work in resource-limited settings to attendee’s own topic area of interest.

Work in resource constrained settings is of increasing interest among pulmonary and critical care practitioners, trainees, and researchers, but most institutions lack formal training programs for care delivery, medical education, and research in resource limited settings. In addition, the 2015 ATS Audit indicates that 40% of participants at the international conference were from outside of North America and over 20% of participants were from low- and middle-income countries (LMICs). Work in these settings poses unique challenges including poor infrastructure, limited resources, and inadequate training. Strategies for successful work with in-country collaborators may differ based on the local context and goals of each project. The purpose of this course is to provide pragmatic approaches for global pulmonary and critical health research, clinical care, and capacity building using a variety of perspectives across different topic areas from successful faculty affiliated with different institutions and countries.
PG19  RESPIRATORY PHYSIOLOGY OVER THE LIFESPAN: WHEN IT’S RIGHT AND WHEN IT’S NOT

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $350  In-Training Member: $200
Non-Member: $425  In-Training Non-Member: $300

Registrants must bring a laptop to the course to view the course material.

Assemblies on Pediatrics; Clinical Problems; Critical Care; Pulmonary Circulation; Respiratory Cell and Molecular Biology; Respiratory Structure and Function; Sleep and Respiratory Neurobiology

8:00 a.m. - 4:00 p.m.  KBHCCD Room C140/C142 (Level 1)

Target Audience
Fellows in training as well as established physicians in the practice of pediatric pulmonology, critical care or neonatal medicine who are interested in reviewing basic physiology principles as they apply to clinical care

Objectives
At the conclusion of this session, the participant will be able to:
• apply several basic respiratory principles to the diagnosis and management of common pediatric respiratory disorders;
• learn how physiologic measurements can be used to change interventions and enhance outcomes;
• improve the quality of life/health status of patients by recognizing age-related differences in function and approaches to treatment.

This course will consist of a series of paired lectures covering several topics in pediatric respiratory physiology with an additional emphasis on maturational changes of various aspects of the respiratory system. When possible, the first talk will present normal physiology and how the issue being discussed changes with age. The companion talk will relate associated pathophysiology and also discuss how maturation alters the diseases discussed. An interactive format, using questions from the speakers and audience responses will be used to enhance audience participation, and to allow the participant to understand key concepts or to identify areas requiring additional study.

Chairing:
H.B. Panitch, MD, Philadelphia, PA
J.L. Allen, MD, Philadelphia, PA

8:00  The History of Developmental Physiology
G. Kurland, MD, ATSF, Pittsburgh, PA

8:35  Maturational Changes in the Apparatus of Breathing
T.G. Keens, MD, Los Angeles, CA

9:10  Abnormalities of the Chest Wall in Infants and Adolescents
G.J. Redding, MD, Seattle, WA

9:45  Break

9:55  Airways and Airway Smooth Muscle
H.B. Panitch, MD, Philadelphia, PA

10:30  Wheezing Across the Ages
W.J. Morgan, MD, Tucson, AZ

11:05  Forced Flows from Infants to Adolescents
J.L. Allen, MD, Philadelphia, PA

11:40  LUNCH

12:20  Respiratory Outcomes of Prematurity
C.L. Ren, MD, MBA, ATSF, Indianapolis, IN

12:55  Control of Breathing from Birth to Adulthood
J.L. Carroll, MD, Little Rock, AR

1:30  Obstructive Apnea Across the Ages
C.M. Cielo, DO, Philadelphia, PA

2:05  Break

2:15  The Pulmonary Circulation in Transition
S. Lakshinrusimha, MD, Sacramento, CA

2:50  Pulmonary Hypertension in Infants and Children
R.K. Hopper, MD, Palo Alto, CA

3:25  Exercise in Children and Adolescents
D.M. Orenstein, MD, Pittsburgh, PA

PG20  OPTIMIZING MANAGEMENT OF THE PATIENT WITH SEVERE BRONCHOPULMONARY DYSPLASIA

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $350  In-Training Member: $200
Non-Member: $425  In-Training Non-Member: $300

Registrants must bring a laptop to the course to view the course material.

Assemblies on Pediatrics; Clinical Problems; Critical Care; Pulmonary Circulation; Respiratory Cell and Molecular Biology

8:00 a.m. - 4:00 p.m.  KBHCCD Room C146 (Level 1)

Target Audience
Neonatal, critical care and pulmonary fellows in training, neonatologists, pediatric pulmonologists, pediatric critical care specialists, respiratory therapists, neonatal, pulmonary and critical care nurses and nurse practitioners, ethicists

Objectives
At the conclusion of this session, the participant will be able to:
• apply evidence based approaches to prevent the development of and manage the child with sBPD;
• gain new strategies, recognize and diagnose complications of sBPD;
• develop multidisciplinary teams and integrated strategies to enhance the effectiveness of care of the child with sBPD.

The course will consist of a series of lectures covering topics related to the preterm infant who develops severe bronchopulmonary dysplasia (sBPD).
Lectures will review evidence for optimal in hospital through post-hospital management of these infants at both an individual patient-based and system based level. Topics will span from advances in basic science that provide mechanistic insights into sBPD development, to clinical management of infants with sBPD including issues related to mechanical ventilation of infants with established sBPD. A primary focus of the session will be a comprehensive discussion of real-world approaches for the development of multidisciplinary systems based teams to optimize in hospital and post hospital outcomes for infants with sBPD and their families.

Chairing: T.E. Tipple, MD, Birmingham, AL
S.A. McGrath-Morrow, MD, Baltimore, MD
L.M. Rhein, MD, MPH, Worcester, MA

8:00 What’s New in the Pathogenesis of BPD?
K. Lingappan, MD, PhD, MS, Houston, TX

8:30 Update on Evidence for Treatments and Approaches to Prevent BPD
L.M. Rhein, MD, MPH, Boston, MA

9:00 Diagnostic Considerations: When Is It Not BPD?
E. Shepherd, MD, Columbus, OH

9:20 Advanced Imaging Modalities in the Assessment of BPD
J.C. Woods, PhD, Cincinnati, OH

9:50 Break

10:00 Approach to Nutrition and Feeding Issues in Babies with sBPD
C. Martin, MD, Boston, MA

10:30 Diagnosis and Management of Airway and Vascular Complications of sBPD
E. Hysinger, MD, Cincinnati, OH

11:10 Diagnosis and Management of sBPD Related Pulmonary Hypertension
P.M. Mourani, MD, Aurora, CO

11:40 Evidence Based Approaches to Mechanical Ventilation in the Child with sBPD
M. Keszler, MD, Providence, RI

12:10 LUNCH

1:00 In-Hospital Interdisciplinary Care of the Infant with sBPD: Who, Where, and When?
S. Yallapragada, MD, Dallas, TX
D.R. Rao, MD, Dallas, TX
H. Zhang, MD, Philadelphia, PA

1:40 Post-Hospital Management of Infants with sBPD
A.M. Canakis, MD, Montreal, Canada

2:20 Roles for Palliative Care in the Management of the Infant with sBPD
A. Singh, MD, Greenville, SC

2:40 Break

2:50 Very Long-Term Follow-Up and Outcomes of Children with sBPD
P.E. Moore, MD, ATSF, Nashville, TN

3:10 The Parental Perspective: Life as a Parent of a Child with sBPD
R.C. Savani, MBChB, Dallas, TX

3:30 Panel Discussion and Wrap-Up
L. M. Nogee, MD, Baltimore, MD
10:45 Eosinophils as Host Defense Cells
A.E. Samarasinghe, PhD, Memphis, TN

11:15 Innate Lymphoid Cells in Viral Lung Infections
D.C. Newcomb, PhD, Nashville, TN

11:45 LUNCH

12:45 Lung Immunity Learns from Experience: Influence of Antecedent Infection
J.P. Mizgerd, ScD, ATSF, Boston, MA

1:15 Antimicrobial Immunity and Chronic Lung Disease
C. Dela Cruz, MD, PhD, ATSF, New Haven, CT

1:45 Airway Microbiome and Innate Immunity
R.P. Dickson, MD, Ann Arbor, MI

2:15 Break

2:30 Neutrophil Recruitment, Activation, and Homeostasis in Pneumonia
H.R. Luo, PhD, Boston, MA

3:00 Visualizing Integrated Immune Responses in the Lung
J. Bhattacharya, MD, PhD, New York, NY

3:30 Harvesting Innate Immune Function to Protect Patients from Pneumonia
S.E. Evans, MD, Houston, TX

PG22 ALL THINGS NTM: A ROAD MAP TO THE DIAGNOSIS AND MANAGEMENT OF NONTUBERCULOUS MYCOBACTERIA

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

Member: $350 In-Training Member: $200
Non-Member: $425 In-Training Non-Member: $300

Registrants must bring a laptop to the course to view the course material.

Assembly on Pulmonary Infections and Tuberculosis
8:00 a.m. - 4:00 p.m.
KBHCCD
Room D171/D173 (Level 1)

Target Audience
Pulmonary and critical care physicians, pulmonary fellows, infectious disease fellows, internal medicine residents, medical students, pulmonary and infectious disease nurse practitioners, physician assistants, internal medicine providers

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

- learn new findings and apply the latest in epidemiologic trends and diagnostic modalities in patients with suspected NTM lung disease;
- apply and learn the latest in research in the management of NTM lung infections;
- reinforce guideline based therapy for newly diagnosed and refractory NTM lung disease as well as discuss tools to improve adherence to medical therapy through an interactive case-based panel discussion.

The course will provide an overview and update on the latest in nontuberculous mycobacterial (NTM) lung disease. It will discuss recent epidemiologic trends, radiology, microbiology, diagnosis and management of NTM lung disease in different populations. It will discuss the latest in research (including results from the National Bronchiectasis NTM Research Registry, epidemiologic research and recent clinical trials). It will also involve an interactive case-based panel discussion discussing common and difficult real-world NTM patient scenarios. Finally, the course will include an FDA perspective on drug development and areas of needed research.

Chairing: S.H. Kasperbauer, MD, Denver, CO
A. Basavaraj, MD, New York, NY
K.N. Olivier, MD, MPH, Bethesda, MD

8:00 Epidemiology of NTM
R. Prevots, PhD, MA, Bethesda, MD

8:30 Environmental Sources of NTM
R. Thomson, MBBS, PhD, Brisbane, Australia

9:00 Host Vulnerability
A.E. O'Donnell, MD, Washington, DC

9:30 Break

9:40 The Management of Pulmonary MAC
D.E. Griffith, MD, Tyler, TX

10:10 The Management of Pulmonary M. Abscessus Complex
S.H. Kasperbauer, MD, Denver, CO

10:40 Treatment of Less Commonly Encountered NTM
J. Philley, MD, Tyler, TX

11:10 Management of Drug Resistant NTM Infections
K.N. Olivier, MD, MPH, Bethesda, MD

11:40 Non-Pharmacologic Therapies and Airway Clearance
A. Basavaraj, MD, New York, NY

12:10 LUNCH

12:50 NTM Cases in the Community
K.A. Cohen, MD, Baltimore, MD

1:20 Cystic Fibrosis Related NTM Infection
A. Floto, MD, PhD, Cambridge, United Kingdom

1:50 Surgical Approach to the Management of NTM Infections
J.D. Mitchell, MD, Aurora, CO

2:20 What's New in NTM Treatment and Where Should We Focus Our Research Efforts?
C.L. Daley, MD, Denver, CO

2:50 Break

3:00 Drug Development, the FDA Perspective
P. Kim, MD, Silver Spring, MD

3:30 Difficult to Manage NTM Cases
M. Holt, MBBS, BSc, Brisbane, Australia
PG23  HIGH-CONTENT SINGLE-CELL TECHNIQUES TO STUDY LUNG IN HEALTH AND DISEASE

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

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Registrants must bring a laptop to the course to view the course material.

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

8:00 a.m. - 4:00 p.m.  
KBHCCD  
Room D166 (Level1)

Target Audience  
Basic and clinical researchers, postdocs, graduate students, clinical fellows

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

- learn about the available high content single-cell technologies and their applicability to study human lung in health and disease;
- learn about the bioinformatics and computational tools and resources available for analysis of high-content single-cell data in the context of the lung biology and disease;
- design high content single-cell studies in human subjects.

This postgraduate course will provide an introduction to the high content single cell techniques in the context of the lung development, aging, and disease. We will focus on single-cell RNA-seq (including CITE-seq and single nucleus RNA-seq), single-cell ATAC-seq and high content imaging (such as PLISH and MERFISH) and corresponding bioinformatics tools.

Chairing:  
S. Herold, MD, PhD, Giessen, Germany  
M.C. Nawijn, PhD, Groningen, Netherlands  
A. Misharin, MD, PhD, Chicago, IL

8:00  
Welcome  
S. Herold, MD, PhD, Giessen, Germany

8:05  
Overview of the Single Cell scRNA-seq Methods  
H.B. Schiller, PhD, Neuherberg, Germany

8:40  
Computational Tools for Single Cell Transcriptomic Analysis  
P. Reyfman, MD, Chicago, IL

9:15  
Single-Cell Profiling of the Open Chromatin via HTS-seq  
T.E. Duong, MD, San Diego, CA

9:50  
Break

10:00  
Single-Nucleus RNA-seq to Study Archived Lung Samples  
A. Misharin, MD, PhD, Chicago, IL

10:35  
Cell Atlas of the Human Lung V1.0  
M.C. Nawijn, PhD, Groningen, Netherlands

11:10  
Single Cell Proteomics in the Lung  
C. Ansong, PhD, Richland, WA

PG24  PULMONARY FUNCTION TESTING IN THE REAL WORLD: 2019 UPDATES ON THE ART AND SCIENCE OF PFT

Pre-registration and additional fees required. Continental breakfast and box lunch included. Attendance is limited.

<table>
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<tr>
<th>Membership</th>
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<tr>
<td>Member:</td>
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<td>In-Training Member:</td>
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<td>In-Training Non-Member:</td>
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Registrants must bring a laptop to the course to view the course material.

Assemblies on Respiratory Structure and Function; Clinical Problems

8:00 a.m. - 4:00 p.m.  
KBHCCD  
Room C144-C145 (Level1)

Target Audience  
Physicians, current/future PFT lab directors, respiratory therapists, trainees/fellows, and other interested healthcare providers. Basic knowledge of pulmonary physiology and PFT interpretation is desirable but not required

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

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

This course will focus on “real world” updates in lung function testing, combining guidelines from the new technical standards published in the past two years with hands-on experience in small group settings focusing on the performance, interpretation, and reporting of pulmonary function testing (PFT). We will combine
didactic lectures with case-based instruction, small group discussions, and hands-on
demonstration of spirometry, and we will offer participants the opportunity to submit
their own complex cases for review by an expert team of 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: C. Oropez, MD, MHS, Tucson, AZ
R. Clay, MD, Clackamas, OR
D.A. Kaminsky, MD, Burlington, VT

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

8:05 Welcome to the Real World: Spirometry in 2019
B.H. Culver, MD, Seattle, WA

8:35 Lung Volumes in Reality: Methods for Measurement,
Interpretation, and Reporting
B. Borg, CRFS, Melbourne, Australia

9:05 Keeping It Real: Practical Considerations for DLCO
Measurement, Reporting, and Interpretation
C. Oropez, MD, MHS, Tucson, AZ

9:35 Real Life Considerations for Pediatric Pulmonary Function
Testing
D.J. Weiner, MD, ATSF, Pittsburgh, PA

10:05 Break

10:20 Putting It All Together: Interpretation of Real World PFTs
P.D. Scanlon, MD, Rochester, MN

10:50 Make the Case: Pulmonary Function Interpretation in the Real
World
T. DeCato, MD, Spokane, WA

11:35 Hands-On: Pulmonary Function Testing in the Real World
G.L. Ruppel, RRT, RPFT, Med, St. Louis, MO

12:20 LUNCH

12:50 Forced Oscillation Technique: What You Really Need to Know
D.A. Kaminsky, MD, Burlington, VT

1:20 Overcoming the Challenge: How to Apply New Guidelines for
Direct and Indirect Bronchial Challenge Testing in Real-Life
Practice
T.S. Hallstrand, MD, MPH, ATSF, Seattle, WA

2:05 PFT Troubleshooting in the Real World
C.D. Mottram, RPFT, RRT, Rochester, MN

2:45 Break

3:00 Make the Case: Real World Cases for PFT Expert Panel
P.D. Scanlon, MD, Rochester, MN
M. Rosenfeld, MD, Seattle, WA
N.R. MacIntyre, MD, Durham, NC
C.G. Irin, PhD, ATSF, Burlington, VT

ATS 2019 • Dallas, TX
10:50  Mechanisms of Hyperventilation in Heart Failure
       M.T. Naughton, MD, ATSF, Prahran, Australia

11:40  LUNCH

12:35  Heart Failure with Obstructive Sleep Apnea- Evidence for PAP Therapy
       M. Arzt, MD, Regensburg, Germany

1:10   Oxygen Therapy in Heart Disease: Who Should We Target?
       R.W. Beasley, MD, Wellington, New Zealand

1:45   Adaptive Servo Controlled Ventilation in Chronic Heart Failure:
       Can Lessons Learnt Predict the Future?
       D. Bradley, MD, Toronto, Canada

2:00   Periodic Breathing in Heart Failure: To Pace or Oxygenate?
       S. Javaheri, MD, Cincinnati, OH

2:20   Break

3:00   Case Discussions
       M.T. Naughton, MD, ATSF, Prahran, Australia
       M.S. Badr, MD, Detroit, MI

4:30 p.m. - 5:30 p.m.
OPENING CEREMONY
KBHCCD
Hall A (Level 2)

The American Thoracic Society invites you to attend the Opening Ceremony for the 2019 International Conference. The Ceremony will feature distinguished physician, educator, and medical scientist Mary E. Klotman, MD, dean of the Duke University School of Medicine. Dr. Klotman will discuss the importance of collaborative teams and mentors to career development; their roles today and tomorrow.
Also during the Opening Ceremony will be an address by ATS President Polly Parsons, MD, ATSF, and the presentation of several Respiratory Health Awards:
Public Service Award: Dona J. Upson, MD, MA, Albuquerque, NM
World Lung Health Award: Peter D. Sly, MBBS, MD, ATSF, South Brisbane, Australia
Jo Rae Wright Award for Outstanding Science: Yvonne J. Huang, MD, Ann Arbor, MI

5:30 p.m. - 6:30 p.m.
THE NETWORKING EXCHANGE
FOR EARLY CAREER PROFESSIONALS
Omni Dallas Downtown
Trinity Ballroom 4/8 (Level 3)

The Networking Exchange for Early Career Professionals is an annual networking event for early career professionals and first time conference attendees. This one hour event is intended to provide a relaxed atmosphere where attendees can network with peers, ATS leaders, program directors, associate program directors and division directors, as well as other prominent thought leaders. Cocktails and appetizers will be provided.
The Membership Committee, Training Committee, and the Members in Transition and Training Committee (MITT) jointly host the Networking Exchange for Early Career Professionals.

Conference badges are required for admission. Space is limited and admittance is on a first-come, first-served basis. There is no additional fee.
**PCC1  PEDIATRIC CLINICAL CORE CURRICULUM**

**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:

- remain current with medical knowledge relevant to their practice in pediatric pulmonology;
- evaluate their understanding of key skills and content areas in pediatric pulmonology as well as receive feedback on their comprehension of a result of a pre-test/post-test comparison;
- 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. The symposia will address topics that have been identified by an ATS pediatric working group, which is comprised of members of the ATS Education Committee and the International Conference Committee, who have identified important areas within pediatric medicine (including severe asthma, ILD, BPD, pulmonary hypertension and pulmonary manifestations of pulmonary disease). Attendees will increase their medical knowledge as a result of attending this symposium, and this will be measured by a comparison of pre-test vs. post-test results on the corresponding maintenance of certification module. The ATS Pediatric Core Curriculum will focus on a 3-year content cycle of key medical content in the area of pediatric medicine.

**Chairing:** A. Horani, MD, St. Louis, MO

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<tr>
<th>6:45 a.m. - 7:45 a.m.</th>
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<td><strong>Dallas Ballroom A-C (Level 3)</strong></td>
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**A1  CLINICAL YEAR IN REVIEW 1**

- **New!** The Clinical Year in Review Bibliography is only available via the conference website [http://conference.thoracic.org/go/cyir](http://conference.thoracic.org/go/cyir) or mobile app. Attendees wishing to access the bibliography should bring a smart phone, tablet or laptop to the session.

<table>
<thead>
<tr>
<th>9:15 a.m. - 11:15 a.m.</th>
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<td><strong>Hall A (Level 2)</strong></td>
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**Target Audience**
Providers including physicians, nurses, respiratory therapists, nurse practitioners, physician assistants; trainees including residents and fellows; clinical researchers

**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.

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<thead>
<tr>
<th>6:45</th>
<th>Control of Breathing Disorders in Children</th>
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<td>E.S. Katz, MD, Boston, MA</td>
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<th>7:15</th>
<th>Management of Obstructive Sleep Apnea in Children</th>
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<td></td>
<td>J.E. Maclean, BSc(Hons), MD, PhD, Edmonton, Canada</td>
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**K1  WHEN EXPERTS DISAGREE: THE ART OF MEDICAL DECISION MAKING**

**Speakers:** Jerome E. Groopman, MD, Boston, MA  
Pamela I. Hartzband, MD, Boston, MA

**K2  IMPLEMENTATION SCIENCE: HOW CAN IT SUPPORT HEALTH RESEARCH?**

**Speaker:** Anne Sales, PhD, RN, MSN, Ann Arbor, MI
The annual Clinical Year in Review symposia provides concise summaries of the most impactful clinical research publications related to specific clinical topics. Speakers are asked to conduct a literature review of the prior year’s scientific publications and develop a written summary of the top 20 articles and highlight 5 of the most important and influential publications on their topic in written format and during their talks at the International Conference Clinical Year in Review sessions.

Chairing: V.E. Ortega, MD, PhD, ATSF, Winston Salem, NC
J.S. Lee, MD, Aurora, CO
P.A. Kritek, MD, EdM, Seattle, WA

9:15 Sepsis and Septic Shock
C.W. Seymour, MD, MSc, Pittsburgh, PA

9:44 Health Disparities
N. Thakur, MD, MPH, San Francisco, CA

10:13 COPD
N.N. Hansel, MD, MPH, Baltimore, MD

10:42 Interventional Pulmonology
M.R. Bowling, MD, Greenville, NC

11:11 MOC Questions

BASIC • CLINICAL

CLINICAL TOPICS IN PULMONARY MEDICINE
CME Credits Available: 2

A2 THE NEW ENGLAND JOURNAL OF MEDICINE AND JAMA. DISCUSSION ON THE EDGE: REPORTS OF RECENTLY PUBLISHED PULMONARY RESEARCH
9:15 a.m. - 11:15 a.m. KBHCCD
Room D163/D165/D170/D172 (Level 1)

This session will provide a forum for attendees to interact with the authors and editors about papers published in the New England Journal of Medicine and JAMA and. 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: J. Drazen, MD, Boston, MA
G. T. O’Connor, MD, Boston, MA

Speakers and Talks to be Announced.

A3 WHEN THERE IS NO RIGHT ANSWER: A PRO/CON DEBATE ON CONTROVERSIES IN ILD

Assemblies on Clinical Problems; Behavioral Science and Health Services Research
9:15 a.m. - 11:15 a.m. KBHCCD
Ballroom C Three-Four (Level 2)

Target Audience
Clinicians and researchers with a focus on interstitial lung disease, trainees.

Objectives
At the conclusion of this session, the participant will be able to:
• more appropriately refer patients with scleroderma, IPF, and rapidly progressive ILD for appropriate, evidence-based therapies;
• adopt a patient-centered approach when discussing risks and benefits of therapies in patients with ILD, especially the use of anti-fibrotics in the frail and/or elderly;
• highlight controversy surrounding the implementation of IPAF clinical criteria and the need for a single framework with which to evaluate patients with autoimmune features and ILD.

The evaluation and management of interstitial lung disease is an evolving topic where clinicians are often left without a clear “right” answer. We will use the popular pro/con debate format to engage the audience in four areas of current controversy in the field including whether patients with scleroderma should undergo lung transplantation, if elderly patients with idiopathic pulmonary fibrosis (IPF) should be treated with anti-fibrotic therapy, whether patients with rapidly progressive interstitial lung disease should be treated with extracorporeal membrane oxygenation (ECMO), and whether interstitial pneumonia with autoimmune features (IPAF) is a distinct clinical entity and should be treated as such.

Chairing: S.M. Bhorade, MD, Chicago, IL
R. Jablonski, MD, Chicago, IL

9:15 PRO: Lung Transplant Is a Viable Treatment Option for Scleroderma
M.M. Crespo, MD, Philadelphia, PA

9:27 CON: Other Options Should Be Explored for Management of Scleroderma Lung Disease
R. Jablonski, MD, Chicago, IL

9:39 Rebuttal
M.M. Crespo, MD, Philadelphia, PA

9:45 PRO: All Patients with IPF Should Receive Anti-Fibrotic Therapy
T.M. Maher, MD, MSc, PhD, London, United Kingdom

9:57 CON: All Patients with IPF Should Not Receive Anti-Fibrotic Therapy
S.D. Nathan, MD, Falls Church, VA

10:09 Rebuttal
T.M. Maher, MD, MSc, PhD, London, United Kingdom
10:15 PRO: Patients With Rapidly Progressive ILD Should Be Offered ECMO
D. Brodie, MD, New York, NY

10:27 CON: Patients With Rapidly Progressive ILD Should Not Be Offered ECMO
J. M. Walter, MD, Chicago, IL

10:39 Rebuttal
D. Brodie, MD, New York, NY

10:45 PRO: An IPAF Designation Provides Useful Prognostic Information to the Evaluation of Idiopathic Interstitial Pneumonia
M.E. Strek, MD, ATSF, Chicago, IL

10:57 CON: The IPAF Criteria Need to Be Refined Prior to Widespread Implementation
A.U. Wells, MD, London, United Kingdom

11:09 Rebuttal
M.E. Strek, MD, ATSF, Chicago, IL

This session and the International Conference are supported by an educational grant from Boehringer Ingelheim Pharmaceuticals, Inc.

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

A4 DO I HAVE TO? RE-EVALUATING COMMON PRACTICES IN THE ICU

Assemblies on Critical Care; Behavioral Science and Health Services Research; Nursing
9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN
Dallas Ballroom D/H (Level 3)

Target Audience
Critical care clinicians (fellows, attending physicians, NPs/PAs/CRNAs, nurses, allied health professionals), critical care researchers, ICU administrators

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

• identify practices which may be commonplace, yet without clear reason;
• understand the data (for, against, or absent) in relation to these commonplace practices;
• understand why changing practice in the ICU setting is hard and how we may move towards better achieving desired change.

Much of what we do in the ICU is done because, well, “that’s just the way we do things.” Over time, well-accepted standards of care have, when studied, been found to be of no benefit (e.g., pulmonary artery catheters) and/or potential harm (e.g., sedation to coma) to patients. There remain, however, many things we do every day which, upon closer inspection, have little basis for being the mainstay of practice. In this session, we will delve into the data (or lack thereof) underpinning several of these routine practices, and we will consider what may happen if (gasp), we stopped doing them.

Chairing: H.B. Gershengorn, MD, ATSF, Miami, FL
M. Hua, MD, MSci, New York, NY
K. Hibbert, MD, Boston, MA

9:15 Why It’s Necessary to Challenge Practice That Has Become Dogma
H.B. Gershengorn, MD, ATSF, Miami, FL

9:25 Do I Have to Use a Central Line to Deliver Vasopressors?
J. Cardenas-Garcia, MD, Ann Arbor, MI

9:40 Do I Have to Limit the Number of Visitors in the ICU?
S. Beesley, MD, Salt Lake City, UT

9:55 Do I Have to Use Stylets for Intubation in the ICU?
M. Hua, MD, MSci, New York, NY

10:10 Do I Have to Withhold IV Contrast from CT Scans for Critically Ill Patients?
K. Kashani, MD, MSc, Rochester, MN

10:25 Do I Have to Obtain Imaging Studies for Altered Mental Status in the ICU?
H. Wunsch, MSc, MD, Toronto, Canada

10:40 Do I Have to Keep All My Patients on Supplemental Oxygen?
M. Girardin, MD, Modena, Italy

10:55 Why It’s Difficult to Change Practice That Has Become Dogma
G.D. Rubenfeld, MD, MSc, Toronto, Canada

11:05 Questions and Answers
K. Hibbert, MD, Boston, MA

A5 CELL FATE DETERMINATION IN THE LUNG IN HEALTH AND DISEASE: LOCATION AND NEIGHBORS MATTER

Assemblies on Allergy, Immunology and Inflammation; Critical Care; Environmental, Occupational and Population Health; Pediatrics; Pulmonary Infections and Tuberculosis; Respiratory Cell and Molecular Biology; Respiratory Structure and Function; Thoracic Oncology
9:15 a.m. - 11:15 a.m. KBHCCD
Ballroom D Two (Level 3)

Target Audience
Providers of lung health; those serving patients with COPD, ILD, pulmonary vascular disease; those with clinical and research responsibilities; those needing instruction in areas of medicine outside of their specialty.

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

• learn new findings about the different types of stem and progenitor cell types in the lung and how these participate in development and in repair after injury;
• integrate this knowledge related to the evolving field of regenerative medicine and stem cell therapy;
• review the scientific and medical literature and expert opinion of members of the Science Core of the ATS.
This symposium aims to provide new insights into the interactions between the signaling pathways determining the fate of resident and itinerant progenitor cells in the lung and how signals from the microenvironments in the vascular, epithelial, and mesenchymal compartments shape cell fate. The origins and plasticity of alveolar type I and type II cells will be explored. The session will also focus on the parallels between developmental pathways by which progenitor cells evolve into fully differentiated cells that constitute functional lung and the pathways responsible for repair and remodeling of the injured lung in health and in conditions such as pulmonary fibrosis, pulmonary infections, ARDS, LAM, and COPD as well as key areas of research and treatment relevant to these diseases.

Chairs: G.P. Downey, MD, Denver, CO
        B.D. Levy, MD, ATSF, Boston, MA
        K. Asano, MD, Kanagawa, Japan
        E.R. Neptune, MD, Baltimore, MD

9:15 Introduction to Development, Fate and Plasticity of Cells in the Lung
        Z. Borok, MD, ATSF, Los Angeles, CA

9:32 Applications of Functional Lung Epithelial Cells Derived from Human Pluripotent Stem Cells
        S. Gotoh, MD, PhD, Kyoto, Japan

9:49 One Cell at a Time: Dissecting Cellular and Molecular Heterogeneity of the Human Tracheal Airway Through Single Cell Transcriptomics
        M.A. Seibold, PhD, Denver, CO

10:06 The Vascular Niche Regulates Lung Regeneration and Fibrosis
        B. Ding, PhD, New York, NY

10:23 Mechanisms of Alveolar Epithelial Proliferation and Differentiation After Lung Injury
        R. Zemans, MD, Ann Arbor, MI

10:40 Lung Tissue Mimetic Hydrogels and Genome Engineering for Lymphangioleiomyomatosis (LAM) Modeling and Drug Development
        W. Stanford, PhD, Ottawa, Canada

10:57 Specialized Facultative Progenitor of the Alveolar Epithelium
        W. Zacharias, MD, PhD, Cincinnati, OH

The goal of this scientific symposium is to debate controversial in clinical trials related to the treatment of sleep-disordered breathing using a pro/con format. Historically, these pro/con debates have been lively, well-attended, and allow discussion of a broad range of topics within a single symposium. We include topics in which recent studies have informed clinical care, but where management decisions are still not entirely clear and guidelines are not in place incorporating new data. Experts from around the globe have been recruited for this symposium. Specifically, we will debate the following topics: 1) whether treatment of OSA leads to any improvement in cardiovascular outcomes, 2) What are potential reasons for negative PAP trials in heart failure, and what future therapies and designs should be considered in this population, and 3) whether obesity hypoventilation syndrome should be treated with CPAP or NIV and the impact of these treatment modalities on cardiovascular outcomes. Finally, Dr. Robert Wise, who has extensive trial experience and involvement in landmark trials in Pulmonary and Critical Care, will offer a unique and instructive “outside perspective” on what direction SDB trials should take in the future.

Chairs: S. Pamidi, MD, Montreal, Canada
        N.A. Shah, MD, MPH, MSci, New York, NY
        S.R. Patel, MD, Pittsburgh, PA
        B. Mokhlesi, MD, MSc, Chicago, IL

9:15 Introduction
        B. Mokhlesi, MD, MSc, Chicago, IL

9:20 PRO: Moderate to Severe OSA Should Be Treated to Improve Cardiovascular Outcomes
        S.S. Redline, MD, Boston, MA

9:35 CON: Moderate to Severe OSA Should NOT Be Treated to Improve Cardiovascular Outcomes
        R.D. McEvoy, MD, MBBS, Adelaide, Australia

9:50 PRO: Treatment of Ambulatory Patients with Obesity Hypoventilation Syndrome (OHS) Should Start with CPAP
        A.J. Piper, MEd, PhD, Camperdown, Australia

10:05 CON: Treatment of Ambulatory Patients with OHS Should Start with Noninvasive Ventilation (NIV)
        P.B. Murphy, MBBS, PhD, London, United Kingdom

10:20 PRO: PAP Therapy Should Be Used in Patients with Central Sleep Apnea and Heart Failure
        M.T. Naughton, MD, ATSF, Prahran, Australia

10:35 CON: PAP Therapy SHOULD NOT Be Used in Patients with Central Sleep Apnea and Heart Failure
        A. Malhotra, MD, ATSF, La Jolla, CA

10:50 Clinical Trials in Sleep-Disordered Breathing: An Outsider’s Perspective
        R.A. Wise, MD, Baltimore, MD
A7 BREAKING THE PARADIGM: EARLY ORIGINS OF COPD

Assemblies on Respiratory Cell and Molecular Biology; Allergy, Immunology and Inflammation; Clinical Problems; Environmental, Occupational and Population Health; Pediatrics

9:15 a.m. - 11:15 a.m. KBHCCD Ballroom D One (Level 3)

Target Audience
Patients; health care providers; pulmonary specialists; basic and translational scientists

Objectives
At the conclusion of this session, the participant will be able to:
• define and understand the term "early COPD";
• identify the subjects at risk of developing COPD and thus targeting the early stages of the disease;
• gain an overview of the current knowledge of the biological mechanisms underlying early COPD.

The term "early COPD" is being used to indicate the presence of initial manifestations of COPD, such as airflow obstruction, in younger individuals. Recent evidence points toward other causes of early decline of lung function beyond cigarette smoking. This session will discuss the specific clinical and pathologic hallmarks of early COPD.

Chairing:
F.D. Martinez, MD, Tucson, AZ
D.D. Sin, MD, Vancouver, Canada
F. Polverino, MD, PhD, Tucson, AZ

9:15 A Patient's Perspective
J. Rommes, W. Des Moines, IA

9:20 Does Early COPD Start at Birth? COPD Beyond Cigarette Smoke
F.D. Martinez, MD, Tucson, AZ

9:39 Bronchopulmonary Dysplasia: An Emerging Culprit in Early COPD
S.A. McGrath-Morrow, MD, Baltimore, MD

9:58 Pathobiology of Early COPD: An Incomplete Puzzle
F. Polverino, MD, PhD, Tucson, AZ

10:17 Genomics of Early COPD: Where Do We Stand?
M.R. Faner, PhD, BSc, Barcelona, Spain

10:36 Early COPD and Late Mild COPD: Differences and Similarities
S. Dharmage, MD, Melbourne, Australia

10:55 Microbiome and Host Response in Early COPD
J. Hurst, MD, London, United Kingdom

A8 CROSSING THE BORDER: MILDLY INCREASED PULMONARY ARTERY PRESSURE AND THE NEW DEFINITION OF PULMONARY HYPERTENSION

Assembly on Pulmonary Circulation
9:15 a.m. - 11:15 a.m. KBHCCD Ballroom C One-Two (Level 2)

Target Audience
All ATS attendees who are involved in patient care or research involving pulmonary hypertension

Objectives
At the conclusion of this session, the participant will be able to:
• understand the normal limits of pulmonary artery pressure and rationale for thresholds used to diagnose pulmonary hypertension;
• gain new findings about the epidemiology and natural history of mildly increased pulmonary artery pressure, both in the general population and specific patient subgroups;
• improve the ability to diagnose and manage patients with mildly increased pulmonary artery pressures who fit the new definition of pulmonary hypertension.

Emerging data indicates that having a mild increase in pulmonary artery pressure (below the threshold for diagnosis of pulmonary hypertension [PH]) is associated with a worse prognosis compared to individuals with a normal mean pulmonary artery pressure (mPAP), both in the general population and specific patient groups. Based on this data, the 2019 World Symposium on Pulmonary Hypertension recommended lowering the cut-off for PH diagnosis to a mPAP20mmHg. In this session, we will discuss this important new patient population who will now be defined as having PH, including epidemiology, natural history, and controversies regarding the changing definition and treatment decisions.

Chairing:
M.R. Lammi, MD, MSCR, New Orleans, LA
E. Brittain, MD, Nashville, TN
G. Kovacs, MD, Graz, Austria

9:15 Normal Limits of Pulmonary Artery Pressure and the Evolving Definition of Pulmonary Hypertension
N.S. Hill, MD, Boston, MA

9:35 Epidemiology and Natural History of Patients with Mild Increases in Pulmonary Artery Pressure
B.A. Maron, MD, Boston, MA

9:55 Case Study: Mildly Increased Pulmonary Artery Pressure in Scleroderma
M.R. Lammi, MD, MSCR, New Orleans, LA

10:15 Case Study: Mildly Increased Pulmonary Artery Pressure in Sickle Cell Disease
E.S. Klings, MD, Boston, MA
10:35 Should Patients with Mildly Increased Pulmonary Artery Pressure Be Diagnosed with and Treated for Pulmonary Hypertension? Yes
E. Brittain, MD, Nashville, TN

10:50 Should Patients with Mildly Increased Pulmonary Artery Pressure Be Diagnosed with and Treated for Pulmonary Hypertension? No
G. Kovacs, MD, Graz, Austria

11:05 Should Patients with Mildly Increased Pulmonary Artery Pressure Be Diagnosed With and Treated for Pulmonary Hypertension? Open Discussion
M.R. Lammi, MD, MSCR, New Orleans, LA

This session and the International Conference are supported by an educational grant from Bayer US.

CLINICAL • TRANSLATIONAL

Scientific Symposium

CME Credits Available: 2

A9 NOVEL BIOMARKERS FOR THE DIAGNOSIS, PHENOTYPING, AND MANAGEMENT OF PEDIATRIC LUNG DISEASES

Assemblies on Pediatrics; Allergy, Immunology and Inflammation; Clinical Problems
9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN
Dallas Ballroom A-C (Level 3)

Target Audience
This session will appeal to primary care providers, nurses, trainees, and subspecialists who care for children with lung diseases, as well as scientists conducting pediatric pulmonary research

Objectives
At the conclusion of this session, the participant will be able to:
• learn new findings on novel biomarkers of pediatric pulmonary diseases such as viral acute respiratory infections, pulmonary vascular diseases, primary ciliary dyskinesia, asthma, and rare lung diseases;
• review the clinical implications of these findings and how they could impact personalized pediatric pulmonary medicine;
• explore future directions for research aimed at biomarker discovery for pediatric pulmonary diseases.

Our understanding of the pathophysiology of pediatric pulmonary diseases has advanced exponentially over the past several years. This, together with marked improvements in laboratory techniques, omics approaches, and data analysis methods, has led to the discovery of novel measurements that can aid in the diagnosis, phenotyping, and management of childhood respiratory illnesses. In this session, we will discuss the latest developments and clinical implications of biomarkers of pediatric pulmonary conditions such as viral acute respiratory infections, pulmonary vascular disease, primary ciliary dyskinesia, asthma, and rare lung diseases, and explore future directions in the field.

9:15 Introduction
C. Rosas-Salazar, MD, MPH, Nashville, TN

9:20 Predicting Short- and Long-Term Outcomes of Viral Acute Respiratory Infections in Infancy
C. Rosas-Salazar, MD, MPH, Nashville, TN

9:43 Biomarker Discovery for Pediatric Pulmonary Vascular Diseases
S.H. Abman, MD, Aurora, CO

9:57 Epigenetics and Transcriptomics in the Prediction and Phenotyping of Childhood Asthma
E. Forno, MD, MPH, Pittsburgh, PA

10:06 Improving the Diagnosis of Primary Ciliary Dyskinesia
S.D. Davis, MD, ATSF, Chapel Hill, NC

10:29 Emerging Biomarkers of Pediatric Rare Lung Diseases
L.R. Young, MD, ATSF, Nashville, TN

10:52 TREATING ASTHMA IN PATIENTS WITH OBESITY: THE NEED FOR A NEW APPROACH

Assemblies on Respiratory Structure and Function; Allergy, Immunology and Inflammation; Clinical Problems; Environmental, Occupational and Population Health; Sleep and Respiratory Neurobiology
9:15 a.m. - 11:15 a.m. Room D221/D225/D226 (Level 2)

Target Audience
Clinicians taking care of obese patients, translational investigators working in basic science, epidemiology and behavioral science

Objectives
At the conclusion of this session, the participant will be able to:
• understand the effects of obesity on respiratory physiology and immune function;
• develop a rationale approach to treating obese patients with asthma;
• explain how comorbidities complicate treatment of asthma in obesity.

Obesity is a major risk factor for asthma, and nearly 60% of patients with severe asthma are obese. Obese patients do not respond as well to standard therapies; this represents a major challenge to clinicians and a public health crisis. This session will discuss the pathophysiology of the different phenotypes of obese asthma, and how this affects treatment responses. The role of medications, lifestyle interventions, and...
co-morbidities will be discussed, along with a discussion of future therapies being
developed to address this challenging new patient population.

**Chairing:**
A.E. Dixon, MD, ATSF, Burlington, VT
D. Rastogi, MBBS, MS, Bronx, NY

9:15 **A Patient’s Perspective**
L. Clark, Irving, TX

9:20 **Asthma and Obesity in 2019**
D. Rastogi, MBBS, MS, Bronx, NY

9:25 **Pathophysiology of Phenotype in the Asthma of Obesity**
J.H.T. Bates, PhD, DSc, ATSF, Burlington, VT

9:40 **The Interrelation Between Asthma and Sleep-Disordered Breathing**
M. Teodorescu, MD, MS, Madison, WI

9:55 **Obesity Oxidative Stress and Asthma**
F. Holguin, MD, MPH, Aurora, CO

10:10 **Dietary Interventions for Obese Asthma**
L.G. Wood, PhD, New Lambton Hts, Australia

10:25 **Lifestyle Interventions for Asthma and Obesity**
S.M. Nyenhuis, MD, MPH, Aurora, CO

10:40 **Depression, Anxiety and Obese Asthma**
K. Lavoie, PhD, MA, BA(Hons), Montreal, Canada

10:55 **Controlling Obese Asthma: How Far Should We Go with Medications?**
A.E. Dixon, MD, ATSF, Burlington, VT

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**BEHAVIORAL • CLINICAL**

**PUBLIC ADVISORY ROUNTABLE SYMPOSIUM**

CME Credits Available: 2
MOC Points Available: 2

A12 **CAREGIVER BURDEN: BIDIRECTIONAL IMPACT OF PULMONARY, CRITICAL CARE, AND SLEEP DISORDERS ON THE ENTIRE FAMILY**

Public Advisory Roundtable; Assemblies on Behavioral Science and Health Services Research; Clinical Problems; Critical Care; Pulmonary Circulation; Sleep and Respiratory Neurobiology

9:15 a.m. - 11:15 a.m.  
Room C146 (Level 1)

**Target Audience**
Physicians, clinical investigators, registered nurses, advanced practice nurses, nurse practitioners, patients, caregivers

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

- understand the signs and symptoms of caregiver burden in caregivers and healthcare professionals;
- understand the consequences of caregiver burden on patients and their caregivers;
- identify potential interventions to alleviate the deleterious effects of caregiver burden.

Approximately one in four American adults have multiple chronic conditions. As people live longer and acute illnesses become chronic conditions, the need for
formal and informal caregiving has grown tremendously. Approximately 43.5 million American caregivers provided unpaid care to an adult or child. The international burden is even greater. Adults over the age of 80—who have a high likelihood of physical and cognitive impairments and great need of caregiving services represent the fastest growing population of older adults. As a result, the need for caregiving is only expected to increase as our society ages. It isn’t only older adults who may need caregiving services, 7% of children have multiple chronic conditions that could require caregiving services. This symposium will discuss the emerging issues and consequences of caregiver burden, and will review potential interventions that may reduce the problem.

Chairing: M. Moss, MD, ATSF, Aurora, CO
K. Connolly, BS, Danvers, MA

9:15 PAR Awards Presentation
K. Connolly, BS, Danvers, MA

9:25 A Patient's Perspective
S. Burlile, PhD, Meridian, ID

9:35 Caregiver Burden: What Is It and Why Is It Important
B.A. Graney, MD, Aurora, CO

9:55 Helpful and Unhelpful Behaviors of Caregivers in Supporting Disease Management
K.J. Haines, PhD, BHS, Melbourne, Australia

10:15 Caregiver Burden in Health Care Professionals
M. Mealer, PhD, Denver, CO

10:35 How to Alleviate Caregiver Burden: Potential Interventions
M.S. Herridge, MD, Toronto, Canada

10:55 The Future of Caregiver Burden Research
L. Saketkoo, MD, MPH, New Orleans, LA

A13 STATE OF THE ART TREATMENT OF TOBACCO DEPENDENCE
Tobacco Action Committee; Assemblies on Behavioral Science and Health Services Research; Thoracic Oncology

9:15 a.m. - 11:15 a.m. KBHCCD
Room D167/D174 (Level 1)

Target Audience
Interprofessional (physicians, nurses, allied health, in training) clinicians who care for patients with tobacco dependence and/or treat their tobacco related disease. Researchers with an interest in tobacco dependence biology and treatment

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

• learn evidence based recommendations for pharmacotherapy treatment for tobacco dependence;
• discuss potential barriers to tobacco dependence treatment including e-cigarettes and flavorings;
• acquire new strategies and tools to integrate tobacco dependence treatment into novel care setting to target health disparities.

Tobacco dependence is the leading cause of lung disease in the U.S. and internationally and has significant disparities without most vulnerable populations at greatest risk. Our understanding of the most effective strategies for treatment of tobacco dependence has improved in recent years. This session seeks to improve the treatment of tobacco dependence by providing evidence-based recommendations for interventions that have been proven to improve clinical outcomes as well as discuss potential barriers to treatment including electronic cigarettes and flavorings. The session will also include novel methods for integrating tobacco dependence treatment into different care settings to reduce known disparities.

Chairing: M. Eakin, PhD, Baltimore, MD
H. Kathuria, MD, ATSF, Boston, MA
H.J. Farber, MD, MSPH, ATSF, ATS F, Houston, TX

9:15 Pharmacological Treatment of Tobacco Dependence
F.T. Leone, MD, MS, ATSF, Philadelphia, PA

9:35 They Did Not Stop Tobacco After 6 Weeks! The Evidence Behind Extended Treatment of Tobacco Dependence
D.P.I. Sachs, MD, Palo Alto, CA

9:55 Menthol Makes it Smooth: The Use of Flavorings to Promote Tobacco Use
E.R. Neptune, MD, Baltimore, MD

10:10 More of a Foe Than Friend: The Role of E-Cigarettes in Tobacco Dependence Treatment
I. Jaspers, PhD, Chapel Hill, NC

10:30 Tobacco Dependence Treatment for the Marginalized Populations
S. Pakhale, MD, MSCE, Ottawa, Canada

10:45 Do It for the Kids? Treating Parents for Tobacco Dependence in Pediatric Settings
T.J. Moraes, MD, Toronto, Canada

11:00 Teachable Moment: Integrating Tobacco Dependence Treatment into the Inpatient Setting
H. Kathuria, MD, ATSF, Boston, MA


10:00 Providers at an Academic Safety-Net Hospital System Tend to Refer Patients for Lung Cancer Screening Based on Patient Risk, but Demographic Disparities Persist/D.J. Kats, Y. Adie, A. Tilmat, Y. Tarabichi, Cleveland, OH, p.A1004


10:30 Capitalizing on Hospitalization to Engage Low Socioeconomic Status Smokers in Lung Cancer Screening/M. Spring, V. Cobb, C. Fitzgerald, C. Wakeman, V. Truong, K.A. Steiling, K. Lasser, R.S. Wiener, H. Kathuria, Boston, MA, p.A1006


10:30 Heat Shock Protein (HSP) 90 Inhibitors Prevent the Development of Nitrogen Mustard-Induced Chronic Lung Injury and Pulmonary Fibrosis in Mice/P. Solopov, M. Marinova, C. Dimitropoulou, J.D. Catravas, Norfolk, VA, p.A1021


BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

A17 VIRAL INFECTION IN EARLY CHILDHOOD

9:15 a.m. - 11:15 a.m. KBHCCD

Chairing: J.K. Kolls, MD, New Orleans, LA
M.B. Hershenson, MD, Ann Arbor, MI

Oral Presentations

9:15 In Hypoxia-Exposed Immature Mice, Gelsolin Protects from Rhinovirus-Induced Pulmonary Inflammation/T.X. Cui, C. Fulton, A. Brady, A.P. Popova, Ann Arbor, MI, p.A1024


10:00 Attenuation of Respiratory Syncytial Virus (RSV) Burden by MMP-9 Inhibition Via a Small Molecule Inhibitor/M. Kong, W. Zhang, N. Ambalavanan, R. Whitley, Birmingham, AL, p.A1027


10:45 Early Life Rhinovirus Infection Alters the Host Response to Heterologous Infection and Leads to an Exaggerated Asthma Like Phenotype/C. Rajput, T. Ishikawa, J. Lei, M. Han, J.K. Bentley, M.B. Hershenson, Ann Arbor, MI, p.A1030

Featured Speaker

11:00 Early Life Viral Infections and Asthma/M.B. Hershenson, Ann Arbor, MI

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

A18 NTM: HOW, WHERE OR WHY DID I GET IT?

9:15 a.m. - 11:15 a.m. KBHCCD

Chairing: A.E. O’Donnell, MD, Washington, DC
A. Floto, MD, PhD, FRCP, Cambridge, United Kingdom
K.N. Olivier, MD, MPH, Bethesda, MD

Oral Presentations


9:30 Bronchoscopy Detection of Aspiration in Patients with Mycobacterium Avium Complex Pulmonary Infection/S. Whealon, L. Lande, Wynnewood, PA, p.A1032


11:00 Whole Genome Sequencing of Nontuberculous Mycobacterium (NTM) Derived from Sputum Specimen in Co-Habiting Patients with NTM Pulmonary Disease/J.K. Yoon, T.S. Kim, J. Kim, J.-J. Yim, Seoul, Korea, Republic of, p.A1038

A19 LESS IDIOPATHIC: STRUCTURAL AND FUNCTIONAL ABNORMALITIES IN IPF

9:15 a.m. - 11:15 a.m. KBHCCD

Chairing: A. Stewart, PhD, Melbourne, Australia
S. Dua, MD, New York, NY
F. Xu, PhD, Vancouver, Canada

Oral Presentations


10:00 Human Lung Bacterial Communities Associated with Clinical Outcome in Patients with Idiopathic Pulmonary Fibrosis/H. Yoon, J.W. Song, K. Choi, J.H. Kim, W. Kim, D.S. Kim, Seoul, Korea, Republic of, p.A1042


RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A21 ADVANCES IN ASTHMA PATHOGENESIS

9:15 a.m. - 11:15 a.m. KBHCCD

Chairing: R.A. Rahimi, MD, PhD, Boston, MA
B. Lambrecht, MD, Ghent, Belgium
A.I. Sperling, PhD, ATSF, Chicago, IL


503 The Cytosolic DNA Sensor Cyclic-GMP-AMP Synthase Is Critical in Experimental Models of Allergic Airway Inflammation/F. Yan, Y. Han, L. Chen, H. Liu, Hangzhou, China, p.A1049


506 Club Cell Secretory Protein-16 Deficiency Leads to an Eosinophilic and Neutrophilic Airway Inflammation in Response to House Dust Mite in a Mouse Model of Asthma/J. Gozdz, D. Francisco, A. Manne, M. Conway, F.D. Martinez, S. Guerra, J.G. Ledford, M. Kraft, Tucson, AZ, p.A1052

507 Hsp70 Is a Positive Regulator of Airway Inflammation and Mucus Hypersecretion Through the Increase of Type 2 Cytokine Production by Activated T Cells in Allergic Asthma/D. Janssen-Heininger, Burlington, VT, p.A1048

508 Negative Human IL33 Regulation in Lung Endothelium During Allergic Inflammation Is Dependent on a 5kB Upstream Region in the IL33 Locus/C. Howard, D.C. Decker, K.M. Blaine, I.A. Swanson, D.F. Camacho, M. Nobrega, A.I. Sperling, Chicago, IL, p.A1054

509 Autophagy Limits 15LO1-Mediated Ferroptotic Cell Death and Associated Mitochondrial DNA Release in Human Airway Epithelial Cells (HAECs) J. Deng, T. Nagasaki, Z. Li, N. Bonfiglio, J.B. Trudeau, J. Zhao, S.E. Wenzel, Pittsburgh, PA, p.A1055
510 IL-4Rα Blockade with Dupilumab Prevents Both Obstructive and Restrictive Aspects of Lung Function Impairment in an HDM-Induced Asthma Mouse Model/G. Scott, J. Allinne, A.J. Murphy, M.A. Sleeman, J.M. Orengo, Tarrytown, NY, p.A1056


521 Genetic Risk Factors for Asthma Age of Onset Implicate Epithelial Barrier Dysfunction and Innate Immune Genes in Earlier Onset Asthma/N. Schoettler, M. Pividori, D.L. Nicolae, H.K. Im, C. Ober, Chicago, IL, p.A1067

522 Replacement of Fetal-Derived with Bone Marrow-Derived Pulmonary Resident Macrophages Reduces House Dust Mite-Induced Airway Hyperresponsiveness/Y.R.A. Yu, J. Daly, S.-L. Phelan, R.I. Cumming, A. Birukova, Y. Malakhou, J.L. Ingram, M.D. Gunn, L.G. Que, R.M. Tighe, Durham, NC, p.A7297


**BEHAVIORAL • CLINICAL**

**RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION**

**A22 FACILITATING PALLIATIVE AND END-OF-LIFE CARE**

9:15 a.m. - 11:15 a.m.  
KBHCCD

**Abstract Summaries**  
9:15-9:45

**Viewing/Discussion**  
9:45-11:15

**Chairs: A.S. Iyer, MD, Birmingham, AL**

A.E. Turnbull, DVM, MPH, PhD, Baltimore, MD

J. Hart, MD, MS, Philadelphia, PA

601 Facilitators and Barriers of High-Quality Community Based Palliative Care (CBPC): Perspectives of Chronic Obstructive Pulmonary Disease (COPD) Patients and Their Caregivers/K. Hyden, H. Coats, P.M. Meek, Aurora, CO, p.A1068

602 Integrating Screening and Referral to Palliative Care on Hospital Discharge Improves Symptom Scores in Patients with Severe COPD/K.R. Prendecki, I.R. Allon, S. Klinger, K. Roy, Watford, United Kingdom, p.A1069

603 Palliative Care Use Around the Time of Chronic Obstructive Lung Disease Hospitalization Among Persons with Chronic Obstructive Lung Disease in Ontario, Canada/L.C. Maclagan, N. Liu, P. Tanuseputro, T. A. Stukel, J. Guan, T. Kendzerska, M.S. Stefan, P.K. Lindemayer, A.S. Gerhson, Toronto, Canada, p.A1070


605 The Association of Palliative Care with Indicators of Quality Cancer Care Among Patients with Advanced-Stage Lung Cancer/K. Vranas, B. Chan, C.G. Slatore, D.R. Sullivan, Portland, OR, p.A1072

606 Elements of Specialist Palliative Care Among Patients with Advanced Stage Lung Cancer/D.R. Sullivan, L. Ganzini, K.C. Vranas, C.G. Slatore, Portland, OR, p.A1073
**CLINICAL POSTER DISCUSSION SESSION**

**INTERVENTIONAL PULMONARY**

**A23**  
9:15 a.m. - 11:15 a.m.  
K8BCCD  
Room C140/C142 (Level 1)

**Poster Viewing**  
9:15-10:00

**Discussion**  
10:00-11:15

**Chairing:** D.H. Sterman, MD, ATSF, New York, NY  
J.K. Pannu, MD, Nashville, TN  
H.J. Lee, MD, Baltimore, MD

101  

102  
**Bleeding in Patients Undergoing Indwelling Pleural Catheters While on Antiplaatelet Therapy/**C.F. Sisniega, F. Kheir, S. Alamro, A.C. Chee, M.S. Parikh, A. Majid, Boston, MA, p.A1091

103  
**Performance of 19 Gauge Needle and Mini-Forceps in Endobronchial Ultrasound Guided Inthraoracic Nodal and Lesion Biopsy/**T. He, I. Susanto, S.S. Oh, Los Angeles, CA, p.A1092

104  
**The Bigger the Better: Cryo-TBB Is Superior Over Forceps for the Diagnosis of Pulmonary Infiltrate in Immunocompromised Patients/**M. Kassierer, D. Rosengarten, M.R. Kramer, Petach Tikva, Israel, p.A1093

105  
**Rigid Bronchoscopy in Patients with Sickle Cell Disease/**S. Krivinskas, B. Madden, London, United Kingdom, p.A1094

106  

107  
**A Prospective Study on the Relationship Between Sleep Apnea Syndrome and Oxygen Demand During Bronchoscopy Under Sedation/**C. So, Tokyo, Japan, p.A1096

108  

109  
**Outcomes of Inferior Vena Cava Placement in Pulmonary Embolism Complicated with Shock/**H.G. Kul, Z.M. Htu, P. Jain, Chicago, IL, p.A1098

110  
**Endobronchial Valves for Persistent Air Leaks of Various Etiologies/**N.Y. Madisi, T.J. Harkin, New York, NY, p.A1099


Endobronchial Valve Placement for Persistent Air Leaks in the Setting of Infectious Cavitary Lesions and Necrotizing Pneumonia/A.S. Flora, S. Benzaquen, Cincinnati, OH, p.A1106


The Effect of Interventional Pulmonology on the Training of Pulmonary and Critical Care Fellows/S. Alamro, M. Sierra-Ruiz, J.P. Becerra, A. Agnew, A. Majid, M.S. Parikh, A. Chee, Boston, MA, p.A1110


COPD: THERAPY, IMAGING, AND MOLECULAR MARKERS

9:15 a.m. - 11:15 a.m.

Room C141/C143/C149 (Level 1)

Poster Viewing

9:15-10:00

Discussion

10:00-11:15

Chairing: J. Allinson, MRCP(UK), London, United Kingdom B.J. Make, MD, Denver, CO


203 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. van Es, S. Schokker, S. Been-Buck, W. Wiersema, T. Klemmeier-Boekholt, W. Jacobs, Groningen, Netherlands, p.A1114

204 Effect of a 3-Month Low-Dose Azithromycin Intervention for COPD Exacerbations Requiring Hospitalization on Subsequent Respiratory Events and Mortality - The BACE Trial/W. Janssens, K. Vermeersch, T. Troosters, G.G. Brusselle, Leuven, Belgium, p.A1115


206 Patients in Clinical Trials on COPD Triple Therapy Compared to Real World Populations/R. Buhl, C.-P. Criée, P. Kardos, K. Berschneider, V. Obermoser, C. Vogelmeier, H. Worth, Mainz, Germany, p.A1117


812 Lung Inflammation in ARDS Is Correlated with Heterogeneity of Aeration/K. Hibbert, T. Winkler, V.J. Kelly, M.F. Vidal Melo, J.G. Venegas, E. Bajwa, R.S. Harris, B.T. Thompson, Boston, MA, p.A1146


818 Predicting Safe Liberation from Venovenous Extracorporeal Membrane Oxygenation in Patients with Severe Acute Respiratory Distress Syndrome/A.A. Al-Fares, E. Fan, N.D. Ferguson, M. Cypel, S. Keshavjee, L. Del Sorbo, Toronto, Canada, p.A1152


824 Decreased Survival and Increased Oxygen-Mediated Lung Injury in Mice Lacking Nrf2: Protection by Beta-Naphthoflavone/D. Callaway, W. Jiang, K. Lingappan, B. Moorthy, Houston, TX, p.A1158


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RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A26 ENVIRONMENTAL MODIFIERS OF LUNG DISEASE
9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN

Trinity Ballroom 5-7 (Level 3)

Abstract Summaries
9:15-9:45

Viewing/Discussion
9:45-11:15

Chairing:
L.S. Van Winkle, PhD, Davis, CA
E. Brigham, MD, MHS, Baltimore, MD
K.H. Bartlett, PhD, Vancouver, Canada

1001 Gender-Disparities in the Age of Diagnosis and Environmental and Biological Risk Factors of Tuberculosis in India/N. Kumar, J. Sinha, D. Jayaweera, M. Mirsaeidi, Miami, FL, p.A1160


Burden and Risk Factors for Severe Human Metapneumovirus Disease in Children from a Developing Country Setting/I. Esteban, R. Libster, S. Covello, E. Bergel, F.P. Polack, Buenos Aires, Argentina, p.A1186

Clinical Manifestations of Parainfluenza Virus Type 4 in Hospitalized Children in South Korea: A Large-Scale and Comparative Study to Parainfluenza Types 1-3/Y. Sun, Incheon, Korea, Republic of, p.A1187


Human Metapneumovirus Among Young Children with Severe Pneumonia in Africa and Asia: Findings from the Pneumonia Etiology Research for Child Health (PERCH) Case-Control Study/R. Miyakawa, M. Knoll, Baltimore, MD, p.A1191


Platelet Activation as an Early Biomarker for Prediction of Bacteremia in Emergency Department Pediatric Patients/I. Jankauskaite, E. Tamelyte, G. Vaičkauskienė, T. Lapinskas, Kaunas, Lithuania, p.A1195


Utilization of Procalcitonin as a Diagnostic Biomarker of Pediatric Ventilator-Associated Pneumonia in Patients with Congenital Heart Disease Following Cardiac Surgery/F.J.L. Dago-oc, Quezon City, Philippines, p.A1199


Exposure to RSV in Late Pregnancy Increases RSV-Induced Cord Blood IFN-γ and Decreases Risk of Subsequent RSV-LRIs/R. Nenna, D.A. Stern, A. Spangenberg, T.F. Carr, A.L. Wright, F.D. Martinez, M.J. Halonen, Tucson, AZ, p.A7299

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

9:15 a.m. - 11:15 a.m.

A28 BACTERIAL AND VIRAL LUNG INFECTIONS AND PATHOGENESIS

9:15 a.m. - 11:15 a.m. Ballroom A Four (Level 2)

Abstract Summaries
9:15-9:45

Viewing/Discussion
9:45-11:15

Chairs:
A.E. Samarasinghe, PhD, Memphis, TN
J.P. Mizgerd, ScD, ATSF, Boston, MA
C. Steele, PhD, New Orleans, LA


302 Inducible Epithelial Resistance Prevents CD8+ T Cell-Dependent Lethal Immunopathology Following Respiratory Viral Infections/S. Wall, D. Goldblatt, J.R. Flores Gonzalez, M.J. Tuvin, B.F. Dickey, S.E. Evans, Houston, TX, p.A1202


Neutrophils-Released SOCS3 Rectifies Phenotype of SOCS3-Deletion in Lung Epithelial Cells Facilitating Influenza Replication/X. Su, L. Li, H. Wu, Q. Li, K. Xu, Shanghai, China, p.A1207


Dela Cruz, L. K. Sharma, New Haven, CT, p.A7300

Lung Infection with Influenza Viral Infection/Wargo, B. T. Suratt, Burlington, VT, p.A1224

Lung Environment in Murine Obesity Models/L. K. Sharma, New Haven, CT, p.A1224


Purified Beta-Glucan from the Lentinus Edodes Mushroom Attenuates Antibiotic Resistant Klebsiella Pneumoniae-Induced Pulmonary Sepsis/W. F. Laffey, N. Rowan, Galway, Ireland, p.A1222


Chitinase 3 Like 1 Protein Promotes Host Tolerance During Influenza Pneumonia/J. P. Mizgerd, K. Traber, L. J. Quinton, Boston, MA, p.A1221


Chitinase 3 Like 1 Protein Promotes Host Tolerance During Lung Infection with Influenza Viral Infection/A. P. Rebaza, C. Dela Cruz, L. K. Sharma, New Haven, CT, p.A7300

702 Local Delivery of NOX4 Antisense Oligonucleotides Ameliorate Inhalation of Lung Spheroid Cell-Secretome and Exosomes Established Fibrosis in a Bleomycin-Induced Model of IPF/C. Zhao, J.R. Crosby, D. Bai, M. Zhang, A. Bell, A.R. MacLeod, S. Guo, Carlbad, CA, p.A1226


704 Repurposing an Opioid Receptor Antagonist as a Treatment for Idiopathic Pulmonary Fibrosis/D. Soundararajan, S.K. Madala, A. Jegga, Cincinnati, OH, p.A1228

705 Increased Flux Through the Mevalonate Pathway Mediates CD 36 Promotes Lung Fibrosis in Response to Oxidized Reducing Protein Cysteine Oxidation by Coordinate Action of Oxidoreductases Reverses Existing Increases in Lung Injury and Fibrotic Remodeling/Phospholipids: Role of Lung Macrophages?/G.M. Mutlu, Chicago, IL, p.A1241


715 Peptidylarginine Deiminase 4 Contributes to the Profibrotic Phenotype of Fibroblasts from Patients with Idiopathic Pulmonary Fibrosis and Promotes Experimental Pulmonary Fibrosis/A.J. Esposito, S. Chu, S. Poli De Frias, B. Sun, T.J. Doyle, S.Y. El-Chemaly, M.A. Perrella, I.-C. Ho, K. Tsioyi, I.O. Rosas, Boston, MA, p.A1239

716 Regulator of Cell Cycle (RCC1) Protects from Pulmonary Fibrosis/S.P. Atamas, V. Rus, H. Rus, V. Lockatell, N.W. Todd, I.G. Luzina, Baltimore, MD, p.A1240

717 Alveolar Epithelial Fgr2 Signaling is Required for Recovery from Bleomycin-Induced Injury/R. Guzy, S. Dorry, A. Meliton, D. Ornitz, G.M. Mutlu, Chicago, IL, p.A1241


A30 WHAT'S NEW IN INTERVENTIONAL PULMONARY AND PLEURAL DISEASE

9:15 a.m. - 11:15 a.m. KBHCCD

Abstract Summaries 9:15-9:45
Viewing/Discussion 9:45-11:15

Chairing:
J. Puchalski, MD, MEd, New Haven, CT
C. Ghattas, MD, Columbus, OH
D.J. Feller-Kopman, MD, Baltimore, MD


041 Malignant Pleural Effusion Readmission Burden in the United States/C. Di Felice, R. Masroujeh, S. Al-Kindi, R. Hejal, B. Young, Cleveland, OH, p.A1248


043 Microbiome Profile Associations in Malignant Pleural Effusion/S. Shojaaee, A. Sharma, N. Gottell, T. Sanchez, J. Gilbert, N. Rahman, Richmond, VA, p.A1249


045 The Significance of TNF-a /TNFR2 Pathway on Human Treg Cells in Malignant Pleural Effusion/L. Ye, Q. Zhou, Wuhan, China, p.A1251


055 First in Human Evaluation of a Novel Monopolar Radiofrequency Electrosurgical Device for Cutting and Coagulation of Central Airway Obstruction/B. Benn, M. Lum, G. Krishna, Orange, CA, p.A1261


057 Transbronchial Lung Cryobiopsy and Forceps Lung Transbronchial Biopsy in Malignant Disease: Same Difference?/ I.J. Mantano Furcada, B.E. Massimino, R.S. Castro Acurra, G. Svetcila, Buenos Aires, Argentina, p.A1263


A31  ASTHMA: CLINICAL STUDIES I

9:15 a.m. - 4:15 p.m.  KBHCCD
Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session.
Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.
Facilitator: P. Akuthota, MD, La Jolla, CA

P655 Dupilumab in Severe Asthma: A Real-Life Cohort in France/C.
Dupin, L. Guilleminault, P. Bonniaud, A.-S. Gamez, C. Leroyer, G.
Mahay, F. De Blay, S. Fry, G. Le Bourdelles, A. Proust, L. Rosencher,
D. Belhadi, P. Berger, A. Dider, A. Bourdin, C. Chenivesse, G. Garcia,

P656 Effect of Pre-Seasonal Use of Omalizumab on Fall Asthma
Exacerbations in School-Age Children Using a US Claims
Database/N.A. Hanania, J. Fang, B. Ortiz, L. Alves, X. Jaumont,
A. Kavati, H. Tian, H. Cao, Houston, TX, p.A1268

P657 Oral Corticosteroids Use Patterns in Asthma GINA Steps 4 and
5 Patients in a US Commercially Insured Population/N.A.
Hanania, J. Fang, P. Altman, B. Ortiz, L. Alves, L. Zhou, H. Cao,
Houston, TX, p.A1269

P658 Effect of Reversibility and Eosinophils on Lung Function
Improvement with Omalizumab Treatment: Pooled Analyses in
Patients with Moderate or Severe Allergic Asthma/T.B. Casale,
B.E. Chippa, T. Haselkorn, A. Iqbal, B. Yoo, B. Ortiz, B.Q. Lanier,
C. Castaneda, A. Papi, A. Bourdin, P. Galié, P. Pinot, D.J. Bratton,
E.R. Bleecker, J.L. Marder, J.V. Fahy, New York, NY, p.A1270

P659 Response Rate Improvement and Systemic Corticosteroid
Burden Reduction with Intravenous (IV) Resilizumab in a
Subgroup of Asthma Patients with GINA 4/5 Severity and >=2
Clinical Asthma Exacerbations (CAEs) in the Prior 12
Months/M. Wechsler, L. Hickey, M.C. Garin, A. Chauhan, Denver,
CO, p.A1271

P660 Assessment of Response to Anti-IL-5 Monoclonal Antibodies in a
Tertiary Care Centre: A Real-Life Study/S. Tran, J. L’Archeveque, I.
Coman, A. Cartier, C. Lemiere, Montreal, Canada, p.A1272

P661 Real-World Effectiveness of Mepolizumab in an Academic
Asthma Clinic/P. Sharma, C.A. Vitari, M. Tuft, S.E. Wenzel,
Pittsburgh, PA, p.A1273

P662 Efficacy of Mepolizumab in Patients with Severe Eosinophilic
Asthma by Age of Asthma Onset: Meta-Analysis of Two Phase
III Trials/F.C. Albers, N.A. Hanania, M. Kraft, D.J. Bratton, E.
Bradford, S.G. Smith, C.M. Prazma, G. Brusselle, Research
Triangle Park, NC, p.A1274

P663 Type 2 Biomarkers and Eosinophil Activation in Severe
Asthma and the Impact of Mepolizumab/P. Howarth, S. Quirce,
A. Papi, E. Israel, S. Mallett, S. Bates, F.C. Albers, N. Kwon,
Brentford, United Kingdom, p.A1275

P664 The Effectiveness of Combination Therapy of Severe Asthma
by Tiotropium with ICS/LABA in Patients with Cold Airway
Hyperresponsiveness/J.M. Perelman, A.B. Pirgov, A.G.
Prikhodko, D.A. Gassan, Blagoveshchensk, Russian Federation,
p.A1276

P665 The Efficacy of the Combination Indacaterol/Glycopyrronium/
Mometasone Furoate Is Independent of Time of Dosing in
Patients with Asthma/J. Beier, H. Watz, V. Scholz, Z. Diamant,
J.M. Hohlfeld, D. Singh, P. Pinot, K. Lheritier, A. Sarkar, H.C.
Tillmann, Wiesbaden, Germany, p.A1277

P666 A Cumulative Dose (1440 µg) Study to Evaluate the Efficacy,
PK, Extrapolmonary PD, and Safety of Albuterol Sulfate MDI in
Co-Suspension Delivery Technology (AS MDI; PT007) in
Patients with Asthma/A. Maes, C. Cappelletti, K. Rossman, M.

P667 Health Related, Cross-Sectional, Case Control, Drug Utilization
Surveillance Study on Home Nebulization in Bronchial Asthma
(H R A A Study)/D. Casale, S. Bendre, K. Korukonda, Noida,
India, p.A1279

Facilitator: J.K. Kolls, MD, New Orleans, LA

P668 Impaired Glucose Metabolism Is Associated with Asthma
Severity in the Severe Asthma Research Program-3 (SARP-3)
Cohort/M.C. Peters, M. Schieblere, E.R. Bleecker, M. Castro,
S.C. Erzurum, A.T. Hastie, B.D. Levy, J.C. Cardet, E. Israel, B. Phillips,
D. Mauger, M.W. Johannson, S.E. Wenzel, N.N. Jarjour, J.V. Fahy,
San Francisco, CA, p.A1280

P669 Ceramide as a Key Player in Obesity Exacerbated Asthma/J.L.
Sturgill, M. Khosravi, J. Allegood, S. Spiegel, Lexington, KY,
p.A1281

P670 Gastroesophageal Reflux predicts Asthma Exacerbations in
Obese Asthmatics/A. Ghinea, D. Chhabra, A. Shah, F. Chung,
E.R. Bleecker, A.M. Fitzpatrick, M. Castro, S.E. Wenzel, B.M.
Gaston, E. Israel, W.G. Teague, W.C. Moore, S.P. Peters, N.N.

P671 Association of sIL1RA Levels with Lung Function in Asthma
and Divergence with World Trade Center Related Lower
Respiratory Symptoms/N. Dumus, Y. Zhang, K. Doo, G. Grunig,
M. Cotrina-Vidal, Y. Shao, J. Reibman, New York, NY, p.A1283

P672 Evaluation of Blood Eosinophil Measurements Between Local
and Central Laboratories/M. Bafadhel, C. Holweg, A. Iqbal, A.
Chai, B. Yoo, N.N. Jarjour, Oxford, United Kingdom, p.A1284

P673 L-Arginine Intervention in Severe Asthma Patients/S.Y. Liao,
S. Linderholm, C. Kivler, L. Franzi, M. Showalter, Y. Li, L. Qi, O.
Diamant, J.M. Hohlfeld, H. Watz, V. Scholz, Z. Diamant, J.M.
Hohlfeld, D. Singh, P. Pinot, K. Lheritier, A. Sarkar, H.C.
Tillmann, Wiesbaden, Germany, p.A1277

P674 Characterization of Asthma-COPD Overlap in an Asthma
Cohort/Z. Lipkin-Moore, J. Gomez, G. Chupp, New Haven, CT,
p.A1285

P675 Impact of Intrinsic and Extrinsic Factors on the Variability of
Blood Eosinophil Levels in Asthma/J. Beier, H. Watz, V. Scholz,
Z. Diamant, J.M. Hohlfeld, D. Singh, P. Pinot, K. Lheritier, A.
Sarkar, H.C. Tillmann, Wiesbaden, Germany, p.A1277

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P702 The Pharmacokinetics and Relative Bioavailability of Mepolizumab 100 mg Liquid Formulation Administered Subcutaneously to Healthy Participants: A Randomized Trial/S. Shabbir, I. Pouliquen, J.H. Bentley, E.S. Bradford, M.C. Kaisermann, M. Albayat, Stevenage, United Kingdom, p.A1311


Facilitator: S.E. Wenzel, MD, ATSF, Pittsburgh, PA


P707 Pharmacokinetics, Safety and Tolerability of Single Doses of Budesonide Delivered by AKITA® JET and Conventional Nebulizer in Healthy Adult Volunteers and Patients with Asthma/G. Burgess, M. Huyghe, B. Mullinger, S. Snape, Chippenham, United Kingdom, p.A1316


P709 Reduced Prescriptions of Salbutamol in Patients Initiated on Fluticasone Furoate/Vilanterol (FF/Vi) Compared with Continuing Usual Care (UC) in the Asthma Salford Lung Study (SLS Asthma)/H. Svedsater, L. Jacques, D. Powell, J. Lay-Flurrie, S. Collier, Brentford, United Kingdom, p.A1318

P710 A Dose Ranging Study of Albuterol Sulfate MDI in Co-Suspension Delivery Technology (AS MD); PT007 in Patients with Asthma/C. Cappelletti, A. Maes, K. Rossman, E.M. Kerwin, C. Reisner, Durham, NC, p.A1319


P715 The Effectiveness of Anti-Inflammatory Therapy in Severe Asthma in Patients with Cold Airway Hyperresponsiveness/J.M. Perel, A.B. Pirogov, A.G. Prikhodko, D.A. Gassan, V.P. Kolosov, Blagoveshchensk, Russian Federation, p.A1324


Facilitator: J.W. Upham, MD, PhD, Woolloongabba, Australia


P718 pH Measurements in Induced Sputum of Asthmatics and Healthy Volunteers: Association with Markers of Airways Inflammation/N.E. Alexis, D. Goodfriend, H. Wells, C. Ways, Chapel Hill, NC, p.A1327


P721 The Effects of Bronchial Thermoplasty Procedure on Patient’s Asthma Control Test and Anxiety Level/A. Alismail, K. Sutzko, A. Yanez, R. Ramirez, L. Tan, Loma Linda, CA, p.A1330
P7 Flipping the Pulmonary Physiology Script Resident Education/J.P. Needleman, M.G. Marcus, M. Mendiratta, I. Walker-Descartes, Brooklyn, NY, p.A1353

P8 Development of a Facilitator-Actor-Based Communication Curriculum to Enhance House Officer’s Ability to Deliver Serious News/M.P. Mendez, N. Houchens, P. Choi, J.J. Osterholzer, Ann Arbor, MI, p.A1354

P9 Implementation of a Facilitator-Actor-Based Communication Curriculum to Enhance Pulmonary and Critical Care Fellow's Skill at Delivering Serious News/M.P. Mendez, J.J. Osterholzer, P. Choi, J.I. McSparron, Ann Arbor, MI, p.A1355

Facilitator: G.W. Garrison, MD, Burlington, VT

P10 Respiratory Failure Simulation Curriculum: a Novel Approach to Improving Resident Education and Performance as a Member of a Rapid Response Team/N.R. Fox, T. Ferguson, J. Walker, C.B. Strange, Charleston, SC, p.A1356


P15 Development of a Faculty Training Program in Point of Care Ultrasound/C. Baston, N.H. Ahmed, A.A. Wani, M. Kreider, L. Bellini, Philadelphia, PA, p.A1361


Facilitator: M.M. Hayes, MD, Boston, MA

P19 Validation of the EAST-IST Within Internal Medicine Subspecialty Fellowship Programs/H.D. White, B.A.A. White, S.A. Ghamande, A.J. Hayek, C. Patel, A. Shakespeare, A.C. Arroliga, Temple, TX, p.A1365

P20 Enriching Career Development Through Implementation of a Peer-Mentoring Program Within the Pulmonary and Critical Care Fellowship/B. Graney, T.J. Huie, A. Neumeier, Aurora, CO, p.A1366


P25 A Review of 9400 Pulmonologists’ Online Patient Reviews/N. Shaffer, E. Smith, N. Franks, San Antonio, TX, p.A1371

P26 Impact of On-Line Medical Education for Pulmonologists and Allergists/Clinical Immunologists on the Management of COPD/T. Lambert, Wilmslow, United Kingdom, p.A1372

BEHAVIORAL
THEMATIC POSTER SESSION
A34 SCREENING, DIAGNOSIS, AND TREATMENT IN SLEEP DISORDERS
9:15 a.m. - 4:15 p.m.
Area K (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: V. Krishnan, MD, MHS, ATSF, Cleveland, OH

P1197 Lung Function and Subjective Sleep Disturbance in a General Community Sample/A.L. Koch, N.M. Punjabi, Baltimore, MD, p.A1373


P1199 The Predictive Value of BOAH Scale Among Patients of Sleep Disorders Clinic/A. Gabryelska, L. Mokros, G. Kardas, M. Niedzielski, M. Panek, P. Kuna, R.L. Riha, P. Bialasiewicz, Lodz, Poland, p.A1375


**CLINICAL**

**THEMATIC POSTER SESSION**

**A35**  INTERVENTIONAL PULMONOLOGY

9:15 a.m. - 4:15 p.m.  KBHCCD

**Area D (Hall F, Level 2)**

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: W.A. Bulman, MD, New York, NY

M. Ikura, MD, PhD, Tokyo, Japan

P429  Safety of Percutaneous Dilatation Tracheostomy (PDT) with Concomitant Antiplatelet and Anticoagulation Therapy: Single Center Experience/M. Sierra, F. Kheir, J. Beattie, A.C. Chee, M.S. Parikh, A. Majid, Boston, MA, p.A1391


P431  Diagnostic Utility of Medical Thoracoscopy in Spontaneous Pneumothorax/B. Prasad, Bangalore, India, p.A1393

P432  “Neutral Needle Please!” - How Empowering Endoscopy Staff Decreased Our EBUS Scope Damages by $72,730 a Year/J. Crossan, S. Kalluri, P. Reister-Morris, Y. Sangwan, E.S. Edell, Salisbury, MD, p.A1394


P435  The Sensitivity of Parameters of Pulmonary Function Tests and Flow-Volume Loop Findings in the Diagnosis of Upper Airway Obstruction/V. Jain, S. Kumar, A. Bhardwaj, H.S. Hira, New Delhi, India, p.A1397


Facilitator: S. Benzaquen, MD, ATSF, Cincinnati, OH


P441 Outcomes in Patients Undergoing Thoracentesis with Concomitant Anti-Platelet Therapy/J. Klooster, T.D. Koster, M. van Dijk, D.-J. Slebos, Groningen, Netherlands, p.A1404


P447 Use of a Novel Non-Invasive Ventilation Unit in Patients with Excessive Dynamic Airway Collapse/E. Backer, Lebanon, NH, p.A1409


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A36 RARE LUNG DISEASES FROM BENCH TO BEDSIDE

9:15 a.m. - 4:15 p.m. KBHCCD

Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: W.A. Bulman, MD, New York, NY
M. Ikura, MD, PhD, Tokyo, Japa


P452 Single Center Experience of Lung transplantation for Lymphangioleiomyomatosis/J. Zhang, Wuxi, China, p.A1413


P455 Change of Pulmonary Function Test in Patients with Tuberculous Sclerosis Complex - Lymphangioleiomyomatosis (TSC-LAM)/L.-C. Chen, Y.-W. Kuo, P.-H. Kuo, H.-D. Wu, H.-C. Wang, Taipei City, Taiwan, p.A1416


Facilitator: A.S. Kristof, MD, Montreal, Canada


P459 Exosomes Released from Lymphangioleiomyomatosis-Derived Smooth Muscle-Like Cells Mediate Endothelial Cell Apoptosis and Vascular Network Disruption/M. Ho, M. Ho, L. Julian, W. Stanford, D.J. Stewart, Ottawa, Canada, p.A1420

P460 Mast Cell Recruitment in Lymphangioleiomyomatosis and Lung Cystic Destruction; Opportunities for Drug Repurposing/R. Babaie Jadidi, A. Dongre, D. Clements, S. Miller, S. Johnson, Nottingham, United Kingdom, p.A1421
P461  Association Between Clinicopathologic Characteristics and BRAFV600E Expression in Chinese Patients with Langerhans Cell Histiocytosis/H. Huang, T. Lu, S. Li, Y. Sun, R. Feng, Z. Xu, Beijing, China, p.A1422


P466  Targeting AKT as a Therapeutic Intervention in Treatment of LAM/K. Medepalli, S. Purdon, R. Choi, P. Catanuto, D.J. Kwiatkowski, S. Elliot, M.K. Glassberg Csete, Miami, FL, p.A1427


P178  Diverse Clinical Features of Interstitial Lung Disease in Patients with the Anti-SSA-52 kD Myositis-Associated Autoantibody/A. Sclafani, E. Miloslavsky, A. Sharma, S. Montesi, Boston, MA, p.A1431


P181  Combined Pulmonary and Rheumatology Clinics Improve the Care of Patients with Interstitial Lung Diseases/K. Rawal, I. Azuelos, C. Pineau, D. Assayag, Montreal, Canada, p.A1434


P186  The Place of Respiratory Manifestations During Scleroderma in Dakar: A Multicentric Study/F.B.R. Mbaye, K. Thiam, M.F. Cissé, Y. Dia Kane, N.O. Touré, Dakar, Senegal, p.A1439


P194 The Design and Rationale of the Trial Trial: A Randomized Double-Blind Phase II Clinical Trial of Pirfenidone in Rheumatoid Arthritis-Associated Interstitial Lung Disease/J. Solomon, Denver, CO, p.A1447

CLINICAL

THEMATIC POSTER SESSION

A38 IDIOPATHIC INTERSTITIAL PNEUMONIA: DIAGNOSIS AND NATURAL HISTORY

9:15 a.m. - 4:15 p.m. KBHCCD Area B (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: R. Raj, MD, Palo Alto, CA A. Suzuki, MD, Nagoya, Japan


P206 A Single-Center Prospective Cohort Study of Diagnostic Procedure of Interstitial Pneumonia in Clinical Setting; The Importance of Distinguishing Chronic Hypersensitivity Pneumonitis from Idiopathic Pulmonary Fibrosis/M. Ishizuka, Y. Inoue, T. Honda, Y. Miyazaki, Tokyo, Japan, p.A1459

Facilitator: M.L. Salisbury, MD, Ann Arbor, MI

P207 Changes in Lung Histopathology from Diagnosis to Transplant in IPF Patients/A. Unterman, B. Pertzov, N. Kaminski, M.R. Kramer, New Haven, CT, p.A1460


P209 Clinical Significance of Serum Adiponectin for Patients with Pulmonary Fibrosis/Y. Fujiki, Tochigi Prefecture, Japan, p.A1462


P211 Squamous Cell Carcinoma in Patients with Interstitial Lung Disease Using Exhalative Breath Markers/E. Krauss, M. Brinkmeier, W. Seeger, F. Drakopanagiotakis, A. Guenther, Giessen, Germany, p.A1464

P212 Diagnosis of Interstitial Lung Diseases Using Exhalative Breath Markers/E. Krauss, M. Brinkmeier, W. Seeger, F. Drakopanagiotakis, A. Guenther, Giessen, Germany, p.A1464

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Amiodarone in Nodular Interstitial Lung Disease/T. Phanthok, C. Duran, V.S. Taskar, Augusta, GA, p.A1493

Facilitator: V.G. Esguerra, MD, Columbus, OH

Enasidenib Causing Differentiation Syndrome and Pulmonary Facilitator: D. Wu, New York, NY, p.A1494

Amiodarone in Nodular Interstitial Lung Disease/T. Phanthok, C. Duran, V.S. Taskar, Augusta, GA, p.A1493

Facilitator: V.G. Esguerra, MD, Columbus, OH

Enasidenib Causing Differentiation Syndrome and Pulmonary Complications in a Patient with Acute Myeloid Leukemia/A. Abdullah, C. Tsai, Danville, PA, p.A1494


A Unique Case of Narcan-Induced Pulmonary Hemorrhage/S.M. Nanavati, G. Melki, V. Kumar, A. Sharif, P. Michael, A. Shaaraan, Paterson, NJ, p.A1496

Pulmonary Arterial Dissection: Survival of Surgical Repair in the Setting of Chronic Pulmonary Hypertension/A. Garcia, A.S. Friedenberg, D. Ogden, San Jose, CA, p.A1497

Mammalian Target of Rapamycin (mTOR) Inhibitor Induced Pulmonary Alveolar Proteinosis/J. Liu, K.J. Goh, T.H. Ong, T. Kee, A. Takano, D. Anantham, Singapore, Singapore, p.A1498

Dyspnea and Dry Eyes After Pembrozilumab/A.M. Shioleno, X. Wu, New York, NY, p.A1499

Yet Another Pulmonary Complication of TNF Inhibitor/D. Sharma, D. El Sayegh, Staten Island, NY, p.A1500

Pazopanib-Induced Pneumonitis: A Case Report/A. Alshami, A.S. Museedi, S.R. Surani, J. Varon, K. Heyne, Houston, TX, p.A1501

DRESS Syndrome Without Eosinophilia and Tuberculosis Treatment/C. Bernal, Lima, Peru, p.A1502


Iplilimab Pneumonitis Treated with Infliximab/K. Lai, V.R. Shannon, L. Bashoura, S.A. Faiz, Houston, TX, p.A1505

Facilitator: C.D. Onofrei, MD, MS, Denver, CO

Two Cases of Daptomycin-Induced Acute Eosinophilic Pneumonia/M. Ghani, H. Hashemi, M. Behere, Bronx, NY, p.A1506

Yttrium-90 Radioembolization of Hepatocellular Carcinoma Resulting in Radiation Pneumonitis in a Patient with Low Lung Shunt Fraction/R. Israel, A. Sarwar, D.M. Beach, Boston, MA, p.A1507


Delayed Onset Trastuzumab Induced Pneumonitis/A. Mirrakhimov, A.I. Saeed, Albuquerque, NM, p.A1509


Dasatinib Induced Chylothorax/A. Ghauri, M.H. Iftikhar, A. Alratroot, H. Laird-Fick, East Lansing, MI, p.A1511

Paclitaxel Induced Diffuse Interstitial Pneumonitis: A Case Report/N.A. Siddiqui, R. Arora, R.C. Holladay, Shreveport, LA, p.A1512


Gastrointestinal Angiodysplasia and Ambrisentan/A. Munir, J.D. Parekh, A. Wells, M.J. Sanley, Omaha, NE, p.A1514


Nitrofurantoin Toxicity: A Near Case of Mistaken Identity/ J. Miskoff, M. Chaudhri, Neptune, NJ, p.A1517

Infliximab Associated Shrinking Lung Syndrome/J. Krishnan, B. Hayward, New York, NY, p.A1518

### CLINICAL

#### THEMATIC POSTER SESSION

**A40 INFLAMMATORY DPLDs CASE REPORTS**

**9:15 a.m. - 4:15 p.m.**

**Area D (Hall F, Level 2)**

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitators:** B. Shea, MD, Providence, RI M. Akgun, MD, Erzurum, Turkey

**P507** Rituximab for Stabilization of Fibrotic Hypersensitivity Pneumonitis in a Patient with Continued Antigen Exposure/E. Blackstock, C.E. Come, E.Y. Kim, Boston, MA, p.A1519

**P520** Idiopathic Chronic Eosinophilic Pneumonia with Bilateral Eosinophilic Effusions: A Unique Presentation of a Rare Disease/R.M. Davis, R.M. Dunn, W.P. Tillis, Peoria, IL, p.A1520

**P521** Breathing a Sigh of Relief: A Case of Refractory Non-Specific Interstitial Pneumonia Responsive to Rituximab/J. Lenka, N. Sharma, T.J. Sheppard, Rochester, NY, p.A1521


Benzodiazepine Use and Clinical Outcomes Among Adult Outpatients with Chronic Obstructive Pulmonary Disease: A Retrospective Cohort Study/N. Tentoni, A. Ferraris, F. Angriman, B.L. Ferreyro, J. Maritano Furcada, D. Giunta, Buenos Aires, Argentina, p.A1584

Comparison of Weekend and Weekday Physical Activity Patterns in Chronic Obstructive Pulmonary Disease (COPD) and Non-COPD Participants by Daily Activity Level/N. Locantore, R.P. Bowler, M. Marschall, S. Chen, Y. An, M. Allinder, D. Mohan, Collegeville, PA, p.A1585

Blood Eosinophil Counts in Patients with Marked FEV1 Reversibility and Fixed Airflow Obstruction/S. Riley, R. Al-Lehebi, S. Gurupatham, E. Grbac, M.B. Stanbrook, Toronto, Canada, p.A1586

Correlation of Oxidative Stress and Antioxidant Enzymes with Mortality in Critically Ill Mechanical Ventilated Patients/R. Guleria, S. Arora, P. Tiwari, A. Mohan, M. Kalaivani, New Delhi, India, p.A1587


HIV Infected Patients with Chronic Respiratory Symptoms Should Be Proactively Screened for Chronic Obstructive Pulmonary Disease, Results from a Cross Sectional Study/A. Ddungu, B. Kirenga, F. Semitala, B. Castelnuovo, C. Sekaggya-Wiltshire, W. Worodria, Kampala, Uganda, p.A1589


P168 Preclinical Manifestations of Atherosclerosis in the Carotid Arteries and Cardiovascular Dysfunction in Smokers and During the Early Stages of Chronic Obstructive Pulmonary Disease/N. Vera, E. Kondrashova, D. Bogdanov, E. Shestopalov, Vladivostok, Russian Federation, p.A1604


P171 Clinical Significance of COPD as a Risk Factor for Community-Acquired Pneumonia (CAP) and Healthcare-Associated Pneumonia (HCAP)/S. Teramoto, M. Ishida, T. Ichiwata, Tokyo, Japan, p.A1607

P172 Prevalence of COPD Outpatient Based on COPD Diagnostic Questionnaire and Spirometry in Persahabatan General Hospital in Jakarta/R. Ratnawati, Y.M. Kolewora, F. Yunus, A.D. Susanto, E. Samoedro, Jakarta, Indonesia, p.A1608


P30 Comparing Heated High Flow Nasal Cannula vs. Conventional Modalities When Exubating Patients with Active Cancer and Advanced Liver Failure/N. Iannazzio, M. Kult, S. Steele, K.J. Diab, Indianapolis, IN, p.A1611

P31 Recruitment Maneuver During Non-Invasive Ventilation in Coronary Artery Bypass Grafting Patients: Effect on Cost of Oxygen Supplementation/C. Fu, Sao Paulo, Brazil, p.A1612


P36 Introduction of an NIV Retrieval Team into a District General Hospital/V. Lewis, H. Jones, L. Ward, S. Fairbairn, Newport, United Kingdom, p.A1617

P37 Predicting Non-Invasive Ventilation Failure in Severe Acute Respiratory Distress Syndrome/S. Harabaglia, M.J. Junqueira, Pueblo, CO, p.A1618


Facilitators: D. Brodie, MD, New York, NY
A. Abbasi, MD, Providence, RI


Early Corticosteroid Use in Influenza Pneumonia Related Acute Respiratory Distress Syndrome Treated with Extracorporeal Membrane Oxygenation: A Retrospective Cohort Study/Y.-S. Chien, C.-Y. Chien, J.-Y. Li, Taipei City, Taiwan, p.A1625


Establishing a New Extracorporeal Membrane Oxygenation Program at a Tertiary Referral Academic Medical Center: A Qualitative Review/V. Schims, J. Wells, D.L. Hotchin, Portland, OR, p.A1627


Association of Serum Cytokine Levels with Mortality in Patients with ARDS on ECMO Support/E. Gupta, K. Carey, N. Cavarocchi, H. Hirose, M. Baram, Philadelphia, PA, p.A1629


Lung Ultrasound for Aeration Assessment in Patients with Acute Respiratory Distress Syndrome Treated with Extracorporeal Membrane Oxygenation (ECMO)/Z. Zhang, M. Li, D. Liu, W. Chen, G. Cui, P. Li, X. Zhang, C. Wang, Q. Zhan, Beijing, China, p.A1632


Characteristics of Patients Receiving Invasive Mechanical Ventilation for Fewer than Four Days and for More than Four Days/P. Formanek, F. Laghi, C. Joyce, M. Afshar, Maywood, IL, p.A1635


BMI as an Indicator of Outcome in ICU Patient with Acute Respiratory Failure/S.S. Salameh, A. Targovnik, B. Puello, K. Foster, A. Aboeed, Bakersfield, CA, p.A1638

Relationship of Fluid Balance on Outcomes in Patients with Severe Obesity Presenting with Respiratory Failure/N. Miller, B. Digiovine, E. Calvo Ayala, Detroit, MI, p.A1639

Impact of Body Mass Index on Acute Respiratory Distress Syndrome Outcomes in Large Urban Teaching Hospitals/A. Karambelkar, G.S. Martin, A.M. Esper, Atlanta, GA, p.A1640


Attending-Patient Familiarity and the Decision to Extubate Mechanically Ventilated Patients/A. Khan, J.A. Greenberg, Chicago, IL, p.A1642

Facilitators: G.B. Allen, MD, Burlington, VT
S. Sahetya, MD, Baltimore, MD


Effects of Support Pressure and PEEP on the Asynchrony Index Evaluated by Electrical Impedance Tomography in Mechanically Ventilated Critical Patients of a University Hospital/D. Arellano, R.A. Cornejo, M. Lazo, Santiago of Chile, Chile, p.A1645

A44 CRITICAL CARE: ONE THOUSAND AND ONE NIGHTS - NON-PULMONARY CRITICAL CARE

9:15 a.m. - 4:15 p.m. KBHCCD

A44 CRITICAL CARE: ONE THOUSAND AND ONE NIGHTS - NON-PULMONARY CRITICAL CARE

9:15 a.m. - 4:15 p.m. KBHCCD

Area A (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: B. Rochwerger, MD, MSCE, Hamilton, Canada
L. Munshi, MD, MSc, Toronto, Canada

P85 Are Arterial Catheters Effective Tools in the ICU? A Retrospective Analysis

P86 Safety of Bedside Percutaneous Tracheostomy in Liver Transplant Recipients

P76 Stress Index Predicts Alveolar Recruitment After a Lung Recruitment Maneuver

P77 A Dynamic Protocol Based, Multi Disciplinary Ventilator Management Strategy

P78 Comparing Driving Pressures in Airway Pressure Release Ventilation in Trauma Intensive Care Unit Patients

P79 A Retrospective Analysis to Estimate the Range of Driving Power

P80 Characteristics of the Ventilation Delivered Using Neurally Adjusted Ventilatory Assist in Critically Ill Children

P81 Maximal Recruitment Open Lung Ventilation in Acute Respiratory Distress Syndrome: The PHARLAP Trial

Discussion:

ATS 2019 • Dallas, TX
P91 Mortality Is Underestimated in Cirrhosis Patients with Acute on Chronic Liver Failure According to Physician Survey/S. Burke, A.C. Miller, S. Patolia, St. Louis, MO, p.A1670

P92 Hemophagocytic Lymphohistiocytosis (HLH) in the MICU: A Single Institution Cohort Study on Mortality and Liver Failure/N. Al Nasrallah, C.R. Sears, Indianapolis, IN, p.A1671

Facilitators: D.W. Ford, MD, Charleston, SC
J.M. Dianti, MD, Caba, Argentina

P93 A Novel Multidisciplinary Approach - Medical Intensive Liver Unit (MILU)/A. Kapoor, Cleveland, OH, p.A1672


P101 Plasmatic Sodium Behaviour During the Recovery of Renal Function in Critically Ill Adult Patients/N. Angeloni, F.D. Masevicius, Buenos Aires, Argentina, p.A1680


P103 Predictors of Suppressive Wave Form on Electroencephalogram in Intensive Care Unit Patients with Encephalopathy/T. Kohal, B. Balakrishnan, J.H. Jennings, Detroit, MI, p.A1682

Facilitators: P.M. Dodek, MD, Vancouver, Canada
B.L. Ferreyro, MD, Toronto, Canada

P104 Predictors of SubClinical Seizures on Electroencephalograms in Intensive Care Unit Patients with Encephalopathy/T. Kohal, B. Balakrishnan, J.H. Jennings, Detroit, MI, p.A1683

P105 Patterns and Significance of Abnormal Liver Function Test in Decompensated Diabetes Mellitus/R. Ogunti, A. Awan, H. Yaqoob, P. Wessly, K. Binu, M. Munawwar, B. Ahmad, Y. Gebrekidan, V. Kodadhalah, V. Poddar, Washington, DC, p.A1684


P111 Serum Estradiol Concentrations in Male Subjects with Cirrhosis and Critical Illness/G.B. Pereira, J. Barney, Birmingham, AL, p.A1690

P112 Perils of Long-Term Follow-Up of Patients with Life-Threatening, Inhalation-Induced Synthetic Cannabinoids-Associated Coagulopathy in Chicago, Illinois/M. Tole, S. LaBedz, I. Rubinstein, Chicago, IL, p.A1691

P113 Impact of Insurance Type on Undergoing Chemotherapy and Radiation in Lung Cancer Patients Receiving Care at the NCI Designated Cancer Center in New Mexico/A. Wright, E. Sheehan, A.I. Saeed, F. Qeadan, L. Statler, Albuquerque, NM, p.A1692


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A45 CRITICAL CARE: OF MICE AND MEN - INSIGHTS FROM EXPERIMENTAL AND ANIMAL MODELS IN ARDS AND SEPSIS

9:15 a.m. - 4:15 p.m. KBHCCD
Area A (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: H. Zhang, MD, PhD, Toronto, Canada
J.K. Juss, MD, PhD, Toronto, Canada


Tumor Necrosis Factor Soluble Receptor Treatment Improves Survival with B. Anthracis Cell Wall Peptidoglycan Challenge in Rats/X. Cui, Y. Li, J. Shiloach, J. Sun, D. Suffredini, L. Margoles, Y. Fitz, P. Eichacker, Bethesda, MD, p.A1697


Sepsis-Induced Multiorgan Dysfunction Rapidly Progresses in Male Sheep than in Female Sheep/K. Liu, Y. Niimi, S. Fukuda, T. Baljinnym, D.S. Prough, P. Enkhaatbar, Galveston, TX, p.A1699

Characterization of Murine Delivery of Aerosolized Therapeutics/E. S. Halstead, T.M. Umstead, Hershey, PA, p.A1700

Respiratory Epithelial Cell Transcriptomics to Identify Endotypes in Pediatric ARDS/B. M. Varisco, J. G. Williams, R. Joshi, R. Jones, L. Benken, Cincinnati, OH, p.A1701


Characterization of Microparticle Gasdermin-D in Patients in the Medical Intensive Care Unit/E. Homsy, P. Consiglio, S. Das, H. Nagaraja, M.D. Wewers, M.C. Exline, A. Sarkar, Columbus, OH, p.A1705


Airway Epithelial Hepcidin Coordinates Pulmonary Macrophage and Local Iron Against Bacterial Pneumonia/Q. Chen, Y. Yang, C. Zeng, S. Yang, S. Song, S. Liu, X. Fang, Q. Shu, Hangzhou, China, p.A7311

CRITICAL CARE CASE REPORTS: ACID BASE, ELECTROLYTES, ENDOCRINE, METABOLIC AND RENAL

A46 Critical Care Case Reports: Acid Base, Electrolytes, Endocrine, Metabolic and Renal

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: C.M. Hendrickson, MD, MPH, San Francisco, CA

P937 Nivolumab-Induced Hypophysitis/M. Reaven, W. Bender, C. Swenson, Atlanta, GA, p.A1707


P939 Not Your Textbook Thyroid Storm: Paradoxical Beta Blocker Decompensation Masking Unusual Cardiac Manifestations/A. Ramanui, Columbus, OH, p.A1709

P940 A Case of Thyroid Storm with Ventricular Fibrillation Arrest/N. Jiwa, Waterbury, CT, p.A1710

P941 SubClinical Hypothyroidism with Myxedema Symptoms/R. Russo, E. Brume, A. Shawkat, R. Dean, Syracuse, NY, p.A1711

P942 Thyroid Storm Presenting with Multiorgan Failure and Severe Lactic Acidosis/J. D. Price, K. El-Kersh, Louisville, KY, p.A1712

P943 In the “I” of the Storm: Thyroid Storm Induced by Iodine Contrast in Thyrotoxicosis/M. Kauth, A. Sheikh, L. Hinkle, Indianapolis, IN, p.A1713

P944 ROSC with Methylprednisolone: A Case of Cardiac Arrest Due to Myxedema/H. Yousaf, C. Allen, D. Roma, Savannah, GA, p.A1714

P945 The Domino(Side) Effect: Steroid Induced Ketosis Post Rapid Decompensation Masking Unusual Cardiac Manifestations/A. Almalouf, Mobile, AL, p.A1715

P946 The Domino(Side) Effect: Steroid Induced Ketosis Post Rapid Decompensation Masking Unusual Cardiac Manifestations/A. Almalouf, Mobile, AL, p.A1715

P947 Early Use of Continuous Renal Replacement Therapy (CRRT) for Septic Shock in an End-Stage Renal Disease (ESRD) Patient/H.-I. Liao, K.A. Radigan, Chicago, IL, p.A1716

P948 Transcontinental Dialysis at 30,000 Feet/J. D. Price, K. El-Kersh, Louisville, KY, p.A1717

P949 The Critically Ill Patient with a Renal Transplant/I. Bronshteyn, D.J. Pearson, Dayton, OH, p.A1718

Facilitators: S. Beesley, MD, MSc, Salt Lake City, UT


Facilitators: P. Rall, MD, Philadelphia, PA
M. Urner, MD, Toronto, Canada


P990 A Rare Case of Tension Pneumocephalus Induced by High Prior Head Trauma/V. Kumar, R. Singh, A. Rahman, T.-H. Le, G. Khubair, M.L. Groth, Port Jefferson, NY, p.A1758


P992 Bending the Rules: A Case of ARDS in a Patient with Severe Scoliosis and Spina Bifida/D.M. Petrenko, D.R. Kalos, East Norriton, PA, p.A1760


P994 Necrotizing Autoimmune Myopathy Presenting with Acute Respiratory Failure: A Rare Case with a Rare Presentation/N.A. Khan, S. Khalid, S. Makhoul, Johnstown, PA, p.A1762

P995 Severe Perioperative Hypoxicemic Respiratory Failure/B. Daxon, Rochester, MN, p.A1763


P998 Sensitive Guard of the Airways-Larynx After Tooth Extraction/ E. Sherman, H. Grewal, A.I. Philip, Syracuse, NY, p.A1766

Facilitators: M. Damarla, MD, Baltimore, MD
K.A. Barrett, MD, MSc, Toronto, Canada

P999 A Case of Angiotensin-Converting Enzyme Inhibitor-Induced Angioedema Resolved with Icatibant in the Intensive Care Unit/R. Sehgal, R. Khan, Orlando, FL, p.A1767


P1001 Acute Respiratory Distress Syndrome Secondary to Probable Catastrophic Antiphospholipid Syndrome in a Patient with Elevated Anti-ß2 Glycoprotein I/II-A.D. Wilson, Norwalk, CT, p.A1769

P1002 Acute Hypercapnic Respiratory Failure in a Patient with Esophageal Adenocarcinoma/F. Figueroa Rodriguez, S. Savedchuk, M. Schloop, B.D. Dalal, Royal Oak, MI, p.A1770

P1003 Abrupt Respiratory Failure as Initial Presentation of Myasthenia Gravis Crisis/V. Correa, J.R. Vintch, M. Adler, Torrance, CA, p.A1771

P1004 Hyperacute Lung Rejection in Setting of Acceptable HLA-Crossmatching/M. Hopenfen, E.I. Matthaiou, A. Rogers, J. Hsu, Palo Alto, CA, p.A1772


P1036 When Mary Jane and Joe Camel Meet...Eosinophilic Sparks Are Born/J. Felzer, A.J. BoydKing, La Jolla, CA, p.A1803


P1040 The First Case of Orthostatic Hypotension Due to Bupropion Used in Smoking Cessation Treatment/X. Zhang, H. Chen, Chongqing, China, p.A1807


Facilitator: N.A. Assad, MD, Albuquerque, NM

P1042 Cannabis Induced Hemoptysis: A Rare Complication of a Commonly Used Illicit Substance Used in Smoking Cessation Treatment/C. Shams, B.D. Dalal, R. Mehdiniratta, G. Leammon, Royal Oak, MI, p.A1808


P1044 The Dangers of Dabbing: A Case of ARDS Following Inhalation of Vaporized Butane-Extracted Cannabis Product/K. Albrektson, R. Masroujeh, B.P. Young, Cleveland, OH, p.A1811

P1045 Occupational Polycaprolactone Inhalation Induced Acute Lung Injury/R. Findlay, R. Lyons, G.R. Zosky, Hobart, Australia, p.A1821


A50 MOLECULAR MECHANISMS OF ENVIRONMENTAL AND OCCUPATIONAL LUNG DISEASES

9:15 a.m. - 4:15 p.m. KBHCCD

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: J.R. Harkema, DVM, PhD, ATSF, East Lansing, MI


P1056 Males Are More Susceptible to the Somatic Effects of In Utero Exposure to Particulate Matter/S. Thaver, E. Bennett, L. Foa, S. Richards, B. Lyons, G.R. Zosky, Hobart, Australia, p.A1822


P1058 Ozone Reacts with Carbon Black to Produce Fulvic Acid-Like Substance Impacting Both Cell Iron Homeostasis and Biologic Effect/A.J. Ghio, J. Soukup, M. Madden, J. Bernts, D. Gonzalez, S. Paulson, Chapel Hill, NC, p.A1824

P1059 Deficiency of Interleukin-11 Receptor, Alpha Chain 1 Has No Effect on Ozone-Induced Lung Injury and Lung Inflammation/R.A. Johnston, C.L. Atkins, C.Y. Spencer, I.U. Haque, Morgantown, WV, p.A1825

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**THEMATIC POSTER SESSION**

**A51** PULMONARY HEALTH EFFECTS CAUSED BY OCCUPATIONAL EXPOSURES

**Area H (Hall F, Level 2)**

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion. 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** C.S. Glazer, MD, MSPH, Dallas, TX

**P1073** Inflammatory Effects of Silica and Iron Oxide Particulate Matter on Macrophages | L. Williams, S.G. Tristram, G.R. Zosky, Hobart, Australia | p.A1839 |
| Inhaled Engineered Zinc Oxide Nanoparticles Induce Acute Toxicity in the Lungs of Rats | P. Upadhyay, R. Abara, X. Luo, L.S. Van Winkle, K.E. Pinkerton, Davis, CA | p.A1840 |
| Sakuranetin, a Flavonoid Derived from Baccharis Retusa, Prevents Pulmonary Inflammation Induced by Air Pollution (Total Suspended Particles) in Mice | S.D.O. Santos, P. Melo, S. Grecco, C. Olivo, I. Tibeiro, M. Macchione, P. Saldiva, D. Estadella, M. Kubota, T. Escrobat, J. Lago, F. Santana, C. Prado, Santos, Brazil | p.A1843 |
| Fate of Barium Sulfate Nanoparticles Deposited in the Lungs of Rats | R.M. Molina, N. Konduru, P. Quieroz, B. Figueiroa, D. Fu, L. Ma-Hock, S. Groeters, D. Schaudien, J.D. Brain, Boston, MA | p.A1844 |
| Co-Exposure of Glyphosate with LPS Enhances Lung Inflammation in Mice | U. Pandher, S. Kiychuk, D. Schneberger, B. Thompson, G. Aulakh, B. Singh, R.S. Sethi, Saskatoon, Canada | p.A1845 |
P572 Communicating Pediatric Airway and Tracheostomy Status
P571 Length of Stay and Readmission Frequency for Infants with Nutritional Status in Pediatric Aerodigestive Referrals
P576 Potassium Levels After Albuterol Continuous Therapy in The Efficacy and Safety of Pulmonary Vasodilators in Pediatric Pulmonary Arterial Hypertension: A Systematic Review and Meta-Analysis/W. Huang, S. Tingting, C. Huaiqiao, Chongqing, China, p.A1877


Facilitator: L.C. Eldredge, MD, PhD, Seattle, WA

P580 Lentil Aspiration Causing Hypersensitivity Pneumonitis: Describing a Novel Antigen, Novel Entity?/N. Dhochak, K.R. Jat, R. Lodha, S. Kabra, Delhi, India, p.A1881
P581 Clinical Study by Tonifying Lung and Spleen, Phlegm and Dispelling Stasis Method in Treating Children with Bronchiolitis Obliterans/X. Zhang, G. Li, G. Li, Beijing, China, p.A1882
P582 Allergic Bronchopulmonary Aspergillosis in a Cohort of Pediatric Patients with Elevated IgE in a Referral Hospital in Colombia/E. Avila-Rojas, M. Villamil, C.E. Rodriguez-Martinez, S.M. Restrepo, Bogota, Colombia, p.A1883
P583 Associated Factors with Severe RSV, Adenovirus or Influenza Infections in Children Under 3 Years of Age in a Colombian Referral Hospital/M. Villamil, N. Aponte Barrios, S.M. Restrepo, C.E. Rodriguez-Martinez, Bogota, Colombia, p.A1884
P587 Outcomes of Pediatric Patients Discharged from a Multidisciplinary Pulmonary Hypertension Program/P. Lawrence, J. Huckabay, L. Guglani, Atlanta, GA, p.A1888

Facilitator: T.J. Moraes, MD, Toronto, Canada


A54 CASE REPORTS IN PULMONARY VASCULAR MEDICINE I


P810 Pulmonary Vein Stenosis with Exertional Hypoxemia/J. Untisz, M.J. Morris, San Antonio, TX, p.A1922


P812 A Case of Congenital Vascular Abnormality Resulting in Pulmonary Hypertension/R. Story, J.S. Smith, Columbus, OH, p.A1924

P813 Embolic Acute Myocardial Infarction in Young Adult with Congenital Heart Disease and Eisenmenger Syndrome/A. Chao, P. Chan, D. Shavelle, S. Ganesh, B. Yaghmour, Los Angeles, CA, p.A1925


P816 Cyanotic Congenital Heart Disease in Adulthood/T. Sharma, A. Aujla, N. Shah, N. Patel, J. Kluger, Hartford, CT, p.A1928

Facilitator: C. Kholdani, MD, Boston, MA


P819 High Out-Put Cardiac Failure Secondary to High Dose Prostacyclin Therapy for Pulmonary Hypertension/A. Syed, R.J. Schilz, R. Masroujeh, Cleveland, OH, p.A1931


P821 Diffuse Alveolar Hemorrhage Due to Acute Posterior Mitral Leaflet Prolapse/A. Shiari, A. Boshara, R. Franco, Detroit, MI, p.A1933

P822 A Rare Cause of Hemoptysis: Pulmonary Vein Stenosis Masquerading as Sarcoidosis with Airway Involvement/S. Kadura, H.S. Kim, P. LaCamera, Brighton, MA, p.A1934


P825 Case of Postural Orthostatic Tachycardia Syndrome with Oxygen Desaturation/F. Oza, T. Tariq, N. Saqib, P. Ochieng, Scranton, PA, p.A1937


Facilitator: W.H. Fares, MD, MS, New Haven, CT


P828 Single Atrium: A Rare Case of Late Presentation and Marked Right Ventricular Reverse Remodeling After Surgical Repair/ M. Hurstanovic-Kadic, K. El-Kersh, Louisville, KY, p.A1940

P829 Dissecting Aneurysm of the Pulmonary Artery Associated with Pulmonary Arterial Hypertension/C. Villaquiran-Torres, M.A. Rodriguez, Bogotá, Colombia, p.A1941


Pulmonary Tumor Embolism Accompanied by Stroke: An Infrequent Complication of a Rare Disease/M. Hamza, K. Mohamed Ahmed, M. Elilithi, M. Mustafa, A.J. Hericks, Sioux Falls, SD, p.A1945


A Case of High Output Cardiac State Exacerbated by Portopulmonary Hypertension Medications/A. Korwin, I. Singh, New Haven, CT, p.A1947


Death by Behcet: A Case of Pulmonary Artery Aneurysm Secondary to Active Behcet's Vasculitis/H. Bukiri, B. Mann, Seattle, WA, p.A1949


A Case of Pulmonary Hypertension and Undiagnosed Atrioventricular Canal in an Adult Patient/T. Campbell, L.C. Behlen, R. Wells, R. Sessums, Keesler AFB, MS, p.A1951

Pulmonary Hypertension in Right-Side Unilateral Pulmonary Artery Agenesia and Hypoplastic Lung/J. Edebrini, M. Mody, P. Patel, C. Migliore, G. Vivesvaran, T. Ogundare, Newark, NJ, p.A1952


Paradoxical Pulmonary Embolism Complicating an Aneurysmal Aortocaval and Aortoiliac Fistula/A.O. Olobatoke, M. Ehtesham, Southfield, MI, p.A1954


Facilitator: I.R. Preston, MD, Boston, MA

Right Ventricular Diverticulum in Scimitar Syndrome/J.C. Tang, A. Chao, B. Yaghmour, Los Angeles, CA, p.A1959

Preserving Fragile Balance: A Perpetual Quest/M. Johnston, M. Hooper, M. Eggert, Norfolk, VA, p.A1960


A Rare Case of Scimitar Syndrome Presenting as Hemoptysis in a Young Adult/D. Folt, C. Teba, R. Schilz, K. Ansari Gilani, Cleveland, OH, p.A1963


Against All Odds: A Case of Severe Pulmonary Hypertension Secondary to Concomitant PISZ Alpha-1-Antitrypsin Deficiency and Combined Pulmonary Fibrosis and Emphysema Successfully Treated with Intravenous Epoprostenol/N. Ruopp, N.C. Schoenberg, H.W. Farber, Boston, MA, p.A1965


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Facilitator: N. Al-Naamani, MD, MS, Philadelphia, PA

P864 Gamma Secretase Activating Protein is Necessary for Endothelial Dysfunction and Production of Cytotoxic Beta Amyloid During Bacterial Infection/M. Gwin, S.B. Voth, C.M. Francis, R. Balconz, T. Stevens, Mobile, AL, p.A1975

P865 Inhibition of Group V Phospholipase A2 (gVPLA2) Protects Lung Endothelium from Methicillin-Resistant Staph Aureus (MRSA) Induced Permeability/Y.M. Htwe, L. Meliton, S.M. Dudek, Chicago, IL, p.A1976


Facilitator: A.M. Andruska, MD, Stanford, CA


P885 Sleep-Disordered Breathing and Hypoxemia in Pulmonary Thromboendarterectomy Trends: Perspective from Rationale and Design of the Selexipag in Inoperable or Rapid Titration of Riociguat in Patients with Pulmonary Arterial Call for Attention: Hypoxia from Acute Pulmonary Facilitator Change in Pulmonary Hemodynamics in Patients with Acute Pulmonary Embolism in Patients with Acute Pulmonary Embolism Treated with Catheter Directed Intervention- a Meta-Analysis/A. Shujaat, J. Filopei, D. Steiger, New York, NY, p.A1995


Facilitator: J.M. Rodriguez-Lopez, MD, Boston, MA


P890 Rapid Titration of Ricoguatin in Patients with Pulmonary Arterial Hypertension and Chronic Thromboembolic Pulmonary Hypertension/S. Katta, Z. Safdar, S. Sahay, Houston, TX, p.A1999


Facilitator: F. Torres, MD, Dallas, TX

P897 Adherence to Diagnostic Guidelines for Suspected Pulmonary Embolism/L. Salmon, Y. Edwards, M. Majeed, Liverpool, United Kingdom, p.A2006


P899 A Survey of Precision Management and Research Capacity of Pulmonary Embolism in 90 Hospitals of China/D. Wang, X. Shao, J. Lei, Z. Zhai, Beijing, China, p.A2008


P902 Plasma TIMP-1 Is Increased in Chronic Thromboembolic Pulmonary Hypertension and Correlates with Pulmonary Vascular Resistance/P. Homma, P. Chiles, T. Fernandes, San Diego, CA, p.A2011

P903 Differences in Ventilation Inefficiency and Exercise Limitation in Patients with Chronic Thromboembolic Pulmonary Hypertension and Idiopathic Pulmonary Arterial Hypertension/J. Liu, Q. Xiao, J. Guo, L. Wang, Q. Zhao, S. Gong, Shanghai, China, p.A2012

P904 Cardiopulmonary Exercise Test in Pulmonary Embolism/J. Liu, J. Guo, P. Yuan, L. Wang, Q. Zhao, S. Gong, Shanghai, China, p.A2013

Facilitator: M.M. Chakinala, MD, Saint Louis, MO


CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A57 NTM: CASE REPORTS

9:15 a.m. - 4:15 p.m. 

Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: A. Basavaraj, MD, New York, NY

P622 The British Invasion: A Rare Case of Mycobacterium Malmoense Infection in a Landscaper/M. Young, J. Leap, C. Ledgerwood, A. Alhajhusain, Pittsburgh, PA, p.A2021


P625 Disseminated Mycobacterium Avium Complex Infection in a Patient with Anti-IFN-γ Autoantibodies/Y.-K. Yeh, C. Wei-Chih, Taipei, Taiwan, p.A2024

P626 Buried Beneath the Surface, Mycobacterium Xenopi Masking as Sarcoidosis/C. Onyemekwu, C. Gibson, Bronx, NY, p.A2025

P627 A Rare Nontuberculous Mycobacterial Infection in an Immunocompetent Patient/H. Ahmad, D.T. Tsukayama, R.S. Shapiro, Minneapolis, MN, p.A2026


Facilitator: C. Swenson, MD, Atlanta, GA


P630 More than Meets the Eye: Mycobacterium Avium Intracellulare (MAI) Lung Disease Due to an Eye Immunomodulator/W. Rodriguez, Y. Santos-Roman, A.N. Cordero, San Juan, Puerto Rico, p.A2029


P635 TB or Not TB but NTM - Mycobacterial Double Whammy/A. Cheema, S. Assaf, E.S. Guy, Houston, TX, p.A2034

Facilitator: K.A. Cohen, MD, Baltimore, MD

P636 Hold the Valve, a Challenging Case of Persistent Air Leak/Z. Zhang, G. Stroh, E.J. Cano, J. Skalski, Rochester, MN, p.A2035

P637 Lightning Does Strike Twice: Tigecycline-Induced Pancreatitis and Mycobacterium Abscessus/S. Raad, A.D. Betensley, Oklahoma City, OK, p.A2036

P638 A Peculiar Cause of Atypical Pneumonia/M.Z. Bitar, Y.A. Al-Ahwel, Cincinnati, OH, p.A2037

P639 A Rare Not so Typical Mixed Mycobacterial Infection with Mycobacterium Chimaera and Mycobacterium Abscessus/R. Parikh, P. Govender, Boston, MA, p.A2038

P640 Mycobacterium Chimaera: A Rare Presentation/J. Miskoff, M. Chaudhri, Neptune, NJ, p.A2039

P641 Case Study: Bronchiectasis Patient with Nontuberculous Mycobacteria, Improved Outcomes with Inhaled Nitric Oxide/K. Miller, J. Martins, B. McMullin, J.D. Road, C. Miller, Chicago, IL, p.A2040
A58 NTM: EPIDEMIOLOGY AND CLINICAL STUDIES

9:15 a.m. - 4:15 p.m. KBHCCD

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion.

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: T.R. Aksamit, MD, Rochester, MN


P648 Intercostal and Quadriceps Muscle Oxygenation During Exacerbation and Early Recovery in Chronic Obstructive Pulmonary Disease (COPD) Patients/T.K. Hsiai, Torrance, CA, p.A2053


P650 A Study of Non-Tuberculous Mycobacterial (NTM) Disease Among Tuberculosis Suspects at a Tertiary Care Center in North India/S.K. Sharma, R. Sharma, B.K. Singh, V. Upadhyay, I. Mani, Wardha, India, p.A2048

Facilitator: S.H. Kasperbauer, MD, Denver, CO


P654 Nontuberculous Mycobacterial Disease Diagnosis in the Era of Surveillance Chest CT Scan/O. Salamo, A.S. Calzadilla, G.E. Holt, M.A. Campos, M. Mirsaedi, Houston, TX, p.A2052
### P242 
**Cognitive Function Is More Impaired in Chronic Obstructive Pulmonary Disease Patients with Skeletal Muscle Dysfunction and Is Associated with Disturbances in Tryptophan Metabolism**/*C. Cruthirds, R.I. Harrykissoon, A.J. Zacharia, N.E.P. Deutz, M.P.K.J. Engelen, College Station, TX, p.A2058

### P243 
**The Mitochondrial Motility in Diaphragm and Quadriceps of COPD Rat Before and After Rehabilitation**/*S. Qumu, Beijing, China, p.A2059

### P244 
**Impaired Oxidative Phosphorylative Capacity in Skeletal Muscle of Patients Referred for Pulmonary Rehabilitation**/*P. T. Diaz, S. Smart, B. McCarthy, J. Drake, S. Raman, Columbus, OH, p.A2060

### P245 

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### P247 
**Exercise Capacity May Be More Strongly Associated with Health Status in Alpha-1 Antitrypsin COPD Patients than in Alpha-1 Antitrypsin Replete COPD Patients**/*E. Durkan, T. Carroll, N.M. Moyna, N.G. McElvaney, Dublin, Ireland, p.A2063

### P248 
**Recovery of Muscle Strength and Endurance after Hospitalization in Patients with Medical Illness**/*S. Baveja, B. Akpa, J. Ferris, J. Hecht, E. Heidel, R. Dhand, Knoxville, TN, p.A2064

### P249 
**Subjective Assessment of Perceived Activity and Weakness Score (PAWS) Correlates with Objective Assessments of Muscle Strength and Endurance in Patients Admitted to a Hospital with Medical Illness**/*S. Baveja, B. Akpa, J. Ferris, J. Hecht, E. Heidel, R. Dhand, Knoxville, TN, p.A2065

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### P251 
**Effects of Combined Exercise Training in Respiratory System Mechanical Properties and Inflammation in Rats with Hepatopulmonary Syndrome**/*E. Nascimento, W. Nunes, S. Costa-Silva, M. Roza, O. Nobrega, W. Machado-Silva, V. Amado, C. Melo-Silva, Brasilia, Brazil, p.A2067

### P252 
**Relation of Subjective Assessment of Perceived Activity and Weakness Score (PAWS) to Health Outcomes Up to 90 Days After Hospital Admission for a Medical Illness**/*B. Akpa, S. Baveja, J. Ferris, J. Hecht, E. Heidel, R. Dhand, Knoxville, TN, p.A2068

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### BASIC • TRANSLATIONAL

#### THEMATIC POSTER SESSION

**A60 LUNG INJURY, SEPSIS, AND ARDS**

**9:15 a.m. - 4:15 p.m.**

Area C (Hall F, Level 2)

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** B.D. Southern, MD, Cleveland, OH

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**P255** 

**P256** 
**Role of Antigen Processing and Presentation Pathway in Sepsis**/*L. Gao, E.Y.L. Liu, Baltimore, MD, p.A2071

**P257** 

**P258** 
**In Vitro Comparison of the Immunomodulatory Effects of Sevoflurane and Propofol in a Sepsis Model**/*T. Oliveira, C.L. Braga, P.L. Silva, P.R.M. Rocco, F.F. Cruz, Rio de Janeiro, Brazil, p.A2073

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**P260** 
**Anti-Aging Protein Klotho Modulates the Neutrophil Response to Mediators of Sepsis**/*C. Molina, P.G. Arndt, Minneapolis, MN, p.A2075

**P261** 

**P262** 

**P263** 
**Pulmonary Challenge Induces Age-Dependent Changes in Pancreatic Activity**/*E.J. Miller, K. Ochani, K. Lin, P. Wang, S.F. Liu, H.L.R. Rilo, Manhasset, NY, p.A2078


P267 Peptide Transporter 2 (PEPT2) Is Involved in the Transport of Ac-PGP in the Lung/S.W. Robison, J. Li, L. Viera, J.E. Blalock, X. Xu, A. Gagar, Birmingham, AL, p.A2082


P269 Dimethyl Fumarate Potently Inhibits Thioredoxin Reductase 1 and Enhances Nrf2-Dependent Responses in Murine Club Cells/T. Nicola, S. Wall, R. Li, W. Zhang, M. MacEwen, N. Ambalavanan, T.E. Tipple, Birmingham, AL, p.A2084

P270 Identification of the Ideal Mesenchymal Stem Cell Candidate to Treat Infection Induced Acute Respiratory Distress Syndrome In Vitro/L. Alvarado, L. Rodriguez, A. Mohammadi, L.C. Canic, B. Antebi, Ft. Sam Houston, TX, p.A2085

P271 Differential Protein Expression Profiles of Bronchoalveolar Lavage Fluid Following Lipopolysaccharide-Induced Direct and Indirect Lung Injury/X. Yue, J. Guidry, New Orleans, LA, p.A2086

P272 Comparison of Biological Properties and Therapeutic Potential of Human Mesenchymal Stem Cells Derived from Bone Marrow and Chorionic Villi in Naphthalene-Induced Lung Injury Model/S. Ji, C. Wu, Y. Song, Shanghai, China, p.A2087

P273 Ethyl Pyruvate Attenuates Ventilation-Induced Diaphragm Dysfunction Through High-Mobility Group Box-1 in a Murine Endotoxemia Model/L.-F. Li, L.-C. Chu, Taoyuan, Taiwan, p.A2088


P278 GAT107 Attenuates Hyperoxia-Induced Macrophage Dysfunction/ A. Gauthier, R. Sitapara, L. Mantell, Jamaica, NY, p.A2093

P279 The Study of BM-MSC in Regulating Function and Autophagy of Macrophages in Oxygen-Glucose Deprivation/Restoration Microenvironment/N. Wang, C. Bai, Shanghai, China, p.A2094

P280 The NLRP3 Inflammasome Is a Critical Mediator of Cell-Free Hemoglobin-Induced Acute Lung Inflammation/C.M. Shaver, S.R. Landstreet, S. Puganzleti, L.B. Ware, J.A. Bastarache, Nashville, TN, p.A2095

P281 Mechanisms of Human SP-B Genetic Variant Susceptibility and Sex Differences in Acute Lung Injury/G. Wang, J. Zhang, Y. Fengyong, F. Ruan, O. Abdel-Razek, Syracuse, NY, p.A2096


Facilitator: L. Mantell, MD, PhD, East Meadow, NY

P283 Hypercapnia Decreases Function and Plasma Membrane Abundance of Na,K-ATPase by Inducing Carbonylation of Its ß-Subunit in Alveolar Epithelial Cells/V. Kryvenko, W. Seeger, I. Vadasz, Giessen, Germany, p.A2098


P287 Downregulated Microrna-27b Attenuates Lipopolysaccharide-Induced Acute Lung Injury Via Activation of Nrf2 and Inhibition of NF-κB Signaling Pathways/G. Zhu, Y. Huang, L. Huang, W. Zhang, Z. Pei, Beijing, China, p.A2102

P288 Aging Causes Distinct Transcriptional and Epigenetic States in Pro-Resolving T Cells/B.D. Singer, K. Helmin, L. Morales-Nebreda, L. Niedernhofer, Chicago, IL, p.A2103


P290 Preconditioning in an Acute Respiratory Distress Syndrome-Like Milieu Augments the Immunomodulatory and Anti-Inflammatory Function of MSCS/L. Rodríguez, A. Mohammadi, R.M. Kamucheka, A. Asher, L. Alvarado, B. Antebi, L. Cancio, Ft. Sam Houston, TX, p.A2105
P301 Cyclophilin A as a Novel Mediator in Acute Lung Injury

P299 Club Cell Specific Heme Oxygenase-1 Deletion Does Not Alter Immunomodulation Properties of a Novel ß-Glucan Extract

P297 Detection of Mitochondrial Oxidative Phosphorylation Variants

P295 Lentivirus-Mediated Overexpression of Mitochondrial Aldehyde Dehydrogenase (ALDH2) in H441 Cells Protects Against Hyperoxia Induced Mitochondrial Dysfunction

P293 Role of UCHL1 in Radiation-Induced Lung Injury Mediated by Sphingolipids

P291 Endothelial Metabolic Profiling of Ventilation Associated Mechanical Stress

P304 Differential Impact of Co-Expressed SP-A1 and SP-A2 Protein on AM miRNome

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

A61 EPITHELIAL BIOLOGY

9:15 a.m. - 4:15 p.m.

Area C (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

Facilitator: K.M. Ridge, PhD, Chicago, IL

P306 Structural Composition and Signaling Pathways of Alveolar Epithelial TREK-1 Potassium Channels

P307 Negligible Telomere-Independent Effect of Telomerase on Alveolar Epithelial Cells

P308 Single-Cell RNA Sequencing of Aquaporin 5 (Aqp5)-Positive Epithelial Cells in Adult Mouse Lung Reveals Heterogeneity of Type I Cells and Facilitates Identification of Gprc5a as a Potential Novel Type I Cell Marker

P310 Widespread Sexual Dimorphism in the Transcriptome of Human Airway Epithelium in Response to Smoking

P311 Survival Mechanisms of Cells Following Chronic Expression of aberrantly Trafficked ABCA3 Mutant Proteins: An In Vitro Study

P312 Calorie Restriction Can Reverse Several of the Aging and HFD-Induced Changes in Lung Epithelial Stem Cells

P309 Delayed Increases in Hyaluronan Following Ozone Exposure Associates with Alveolar Type 2 Cell Proliferation

P303 Evidence of Keratin 5 Positive Distal Airway Epithelial Cell Expansion in a Nonhuman Primate Model of Bleomycin-Induced Lung Injury

P302 Glutaredoxin-1 Mediated S-Glutathionylation Attenuates Acute Lung Injury

Inhibition of Cyclin G-Associated Kinase (GAK) Impairs Growth of Alveolar Type 2 Cells in a 3-Dimensional Culture System/C.A. Bates, B. Zhao, A. Schlobohm, C. Asquith, W. Zuercher, C.E. Barkauskas, Durham, NC, p.A2125

Glucocorticoid-Driven Transcriptomes in Human Airway Epithelial Cells: Commonalities, Differences and Functional Insight from Cell Lines and Primary Cells/M.M. Mostafa, C.F. Rider, R. Newton, Calgary, Canada, p.A2126

Modulation of TMEM16B Channel Activity by the Calcium-Activated Chloride Channel Regulator 4 Suggests a Common Function for CLCA Proteins in Modifying TMEM16 Channels/T. Brett, M. Sala-Rabanal, K. Berry, D.F. Steinberg, C.G. Nichols, St. Louis, MO, p.A2127

Gymnotic Uptake of Oligonucleotides Alter MicroRNA Levels P318


Selecting Activation of Angiotensin Type 2 (AT2) Receptor Protects Alveolar Epithelial Cells Against Bleomycin-Induced Injury/R. Alcaraz, A. Shenoy, U. Steckelings, M. Katovich, C. Gowers, S. Janes, London, United Kingdom, p.A2134

HECT E3 Ubiquitin Ligase Smurf2 Regulates δ-Opioid Receptor Degradation in Lung Epithelial Cells/Y. Zhao, S. Dong, J. Liu, J. Zhao, Columbus, OH, p.A2135


Dynamin Related Protein 1-Mediated Mitochondrial Fission Regulates the Lung Epithelial Response to Allergen/S. Bruno, B. Korwin-Mihavics, A. Kumar, Z. Mark, B. Cunniff, V. Anathy, Burlington, VT, p.A2137

ATP-Citrate Lyase Controls Oxygen Consumption Rate and DNA Repair Responses in Alveolar Epithelial Cells/H. Shaghaghi, R. Para, D.J. Sales, F. Romero, R.S. Summer, Philadelphia, PA, p.A2138

Dexamethasone Induces Senescence in A549 Cells: Relevance to Pulmonary Fibrosis/R. Longhome, H.N. Wilkinson, M.J. Hardman, S. Hart, Cottingham, United Kingdom, p.A2139

Development of a Human in Vitro Model of Lung Epithelial Senescence Highlights the Cell-Type Specific Response to Telomere Dysfunction/D. Sullivan, M.G. Roth, J.K. Alder, Pittsburgh, PA, p.A2140


Unjamming and Energy Metabolism in the Epithelial Layer/S. DeCamp, N.C. Ogassavara, J.J. Fredberg, Boston, MA, p.A7322


Interleukin-6 Is Required for Neuregulin-1 Induced HER2 Signaling in Pulmonary Epithelial Cells/R. A.K. Sinha, S. Sumners, V. Shenoy, Clovis, CA, p.A7326

Hyperoxic Exposure Increases Senescence in Type II-Like Mouse Lung Epithelial Cells: Role of P53 Signaling/A. Scaffa, A. Schiavo, J.H. Finigan, J.A. Kern, Denver, CO, p.A7327


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A62 MUCUS, MUCINS, MUCOCILIARY UNIT IN LUNG DISEASE
9:15 a.m. - 4:15 p.m. KBHCCD
Area C (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: W.J. Janssen, MD, Denver, CO

P342 Deficiency of Autophagy Regulatory Proteins Increase Airway Epithelial Secretory Mucins MUC5AC and MUC5B/J.D. Dickinson, J. Sweeter, B.F. Dickey, S.L. Brody, Omaha, NE, p.A2143


P344 Chronic Alcohol Exposure Reduces Airway Secretory MUC5AC Levels in a Post-TRANSLATIONAL Fashion in Human Airway Epithelial Cells/R. Hooten, J. Sweeter, J.H. Sisson, J.D. Dickinson, Omaha, NE, p.A2145


Facilitator: C.M. Evans, PhD, Aurora, CO


P350 AC6 Regulates Microtubule-Depolymerizing Kinesin Kif19a for Ciliary Length Control in Mammals/K. Arora, Cincinnati, OH, p.A2151

Facilitator: W.J. Janssen, MD, Denver, CO


Facilitator: V. Kim, MD, ATSF, Philadelphia, PA

P354 Amphiregulin Potentiates Airway Inflammation and Mucushypersecretion Induced by Urban Particulate Matter Via the EGFR-P13Ka-AKT/ERK Pathway/J. Wang, M. Zhu, Y. Song, Shanghai, China, p.A2155

P355 Mucociliary Transport In Vitro: Effect of Mucin Concentration, Reducing Agents, and DNA on Rheological Properties and Transport Rate/L.E. Ostrowski, P.R. Sears, M. Markovetz, H. Gong, D.B. Hill, Chapel Hill, NC, p.A2156


P357 Syntaxin 3 Mediates Baseline Mucin Secretion/A.M. Estrella, E. Dobrinskikh, C.E. Hennessy, I.V. Yang, D.A. Schwartz, Aurora, CO, p.A2158

P358 Muc5b and Other Genes Predispose Mice to Lung Fibrosis/A.M. Estrella, E. Dobrinskikh, C.E. Hennessy, I.V. Yang, D.A. Schwartz, Aurora, CO, p.A2159

P359 The Proline-Rich Domain of p53 Protects from Mucin Gene Expression at Baseline and After Short-Term but Not Chronic Wood Smoke Exposures/D. Tassew, Y. Tesfaigzi, Albuquerque, NM, p.A2160

P360 Balancing the Immune Response in Cystic Fibrosis: Using Zebrafish Models of Inflammation to Uncover New Therapeutic Approaches/S.A. Renshaw, A. Floto, A. Bernut, Sheffield, United Kingdom, p.A2161


A63 P748 Calcium-Sensing Receptor Contributes to Hyperoxia-Induced Ambrosia Psilostachya Pollen Induces the Proliferative Benzbromarone Decreases Agonist-Induced MLC Extracellular Matrix Regulates Calcium Oscillations in Tracheal Smooth Muscle Relaxation Produced by Effect of Stretch on Hyaluronan Expression and Signaling in Developing Human Airway Smooth Muscle PathoPhySiology of Asthma in Cells, Tissues, and Animal Models

9:15 a.m. - 4:15 p.m. KBH CCD

Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: G. Ijpma, PhD, Montreal, Canada

P739 Preservation of Contractility after Cryopreservation of Isolated Airway Smooth Muscle


P740 The Elapsed Time Between Simulated Deep Inspirations on the Mechanics of Airway Smooth Muscle in Ovine Tracheal Strips

F. Khadangi, M. Gazzola, M. Clisson, J. Beaudoin, M.-A. Clavel, Y. Bossé, Quebec, Canada, p.A2161

P741 Effect of Stretch on Hyaluronan Expression and Signaling in Developing Human Airway Smooth Muscle


P742 Tracheal Smooth Muscle Relaxation Produced by Phosphodiesterase Inhibitors (Sildenafil and Ordonofil) Compared to That of Theophylline


P743 Extracellular Matrix Stiffness Regulates Force Transmission Pathways in Multicellular Ensembles of Human Airway Smooth Muscle Cells

S.R. Polio, S.E. Stasiak, R. Krishnan, H. Parameswaran, Boston, MA, p.A2164

P744 Extracellular Matrix Regulates Calcium Oscillations in Multicellular Ensembles of Airway Smooth Muscle Cells

S.E. Stasiak, H. Parameswaran, Boston, MA, p.A2165

Facilitator: A.A. Zeki, MD, Davis, CA

P745 Benzbromarone Decreases Agonist-Induced MLC Phosphorylation While Also Enhancing cAMP Signaling Pathways


P746 Proprotein Convertase PACE4 Modulates Basal Progenitor Cell Fate in IL-4-Stimulated Human Nasal Epithelial Cells


P747 Ambrosia Psilostachya Pollen Induces the Proliferative Secretory Phenotype of Airway Smooth Muscle Cells and Inhibits MicroRNA-106b-25 Expression

M.A. Ba, C. Adajar, C.A. Singer, Reno, NV, p.A2168

P748 Calcium-Sensing Receptor Contributes to Hyperoxia-Induced Enhancement of Calcium Regulation and Remodeling in Human Fetal Airway Smooth Muscle

A.M. Roesler, C.M. Pabelick, R. Martin, P. MacFarlane, Y.S. Prakash, Rochester, MN, p.A2169

P749 Statin Drug Lipophilicity Affects Airway Epithelial Distribution: Not All Statins Are Created Equal

A.A. Zeki, K. Chmiel, O. Fiehn, Davis, CA, p.A2170

P750 Differentiating Bronchial Epithelial Cells from Patients with Asthma Display Prolonged Repair and Delayed Barrier Formation


Facilitator: C.A. Singer, PhD, Reno, NV

P751 TNFα Increases Mitochondrial Biogenesis in Human Airway Smooth Muscle


P752 TNFα Induces Endoplasmic Reticulum Stress in Human Airway Smooth Muscle Cells


P753 Kisspeptins Expression and Function in Asthmatic Human Airway Smooth Muscle

N.A. Borkar, R.S.R. Kaidhindi, N.S. Ambhore, J. Loganathan, C.M. Pabelick, Y.S. Prakash, V. Sathish, Fargo, ND, p.A2174

P754 Smart Therapy: Why Is It Smart?


P755 Integrin Alpha2Beta1 Transmits Tension in Smooth Muscle via Interaction with Collagen and Laminin

S. Liu, D. Sheppard, A.B. Sundaram, San Francisco, CA, p.A2176

P756 Interleukin-17A and Transforming Growth Factor-β1 Dysregulate miR-25 Expression and Modulate Contractility in 3D-Printed Airway Rings


Facilitator: C.M. Pabelick, MD, Rochester, MN

P757 Proteostasis and Senescence in the Aging Lung

S.A. Wicher, A.M. Roesler, L. Manlove, B. Roos, Y.S. Prakash, C.M. Pabelick, Rochester, MN, p.A2178

P758 Oxygen Exposure and Circadian Biology in the Premature Developing Airway


P759 Hyperoxia-Induced Soluble Guanylyl Cyclase (sGC) Dysfunction in Developing Airway Involves the Calcium Sensing Receptor (CaSR)


P760 Intrauterine Growth Restriction Mediates an Inflammatory Phenotype in Offspring but Does Not Affect Airway Epithelial Tight Junction Expression


P761 Inhaled Budesonide Promotes Barrier Integrity In Vivo in a Mouse Model of Epithelial Barrier Disruption

S.N. Georas, J. Veazey, Rochester, NY, p.A2182

P762 The Bronchodilator and Nutraceutical Ginger Reduces Lung Inflammation in a Murine Asthma Model


P765 TMEM16A Inhibitors Decrease TMEM16A Expression and Goblet Cell Metaplasia in IL-13-Treated Guinea Pig Trachea In Vivo/M. Kondo, K. Hara, M. Tsuji, A. Kurokawa, K. Takeyama, E. Tagaya, Tokyo, Japan, p.A2186

P766 Airway Hyperresponsiveness in IL-33-Induced Asthma Model of Leptin-Deficient Obese Mice/A. Kurokawa, M. Kondo, K. Airmura, S. Ashino, K. Takeyama, E. Tagaya, Tokyo, Japan, p.A2187


P768 Receptor Specific Estrogen Signaling Regulates Extracellular Matrix Deposition in Human Airway Smooth Muscle Remodeling/N.S. Ambhore, R.S.R. Kaldhindi, C.M. Pabelick, Y.S. Prakash, V. Satish, Fargo, ND, p.A2189

Facilitator: M.G. Drake, MD, Portland, OR

P769 Effects of Repeat Acute Hypoxic Preconditioning (RAHP) on Blood Pressure During Allergen-Induced Airway Inflammation/J. Setzke, R. Song, O. Broytman, M. Teodorescu, Madison, WI, p.A2190

P770 The Therapeutic Effects of the Combination of Azithromycin and Fluticasone in an Equine Model of Neutrophilic Asthma/M. Mainguy-Seers, R. Boivin, P. Hélie, J.G. Martin, J.-P. Lavoie, St-Hyacinthe, Canada, p.A2191


P774 Mesenchymal Stem Cells Accelerate Epithelial Repair and Ameliorate Granulation in a Rat Model of Benign Tracheal Stenosis/S. Chen, Shanghai, China, p.A2195

Facilitator: J. Johnson, PhD, Birmingham, United Kingdom

P775 Testing the Antioxidant and Antiinflammatory Potential of Propolis and N-Acetylcysteine Combination/D. Zujovic, L. Sagic, K. Milosevic, Belgrade, Serbia, p.A2196


P778 Respiratory Biomarkers in Kcnq1-null Mice, A Model for Temporal Lobe Epilepsy/L. Netzel, J. Hallgren, K. Simeone, Omaha, NE, p.A2199

P779 Distinct Microbial Composition of Nasal Polyp in Chronic Rhinosinusitis/D.-Y. Kim, Seoul, Korea, Republic of, p.A2200

P780 Analyses of Factors Affecting Olfactory Dysfunction; Cognitive Function May Affect Olfactory Dysfunction More than Chronic Sinusitis/Z. Isobe, Fukaya, Japan, p.A2201

P781 Natural Components of Ginger Relax Airway Smooth Muscle Via Inhibition of Multiple Cell Signaling Events/E. Lukovic, Y. Zhang, C.W. Emala, New York, NY, p.A7334

A64 CLINICAL ASThma: ASSESSMENT AND Treatment

9:15 a.m. - 4:15 p.m. KBHCCD

Facilitator: T.M. Murphy, MD, Durham, NC

P783 Correlation Between Exercise-Induced Bronchoconstriction and Asthma Control/J.M. Perelman, L.G. Nakhamchen, A.G. Prikhodko, Blagoveshchensk, Russian Federation, p.A2202


P785 Assessing the Adequacy of the Evaluating Respiratory Symptoms in COPD Measure and Supplemental Asthma Items Among Patients with Moderate-to-Severe Asthma/R. von Maltzahn, L. Murray, H. Syrad, T. Howell, L. Lee, S. Pascoe, A. Fowler, L. Nelsen, Uxbridge, Middlesex, United Kingdom, p.A2204

P786 Pulmonary Therapeutic Bioequivalence of Wixela® Inhub® and Advair® Diskus® in Adults with Asthma/R. Allan, E.M. Kerwin, M.V. White, S.D. D. Miller, S. Haughe, J. Ward, D.W.H. Ng, Sandwich, United Kingdom, p.A2205


Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: T.M. Murphy, MD, Durham, NC

P788 Wixela® Inhala® Dry Powder Inhaler - In Vitro Performance Compared with Advar® Diskus® and Inhalation Profiles in Patients with Asthma or Chronic Obstructive Pulmonary Disease/A. Cooper, C. Newcomb, R. Wallace, K. Canham, J. Ward, R. Allan, M. Berry, J. Parker, E. Clift, Sandwich, United Kingdom, p.A2207

Facilitator: K.C.W. Wang, PhD, Crawley, Australia

P789 Equivalent Systemic Exposure to Fluticasone Propionate/Salmeterol Following Single Inhaled Doses of Advar® Diskus® and Wixelor Inhalers: Results of Three Pharmacokinetic Equivalence Studies/J.K. Ward, N. Wood, R. Allan, S. Haughe, Sandwich, United Kingdom, p.A2208


P792 Value and Safety of High Flow Oxygenation in the Treatment of Inpatient Asthma, a Randomized, Double-Blind, Clinical Trial/A. Fakharian, S. Raeisi, Tehran, Iran, Islamic Republic of, p.A2211


Facilitator: L. Wang, PhD, Vancouver, Canada


P796 Risk of Pulmonary Embolism in Patients with Asthma: A Meta-Analysis/S. Congrete, B. Boonpheng, Boston, MA, p.A2215


P798 Cardiorespiratory Responses to Exercise Differs in Children with Large and Small Airway Obstructive Disease/N. Selvadurai, B. Kennedy, E. Coward, S. Haggie, H. Selvadurai, Sydney, Australia, p.A2217


P800 The Relationship Between Bronchodilator Response and Gas Trapping in Patients with Asthma/N. Wiebe, M.H. Khan, K.R. Chapman, Vancouver, Canada, p.A2219

Facilitator: K.O. Tonga, MBChB, Sydney, Australia

P801 The Opening Index to Measure Airway Closure in Children and Adults with Asthma/J. Lang, E. McGuire, R. Henderson, J.T. Holbrook, Durham, NC, p.A2220

P802 Changes in Tidal Volume During Exercise Induced Bronchoconstriction (EIB) Could Explain the Post-Exercise Onset of Severe Constriction/T. Winkler, S.D. Anderson, Boston, MA, p.A2221


P806 Monitoring Asthma Control with Inhaled Corticosteroids (ICS) Using Airway Hyperresponsiveness (AHR) to Mannitol Compared to Routine Spirometry in a Pulmonary Function Laboratory (PFL)/C.D. Lake, K.K. Wong, J.D. Brannan, Camperdown, Australia, p.A7336

A65 OBESITY

9:15 a.m. - 4:15 p.m. KBHCCD

Area C (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: U. Peters, MSc, PhD, Burlington, VT


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A66 LYMPHANGIOLEIOMYOMATOSIS (LAM)

9:15 a.m. - 4:15 p.m. \* KBHCCD

Area C (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: V.P. Krymskaya, PhD, MBA, Philadelphia, PA

P370 Identification of Clinically Relevant Immunohistochemical Sub-Groups in the UK National Cohort of Lymphangioleiomyomatosis (LAM)/S. Miller, D. Clements, I. Soomro, I. Stewart, S.R. Johnson, Nottingham, United Kingdom, p.A2229

P371 Role of KISS1 Signaling in Pulmonary Lymphangioleiomyomatosis/R.S.R. Kalidhindi, N. De Fonseka, N.S. Ambhore, V.P. Krymskaya, V. Satish, Fargo, ND, p.A2230


P377 Diffusing Capacity of the Lung for Carbon Monoxide and Nitric Oxide in 5 to 80 Years-Old Healthy Subjects Residing at 2240 Meters of Altitude/E.A. Reyes, Mexico, Mexico, p.A2234


P379 Can Elevation Training Masks Provoke Venous Thromboembolism: Correlation, Causation or Just a Coincidence?/S. Borgan, Z. Yaqob, G. Yazigi, P.K. Gopal, Orlando, FL, p.A2236


BASIC • CLINICAL

THEMATIC POSTER SESSION

A68 NEW TECHNIQUES, METHODOLOGIES, AND MATHEMATICAL MODELING

9:15 a.m. - 4:15 p.m. \* KBHCCD

Area C (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: Y. Bosse, PhD, Quebec, Canada

P382 Towards Reproducible Whole Body Plethysmography Outcomes in Mice/A. Robichaud, S. Altmejd, P. Graham, Y. Bosse, Montreal, Canada, p.A2238


11:15-12:00P1216 Obstructive Sleep Apnea Prevalence in an Irish Hidradenitis Suppurativa Cohort/J. Meurling, A.S. Kelly, B. Kirby, J.F. Garvey, Dublin, Ireland, p.A2268

12:00-1:00P1217 Evaluation of the Sleep Quality of Medical Students and Its Relationship with Body Mass Index and Physical Activity Status/F. Rizzatti, O.R. Neto, J.A. Xavier, Sao Paulo, Brazil, p.A2269

A69 SRN: WHAT CAN WE LEARN FROM CLINICAL AND EPIDEMIOLOGICAL STUDIES IN SLEEP?

9:15 a.m. - 4:15 p.m. Area K (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: N. Simakajornboon, MD, Cincinnati, OH

P1218 To Study the Effect of Mobile (cell) Phone Usage with Sleep Quality in India/S. Sinha, K. Gupta, A. Tomer, S.K. Sharma, New Delhi, India, p.A2270


P1221 Do Patients with Suspected Sleep Apnea Have Increased Bronchoscopy Related Complications/J.M. Galvis, N. Borkhetaria, A. Niday, R. Cavallazzi, U.A. Gauhar, Louisville, KY, p.A2273


Facilitator: C. Lal, MD, ATSF, Charleston, SC


P1225 Pulmonary Care Utilization by Patients with Muscular Dystrophies/M.M. Rey, J.H. Hansen-Flaschen, D.A. Asch, Philadelphia, PA, p.A2277

P1226 Epidemiological, Clinical, ParaClinical and Evolutionary Aspects of Patients Followed for Obstructive Sleep Apnea Hypopnea Syndrome (OSAHs) in a Private Clinic of Cardiology in Dakar/F.B.R. Mbaye, N.O. Touré, K. Thiam, L. Chrif, Dakar, Senegal, p.A2278


P1229 Exercise Cardiac Power and Coronary Artery Disease Mortality Risk in Patients with Chronic Obstructive Pulmonary Disease (COPD) and Obstructive Sleep Apnea (OSA) Overlap Syndrome (OS)/M. Macrea, R.L. ZuWallack, T.J. Martin, K.A. Oursler, A. Malhotra, Salem, VA, p.A2281


P1233 Burn Pit Exposure in Military Personnel: Is There an Effect on Sleep-Disordered Breathing?/T. Powell, V. Mysliwiec, J. Aden, M.J. Morris, Fort Sam Houston, TX, p.A7340

A70 UNUSUAL PRESENTATIONS AND MIMICS: WHAT YOU SEE IS NOT ALWAYS WHAT YOU GET

9:15 a.m. - 4:15 p.m. KBHCCD
Area J (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion. 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: D.A. Arenberg, MD, Ann Arbor, MI

P1105

Unusual Case of Diffuse Cystic Lung Disease Due to Metastatic Choriocarcinoma/D. Baral, A.P. Maskey, Lexington, KY, p.A2284

P1106

Dare to Breathe: A Rare Cause of Rapidly Progressive Respiratory Failure in Lung Adenocarcinoma/J.T. Hua, Aurora, CO, p.A2285

P1107

More than Just a Cough: Gastric Adenocarcinoma Presenting with Septal Thickening and Bilateral Pleural Effusions/M.A. Saeed, B. Boer, Omaha, NE, p.A2286

P1108


P1109


P1110

Atypical Carcinoid of Thymus Presenting with Bone Marrow Involvement: A Challenging Case/A. Londono, J. Bell, E. Bondarsky, New York, NY, p.A2290

P1111

Linear Infiltrates: A Rare Presentation of MALT Lymphoma/B.A. Hirsh, M.J. Walker, V. Ciocca, S.A. Gregory, Wynnewood, PA, p.A2292

P1112

Primary Lung Adenocarcinoma with Miliary Pattern/M.O. Sillo, A. Thota, K. Manzoor, Boston, MA, p.A2294

P1113


P1114

Primary Lung Adenocarcinoma with Signet Ring Cells, Rare Subtype/F. Berhane, V. Kodadghala, A. Thomas, T.J. Naab, A. Ali, Washington, DC, p.A2295

P1115


P1116

Primary Adenocarcinoma of the Lung with Signet Ring Cells, Rare Subtype/F. Berhane, V. Kodadghala, A. Thomas, T.J. Naab, A. Ali, Washington, DC, p.A2295

P1117


P1118

Sarcomatoid Carcinoma of the Lung: A Rare and Unfortunate Disease/W. Grist, Y. Elamir, Jersey City, NJ, p.A2297

P1119


P1120

Unusual Presentation of AKI with Lung Nodule/A. Andrabi, M. Seth, P. Sundar, K. Quiusky, Pittsfield, MA, p.A2299

P1121


P1122


P1123


P1124

Think Twice: A Case of Lung Adenocarcinoma Mimicking Interstitial Lung Disease/D. Villafuerte, M.I. Velez, S.A. Habib, San Antonio, TX, p.A2303

P1125


P1126

Primary Pulmonary Hepatoid Adenocarcinoma with Normal Serum a-Fetoprotein Level: A Case Report and Review of the Literature/Y. Chen, Y.-C. Chien, Taipei, Taiwan, p.A2305

Facilitator: J.L. Bessich, MD, New York, NY

P1127

A Case of Unexplained Pulmonary Metastases: Adenoid Cystic Carcinoma/S. Pandya, L. Thomas, Kansas City, KS, p.A2306

P1128

A Rock-Solid Lung Mass: A Case of Rare Inflammatory Myofibroblastic Tumor with Challenging Diagnosis/P. King, S. Awadallah, M. Sahebazamani, Greenville, NC, p.A2307

P1129

Myelomatous Pleural Effusion: A Rare Clinical Entity/S. Hussain, S.H. Ijaz, T. Khan, Oklahoma City, OK, p.A2308

P1130

Metastatic Chondrosarcoma Mimicking Pulmonary Embolism/ A. Londono, J. Bell, E. Bondarsky, New York, NY, p.A2309

P1131

A Brewing Case of MALT Lymphoma: Primary Pulmonary Lymphoma Presenting as Cystic Lung Disease/J. Lau, R. Vassallo, Rochester, MN, p.A2310

P1132


P1133

Sarcoid Like Reaction Confounding the Diagnosis of Pulmonary Adenocarcinoma/N. Sirikonda, A. Ali, Mount Vernon, IL, p.A2312

P1134

Pulmonary Artery Intimal Sarcoma Mimicking Lung Cancer with Encasement of Pulmonary Vessels/Z.E. Jhang, S.-Y. Ho, Changhua City, Taiwan, p.A2313

P1135

A Rare Tumor: Inflammatory Myofibroblastic Tumor of the Lungs/J. Onwochei, O. Adekolu, Newark, NJ, p.A2314

P1136

CLINICAL

THEMATIC POSTER SESSION

A71 CASE REPORTS: WHEN IN DOUBT LOOK IN THE AIRWAY
9:15 a.m. - 4:15 p.m. KBHCCD
Area J (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: G. MacRosty, DO, Chapel Hill, NC

P1138 Endobronchial Choriocarcinoma Presenting with Hemoptysis Six Weeks After a Normal Vaginal Delivery: A Bronchoscopic Diagnostic Challenge/M. Sanchez Sierra, G. Ivashchuk, R. Arauco Brown, Weslaco, TX, p.A2316


P1140 Pulmonary Kaposi Sarcoma: Bronchoscopy and Imaging Findings/E. Josan, I. Lalani, S. Williams, M. Ayache, Cleveland, OH, p.A2318

P1141 Tumor Lysis Syndrome Occurring After Endobronchial Ultrasonography: A Novel Association/A. Kapoor, S. Patolia, St. Louis, MO, p.A2319


P1143 Endobronchial Mass Mimicry: A Rare Presentation of Prostate Cancer/H.S. Kim, J. Dewald, S. Kondratiev, D. Khemasuwan, Brighton, MA, p.A2321

P1144 Diagnosis of Hodgkin’s Lymphoma by Endobronchial Biopsy/C. Cunningham, P. Formanek, A. Goyal, Maywood, IL, p.A2322

P1145 A Rare Case of Small Cell Lung Cancer Presenting as Endobronchial Lesion/H. Hashim, A. Khan, M.P. Muthiah, S. Khan, Joplin, MO, p.A2323


P1147 A Rare Occurrence of Endobronchial Granular Cell Tumor/V. Srinivasan, W. Butt, K. Tandon, F. Wells, N.F. Dabage, Bradenton, FL, p.A2325

P1148 A Rare Case of Endobronchial Pyogenic Granuloma/M. Bajwa, Y. Usman, H. Youness, A. Awab, Oklahoma City, OK, p.A2326


BASIC • CLINICAL

THEMATIC POSTER SESSION

A72 ADVANCES IN INTERVENTIONAL PULMONARY
9:15 a.m. - 4:15 p.m. KBHCCD
Area J (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: J. Thompson, MD, Philadelphia, PA


P1152 Hemoptysis in a Cancer Patient/J.J. Grondin, A.L. Harris, G.E. Abraham, Jackson, MS, p.A2330

P1153 Post Obstructive Pneumonia as a Presentation of a Primary Bronchial Carcinoid Tumor: A Rare Diagnosis in a Young Adult/L.M. Villarrubia Ocasio, I.V. Lamboy-Hernandez, J.R. Aleman-Ortiz, Ponce, Puerto Rico, p.A2331


P1159 An Endobronchial Tumor in a Patient with Bilateral Axillary and Inguinal Lymph Nodes Enlargement/M.F. Shen, W.-C. Liao, Taichung, Taiwan, p.A2337


P1163 Review Analysis of Clinical Characteristics in 405 Lung Cancer Cases Patients Under 45 Years Old Diagnosed by Fiberoptic Bronchoscopy/T. Ma, Y. Hu, D. Qu, Changchun, China, p.A2340


P1166 The Relationship Between Sonographic Features of Lymph Nodes During Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration (EBUS-TBNA) and Pathology Result/A. Kiani, A. Abedini, M. Pourabdollah Tootkaboni, H. Mehravaran, F. Razavi, A. Kashefi-Zaehed, H. Emami, M. Kazempour-Dizaji, Tehran, Iran, Islamic Republic of, p.A2343

P1167 Diagnostic Yield of Electromagnetic Navigation Bronchoscopy (ENB) versus ENB with Endobronchial Ultrasound Radial Probe (EBUS-RP) Using Multiple Sampling Techniques in a Community Hospital Setting/L. Aljundi, A. Shiari, M. Zalt, Detroit, MI, p.A2344

P1168 Needle Aspiration in Conjunction with Radial Ultrasound-Guided Forceps Sampling: An Update on Safety and Diagnostic Yield/A. Chowdhury, P. Hanneman, K.J. Diab, Indianapolis, IN, p.A2345


P1178 Impact of Rapid Onsite Cytologic Evaluation with Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration: Community Based Teaching Hospital Experience/A. Arora, S. Shetty, K. Gunasekaran, M. Qiao, B. Alkinj, C. Winterbottom, J.S. Kwon, Bridgeport, CT, p.A2355

P1179 NSCLC Biobank Planning: Current Biopsy and Re-Biopsy Rates and Type at a Tertiary Cancer Centre/P.K. Coghlan, M.P. Kennedy, Cork, Ireland, p.A2356

P1180 Diagnostic Yield and Safety Profile of Cryobiopsy in Lung Pathologies/S.A. Arbat, A. Arbat, S. Bakamwar, Nagpur, India, p.A2357


P1183 Artificial Intelligence Improves Patient Outcomes for Diagnostics of Pulmonary Nodules During Navigational Bronchoscopy/K. Bhadra, Chattanooga, TN, p.A2360


P1185 Diagnostic Accuracy of Navigational Bronchoscopy for the Diagnosis of Solitary Pulmonary Nodules/O. Ashraf, R.D. Thirumala, M. Young, Pittsburgh, PA, p.A2362


WS1 TEACHING IN THE ICU PEARLS AND PITFALLS

Registration Fee: $75 (includes box lunch)
Attendance is limited. Pre-registration is required.

Assemblies on Critical Care; Behavioral Science and Health Services Research
11:45 a.m. - 1:15 p.m. KBHCCD
Room C144-C145 (Level 1)

Target Audience
Fellows and trainees

Objectives
At the conclusion of this session, the participant will be able to:
• integrate adult learning principles to future teaching sessions;
• apply strategies to give an effective large group lecture;
• implement effective approaches to teaching during bedside rounds in the intensive care unit.

During this session, participants will be divided into small groups of eight to ten members. The session will consist of three parts: a presentation of strategies from adult learning theory, a role-play scenario of a large group lecture followed by a small group debrief of the strengths and weaknesses, and a role-play scenario of a bedside rounds teaching session followed by a small group debrief of the strengths and weaknesses.

Chairing:
M. Sharp, MD, MHS, Baltimore, MD
S. Doyle, DO, MBA, Columbus, OH
G. Winter, MD, Cleveland, OH
P.H. Lenz, MD, MEd, Cincinnati, OH

11:45 Introduction
M. Sharp, MD, MHS, Baltimore, MD

11:50 Adult Learning Theory
G. Winter, MD, Cleveland, OH

12:00 Large Group Lecture Role Play
M.M.K.S. Khan, MD, MBBS, Cincinnati, OH

12:10 Role Play Small Group Debrief
D. Djondo, MD, Maywood, IL

12:25 Large Group Debrief
M. Sharp, MD, MHS, Baltimore, MD

12:33 Bedside Teaching Role Play
R. Holden, MD, Atlanta, GA

12:43 Bedside Rounds Small Group Debrief
S. Doyle, DO, MBA, Columbus, OH

12:58 Large Group Debrief
M. Sharp, MD, MHS, Baltimore, MD

1:08 Conclusion
M. Sharp, MD, MHS, Baltimore, MD

ATS 2019 • Dallas, TX

SUNDAY • MAY 19

ATS DIVERSITY FORUM
HYATT REGENCY DALLAS
Landmark Ballroom D (Lobby Level)

The annual ATS Diversity Forum focuses on diversity within the fields of pulmonary, critical care, and sleep medicine and research. Our speaker will be Marc Nivet, EVP of Institutional Advancement, University of Texas Southwestern Medical Center, Dallas, who will address career and diversity issues followed by a question and answer period.

The Minority Trainee Development Scholarships (MTDS), which recognize trainees who are members of underrepresented minority groups, will also be presented at this forum. MTDS recipients are selected for the quality of the science in their submitted abstract, among other criteria. At this Forum we will also recognize the recipient of the 2019 ATS Fellowship in Health Equality.

All conference attendees, including past MTDS recipients, are invited to attend this forum which provides an opportunity for discussion and networking. Attendees will find inspiration and valuable career insights.

The Diversity Forum is organized and presented by the ATS Membership Committee and will be hosted by its chair Janet Lee, MD. The scholarships will be presented by Yolanda Mageto, MD. The Minority Trainee Development Scholarships are supported by the American Thoracic Society.

Conference badges are required for admission. Space is limited and admittance is on a first-come, first-served basis. There is no additional fee. A plated lunch will be served.
WS2 ENHANCING GRANTSMANSHIP: UNDERSTANDING THE GRANT REVIEW PROCESS

Registration Fee: $75 (includes box lunch)
Attendance is limited. Pre-registration is required.

Assembly on Respiratory Structure and Function
11:45 a.m. - 1:15 p.m. KBHCCD Room D171/D173 (Level 1)

Target Audience
Any researcher interested in learning how grant proposals are evaluated

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

• learn about the NIH grant processing and review process and discover common pitfalls that lead to an unsuccessful application, and how to avoid those common mistakes;
• learn time management strategies for grant submissions. How to organize, plan and write your ideas;
• gain knowledge of critical scoring components of a successful grant proposal. How grants are evaluated, and what is the “formula” of successful applications.

Writing a strong, compelling and successful research grant and/or fellowship application is key for a successful career, especially for early stage Ph.Ds and clinical-scientists. Grant applications need to excel in innovation, significance and have a clear approach, but few early career professionals know what reviewers are looking for and how their proposals will be judged. Our workshop will feature highly experienced and internationally recognized investigators who will review, discuss and score two volunteered grant applications (NIH and international). After this mock study session, the workshop will conclude with a Q & A section for audience participation. The workshop aims to highlight the unseen dynamics of the review process and is modeled on previously successful grantsmanship workshops organized by the RSF in 2012 and 2014.

Chairing:
T.P. Cremona, MSc, PhD, Boston, MA
D.I. Kasahara, PhD, Boston, MA
J. Jaffar, BS, PhD, ATSF, Melbourne, Australia

11:45 Introduction
D.I. Kasahara, PhD, Boston, MA

11:50 NIH Grant Mechanisms: How a Proposal is Processed
J.J. Fredberg, PhD, Boston, MA

12:00 The International Perspective
J.K. Burgess, PhD, Groningen, Netherlands

12:15 Mock Study Section #1
B.B. Moore, PhD, ATSF, Ann Arbor, MI
S.J. Gunst, PhD, Indianapolis, IN
G.C. Sieck, PhD, Rochester, MN

12:45 Mock Study Section #2
V.P. Krymskaya, Philadelphia, PA
I. Petrache, MD, ATSF, Denver, CO
Y.S. Prakash, MD, PhD, Rochester, MN

CC1 PULMONARY CLINICAL CORE CURRICULUM I

11:45 a.m. - 1:15 p.m. KBHCCD Hall A (Level 2)

Target Audience
Practicing internists, subspecialists, registered nurses and advanced practice nurses 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:

• remain current with medical knowledge relevant to their practice in pulmonary, critical care, and sleep medicine;
• evaluate their understanding of key skills and content areas in pulmonary, critical care and sleep medicine, as well as receive feedback on their comprehension of a result of a pre-test/post-test comparison;
• support clinicians who are engaged in maintenance of certification activities by providing updates on subjects included in recertification requirements.

The ATS Clinical Core Curriculum Symposia focus on a 3-year content cycle of key medical content in the areas of Pulmonary, Critical Care, and Sleep Medicine. The topics are also aligned with corresponding MOC Medical Knowledge modules. This symposium is intended to assist clinicians with staying current with the growth of information relevant to their medical practice, as well as provide an opportunity to evaluate individual knowledge and skills while earning MOC Medical Knowledge points.

Chairing:
G.W. Garrison, MD, Burlington, VT
J.L. Cho, MD, Iowa City, IA

11:45 Emerging Therapies for COPD
T.Y. Beiko, MD, Charleston, SC

12:15 Preventing Readmission for COPD Exacerbations
N.J. Greening, MBBS, PhD, Leicester, United Kingdom

12:45 The Use of New Biologic Agents in Asthma
N. Lugogo, MD, Ann Arbor, MI

This session and the International Conference are supported by educational grants from Genentech, Inc., Novartis Pharmaceuticals Corporation, Sanofi Genzyme and Regeneron Pharmaceuticals.

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

L1 EXPOSOMICS AND RESPONSOMICS IN ENVIRONMENTAL PULMONARY HEALTH

12:15 p.m. - 1:15 p.m. KBHCCD Ballroom D Two (Level 3)
Target Audience
Clinicians, clinician scientists, basic research scientists, fellows and residents

Objectives
At the conclusion of this session, the participant will be able to:
• expand their knowledge on the environmental impacts on pulmonary health;
• gain new knowledge on the state of science in metabolomics technologies;
• understand Metabolomics profiles from body fluids and exhaled breath condensate and novel biomarkers evaluation.

Humans are exposed to multiple environmental agents simultaneously, this recognition led to developing a conceptual framework of “exposome” to define totality of environmental exposures throughout the life from conception. Exposomics assess the external and internal exposure through targeted and untargeted analyses. To gain comprehensive understanding on the impacts of exposure to environmental agents at the cellular level, i.e., Responsomics needs integration of diverse omics technologies- metabolomics, adductomics, genomics and epigenomics, etc. The research program supported by NIEHS over the past few years in these programs is providing a wholistic understanding that might have not been realized by following a set of targeted analysis or tools or exposure to one agent at a time. In this presentation, the concept of Exposome will be introduced and this will be followed by presentations that are utilizing metabolomics approaches to gain understanding in environmental pulmonary health - new players involved in the inflammatory response in adult asthmatics and risk prediction for lung cancer in current and prior smokers; and novel markers in the exhaled breath to detecting risk of new-onset asthma from air pollution exposures.

Chairing:
G. Collman, PhD, Research Triangle Park, NC
12:15 Introduction
G. Collman, PhD, Research Triangle Park, NC
12:20 The Exposome
G. Collman, PhD, Research Triangle Park, NC
12:37 Applications of Metabolomics in Respiratory Health
S. Sumner, PhD, Chapel Hill, NC
12:54 CawNO and CANO as Novel Exhaled Breath Markers for Detecting Respiratory Effects of Air Pollution Exposure
S.P. Eckel, PhD, Los Angeles, CA

PATIENT CENTERED OUTCOME RESEARCH INSTITUTE

L2 PCORI: EVIDENCE TO ACTION NETWORKS: UPDATE OF PATIENT CENTERED OUTCOME RESEARCH RESULTS
12:15 p.m. - 1:15 p.m. KBHCCD
Room C147/C148/C154 (Level 1)

Target Audience
Clinicians (physicians, nurses, fellows, residents), researchers, administrators and policymakers: anyone involved in delivery of care and the science of patient-centered research

Objectives
At the conclusion of this session, the participant will be able to:
• understand the role of the Patient-Centered Outcomes Research Institute in funding comparative effectiveness research;
• understand collaborative activities taking place through the Transitional Care and Asthma Evidence to Action Networks;
• learn about research results and interventions that improve patient health outcomes.

A PCORI official will introduce summaries of PCORI funded PCOR (patient-centered outcome research) projects in pulmonary, critical care and sleep disorders. PCORI officials will update attendees on the unique evidence to action network activities in asthma and transition of care and discuss the potential implications of the results of the funded studies on research and practice. PCORI funded researcher will give researcher perspective for their experience. The purpose of the session will be to raise awareness of PCORI activities and results relevant to patient-centered care for patients with pulmonary, critical care, and sleep disorders.

Chairing:
A. Anise, MHS, Washington, DC
K. Sumino, MD, MPH, Saint Louis, MO
12:15 Addressing Asthma Disparities: Research Results and Potential Impact from the Asthma Evidence to Action Network
A. Anise, MHS, Washington, DC
12:30 Researcher Perspective on Collaboration in the Asthma Evidence to Action Network
K. Sumino, MD, MPH, Saint Louis, MO
12:45 Transitional Care Evidence to Action Network: Approaches, Accomplishments, Opportunities in Transitional Care Research
S. Clauser, PhD, MPS, Washington, DC
1:00 Panel Discussion
A. Anise, MHS, Washington, DC

U.S. FOOD AND DRUG ADMINISTRATION

L3 GENERIC DRUG DEVELOPMENT FOR RESPIRATORY PRODUCTS: U.S. FOOD AND DRUG ADMINISTRATION UPDATE
12:15 p.m. - 1:15 p.m. KBHCCD
Room C155-C156 (Level 1)

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 bioequivalence for complex inhaled generic drug products, using a weight-of-evidence approach;
• describe product-specific recommendations and guidances 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.

This session will describe respiratory product development of generic drugs within the US, 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. 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.A. Witzmann, MD, Silver Spring, MD

12:15 Introduction
K.A. Witzmann, MD, Silver Spring, MD

12:18 Overview of FDA Generic Inhaled Drug Approval Process
M. Luke, MD, PhD, Silver Spring, MD

12:35 Update for Generic Orally Inhaled and Nasal Drug Products
K.A. Witzmann, MD, Silver Spring, MD

12:52 Emerging Concepts and New Technologies for Bioequivalence of Orally Inhaled and Nasal Drug Products
D.S. Conti, PhD, Silver Spring, MD

1:09 Questions and Answers
K.A. Witzmann, MD, Silver Spring, MD
DIVISION OF LUNG DISEASES, NHLBI/NIH

L6 PREVENTION AND EARLY TREATMENT OF ACUTE LUNG INJURY (PETAL) CLINICAL TRIALS NETWORK
12:15 p.m. - 1:15 p.m. KBHCCD
Room D163/D165/D170/D172 (Level 1)

Target Audience
Practicing critical care and emergency medicine clinicians and clinical researchers would benefit from this session. This includes fellows, students, nurses, and other medical professionals

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

- understand the goals and structure of the PETAL network;
- understand the questions being addressed in PETAL and the design/conducts of the trials;
- learn new findings and results of PETAL trials.

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 and an overview of progress in ongoing trials and results to date.

Chairing:
L. Reineck, MD, Bethesda, MD
R.G. Brower, MD, Baltimore, MD

12:15 PETAL Overview
R.G. Brower, MD, Baltimore, MD

12:25 Neuromuscular Blockade in Severe ARDS (ROSE) Trial Update
M. Moss, MD, ATSF, Aurora, CO

12:35 Vitamin D (VIOLET) Trial Update
A. Ginde, MD, MPH, Aurora, CO

12:45 Update on the CLOVERS Trial
N. Shapiro, MD, MPH, Boston, MA

12:55 Introducing the COROLLA Trial
T.W. Rice, MD, MSc, Nashville, TN

1:05 Extending PETAL's Science Through Ancillary Studies
C.T.L. Hough, MD, MSc, Seattle, WA

DIVISION OF LUNG DISEASES, NHLBI/NIH

L7 ACCESS AND ANALYZE MASSIVE CLINICAL, IMAGE, AND GENOMICS DATA IN THE CLOUD
12:15 p.m. - 1:15 p.m. KBHCCD
Room D220/D227 (Level 2)

Target Audience
Scientists, physicians, fellows, and students who are interested in analyzing clinical, image, and genomic data

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

- learn a new computing system that can integrate large volumes of datasets from clinical studies;
- learn how to use the new computing system to analyze big data for scientific discovery research;
- learn how the new computing system can be used to apply artificial intelligence to extract biomedical information from chest CT image.

The goal of this session is to demonstrate that regular users can easily browse and analyze large volumes of clinical, image, and genomic datasets using a set of tools developed in a public cloud computing system and supported by NHLBI’s new data science project, Data STAGE (Storage, Toolspace, Access and analytics for big data Empowerment). The data from lung disease studies, especially COPDGene, will be used for the demonstration. COPDGene is a longitudinal cohort study for COPD in 10,000 smokers. COPDGene clinical measurements, chest CT, and whole genome sequencing data will be available in this cloud system.

Chairing:
W. Gan, PhD, Bethesda, MD
E.K. Silverman, MD, PhD, Boston, MA

12:15 Data STAGE-NHLBI’s New Project Supporting Large Scale Data Analysis for Everyone
W. Gan, PhD, Bethesda, MD

12:22 Helium’s STAGE Infrastructure in Support of Imaging, Clinical and Genomic Data and Analytics
A. Krishnamurthy, PhD, Chapel Hill, NC

12:35 Creating FAIR Computational Tools for the Nationally-Scaled Conduct of Biomedical Research
P. Avillach, MD, PhD, Boston, MA

12:48 Using STAGE To Advance Big Data Research in COPDGene
E.K. Silverman, MD, PhD, Boston, MA

1:01 Deep Learning Imaging Research in COPDGene on the STAGE
R. San Jose Estepar, PhD, Boston, MA
DIVISION OF LUNG DISEASES, NHLBI/NIH

L8  MOLECULAR IMAGING OF THE LUNG (PHASE 2)
12:15 p.m. - 1:15 p.m.  KBHCCD
Room D221/D225/D226 (Level 2)

Target Audience
Providers of lung health, fellows and other trainees, and basic researchers interested in lung biology and pulmonary imaging

Objectives
At the conclusion of this session, the participant will be able to:
• learn new advances in molecular imaging of the lung;
• understand how molecular imaging technology will improve early detection and monitoring of lung diseases;
• understand the development and testing of molecular probes for pulmonary imaging.

Molecular Imaging of the Lung (Phase 2) is an NHLBI-sponsored program that supports the development of novel imaging reagents and technologies that target pathways or cells involved in the pathobiology of pulmonary diseases. Speakers supported by this program will highlight recent advances in molecular imaging of the lungs, including the development, validation, and testing in human subjects of molecular probes targeting specific cell types and molecules involved in lung diseases.

Chairing:
T.S. Blackwell, MD, Nashville, TN
S. Lin, PhD, Bethesda, MD

12:15 Folate Imaging to Assess Inflammation in COPD
T.S. Blackwell, MD, Nashville, TN

12:25 Bugs, Drugs and the Local Milieu: New Tools for Precision Medicine
S.K. Jain, MD, Baltimore, MD

12:35 Can CCR2 PET Phenotype Patients with Pulmonary Fibrosis?
S.L. Brody, MD, ATSF, Saint Louis, MO

12:45 Collagen-Targeted Molecular Imaging: Initial Experience in IPF Patients
S. Montesi, MD, Boston, MA

1:05 Molecular Imaging of Angiogenic Signaling in PAH
P.B. Yu, MD, PhD, Boston, MA

1:05 In Vivo Imaging of Apoptosis and Disease Severity in COPD
J.M. D’Armiento, MD, PhD, New York, NY

MEET THE PROFESSOR SEMINARS

CME Credits Available: 1

Registration Fee: $70.00 (includes box lunch.)
Attendance is limited. Pre-registration is required.

12:15 p.m. - 1:15 p.m.  OMNI DALLAS DOWNTOWN

MP401 THE INFLUENCE OF SEX HORMONES ON ALLERGIC DISEASE AND ASTHMA
D.C. Newcomb, PhD, Nashville, TN
Greenville Avenue (Level 2)

MP402 BRONCHIECTASIS: CASE BASED CONTROVERSIES IN CLINICAL CARE
A.E. O’Donnell, MD, Washington, DC
G. Tino, MD, Philadelphia, PA
Deep Ellum B (Level 2)

MP403 NEW FLEISCHNER SOCIETY GUIDELINES FOR PULMONARY NODULES
A.C. Mehta, MBBS, ATSF, Cleveland, OH
Deep Ellum A (Level 2)

MP404 IMMUNE CHECKPOINT INHIBITOR PNEUMONITIS: CASES, QUESTIONS AND CONTROVERSIES
P. Camus, MD, Dijon, France
Arts District 1 (Level 2)

MP405 STATISTICAL CHALLENGES IN THE ANALYSIS OF PULMONARY DATA: REAL WORLD EXAMPLES FROM THE DUKE CLINICAL RESEARCH INSTITUTE
M. Neely, PhD, Durham, NC
Arts District 2 (Level 2)

MP406 LUNG TRANSPLANTATION FOR IPF
N. Patel, MD, Penn Valley, PA
Arts District 3 (Level 2)

MP407 DIAGNOSIS AND TREATMENT OF RAPIDLY PROGRESSIVE INTERSTITIAL LUNG DISEASE
S.M. Bhorade, MD, Chicago, IL
Arts District 4 (Level 2)

MP408 CANNABIS 2019: PROMISES AND PERILS OF THE GREEN CROSS
E.L. Burnham, MD, Denver, CO
Arts District 5 (Level 2)

MP409 FROM PAP TO APP: NUTS AND BOLTS OF PEDIATRIC CPAP
S. Bhargava, MD, Palo Alto, CA
Arts District 6 (Level 2)

MP410 ENDEMIC MYCOSES OF NORTH AMERICA AND BEYOND
C.A. Hage, MD, ATSF, Indianapolis, IN
Arts District 7 (Level 2)

MP411 IDENTIFYING MIMICS OF IDIOPATHIC PULMONARY FIBROSIS: HOW AND WHY
S. Dua, MD, New York, NY
Cedars (Level 2)

MP412 ADVANCED SLEEP LAB TITRATION PROTOCOLS FOR CHRONIC HYPOVENTILATION SYNDROMES
W. Lee, MD, Dallas, TX
South Side 1 (Level 3)
ME1 HARNESSING THE POWER OF SOCIAL MEDIA AND FREE OPEN ACCESS MEDICAL EDUCATION (#FOAMED): AN INTERACTIVE WORKSHOP FOR MEDICAL EDUCATORS

Registration Fee: $70 (includes box lunch)
Attendance is limited. Pre-registration is required.

Assembly on Behavioral Science and Health Services Research
12:15 p.m. - 1:15 p.m. OMNI DALLAS DOWNTOWN
Katy Trail (Level 2)

Target Audience
Medical educators, program administrators, trainees, early career physicians, nurses, allied professionals

Objectives
At the conclusion of this session, the participant will be able to:
• compare and learn about effective use of tools to critically appraise the quality of medical education social media resources;
• identify ways to ensure privacy and safety when incorporating social media into medical education;
• develop strategies to translate social media participation into academic scholarship.

Social media resources (websites/blogs/podcasts) for medical knowledge have increased significantly, expanding from less than 20 in 2006 to approximately 356 in 2016. Social media provides a tremendous tool for educational innovation but is fraught with concerns regarding quality and privacy. The goal of this session is to provide medical educators with practical strategies to safely and effectively leverage social media to advance education at their home institution. The faulty will focus particularly on how to critically evaluate social media resources as well as strategies for translating social media participation into scholarship/academic advancement. Small group exercises and a live twitter feed will be used throughout to facilitate discussion.

Chairing: V. Kaul, MD, Elmhurst, NY

Speakers:
H.A. Memon, MD, Cincinnati, OH
J.M. Walter, MD, Chicago, IL
N. Kaminski, MD, ATS, New Haven, CT
C.L. Carroll, MD, ATS, Hartford, CT
M.A. Stiegler, MD, Research Triangle Park, NC

A81 PEDIATRIC YEAR IN REVIEW

New! The Pediatric Year in Review Bibliography is only available via the conference website http://conference.thoracic.org/go/pyir or mobile app. Attendees wishing to access the bibliography should bring a smart phone, tablet or laptop to the session.

Assembly on Pediatrics
2:15 p.m. - 4:15 p.m. OMNI DALLAS DOWNTOWN
Dallas Ballroom A-C (Level 3)

Target Audience
Providers of lung health for children; clinical researchers who study pediatric lung health problems

Objectives
At the conclusion of this session, the participant will be able to:
• gain new findings about scientific developments in the field of pediatric pulmonology that have clinical relevance.

The Pediatric Year in Review focuses on 4 topics in Pediatrics where there have been significant advances over the past year. The discussants will use recent publications to provide an update and perspective on scientific developments that have clinical relevance in Pediatrics.

Chairing: S.D.M. Dell, MD, ATS, Toronto, Canada
S.A. McGrath-Morrow, MD, Baltimore, MD
2:15 Update in Cystic Fibrosis Management  
M.E. Egan, MD, New Haven, CT

2:45 Update in the Management of Aerodigestive Problems in the Pulmonary Clinic  
E.B. Hysinger, MD, MS, Cincinnati, OH

3:15 Update in the Management of Sleep Disordered Breathing in Children  
I. Narang, BMed Sci, MBBCH, MD, Toronto, Canada

3:45 Update on PCD and Non-CF Bronchiectasis  
A.J. Shapiro, MD, Montreal, Canada

This session and the International Conference are supported by educational grants from Insmed Incorporated, Vertex Pharmaceuticals, Inc.

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

A82 CYSTIC FIBROSIS: HETEROGENEITY IN A MONOGENIC DISEASE

Assemblies on Clinical Problems; Pediatrics

2:15 p.m. - 4:15 p.m. KBHCCD

Ballroom C One-Two (Level 2)

Target Audience

Providers of cystic fibrosis; those with cystic fibrosis research interests

Objectives

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

• identify modifiable and non-modifiable reasons for heterogeneity in CF disease severity, prognosis, and treatment-related outcomes;

• gain new strategies to manage the care of women and minorities with cystic fibrosis and improve their quality of life;

• integrate new treatment options in discussing current and future CFTR modulators with CF patients.

Although the proximal cause of cystic fibrosis has been identified as autosomal recessive mutations in the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) gene, there is substantial heterogeneity in disease severity, the rate of health decline, and treatment-related outcomes. For lung function alone, twin studies have shown that 50% of the variability is due to non-CFTR genes, while the other 50% is due to environmental factors, emphasizing the need to address both sources. This session will look at the influence of socioeconomic status, geopolitical environment, specific CFTR genotypes (and the availability of CFTR modulators), and gender on these outcomes.

Chairing:
M. Sala, MD, Chicago, IL
J.L. Taylor-Cousar, MD, MSc, ATSF, Denver, CO
M. Jain, MD, Chicago, IL

2:15 A Patient's Perspective  
J. Eisenmann, Durham, NC

2:20 Heterogeneity in Cystic Fibrosis: Introduction  
M. Sala, MD, Chicago, IL

2:35 Socioeconomic Factors in Cystic Fibrosis Management and Prognosis  
S.A. McColley, MD, Chicago, IL

2:55 The Influence of Gender in Cystic Fibrosis  
R. Jain, MD, MSci, Dallas, TX

3:15 Access in Cystic Fibrosis: Comparisons Between Nations  
S.Z. Nasr, MD, Ann Arbor, MI

3:35 CFTR Modulators and the Personalization of Cystic Fibrosis Therapy  
M. Jain, MD, Chicago, IL

3:55 International Differences in Cystic Fibrosis Outcomes  
A. Stephenson, MD, PhD, Toronto, Canada

This session and the International Conference are supported by an educational grant from Vertex Pharmaceuticals, Inc.

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

A83 GREAT CASES: CLINICAL, RADIOLOGIC, AND PATHOLOGIC CORRELATIONS BY MASTER PHYSICIANS

New! The Great Cases booklet is only available via the conference website http://conference.thoracic.org/go/great-cases or mobile app. Attendees wishing to access the booklet should bring a smart phone, tablet or laptop to the session.

Council of Chapter Representatives

2:15 p.m. - 4:15 p.m. KBHCCD

Ballroom C Three-Four (Level 2)

Target Audience

Clinicians in the fields of pulmonary and critical care medicine, pediatric pulmonology, sleep medicine, thoracic surgery, and infectious disease

Objectives

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

• integrate the clinical presentation, radiologic and pathologic findings for 7 challenging cases;

• understand the clinical reasoning used to determine differential diagnosis by master clinicians using a multidisciplinary approach;

• describe the associated pathology and radiology of the cases.

Learners will have the opportunity to observe master clinicians approach challenging clinical problems by working through 7 unknown cases selected from the abstract pool. Collaboration with a master radiologist reviewing the films and a master pathologist reviewing pathology slides will demonstrate the multidisciplinary approach to difficult cases. The audience will participate though interactive questions that are tallied electronically. Additional discussion by presenters and master panelists will enhance the educational experience.

Chairing:
J. Sunderram, MD, ATSF, New Brunswick, NJ
A.C. Wang, MD, La Jolla, CA
2:15 Of Scars and Mysteries
R.E. Gripaldo, MD, Rochester, MN
Faculty Discussant: S.I.S. Rounds, MD, Providence, RI

2:25 This Shall Not Pass
D. Villafuerte, MD, San Antonio, TX
Faculty Discussant: M.I. Schwarz, MD, Aurora, CO

2:35 This Zebra Has Spots
J. Huston, MD, New Haven, CT
Faculty Discussant: S.I.S. Rounds, MD, Providence, RI

2:45 When Hoof Beats Mean Unicorns
C. Shappell, MD, Boston, MA
Faculty Discussant: M.I. Schwarz, MD, Aurora, CO

2:55 Beauty and the Beast
P. Cheng, MD, MS, Philadelphia, PA
Faculty Discussant: P.C. Stillwell, MD, Aurora, CO

3:05 The Imitation Game
W. Kareem, MD, Los Angeles, CA
Faculty Discussant: S.I.S. Rounds, MD, Providence, RI

3:15 When Calcifications Belie Trouble
T. Ku, MD, Kansas City, KS
Faculty Discussant: M.I. Schwarz, MD, Aurora, CO

3:25 Radiologic Findings
A.G. Wilcox, Los Angeles, CA

3:38 Pathologic Findings
J.L. Myers, MD, Ann Arbor, MI

3:59 Master Clinicians
S.I.S. Rounds, MD, Providence, RI
M.I. Schwarz, MD, Aurora, CO
P.C. Stillwell, MD, Aurora, CO

A84 JAMA AND THE NEW ENGLAND JOURNAL OF MEDICINE. DISCUSSION ON THE EDGE: REPORTS OF RECENTLY PUBLISHED CRITICAL CARE RESEARCH
2:15 p.m. - 4:15 p.m. KBHCCD
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 critical care 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 critical care medicine.
Chairing: H. Bauchner, MD, Chicago, IL
J. Drazen, MD, Boston, MA
Speakers And Talks To Be Announced

BASIC • CLINICAL • TRANSLATIONAL
BASIC SCIENCE CORE
CME Credits Available: 2
A85 LIVING AND DYING BY LIPIDS: RESOLVING INFLAMMATION AND TEMPTING CELL FATE
Assemblies on Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology; Respiratory Structure and Function
2:15 p.m. - 4:15 p.m. KBHCCD
Ballroom D Two (Level 3)
Target Audience
Basic scientists, physiologists, allergists, pulmonologists, translational researchers, fellows and residents, and graduate trainees interested in lung pathophysiology
Objectives
At the conclusion of this session, the participant will be able to:
• apply new understanding of the nature of lipid mediators as pro-inflammatory and pro-resolving factors for inflammation and tissue repair in the lung;
• improve understanding of biological processes affected by lipid mediators, including ferroptosis, and how these determine cell function and fate in response to inhaled chemical stressors;
• appreciate how new findings are being positioned to promote research direction and therapeutic strategies that target lipid mediator effects of cell fate, and inflammation and it’s resolution.
Inflammation and its resolution are active processes. Multiple complex pathways regulate the coordinated response of structural and immune cells after exposure to inhaled irritants, allergens and microbes. Initiation of acute inflammation is associated with oxidative stress leading to lipid peroxidation, changes in metabolic activity, and biosynthesis of pro-inflammatory and resolving-eicosanoids. Though acute inflammation is vital for host protection, return to health relies on endogenous, active resolution programs that restore host tissues to a non-inflamed state. Failure of active resolution permits persistence of inflammation that can lead to chronic disease. This session highlights emerging mechanisms that determine the fate of cells faced with environmental insult and oxidative stress; and how this is a determinant of inflammation and its resolution. Speakers will focus on pro-resolving lipid mediators, how their dysregulation results in chronic airway inflammation, and emerging opportunities to target lipid mediators to treat lung disorders.
Chairing: P.J. Sime, MD, Rochester, NY
C. Wheelock, PhD, Stockholm, Sweden
R.S. Kelly, MPH, PhD, Boston, MA
2:15 Ferroptosis: Death by Lipid Peroxidation
M.Conrad, PhD, Neuherberg, Germany
2:41 Endothelial Barrier-Enhancing and Anti-Inflammatory Effects of Oxidized Phospholipids
K.G. Birukov, PhD, MD, Baltimore, MD
2:59 Targeting Oxidized Phosphatidylcholine to Prevent and Reverse Airway Inflammation, Hyperresponsiveness and Remodeling
A.J. Halayko, BS(Hons), MSc, PhD, ATSF, Winnipeg, Canada
BASIC • CLINICAL • TRANSLATIONAL
SCIENTIFIC SYMPOSIUM
CME Credits Available: 2

A86 MECHANOPHARMACOLOGY OF AIRWAY AND AIRWAY SMOOTH MUSCLE
Assembly on Respiratory Structure and Function
2:15 p.m. - 4:15 p.m. KBHCCD
Ballroom D One (Level 3)

Target Audience
Basic scientists and clinicians interested in lung function and airway diseases

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

- appreciate the influence of mechanical forces on pharmacological responses of lung tissue;
- gain new findings about the synergistic effect of bronchodilators have on airways in combination with mechanical perturbation and agents that modify airway stiffness;
- improve understanding on pharmacology of tissues and organs which are constantly under the influence of mechanical forces.

Traditional pharmacological studies do not take into account the effects of mechanical movement on the drug-receptor interaction. Airways in a living lung are constantly under the influence of cyclic stress and strain due to breathing. Increasingly it has been shown that a dynamic mechanical environment has a significant impact on airway and airway smooth muscle behavior, and that the traditional “static” pharmacology offers very limited understanding on how airways respond to bronchoconstrictor and bronchodilator stimulation. In this session the audience will be introduced to a new branch of science-mechanopharmacology, and learn how mechanical forces modulate airway properties and drug targets for altering the properties.

Chairing:
C. Seow, PhD, ATSF, Vancouver, Canada
P.B. Noble, PhD, Perth, Australia

2:15 Therapeutic Implications of Increased Airway Stiffness in Obstructive Disease
P.B. Noble, PhD, Perth, Australia

2:35 Synergistic Effect of Bronchodilators on Airway Smooth Muscle in the Presence of Rho-Kinase Inhibitor and Mechanical Perturbation
L. Wang, PhD, Vancouver, Canada

2:55 Mechanical Activation of TGFbeta in Contracted and Cyclically Stretched Airways
B.S. Brook, PhD, DrPH, Nottingham, United Kingdom

3:15 The Duration Between Deep Inspirations on the Rate of Airway Renarrowing
Y. Bossé, PhD, Québec, Canada

3:35 TGFbeta Signalling: Complexity Creates Opportunities for Safer Drug Targeting
A. Stewart, PhD, Melbourne, Australia

3:55 Traction Force Screening for Bronchodilator Drug Discovery
R. Krishnan, PhD, MS, Boston, MA

A87 KNOWLEDGE GAPS AND PATHWAYS FORWARD IN RV FAILURE RESEARCH: RECOMMENDATIONS FROM AN OFFICIAL ATS RESEARCH STATEMENT ON RV FAILURE

Assemblies on Pulmonary Circulation; Clinical Problems; Critical Care; Pediatrics; Respiratory Cell and Molecular Biology
2:15 p.m. - 4:15 p.m. KBHCCD
Room D167/D174 (Level 1)

Target Audience
Researchers, critical care physicians, pulmonologists, cardiologists, emergency medicine physicians, anesthesiologists, cardiovascular surgeons, pediatricians, nurses, respiratory therapists, students, residents, fellows, grad students, postdocs

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

- understand the mechanisms underlying adaptive versus maladaptive RV adaptation to pulmonary vascular load including role of fibrosis, angiogenesis, metabolic shifts;
- understand the role of plasma and/or imaging biomarkers (by echocardiography and cardiac MRI) that could be used to accurately evaluate RV function, perfusion, and RV-PA coupling and as end-points in clinical trials;
- identify potential novel therapies aimed at targeting RV myocardial contractility (e.g. calcium-sensitizing agents targeting sarcoplasmic reticulum and/or sarcomere function).

This symposium will discuss key recommendations from an Official ATS Research Statement generated by a working group of 20 international experts from the Assemblies on Pulmonary Circulation and Critical Care. The document has been accepted for publication and will be published in the AJRCCM in the Summer or early Fall of 2018. This symposium will summarize the document and highlight the major knowledge gaps and research priorities to be addressed in the next five years in the areas of epidemiology, pathophysiology, phenotyping, diagnosis, risk stratification and treatment of acute and chronic RV failure. The recommendations will serve as a roadmap for junior and senior investigators interested in cardiopulmonary research.
A88  RETHINKING OXYGEN: GETTING THE RIGHT OXYGEN TO THE RIGHT PATIENT

Assemblies on Nursing; Behavioral Science and Health Services Research; Pulmonary Rehabilitation

2:15 p.m. - 4:15 p.m.  Kbhccd
Room D162/D164 (Level 1)

Target Audience
This symposium will benefit health care professionals who care for adults who use supplemental oxygen therapy.

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

- identify unmet needs and barriers to oxygen delivery in patients with COPD, ILD, and rare lung diseases, including young people who require supplemental oxygen;
- understand impact of oxygen delivery on the quality of life in patients with lung disease and their caregivers;
- identify the role of advocacy for rare lung disease and the implications for policy change for our patients who use supplemental oxygen therapy.

Pulmonary clinicians and patients report barriers in providing and receiving optimal home supplemental oxygen services including inadequate supply, unacceptable portable options, equipment malfunction, absence of quality measures, and lack of evidence-based practice guidelines. Limited evidence exists to describe or quantify these problems and to address these unmet needs. This session will provide information on the variation of oxygen use in patients with COPD and ILD, impact of oxygen on quality of life for patients and caregivers, existing evidence for our practice today, importance of advocacy for patients with rare lung diseases and young adults requiring oxygen, and the role of policy in best helping our patients.

Charging:  K.O. Lindell, PhD, RN, ATSF, Pittsburgh, PA
S.S. Jacobs, RN, MS, Stanford, CA

2:15  Introduction and Opening Remarks
S.S. Jacobs, RN, MS, Stanford, CA

2:25  A Patient's Perspective
H. Kagel, Dallas, TX

2:30  Oxygen for COPD: Knowns and Unknowns
J.A. Krishnan, MD, PhD, ATSF, Chicago, IL

2:50  Oxygen and ILD
C.J. Ryerson, MD, Vancouver, Canada

3:10  Quality of Life for Oxygen Users and their Caregivers
J.J. Swigris, DO, MS, Denver, CO

3:25  Impact of Supplemental Oxygen in Patients with Interstitial Lung Disease: Findings of the Mixed Method AmbOx Trial
M. Farquhar, PhD, RN, Norwich, United Kingdom

3:40  Advocacy in Rare Lung Disease: When Oxygen is Not Optional
S. Sherman, BS, MHA, Cincinnati, OH

3:55  Implications for Policy
G. Ewart, MHS, Washington, DC

4:10  Conclusion: Moving Forward
K.O. Lindell, PhD, RN, ATSF, Pittsburgh, PA

A89  COMMUNITY-ACQUIRED PNEUMONIA 2019: AN INTERACTIVE SESSION

Assemblies on Pulmonary Infections and Tuberculosis; Clinical Problems; Critical Care

2:15 p.m. - 4:15 p.m.  Kbhccd
Ballroom A Three (Level 2)

Target Audience
Clinicians, researchers, and administrative physicians, nurses, advanced practice clinicians, pharmacists, and respiratory therapists who provide care for patients with pneumonia

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

- learn 2019 best treatment of patients with community-acquired pneumonia;
- have new strategies to manage the care of pneumonia patients, replacing HCAP logic with more effective measures for identifying patients at risk for antibiotic resistant pathogens;
understand the issues regarding adjunctive corticosteroid therapy of severe pneumonia with patients, since the committee will be more conservative in its recommendations than recent literature.

Much has changed regarding treatment of community-acquired pneumonia since the last IDSA/ATS guidelines were published in 2007. The symposium speakers are experts in pneumonia, and will discuss the use of adjunctive steroids, empiric antibiotics, site of care determination, use of cultures and molecular diagnostics including procalcitonin, and identifying patients at risk for antibiotic resistant pathogens. Controversies in treating patients with community-acquired pneumonia will be addressed. Speakers will also discuss methods for local implementation of recommended processes of care, including computerized clinical decision support.

Chairing:
M.S. Niederman, MD, New York, NY
E.M. Mortensen, MD, Farmington, CT

2:15 Introduction
J. Metlay, MD, PhD, Boston, MA

2:30 Site of Care
N.C. Dean, MD, Murray, UT

2:45 Identifying the Pathogen: Cultures, Molecular Methods, and Biomarkers
K.A. Crothers, MD, Seattle, WA

3:05 Empiric Antibiotic Selection
M.L. Metersky, MD, Farmington, CT

3:20 Selecting Patients for Empiric Broad Spectrum Antibiotics
M.I. Restrepo, MD, MSc, PhD, San Antonio, TX

3:45 Antibiotic Deescalation and Duration of Therapy
A. Anzueto, MD, ATSF, San Antonio, TX

4:00 Adjunctive Steroids for Patients with CAP
G.W. Waterer, MBBS, MBA, PhD, Perth, Australia

describe evidence-based and emerging strategies for preventing and treating limb and diaphragm weakness in critically ill patients

This session will provide a state of the art overview of emerging mechanistic and clinical insights related to ICU-acquired weakness affecting the limb muscles, respiratory muscles, and pharyngeal muscles. The session incorporates 9 rapid fire presentations highlighting a broad range of key issues. The focus of the session will progress from mechanisms of injury to outcomes and finally to emerging interventions, followed by a 25-minute panel Q&A discussion.

Chairing:
E.C. Goligher, MD, PhD, Toronto, Canada
M. Kho, PT, PhD, Hamilton, Canada
C.T. Hough, MD, MSc, Seattle, WA

2:15 Pathophysiology of Muscle Fatigue, Injury, and Weakness: A Primer
W.D. Reid, PhD, Toronto, Canada

2:25 Diaphragm Muscle Weakness in the ICU: Inevitable or Avoidable?
L.J. Brochard, MD, Toronto, Canada

2:35 Limb Muscle Weakness in the ICU: Inevitable or Avoidable?
C.T. Hough, MD, MSc, Seattle, WA

2:45 Diaphragm Weakness vs. Limb Muscle Weakness: Same Disease? Same Outcome?
M. Dres, MD, PhD, Paris, France

2:55 Beyond the ICU: Impact of ICU-Acquired Weakness on ICU Survivorship
D.M. Needham, MD, PhD, Baltimore, MD

3:05 Emerging Insights on Post-Exubation Swallowing Dysfunction
M. Brodsky, PhD, Baltimore, MD

3:15 Diaphragm-Protective Ventilation: The Next Frontier?
E.C. Goligher, MD, PhD, Toronto, Canada

3:25 Emerging Strategies for Limb Muscle Rehabilitation in the ICU
M. Kho, PT, PhD, Hamilton, Canada

3:35 Emerging Strategies for Diaphragm Muscle Rehabilitation in the ICU
B. Bissett, PT, Canberra, Australia

3:45 Panel Q&A Discussion
E.C. Goligher, MD, PhD, Toronto, Canada

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

• recognize potentially modifiable mechanisms of muscle weakness in critical illness;
• appreciate the respective contributions of limb and diaphragm weakness and post-extubation swallowing dysfunction to clinical outcomes of critical illness both within and beyond the ICU;
Target Audience
Medical practitioners, basic scientists, trainees involved in acute and chronic lung injury research and treatment, including IPF, pulmonary infections, ARDS, and lung cancer

Objectives
At the conclusion of this session, the participant will be able to:
• learn new findings on the interactions of innate immunity and the microbiome in lung disease;
• begin to understand how interactions between the microbiome and immunity can be used to influence patient outcomes in precision medicine approaches to lung disease;
• learn the newest findings on genetic and genomic determinants of lung disease susceptibility and progression.

There is strong research support that acute and chronic lung diseases such as asthma, COPD, and IPF are a result of maladaptive gene-by-environment interactions. Immune genes are leading factors for asthma, ARDS, and IPF susceptibility and progression. Furthermore, the microbiome is now understood to play a role in lung biology. However, research has tended to investigate microbiome and immunity separately, and only recently has the interaction of the two been appreciated. This symposium will integrate recent findings on microbiome and immunity research, and highlight how microbiome-immune interactions lead to lung disease development and progression, with an emphasis on impact on lung diseases across multiple assemblies (asthma, sleep apnea, IPF, etc.)

Chairing:
S. Garantziotis, MD, Research Triangle Park, NC
B.B. Moore, PhD, ATSF, Ann Arbor, MI
C. Dela Cruz, MD, PhD, ATSF, New Haven, CT

2:15 The Lung Microbiome in Healthy Mice: Interactions with Environment, Exposures, and Immunity
R.P. Dickson, MD, Ann Arbor, MI

2:35 Multi-System View of Microbiome-Immune Interactions in Adult Asthma
Y.J. Huang, MD, Ann Arbor, MI

2:55 Host-Microbiome Interactions in Interstitial Lung Disease
P.L. Molyneaux, MRCP(UK), MBBS, BS(Hons), London, United Kingdom

3:15 Could the Microbiome Protect From Pulmonary Fibrosis?
S. Garantziotis, MD, Research Triangle Park, NC

3:35 Lung Microbiota, Host Inflammation and Immune Surveillance in Lung Cancer
L.N. Segal, MD, New York, NY

3:55 The Lower Respiratory Tract Microbiome and Chronic Lung Allograft Dysfunction After Transplant
J.E. McGinniss, MD, Philadelphia, PA
### BASIC • CLINICAL • TRANSLATIONAL MINI SYMPOSIUM

**A93 ASTHMA BREAKTHROUGHS: THE ROLE OF THE IMMUNE SYSTEM IN HUMAN ASTHMA**

2:15 p.m. - 4:15 p.m.  
KBHCCD Room D221/D225/D226 (Level 2)

**Chairing:**  
P. Akuthota, MD, La Jolla, CA  
G.G. Brusselle, MD, PhD, Ghent, Belgium

<table>
<thead>
<tr>
<th>Oral Presentations</th>
<th>Time</th>
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<tbody>
<tr>
<td><strong>2:45</strong></td>
<td>CD103+Lung Tissue Resident Memory T Cells (TRM) Represent an Airway Centered, Clonally Expanded Subset of TRM with ZNF683 (Hobit) Expression Differentiating CD4+ and CD8+CD103+TRM/M. E. Snyder, F. Cvetkovski, P. Dogra, P. Szabo, M. Miron, D. Carpenter, T. Senda, D. Farber, Pittsburgh, PA, p.A2368</td>
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<tr>
<td><strong>3:00</strong></td>
<td>Human Lung CD4 and CD8 Tissue Resident Memory T Cells Have Distinct Transcriptional Programming from Phenotypically Identical Cells in Lung Draining Lymph Node and Activate Asthma-Related Pathways After T Cell Receptor Stimulation/N. Schoettler, C.L. Hrusch, A.I. Sperling, C. Ober, Chicago, IL, p.A2369</td>
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### BEHAVIORAL • CLINICAL MINI SYMPOSIUM

**A94 INNOVATIONS TO IMPROVE CARE IN OBSTRUCTIVE LUNG DISEASE**

2:15 p.m. - 4:15 p.m.  
KBHCCD Room C146 (Level 1)

**Chairing:**  
J.K. Gerald, MD, PhD, Tucson, AZ  
J.P. Wisnivesky, DrPH, MD, New York, NY

<table>
<thead>
<tr>
<th>Oral Presentations</th>
<th>Time</th>
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<tbody>
<tr>
<td><strong>3:30</strong></td>
<td>The Effects of Hospital Outreach Intervention on Decreasing Hospitalizations and Medical Cost of Patients with Chronic Obstructive Pulmonary Disease/J. Yan, L. Wang, C. Liu, Z. He, S. Zhu, L. Long, G. Yang, Changsha, China, p.A2379</td>
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<tr>
<td><strong>3:45</strong></td>
<td>Emergency Department Visits Were Among Older Adults with Asthma Receiving a Patient Tailored Self-Management Intervention: Results of a Randomized Trial/A. Federman, R.O’Conor, J. Erblich, M.S. Wolf, J.P. Wisnivesky, New York, NY, p.A2380</td>
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**Featured Speaker**  
4:00 Opportunities for Improving Care in Obstructive Lung Diseases/L.C. Feemster, Seattle, WA
**Basic • Clinical • Translational**

**Mini Symposium**

**A95  Critical Care: Alice in Wonderland - Biomarkers in Critical Illness: Clues to Be Unravelled**

*2:15 p.m. - 4:15 p.m.*

**OMNI DALLAS DOWNTOWN**

**Trinity Ballroom 4/8 (Level 3)**

**Chairing:**
- C.S. Calfee, MD, San Francisco, CA
- E.P. Schmidt, MD, Aurora, CO

**Oral Presentations**


3:00  Haptoglobin Genotype Modifies Risk of ARDS During Clinical and Experimental Sepsis/D. Kasahara, Y. Cho, A.P. Cardoso, S.A. Shore, Boston, MA, p.A2391


3:45  Transcriptomic Profiles of Sepsis in the Human Brain/ A.C. Bustamante, K. Opron, T.J. Standiford, B. Singer, Ann Arbor, MI, p.A2387


**Mini Symposium**

**A96  New Mechanisms of Ozone Toxicity**

*2:15 p.m. - 4:15 p.m.*

**OMNI DALLAS DOWNTOWN**

**Dallas Ballroom G (Level 3)**

**Chairing:**
- J.G. Wagner, MBA, PhD, East Lansing, MI
- P. Silveyra, PhD, MSc, Chapel Hill, NC
- R.M. Tighe, MD, Durham, NC

**Oral Presentations**


3:00  The Microbiome but Not IL-33 Contributes to Ozone-Induced Airway Hyperresponsiveness in Male Mice with Diet Induced Obesity/D.I. Kasahara, Y. Cho, A.P. Cardoso, S.A. Shore, Boston, MA, p.A2392


3:45  Early Life Ozone Exposure Results in Dysregulation of Wnt11 Expression in the Respiratory Tract of Nonhuman Primates/T. Burgess, M.G. dela Pena-Ponce, L.A. Miller, Davis, CA, p.A2395

4:00  Long-Term Ozone and PM 2.5 Exposure Is Positively Associated with Telomere Length in Critically Ill Patients/C. Wang, P.J. Wolters, C.S. Calfee, S. Liu, J.R. Balmes, T. Koyama, Z. Zhao, L.B. Ware, Nashville, TN, p.A2396

**Basic • Translational**

**Mini Symposium**

**A97  Station to Station: Unraveling the Molecular Pathogenesis of PAH**

*2:15 p.m. - 4:15 p.m.*

**KBHCCD**

**Room C147/C148/C154 (Level 1)**

**Chairing:**
- S. Bonnet, PhD, MSc, Quebec City, Canada
- E.A. Goncharova, PhD, Pittsburgh, PA
- K.R. Stenmark, MD, Aurora, CO
**Oral Presentations**


2:30 **Pericytes Differentiate into Smooth Muscle Cells Through CXCL12 Activation in Hypoxia Induced PH**/K. Yuan, W. Zhang, E. Shamskhou, M. Orcholski, A. Nathan, V. De Jesus Perez, Palo Alto, CA, p.A2398


3:00 **Homeostatic Role for the P53-Dependent Toll-Like Receptor 3 Expression in the Pulmonary Endothelium**/A.R. Bhagwani, D. Farkas, E.A. Goncharova, A.A.R. Thompson, L. Farkas, Richmond, VA, p.A2400


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**BASIC • CLINICAL • TRANSLATIONAL**

**MINI SYMPOSIUM**

A98 **PHENOTYPING COPD AND PREDICTING THE DISEASE PROGRESSION**

2:15 p.m. - 4:15 p.m. **KBHCCD**

**Room C155-C156 (Level 1)**

**Chairing:** Y. Nakano, MD, PhD, Otsu Shiga, Japan
S.R. Hopkins, MD, PhD, La Jolla, CA
D.G. Chapman, BSc, PhD, Glebe, Australia

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**BASIC • CLINICAL • TRANSLATIONAL**

**RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION**

A101 **TRANSLATIONAL STUDIES IN ILD, IPF, AND SARCOIDOSIS**

2:15 p.m. - 4:15 p.m. **KBHCCD**

**Room D222-D224 (Level 2)**

**Abstract Summaries**

2:15-2:45

**Viewing/Discussion**

2:45-4:15


507 The Role of B-1 Cells and IgM to Oxidation-Specific Epitopes in Pulmonary Inflammation and Fibrosis/J.M. Sturek, A.D. Upadhye, A. Kadir, C.A. McNamara, Charlottesville, VA, p.A2419


510 Deletion of Galectin-3 in Myeloid Cells Inhibits Bleomycin-Induced Lung Fibrosis/A.C. Mackinnon, D. Humphries, R. Mills, N. Hirani, N. Henderson, T. Sethi, A. Rossi, Edinburgh, United Kingdom, p.A2422

511 Role of B7H3/IL-33 Signaling in Pulmonary Fibrosis-induced Alterations in Bone Marrow/T. Liu, T. Nakashima, F. Gonzalez De Los Santos, B. Hu, Z. Wu, S.H. Phan, Ann Arbor, MI, p.A2423

512 The Role of IRAK-M in Regulating Monocyte Trafficking to the Lung Following Bleomycin Challenge/M.N. Ballinger, B. Reader, R.V. Thomas Becket, J.W. Christman, Columbus, OH, p.A2424


521 Inflammatory Biomarkers in Patients with Sarcoidosis Associated Pulmonary Hypertension: The Registry of Sarcoidosis Associated Pulmonary Hypertension (ReSAPH)/P. Heukels, J. van Hulst, M. van Nimwegen, M. Wijnsbeek, R.P. Baughman, M. Kool, Rotterdam, Netherlands, p.A2433


Clinical RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A102 COPD: THERAPY

2:15 p.m. - 4:15 p.m.

Room C141/C143/C149 (Level 1)

Abstract Summaries 2:15-2:45

Viewing/Discussion 2:45-4:15
A103 CRITICAL CARE: AS YOU LIKE IT - ICU MANAGEMENT AND PROCESSES OF CARE

2:15 p.m. - 4:15 p.m. OMNI DALLAS DOWNTOWN
Dallas Ballroom E-F (Level 3)

Chairing: H.B. Gershengorn, MD, ATSF, Miami, FL
T.S. Valley, MD, MSc, Ann Arbor, MI
S.J. Hsieh, MD, MS, New York, NY


Compliance with Evidence-Based Processes of Care After Transitions of Care Between Staff Intensivists: A Cohort Study/F. Angriman, R. Pinto, J. Friedrich, N.D. Ferguson, A. Amaral, Toronto, Canada, p.A2457

Effects of a Night Intensivist on Patient Mortality/A. Nikamal, S. Kothari, S. Patel, D. Barounis, A. Shah, Oak Lawn, IL, p.A2458


Validation of Early Warning Scores at Two Long-Term Acute Care Hospitals/M.M. Churpek, J. Prister, J.D. Brofman, M. Hallez, N. Delo Merced, K. Carey, D.P. Edelson, Chicago, IL, p.A2461


Phenotypic Clusters Derived from Clinical Notes of Patients with Respiratory Failure/B. Sharma, D. Dligach, C. Joyce, S.W. Littleton, M. Afshar, Chicago, IL, p.A2465


Improved Efficiency by Transforming a Stepdown Unit into a Critical Care Rapid Assessment Unit (CCRAU)/T.G. Boudet, B.P. Mendez, Winchester, VA, p.A2475


Biomass Fuel Exposure and Lung Cancer Risk Among Nonsmoking Women/M. Gholamnejad, Urmia, Iran, Islamic Republic of, p.A2484


Age of Wood Stove Does Not Correlate with Household Air Pollution Measures/P.M. Meek, H. Petersen, H. Irshad, R. Vazquez Guillamet, J. McDonald, A. Sood, Y. Tesfaigzi, Aurora, CO, p.A2488


1017  

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1021  
Air Pollution/Irritants Trigger and Factors Associated with Asthma Control and Quality of Life Among World Trade Center Health Registry Enrollees with Asthma/J. Yung, S. Osahian, S. Friedman, J. Cone, New York, NY, p.A2500

1022  
Comparison of Pulmonary Function in Females Using Clean Air Pollution/Irritants Trigger and Factors Associated with Airway Oscillometry Identified High Prevalence of Lung Function Abnormalities in Community Members 2 Years After the Alberta Wildfires/C.-W. Chow, E. deHaas, J. Wu, L. Woo, K. Yang, L. Kohl, A. Chan, Toronto, Canada, p.A7345

1023  

1024  

1025  
Insights from the Pulmonary Vascular Phenomics Project (PVDOMICS): The Effect of Multiple Pulmonary Vascular Groups on Hemodynamics in Pulmonary Hypertension/F.P. Rischar, Tucson, AZ, p.A2505

1026  

1027  
The Incremental Shuttle Walking Test Can Be Used to Risk Stratify Patients with Pulmonary Hypertension as Per the European Respiratory/Cardiac Society Guidelines/R. Lewis, C. Billings, J. Hurdman, I. Smith, M. Austin, I. Armstrong, A. Swift, A. Rothman, A. Charalampopoulos, I. Sabroe, C. Elliot, R. Thompson, A. Lawrie, R. Condiffe, D. Kiely, Sheffield, United Kingdom, p.A2507

1028  
Obesity Paradox in Pulmonary Hypertension: Insights from a Large Retrospective Cohort Study/A.W. Trammell, A.P. Shah, L.S. Phillips, C.M. Hart, Atlanta, GA, p.A2508

1029  

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1032  
Comparison of Risk Discrimination Between the REVEAL 2.0 Calculators, the French Pulmonary Registry Algorithm and the Bologna Method in Patients with Pulmonary Arterial Hypertension (PAH)/R.L. Benza, M. Kanwar, A. Raina, L.C. Lohmueller, D.J. Pasta, R. La, C.G. Elliott, H.W. Farber, Pittsburgh, PA, p.A2512

1025  
GLORY DAYS: THE LATEST CLINICAL RESEARCH IN PAH

2:15 p.m. - 4:15 p.m.
Room C140/C142 (Level 1)

Poster Viewing 2:15-3:00
Discussion 3:00-4:15

Chairing:  
S.M. Kawut, MD, MS, Philadelphia, PA
I.M. Lang, PhD, Vienna, Austria
G.S. Butrous, MBChB, PhD, Canterbury, United Kingdom

A105  
GLORY DAYS: THE LATEST CLINICAL RESEARCH IN PAH

2:15 p.m. - 4:15 p.m.

Room C140/C142 (Level 1)

Poster Viewing 2:15-3:00
Discussion 3:00-4:15


Insights from the Pulmonary Vascular Phenomics Project (PVDOMICS): The Effect of Multiple Pulmonary Vascular Groups on Hemodynamics in Pulmonary Hypertension/F.P. Rischar, Tucson, AZ, p.A2505


The Incremental Shuttle Walking Test Can Be Used to Risk Stratify Patients with Pulmonary Hypertension as Per the European Respiratory/Cardiac Society Guidelines/R. Lewis, C. Billings, J. Hurdman, I. Smith, M. Austin, I. Armstrong, A. Swift, A. Rothman, A. Charalampopoulos, I. Sabroe, C. Elliot, R. Thompson, A. Lawrie, R. Condiffe, D. Kiely, Sheffield, United Kingdom, p.A2507

Obesity Paradox in Pulmonary Hypertension: Insights from a Large Retrospective Cohort Study/A.W. Trammell, A.P. Shah, L.S. Phillips, C.M. Hart, Atlanta, GA, p.A2508


NTM: BENCH TO BEDSIDE

Abstract Summaries

Viewing/Discussion

Chairs: T.K. Marras, MD, Toronto, Canada

M. Holt, MBBS, BSc, Denver, CO

J. Philley, MD, Tyler, TX


Comparison of Clinical Characteristics in Patients with Single and Multiple Species Nontuberculous Mycobacterial Pulmonary Disease/E. Lee, Y. Park, S.H. Yong, M.S. Park, Y.S. Kim, Y. Kang, Seoul, Korea, Republic of, p.A2526


Factors Associated with Frailty in Patients with Mycobacterium Avium Complex Lung Disease/K. Fujita, Y. Ito, N. Uchida, Y. Yamamoto, O. Kanai, M. Okamura, K. Nakatani, T. Mio, Kyoto, Japan, p.A2530

A Comparison of the Clinical and Radiological Findings in Patients of Pulmonary MAC Disease Based on Smoking History and Gender/N. Kodaka, Tokyo, Japan, p.A2531

Comparison of the Surgical Lung Histopathologic Features of Patients with Pulmonary Disease Due to Mycobacterium Avium Complex Versus Mycobacterium Abscessus Complex/E.D. Chan, K.J. Potts, C. Cool, M. Althoff, S.D. Groshong, S. Choi, Denver, CO, p.A2532


314 Clinical Characteristics and Outcomes of Patients Undergoing Anti-Mycobacterial Therapy versus No Anti-Mycobacterial Therapy for Mycobacterium Avium Complex Pulmonary Disease/K. Pennington, P. Escalante, Rochester, MN, p.A2537

315 Lower Dose of Ethambutol Reduce Ocular Toxicity Without Compromising Efficacy for Pulmonary Mycobacterium Avium Complex Disease/T. Ando, H. Kage, Y. Matsumoto, T. Nagase, Tokyo, Japan, p.A2538


317 Treatment of Mycobacterium Avium Subsp Hominissus (MAH) Lung Infections in Mice with Intranasally Instilled Liposomal Ciprofloxacin in Combination with Clarithromycin and Ethambutol/L. Bermudez, A. Palmer, J.D. Blanchard, I. Gonda, Corvallis, OR, p.A2540


A107 ENGINEERED AND REMODELLED MATRIX COMPARTMENTS

2:15 p.m. - 4:15 p.m. KBHCCD

Abstract Summaries
2:15-2:45

Viewing/Discussion
2:45-4:15

Chairing:
D.J. Weiss, MD, PhD, ATSF, Burlington, VT
C.M. Magin, PhD, Aurora, CO
D.E. Wagner, PhD, Lund, Sweden


604 Conditional Deletion of the Fibrillar Adhesion Protein Tensin1 Attenuates Extracellular Matrix Deposition in a Murine Model of Pulmonary Fibrosis/K. Bernau, J.P. Leet, E.M. Bruhn, N.K. Sandbo, Madison, WI, p.A2547


607 Single Cell RNA Sequencing of Human Lung Explants Identifies the Cell-Specific Contributions of Extracellular Matrix-Related Gene Expression/S. Poli De Frias, T. Adams, M.-C. Domingo, J. Longtin, L. James, Portland, OR, p.A2550
608 Context-Specific Maturation of Lung Progenitors Is Directed by Lung Matrices and Vascular Cell-Derived Extracellular Vesicles/M. Ho, M. Ho, K.R. Chaudhury, D.J. Stewart, Ottawa, Canada, p.A2551


610 Lung Derived ECM/Polymer Composite Substrates to Investigate Composition and Stiffness-Dependent Cell-ECM Interactions/R.A. Pouliot, A. Bhattacharyya, J.J. Uriarte, K. Xia, D.J. Weiss, Burlington, VT, p.A2553

611 Wnt/Planar Cell Polarity Pathway Signaling Between Endothelial Cell and Pericyte-Like Smooth Muscle Cells Enhance Vascular Repaving in an Acellular Lung Scaffold/M. Ho, K.R. Chaudhury, D.J. Stewart, Ottawa, Canada, p.A2554


618 a-TAT1 Promotes Myofibroblast Activation and Lung Fibrosis Via Microtubule-Dependent Mechatransduction Pathways/A. Santos, Boston, MA, p.A2561


Chairing: D.J. Tschumperlin, PhD, Rochester, MN K. Ask, PhD, Hamilton, Canada M. Bhattacharya, MD, San Francisco, CA


V-Type ATPase Mediates Airway Surface Liquid Acidification in Cultured Pig Small Airway Epithelial Cells

808 Early CF Lung Disease is Characterized by a Permanent Gel Muco-Infammatory Milieu

809 Higher Plasma Concentrations of Angiopoietin-1 and Angiopoietin-1/Angiopoietin-2 in Adults with Cystic Fibrosis Compared to Healthy Age Matched Controls

810 Tetrahydroxymolybdate Treatment Attenuates Bleomycin-Induced Pulmonary Fibrosis in a Large Animal Model

811 Mucus Matters: Ferrets Demonstrate Restrictive Lung Physiology, Sustained Fibrosis, Mucociliary Decrement in Airways, and Aberrant Repair Following Bleomycin-Induced Pulmonary Fibrosis

812 Development of a Novel Combinatorial Therapy for Cystic Fibrosis

813 Protective Effect of 3-Carbamoyl Proxyl Against Bleomycin-Induced Lung Fibrosis

814 Acute Airway Acidification Modifies Mucus Secretion and Transport Properties

815 Exposure to Bile Salts Alters the Architecture and Host Defense of the Airway Epithelium

816 VEGFR1-TK Signaling Induces Bleomycin Pulmonary Fibrosis Formation Through Accumulating of VEGFR1+ Cells

817 Autotaxin Inhibitorsin IPF: Elucidation of a Novel Binding Mode for GLPG1690

BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL
RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A109 SRN: OSA PATHOPHYSIOLOGY AND TREATMENT - MOVING TOWARDS PERSONALIZED MEDICINE

Abstract Summaries
Viewing/Discussion

Chairing:

R.J. Kimoff, MD, Montreal, Canada
A.R. Schwartz, MD, Baltimore, MD

REM Rebound Predicts CPAP Compliance in Patients with Obstructive Sleep Apnea/R.S. Leung, A. Udayashankar, Toronto, Canada, p.A2586
Loop Gain in REM Versus Non-REM Sleep Using CPAP Manipulation/L. Messineo, L. Taranto Montemurro, A. Azarbarzin, M. Marques, N. Calianese, D.P. White, D.A. Wellman, S.A. Sands, Boston, MA, p.A2587
A110  NOVEL IMAGING FOR LUNG CANCER: A PICTURE IS WORTH A THOUSAND WORDS

2:15 p.m. - 4:15 p.m.  KBHCCD

Abstract Summaries 2:15-2:45

Viewing/Discussion 2:45-4:15

Chairs: F. Maldonado, MD, Nashville, TN
N.T. Tanner, MD, MSCR, Charleston, SC
S. Shojae, MD, MPH, Richmond, VA


404  The Predictive Value of Transthoracic Shear-Wave Ultrasound Elastography in Differentiating Benign from Malignant Lung Tumors/Y.-W. Kuo, Y.-L. Chen, J.-Y. Shih, H.-C. Wang, H.-D. Wu, Taipei City, Taiwan, p.A2607


Extra-Thoracic Incidental Findings on Pet Scan Performed for Assessment of Lung Nodule Detected on LDCT Screening/A. Baig, P. Jain, Y.B. Hadi, S. Hadique, Morgantown, WV, p.A2613

The Utility of PET-CT Scan for Mediastinal Staging of Screen Detected Lung Cancer/D.P. Wiebe, R.L. Myers, S. Atkar-Khattra, D. Wilson, A. McGuire, J. Yee, S. Lam, Vancouver, Canada, p.A2614

Clinical Usefulness of Pet Scan for Assessment of Lung Nodule Detected on LDCT Screening/Y.B. Hadi, P. Jain, A. Baig, S. Hadique, Morgantown, WV, p.A2615

Artificial Intelligence-Guided Fiducial Marker Placement to Enable Tumor Tracking in SBRT/D. Nader, Tulsa, OK, p.A2616


Parameter Based Analysis of 18FDG-PET-CT Allows Risk Stratification for Mediastinal Nodal Involvement in Patients with Known Pulmonary Malignancy/B. Elbourne, S. Angelides, K.J. Tong, P.J.-C. Wu, Kanwal, Australia, p.A2620
RESPIRATORY HEALTH AWARDS PRESENTATION OF
THE AMBERSON LECTURE, TRUDEAU MEDAL AND DISTINGUISHED ACHIEVEMENT AWARDS

KBHCCD
Hall A (Level 2)

Amberson Lecture
The Amberson Lecturer is an individual with a career of major lifetime contributions to clinical or basic pulmonary research and/or clinical practice. The Lecture is given in honor of James Burns Amberson, an international authority on chest disease and tuberculosis.
Lecturer: Jahar Bhattacharya, MD, DPhil, New York, NY
Lecture Title: Lung Injury Seen Through the Lens of the Alveolus

Trudeau Medal
The Trudeau Medalist is an individual with lifelong major contributions to prevention, diagnosis and treatment of lung disease through leadership in research, education, or clinical care. This award was established in 1926 and is given in honor of Edward Livingston Trudeau, a founder and the first president of the American Lung Association.
Awardee: Jacob I. Sznajder, MD, Chicago, IL

Distinguished Achievement Award
The Distinguished Achievement Award is given to individuals who have made outstanding contributions to fighting respiratory disease through research, education, patient care, or advocacy.
Awardees: John Hansen-Flaschen, MD, ATSF, Philadelphia, PA
Meir Kryger, MD, New Haven, CT

ASSEMBLY ON PEDIATRICS MEMBERSHIP MEETING

HYATT REGENCY DALLAS
Reunion Ballroom G-H (Lobby Level)

The Assembly Membership Meetings provide an update on the Assembly’s activities via the Assembly’s Leadership and provide Assembly members the chance to have input on future directions, information on how to get involved and networking opportunities. Voting results for the Assembly’s future leaders will also be announced.
Chairing: Stephanie D. Davis, MD, ATSF, Chapel Hill, NC

FOUNDERS DINNER

HYATT REGENCY DALLAS
Reunion Ballroom E-F (Lobby Level)

The Pediatric Assembly will hold a dinner immediately following their Assembly Membership Meeting. Assembly members and non-members, students and fellows are invited to join us for an evening of networking, great company, and camaraderie. This is a wonderful opportunity to introduce young members and trainees to Assembly leaders, to connect with old friends and to set up new interactions and collaborations.

Pre-registration and an additional fee is required. Seating is limited.

Fellow - $82.00
Member - $102.00
Non-Member - $112.00
6:00 p.m. - 8:00 p.m.
SECTION ON GENETICS AND GENOMICS MEMBERSHIP MEETING
HYATT REGENCY DALLAS
Reverchon A-B (Atrium 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.

Chairing: Michael H. Cho, MPH, MD, Duxbury, MA
Anthony N. Gerber, MD, PhD, Denver, CO

6:30 p.m. - 8:30 p.m.
ASSEMBLY ON BEHAVIORAL SCIENCE AND HEALTH SERVICES RESEARCH MEMBERSHIP MEETING
HYATT REGENCY DALLAS
Reunion Ballroom A-B, (Lobby Level)

The Assembly Membership Meetings provide an update on the Assembly’s activities via the Assembly’s Leadership and provide Assembly members the chance to have input on future directions, information on how to get involved and networking opportunities. All Assembly members and other interested individuals are invited to attend.

Voting results for the Assembly’s future leaders will also be announced.

BEHAVIORAL SCIENCE AND HEALTH SERVICES RESEARCH
Chairing: J. Daryl Thornton, MD, MPH, ATSF, Cleveland, OH

7:00 p.m. - 9:00 p.m.
STRATEGIES FOR TB CONTROL: POSTER SESSION
OMNI DALLAS DOWNTOWN
Dallas Ballroom E-F (Level 3)

Organized by:
U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION STOP TB USA

This public health poster forum will focus on innovative techniques, which are helping to meet the challenges of TB control, prevention, and elimination in the United States.

Target Audience:
National, state and local TB program staff, public health professionals (nurses, physicians, epidemiologists), pulmonary specialists, infectious disease specialists, TB and HIV clinicians, epidemiologists, TB consultants, laboratory scientists, and microbiologists.

Chairing: J. Jereb, MD, Atlanta, GA
M. Iademarco, MD, MPH, Atlanta, GA
**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:
  - remain current with medical knowledge relevant to their practice in pediatric pulmonology;
  - evaluate their understanding of key skills and content areas in pediatric pulmonology as well as receive feedback on their comprehension of a result of a pre-test/post-test comparison;
  - 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. The symposia will address topics that have been identified by an ATS pediatric working group, which is comprised of members of the ATS Education Committee and the International Conference Committee, who have identified important areas within pediatric medicine (including severe asthma, ILD, BPD, pulmonary hypertension and pulmonary manifestations of pulmonary disease). Attendees will increase their medical knowledge as a result of attending this symposium, and this will be measured by a comparison of pre-test vs. post-test results on the corresponding maintenance of certification module. The ATS Pediatric Core Curriculum will focus on a 3-year content cycle of key medical content in the area of pediatric medicine.

**Chairing:** P.E. Moore, MD, ATSF, Nashville, TN

- **6:45 a.m. - 7:45 a.m.**
  - **Dallas Ballroom A-C (Level 3)**
  - **OMNI DALLAS DOWNTOWN**

**PCC2 PEDIATRIC CLINICAL CORE CURRICULUM**

- **6:45 a.m. - 7:45 a.m.**
  - **OMNI DALLAS DOWNTOWN**
  - **Dallas Ballroom A-C (Level 3)**

**TARGETED THERAPEUTICS IN CYSTIC FIBROSIS**
G. Hong, MD, MHS, Philadelphia, PA
Deep Ellum B (Level 2)

**STATE OF THE ART AND FUTURE “OMIC” APPROACHES TO DETECT LUNG TRANSPLANT REJECTION**
S. Agbor, MD, PhD, Bethesda, MD
Deep Ellum A (Level 2)

**DIFFUSE CYSTIC LUNG DISEASE: EVALUATION AND MANAGEMENT**
L.A. Ho, MD, Seattle, WA
Arts District 1 (Level 2)

**ILD DIAGNOSIS: SURGICAL LUNG BIOPSY, CYROBIOPSY, AND EMERGING CUTTING-EDGE OPTICAL IMAGING TECHNIQUES**
R.S. Knipe, MD, Boston, MA
C. Keyes, MD, MPH, Boston, MA
L.P. Hariri, MD, PhD, Boston, MA
Arts District 2 (Level 2)

**DIAGNOSIS AND MANAGEMENT OF MASSIVE HEMOPTYSIS**
G.Z. Cheng, MD, PhD, Durham, NC
J. Cardenas-Garcia, MD, Ann Arbor, MI
Arts District 3 (Level 2)

**THE CHANGING LANDSCAPE OF ONCOLOGIC CRITICAL CARE**
L. Munshi, MD, MSc, Toronto, Canada
C. McEvoy, MD, St Louis, MO
R.S. Stephens, MD, Baltimore, MD
C. Gutierrez, MD, Houston, TX
Arts District 4 (Level 2)

**2020 VISION: UPDATE ON THE INTERNATIONAL CLASSIFICATION OF PNEUMOCONIOSIS AND DIGITAL CHEST IMAGING**
R. Zulfikar, MBBS, MD, Morgantown, WV
E.L. Petsonk, MD, Morgantown, WV
Arts District 5 (Level 2)

**BEST LAID PLANS: IMPROVING CLINICAL TRIAL QUALITY THROUGH INTERVENTION FIDELITY MONITORING**
J. Tate, PhD, RN, Columbus, OH
Arts District 6 (Level 2)

**THE BUGS THAT SHAPE US: UNDERSTANDING EVIDENCE ON THE EARLY-LIFE RESPIRATORY MICROBIOME**
C. Rosas-Salazar, MD, MPH, Nashville, TN
Arts District 7 (Level 2)
SS111 PULMONARY HYPERTENSION IN THE ICU: A STEPWISE APPROACH
K. El-Kersh, MD, Louisville, KY
Cedars (Level 2)

SS112 MACROLIDE-RESISTANT MYCOBACTERIUM AVIUM COMPLEX PULMONARY DISEASE: CURRENT CONCEPTS
M. Holt, MBBS, BSc, Denver, CO
South Side 1 (Level 3)

SS113 METHODS IN CHARACTERIZING MUCOUS CELL METAPLASIA
J.D. Dickinson, MD, PhD, Omaha, NE
Fair Park 1 (Level 3)

SS114 CARDIAC DISEASE AND BETA RECEPTORS IN COPD
J. Budde, MD, MPH, Long Island City, NY
Fair Park 2 (Level 3)

SS115 EVALUATION AND MANAGEMENT OF SLEEP-DISORDERED BREATHING IN PREGNANCY
S. Pamidi, MD, Montreal, Canada
Oak Cliff 2 (Level 5)

SS116 LUNG CANCER CHEMOPREVENTION: FROM BENCH TO BEDSIDE
M. Tennis, PhD, Aurora, CO
Victory Park 2 (Level 5)

SS117 E-CIGARETTES: EPIDEMIOLOGY, TOXICOLOGY, AND WHY THEY SHOULD NOT BE RECOMMENDED FOR SMOKING CESSATION
F. Moazed, MD, San Francisco, CA
White Rock 1-2 (Level 5)

Faculty handbooks for promotion and tenure are available for most academic institutions. However, they rarely provide practical guidance or a well-defined road map for early and mid-career professionals to steer them on the path towards academic advancement. This seminar provides concrete strategies and advice to effectively navigate early and mid-career timelines and how to set clear guidelines for achievable goals towards promotion and tenure. A faculty panel with experience in the promotion and tenure process will provide practical tips for academic career advancement. This will occur first in a moderator-led question and answer session which will be followed by career track-based small group interactive discussions.

Chairing: S. Dua, MD, New York, NY
Speakers: S.A. McColley, MD, Chicago, IL
E. Herzog, MD, PhD, New Haven, CT
I. Petrache, MD, ATS, Denver, CO

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FD1 FACULTY PROMOTION AND TENURE: UNRAVELING THE “FACULTY HANDBOOK”
Conference badges are required for admission. Space is limited and admittance is on a first-come, first-served basis. There is no additional fee.

6:45am - 7:45 a.m. OMNI DALLAS DOWNTOWN
Katy Trail (Level 2)

Target Audience
Early and mid-career clinical and/or research faculty, clinical and postdoctoral fellows in academic pulmonary, critical care and/or sleep medicine, PhD candidates

Objectives
• understand the general process by which promotion and tenure are achieved in academic institutions;
• identify strategies and practical ideas to formulate a road map for their professional academic career advancement by leveraging their institutions and societal resources;
• interact with experts within various academic tracks to gain insight and knowledge in devising a concrete plan to meet milestones for academic advancement within their institutions.

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K3 DATA SHARING IN THE CONTEXT OF CLINICAL TRIALS
8:00 a.m.-8:45 a.m.
KBH CCD
Ballroom C One-Two (Level 2)
Speaker: Jeffrey M. Drazen, MD, Boston, MA

K4 UNRAVELLING THE MYSTERY OF BREATHELESSNESS IN COPD
8:00 a.m.-8:45 a.m.
KBH CCD
Ballroom C Three-Four (Level 2)
Speaker: Denis E.O’Donnell, MD, Kingston, Canada
New! The Clinical Year in Review Bibliography is only available via the conference website http://conference.thoracic.org/go/cyir or mobile app. Attendees wishing to access the bibliography should bring a smart phone, tablet or laptop to the session.

9:15 a.m. - 11:15 a.m.  
KBHCCD Hall A (Level 2)

Target Audience
Providers including physicians, nurses, respiratory therapists, nurse practitioners, physician assistants; trainees including residents and fellows; clinical researchers

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

The annual Clinical Year in Review symposia provides concise summaries of the most impactful clinical research publications related to specific clinical topics. Speakers are asked to conduct a literature review of the prior year’s scientific publications and develop a written summary of the top 20 articles and highlight 5 of the most important and influential publications on their topic in written format and during their talks at the International Conference Clinical Year in Review sessions.

Chairing: V.E. Ortega, MD, PhD, ATSF, Winston Salem, NC  
J.S. Lee, MD, Aurora, CO  
P.A. Kritek, MD, EdM, Seattle, WA

9:15 Sarcoïdosis
G.J. Criner, MD, ATSF, Philadelphia, PA

9:44 Mycobacterial Infections
D.J. Horne, MD, MPH, Seattle, WA

10:13 Asthma
W. Weder, MD, Zurich, Switzerland

10:42 ARDS
A. Valipour, MD, Vienna, Austria

11:11 MOC Questions

This session and the International Conference are supported by educational grants from Genentech, Inc., Insmed Incorporated, Mallinckrodt Pharmaceuticals, Novartis Pharmaceuticals Corporation, Sanofi Genzyme and Regeneron Pharmaceuticals. All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.
10:30 Outcome of Lung Reduction with Endobronchial Valve Treatment in Patients with AATD
D.K. Hogarth, MD, Chicago, IL

10:45 EBV for Airleaks
D.-J. Slebos, PhD, MD, Gromingen, Netherlands

11:00 Complications of EBV Placement
D. Gompelmann, MD, Heidelberg, Germany

CLINICAL TOPICS IN PULMONARY MEDICINE
CME Credits Available: 2

B3 FELLOWS CASE CONFERENCE
Assemblies on Allergy, Immunology and Inflammation; Clinical Problems; Pulmonary Circulation; Pulmonary Infections and Tuberculosis; Members In Transition and Training Committee; Training Committee

9:15 a.m. - 11:15 a.m. KBHCCD
Ballroom C Three-Four (Level 2)

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 commonsymptoms that include uncommon/rare diseases in the differential diagnosis when appropriate.

This session will consist of 6 unique cases presented and discussed by fellows with a panel of 3 clinical experts to moderate the discussion and provide commentary. An expert radiologist and expert pathologist will provide guidance on imaging and path. The cases will provide new insights into disease pathogenesis, diagnosis, and/or treatment. Selected cases will include clear clinical teaching points with review of associated pathology and radiology as appropriate. Finally, the discussion will highlight medical decision making important for both physicians-in-training and seasoned clinicians.

Chairing: L.E. Crotty Alexander, MD, ATSF, San Diego, CA

9:15 Welcome and Introduction
L.E. Crotty Alexander, MD, ATSF, San Diego, CA

9:20 Be Careful What You Inhale!
A. Binder, MD, Atlanta, GA

9:30 Finding a Diagnosis After Stem Cell Transplant
C. Kapp, MD, Baltimore,

9:40 When Cough Is More than Bronchitis
L. Winnicka, MD, Mineola, NY

9:50 It’s Not Always a Heart Problem
A. Singha, MD, Columbus, OH

10:00 Rash and Pleural Effusions: A Rare Cause of Acute Respiratory Failure
B. Morang, DO, Bethesda, MD

10:10 What’s Hiding in Your Trash?
D. Axell-House, MD, Houston, TX

10:20 Expert Clinicians
M.I. Schwarz, MD, Aurora, CO
A.E. Dixon, MD, Burlington, VT
A.H. Limper, MD, Rochester, MN

ATS 2019 • Dallas, TX
B5  TILL DEATH DO US PART: CELL FATE AND OBSTRUCTIVE LUNG DISEASE

Assemblies on Respiratory Structure and Function; Allergy, Immunology and Inflammation; Clinical Problems; Respiratory Cell and Molecular Biology

9:15 a.m. - 11:15 a.m.  KBHCCD

Ballroom D Two (Level 3)

Target Audience
This session will benefit all providers of lung health including trainees. Individuals with a research focus on mechanisms of programmed cell death as it relates to obstructive lung disease should find the session of particular interest

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

- learn new findings about programmed cell death and physiologic homeostasis in the lung;
- apply knowledge about programmed cell death to understand the role it plays in obstructive lung disease;
- learn new findings about how mechanisms of cell death may be novel targets for treatment of obstructive lung disease.

The death and removal of inflammatory cells is a normal mechanism of maintaining homeostasis in the lung. The session will focus on the role of programmed cell death in obstructive lung diseases such as asthma and COPD. Common mechanisms of cell death including apoptosis, autophagy and regulation by cellular signaling will be discussed. The learner will understand that interruption of these normal processes can lead to enhanced inflammation.

The session will also highlight how targeting the mechanisms of cell death may play a role in the treatment of obstructive lung diseases.

Chairing:
G.S. Skloot, MD, ATSF, New York, NY
R.A. Panettieri, MD, New Brunswick, NJ
I. Petrache, MD, ATSF, Denver, CO

9:15  A Time to Live and a Time to Die
A.M.K. Choi, MD, New York, NY

9:45  Mechanisms of Cell Death in Asthma: Can Cells Live Too Long?
C.A. Singer, PhD, Reno, NV

10:15  Programmed Cell Death in COPD: So Many Ways to Die
I. Petrache, MD, ATSF, Denver, CO

10:45  Translating Death to Life: Opportunities for Precision Therapeutics in Airways Diseases
R.A. Panettieri, MD, New Brunswick, NJ

B6  BORN TOO SOON: THE EFFECTS OF PREMATURITY ON THE NEONATAL/DEVELOPING LUNG

Assemblies on Pediatrics; Respiratory Cell and Molecular Biology

9:15 a.m. - 11:15 a.m.  OMNI DALLAS DOWNTOWN

Dallas Ballroom A-C (Level 3)

Target Audience
Neonatologists, pediatric pulmonologists, basic researchers of lung development, pediatric pharmacists, neonatal and pediatric pulmonology fellows

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

- understand the current thinking about the pathophysiology of bronchopulmonary dysplasia;
- integrate the roles of the disciplines of neonatology and pulmonology in improving our understanding and care of babies with BPD;
- identify future targets for additional research to increase our understanding of the developing lung.

The Prematurity and Respiratory Outcomes Program (PROP) enrolled 835 preterm infants born less than 29 weeks gestation. Newborns were followed from birth until one year corrected gestational age. Scientific outcomes from these studies remains ongoing. This session will provide an update on current research findings and unpublished results. The studies focus on biomarkers for bronchopulmonary dysplasia (BPD) and later sequelae such as late onset pulmonary hypertension and pulmonary function abnormalities.

Chairing:
P.E. Moore, MD, ATSF, Nashville, TN
A. Hamvas, MD, Chicago, IL

9:15  Introduction and the Effect of Race on BPD and Respiratory Outcomes
R.M. Ryan, MD, ATSF, Charleston, SC
9:30 Lessons from the Heart: Clinical and Biochemical Markers of Chronic Pulmonary Hypertension in Formerly Premature Infants  
E.D. Austin, MD, MSc, Nashville, TN

9:50 What to Do About All That RAGE: The Inflammation Story Continues  
J. Benjamin, MD, MPH, Nashville, TN

10:10 Neonatal Immunology: T-Cell CD31 Expression is a Biomarker for BPD  
G.S. Pryhuber, MD, Rochester, NY

10:30 Respiratory Medications in the NICU and Beyond  
J. Greenberg, MD, Cincinnati, OH

10:50 Physiologic Outcomes of ELGANs at 1 Year of Age  
J.A. Voynow, MD, Richmond, VA

11:10 Where Do We Go From Here?  
P.E. Moore, MD, ATSF, Nashville, TN

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**BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL**

**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 2

**B7 GLOBAL PERSPECTIVES ON CLIMATE CHANGE: IMPACT ON SUSCEPTIBLE POPULATIONS AND LOW-INCOME COUNTRIES**

Assemblies on Environmental, Occupational and Population Health; Allergy, Immunology and Inflammation; Behavioral Science and Health Services Research; Nursing; Pediatrics; Pulmonary Infections and Tuberculosis

9:15 a.m. - 11:15 a.m.  
OMNI DALLAS DOWNTOWN  
Trinity Ballroom 4/8 (Level 3)

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:

• understand the recent evidence on the degree of global climate change, and worldwide actions to stop it;
• gain the knowledge about the health impacts of climate change, particularly among vulnerable populations including the elderly and children;
• encourage ATS members and others to become involved and respond to the health challenges posed by climate change through influencing policy makers.

Climate change impacts individuals around the world especially when adaptation to climate change is a matter of survival for low and middle-income countries. Vulnerability to climate change is not the same for different countries and communities. The main objectives of this symposium are to present a global perspective on the health effects of global climate change. The degree of climate change worldwide changes according to vulnerability of geographic locations such as Arctic, Antarctic, Africa, Middle East, Mediterranean, Asia and Island States. This session will present recent developments in our understanding of the health effects of climate change among vulnerable countries and individuals. Leading scientists will address mechanisms, vulnerability and risk factors of climate change.

Chairing: J.R. Balmes, MD, ATSF, San Francisco, CA  
M.B. Rice, MD, MPH, Boston, MA  
H. Bayram, MD, PhD, ATSF, Istanbul, Turkey

9:15 Climate Change: How Bad Is It? Is There Sufficient Action to Mitigate Its Effects?  
W. Abdalati, PhD, Boulder, CO

9:35 An Overview of Health Impacts of Climate Change  
M. Akpinar-Elci, MD, MPH, ATSF, Norfork, VA

9:55 Lung Health in an Era of Climate Change and Dust Storms  
M. Mirsaeidi, MD, Miami, FL

10:15 Does Age Matter in Climate Change?  
I. Annesi-Maesano, MD, PhD, DSc, Paris, France

10:35 Is the Worst for the Poorest?: Vulnerable Regions and Countries  
H. Bayram, MD, PhD, ATSF, Istanbul, Turkey

10:55 Does It Really Matter for Developed World?  
K.E. Pinkerton, PhD, Davis, CA

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**BEHAVIORAL • CLINICAL**

**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 2

**B8 ENSURING BROAD DISSEMINATION AND EQUITABLE ACCESS TO LUNG CANCER SCREENING: CHALLENGES AND OPPORTUNITIES**

Assemblies on Thoracic Oncology; Behavioral Science and Health Services Research; Nursing

9:15 a.m. - 11:15 a.m.  
KBHCCD Ballroom A One (Level 2)

Target Audience  
clinicians, patients, policy makers, patient advocacy groups, researchers interested in lung cancer screening and reducing disparities in lung health

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

• learn new findings about barriers to equitable access to lung cancer screening;
• more appropriately identify and refer candidates for lung cancer screening;
• gain new strategies to overcome disparities in access to lung cancer screening.

Annual lung cancer screening with low dose CT is one of the few public health interventions proven to reduce lung cancer mortality, yet it is markedly underutilized, with national screening rates under 5% among eligible individuals. There is particular concern that socioeconomically disadvantaged individuals, including those in inner cities as well as rural areas, are at risk for further disparities in lung cancer outcomes if screening is not disseminated broadly. This session will explore barriers faced by patients, clinicians, and systems...
trying to increase access to and reach of lung cancer screening, and successful strategies implemented to overcome these barriers.

**Chairing:**
R.S. Wiener, MD, MPH, Boston, MA  
M.P. Rivera, MD, ATSF, Chapel Hill, NC  
J.P. Wisnivesky, DrPH, MD, New York, NY

**9:15** Overview: Why Are so Few Eligible Individuals Screened?  
R.S. Wiener, MD, MPH, Boston, MA

**9:20** Promoting Quality but Limiting Access? Impact of Policy Coverage Decisions  
M.S. Kale, MD, MPH, New York, NY

**9:40** Lightening the Load: Helping PCPs Identify Eligible Patients and Facilitate Shared Decision-Making  
T. Caverly, MD, MPH, Ann Arbor, MI

**10:00** Overcoming Patient-Level Barriers: Addressing Stigma Experienced by Smokers  
L. Carter-Harris, PhD, APRN, ANP-C, New York, NY

**10:20** Public Health Outreach: Kentucky’s Terminate Lung Cancer Campaign  
R. Cardarelli, DO, MPH, Lexington, KY

**10:40** Integrating and Coordinating Health Care in Inner City Communities  
R.A. Winn, PhD, Chicago, IL

**11:00** Working Together to Turn the Tide  
R.A. Smith, PhD, Atlanta, GA

This session and the International Conference are supported by an educational grant from AstraZeneca LP.

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**SCIENTIFIC SYMPOSIUM**

**CME Credits Available: 2**

**MOC Points Available: 2**

**B9 ADDICTING A NEW GENERATION: JUULING, VAPING, HEAT NOT BURN, FLAVORINGS, AND THE EVIDENCE FOR WHY WE SHOULD BE VERY CONCERNED**

Assemblies on Behavioral Science and Health Services Research; Clinical Problems; Environmental, Occupational and Population Health; Pediatrics; Respiratory Cell and Molecular Biology; Thoracic Oncology

**9:15 a.m. - 11:15 a.m.**  
KBHCCD Room D220/D227 (Level 2)

**Target Audience**
Health care providers and trainees, public policy advocates and decision makers, tobacco and e-cigarette researchers.

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

- describe how to assess harm reduction and different elements that need to go into a harm reduction claim;
- counsel patients and educate the general public about the substantial harms of electronic nicotine delivery systems;
- describe and effectively advocate for evidenced based public policy initiatives that can protect young people from new tobacco products, including electronic nicotine delivery systems.

New tobacco products are coming on the market with implied claims of reduced harm, however many of these claims do not seem to have any more solid of an evidence base as the false claims of reduced harm for low tar and nicotine cigarettes. This session will review principles of assessing claims of harm reduction, the evidence on how these new tobacco products harm users, addicts non-users, and servers as an entry to use of other tobacco products by young people. Evidence based public policy recommendations will be discussed.

**Chairing:**
E.R. Neptune, MD, Baltimore, MD  
D.J. Upson, MD, MA, Albuquerque, NM  
S. Pakhale, MD, MSCE, Ottawa, Canada

**9:15** Verities and Balderdash About Harm Reduction and the New ATS Policy to Support a Comprehensive Evidence-Based Approach  
F.T. Leone, MD, MS, ATSF, Philadelphia, PA

**9:35** New and Emerging Tobacco Products: What Are the Harms? Juul/Vapes/E-Cigs/Heat Not Burn  
I. Jaspers, PhD, Chapel Hill, NC

**9:55** Electronic Nicotine Delivery Systems (E-Cigarettes) Are Addicting a New Generation: Why We Should Worry  
H.J. Farber, MD, MSPH, ATSF, Houston, TX

**10:14** New Tobacco Products and Tobacco Control in Latin America  
G.E. Zabert, MD, Neuquén, Argentina

**10:34** Disparities in Tobacco and Nicotine Promotion and Addiction: How Can Marginalized Populations Be Protected?  
S. Pakhale, MD, MSCE, Ottawa, Canada

**10:53** Video Presentation: Juulers against Juul  
H.J. Farber, MD, MSPH, ATSF, Houston, TX

**10:59** FDA Policy Initiatives to Protect Youth From Nicotine and Tobacco: Where Do We Stand?  
M. Zeiler, JD, Silver Spring, MD

**B10 HUMAN LUNG CELL ATLAS: BEYOND SINGLE CELL RNA-SEQUENCING**

Assemblies on Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology; Section of Genetics and Genomics

**9:15 a.m. - 11:15 a.m.**  
KBHCCD Room D One (Level 3)
**Target Audience**
Basic scientists, translational scientists

**Objectives**
At the conclusion of this session, the participant will be able to:
- understand the conceptual approach of the human cell atlas, and its implications for lung health and disease;
- gain knowledge of the cellular heterogeneity during lung development and in lung disease;
- appreciate the power of single nuclear sequencing for retrospective clinical studies and spatial analyses.

The human lung is a highly structured organ that contains at least 40 discrete cell types that contribute to its physiology and functions. To understand the lung and its diseases, we need to know the cells and their interactions that form this vital organ. Recent advances in single cell biology and spatial transcriptomics offer an unprecedented insight into the cellular and molecular architecture of the lung, the cell lineages that form its core structure and their interactions in health and disease. In this symposium, we will host a series of speakers that will provide a comprehensive overview of recent progress in charting an atlas of human lung cells, and its applications in understanding lung development, biomarker discovery and disease pathogenesis, as well as the cellular response to environmental insults.

**Chairing:**
G.H. Koppelman, MD, PhD, Groningen, Netherlands  
K.A. Steiling, MSc, MD, Boston, MA  
C.P. Hersh, MD, MPH, ATSF, Boston, MA

9:15 **Introduction to Single Cell Sequencing of the Lung**  
G.H. Koppelman, MD, PhD, Groningen, Netherlands

9:23 **The Human Lung Cell Atlas: Charting Cellular Heterogeneity and Plasticity in Lung**  
J. Rajagopal, MD, Boston, MA

9:39 **Single Cell Transcriptomics in ARDS**  
R. Zemans, MD, Ann Arbor, MI

9:55 **Airway Epithelial Cell Heterogeneity Along the Respiratory Tract: Location, Location, Location**  
P. Barbry, PhD, Valbonne, France

10:11 **Single-Nuclear Sequencing of Human Lung Tissue: Empowering Spatial Analyses and Retrospective Analyses**  
A. Misharin, MD, PhD, Chicago, IL

10:27 **Unique Cell States and Interactions in Asthma: Applying the Human Lung Cell Atlas to Understand Disease Pathogenesis**  
M.C. Naujijn, PhD, Groningen, Netherlands

T.E.A. Duong, MD, San Diego, CA

10:59 **Cigarette Smoking Induces Unique Cell States in Bronchial Epithelial Cells**  
A. Spira, MD, Boston, MA

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**BASIC • CLINICAL • TRANSLATIONAL**
**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 2

**B11 LUNG-OMICS: TO BOLDLY GO...**
Assemblies on Pulmonary Circulation; Allergy, Immunology and Inflammation; Environmental, Occupational and Population Health; Nursing; Respiratory Cell and Molecular Biology; Section on Genetics and Genomics

9:15 a.m. - 11:15 a.m.  
Room D163/D165/D170/D172 (Level 1)

**Target Audience**
Physicians, nurses and researchers from any field who are interested in learning about state of the art omics approaches.

**Objectives**
At the conclusion of this session, the participant will be able to:
- understand the different approaches used to interpret coding versus non-coding DNA variants and their functional relevance to disease;
- learn how network analysis can be used to identify critical regulators in complex molecular interactions, and integrate clinical variables to develop risk stratification models for patients;
- describe how ancestry and population structure impact the interpretation of genomic research and translation into the clinic.

New omics technologies are providing unparalleled insight into the causes of lung disease and the potential to personalize therapy to specific endophenotypes, but they also present challenges for interpretation and clinical translation. This symposium showcases how omics approaches such as whole genome sequencing, epigenetics, proteomics and network analysis are being applied in lung diseases, with examples from pulmonary hypertension and asthma. The focus is on broad concepts more than specific pathways. We highlight the importance of considering ancestry in genomic studies to address health disparities, understand complex gene-environment interactions, and ensure that advances in precision medicine will benefit all populations.

**Chairing:**
M. Aldred, PhD, Indianapolis, IN  
K. Yuan, PhD, Palo Alto, CA  
S. Gräf, PhD, Cambridge, United Kingdom

9:15 **Introduction**  
M. Aldred, PhD, Indianapolis, IN

9:25 **Whole Genome Sequencing: Challenges of Interpreting the Non-Coding Space**  
S. Gräf, PhD, Cambridge, United Kingdom

9:47 **Network Biology of the Regulatory Space**  
S.S. Pullamsetti, PhD, Bad Nauheim Hessen, Germany

10:09 **Network Biology of Non-Coding RNAs**  
S.Y. Chan, MD, PhD, Pittsburgh, PA

10:31 **Network Analysis in the Lab and the Clinic**  
B.A. Maron, MD, Boston, MA

10:53 **Translation to the Clinic: The Importance of Ancestry**  
E.G. Burchard, MD, MPH, San Francisco, CA
**BEHAVIORAL SCIENTIFIC SYMPOSIUM**

**CME Credits Available: 2**

**B12 HOT TOPICS IN MEDICAL EDUCATION: WHAT’S NEW IN ‘19**

Education Committee; Members In Transition and Training Committee; Membership Committee; Section on Medical Education

9:15 a.m. - 11:15 a.m.  
OMNI DALLAS DOWNTOWN  
Dallas Ballroom G (Level 3)

**Target Audience**

Physicians, nurses, respiratory therapists and pharmacists who teach students, residents, fellows and/or peers would benefit from this session. Medical trainees, including students, residents and fellows would also value this session.

**Objectives**

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

- Identify the importance and benefit of implementing active learning techniques, including use of asynchronous learning strategies to engage the modern learner.
- Describe how social media can be used as an effective teaching tool in medical education and identify the pros and cons of free open access education.
- Describe best practices for teaching about social determinants of health in order to improve both the learner and the patient experience.

Education, a core skill of all effective health care providers, has rapidly changed over the years. Given work hours changes, shifts in undergraduate medical curricula, increased demands on physicians due to documentation and EHR challenges, new educational techniques are required to keep up with the modern learner. Adult learning theories have changed the way we deliver content and our current fast paced, immediate gratification society has changed the way learners interact with content. This symposium will leave participants with tangible strategies to teach modern learners, use social media for teaching and teach some of the non-traditional topics, such as social determinants of health. Medical education research is a rapidly growing field and this Hot Topics symposium will provide participants with the most up to date research and best practices on how to effectively teach in 2019.

**Chairing:**

M.M. Hayes, MD, Boston, MA  
R. Adamson, MBBS, ATSF, Seattle, WA  
G.W. Garrison, MD, Burlington, VT  
D.M. Boyer, MD, Boston, MA

9:15 Setting the Stage  
M.M. Hayes, MD, Boston, MA

9:20 Activating Active Learning: Tools to Teach the Modern Learner  
K.M. Burkart, MD, MSc, ATSF, New York, NY

9:40 How to Maximize Teaching Time: The Use of Asynchronous Learning  
D. Pradhan, MD, New York, NY

10:00 Best Practices for Teaching About Social Determinants of Health  
A. Luks, MD, Seattle, WA

10:20 Active Learning Break: Think Pair Share  
D.M. Boyer, MD, Boston, MA

**B13 50 YEARS OF PROGRESS IN PULMONARY SCIENCE**

9:15 a.m. - 11:15 a.m.  
Room D221/D225/D226 (Level 2)

**Target Audience**

All research investigators, providers, and lay members with an interest in the history of lung research and examples of notable progress in the field.

**Objectives**

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

- know the origins of the NHLBI Division of Lung Diseases and how grant programs have facilitated lung biology and disease research;
- understand several of the main advances in pulmonary and critical care medicine over the last half century;
- describe future scientific directions being pursued by new investigators that may inform ongoing research and stimulate new collaborations.

This session will include live and video presentations commemorating the 50th Anniversary of the Division of Lung Diseases (DLD) at the NIH National Heart Lung and Blood Institute. Speakers will highlight important scientific advances in pulmonary health and disease and illustrate DLD’s role in facilitating lung biology and disease research.

**Chairing:**

P.E. Parsons, MD, ATSF, Burlington, VT  
G. Gibbons, MD, Bethesda, MD

9:15 Introduction  
G. Gibbons, MD, Bethesda, MD

9:20 Video Presentation: The NHLBI Perspective Featuring Claude Lenfant, MD  
G. Gibbons, MD, Bethesda, MD

9:35 Asthma  
J.M. Drazen, MD, Boston, MA

9:40 Video Presentation: Lung Stem Cells Featuring Tien Peng, MD

9:58 Respiratory Distress Syndrome  
J.A. Whitsett, MD, Cincinnati, OH

**Video Presentations:**

- Lung Development Featuring Denise Al Alam, PhD
- Cystic Fibrosis Airway Featuring Susan Birket, PharmD, PhD
10:24 COPD  
M.K. Han, MD, MS, Ann Arbor, MI  
Video Presentation:  
Pulmonary Vascular Disease Featuring Bradley Maron, MD

10:47 Acute Lung Injury/ARDS  
C.S. Calfee, MD, San Francisco, CA  
Video Presentation:  
Models of Lung Injury Featuring Hasina Outtz Reed, MD, PhD

11:10 Closing Remarks: Looking Ahead  
G. Gibbons, MD, Bethesda, MD

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MINI SYMPOSIUM

B14 LATE BREAKING CLINICAL TRIALS  
9:15 a.m. - 11:15 a.m.  
KBHCCD

Oral Presentations  
9:15 Eosinophil-Guided Corticosteroid-Sparing Therapy in Hospitalized Patients with Exacerbated COPD (CORTICO-COP): A Randomized Prospective Multicenter Investigator-Initiated Trial  

9:30 Primary Analysis of a Phase 1/2 Study to Assess MultiStem® Cell Therapy, a Regenerative Advanced Therapy Medicinal Product (ATMP), in Acute Respiratory Distress Syndrome (MUST-ARDS)  

9:45 A Randomized, Double-Blind, Placebo-Controlled Study to Assess the Safety and Efficacy of Pulsed, Inhaled Nitric Oxide (iNO) at a Dose of 30 mcg/kg-iBW/hr (iNO 30) in Subjects at Risk of Pulmonary Hypertension Associated with Pulmonary Fibrosis (PH-PF) on Long Term Oxygen Therapy  
J. Mannick, S. Shergill, G. Teo, Boston, MA, p.A7354

10:00 Targeted Bronchial Thermoplasty Guided by 129Xe MRI/C  

10:15 Dupilumab Improves Upper and Lower Airway Outcome Measures in Patients with Severe Chronic Rhinosinusitis with Nasal Polyps and Comorbid Asthma: Pooled Results from the SINUS-24 and SINUS-52 Phase 3 Studies  

10:30 A Randomized Controlled Trial of a Novel Smoking Cessation Smartphone Application Integrated with a Mobile Carbon Monoxide Checker for Smoking Cessation Treatment  

10:45 Suvratoxumab Reduces Staphylococcus Aureus Pneumonia in High-Risk ICU Patients: Results of the SAATELLITE Study/B  

10:00 Sustainability and Durability of Culture Conversion in Patients Receiving Amikacin Liposome Inhalation Suspension (ALIS) for Treatment-Refractory Mycobacterium Avium Complex Lung Disease (MAC-LD) in the CONVERT Study/D  

B15 IMMUNOTHERAPY FOR LUNG DISEASE  
9:15 a.m. - 11:15 a.m.  
KBHCCD

Oral Presentations  
9:15 Tezepelumab Treatment Effect on Annualized Rate of Exacerbations by Baseline Biomarkers in Uncontrolled Severe Asthma Patients: Phase 2b PATHWAY Study  

9:30 The Impact of Tezepelumab on Hospitalization and Emergency Department Visits in Patients with Severe Uncontrolled Asthma: Results from the Pathway Phase 2b Trial  
J. Corren, S. Chen, L. Callan, E. Garcia Gil, Los Angeles, CA, p.A2622

9:45 Oral TORC1 Inhibitor Dactolisib Enhances Immune Function and Reduces the Incidence of Respiratory Tract Infections in Elderly Subjects with Asthma  
J. Mannick, S. Shergill, G. Teo, Boston, MA, p.A2623


CLINICAL MINI SYMPOSIUM
B16  ADVANCES IN INTERVENTIONAL PULMONARY
9:15 a.m. - 11:15 a.m.  KBHCCD
Room C147/C148/C154 (Level 1)

Chairing:  F. Maldonado, MD, Nashville, TN
C. Argento, MD, Chicago, IL

Oral Presentations


10:15 Safety and Efficacy of Transplantation of High Cumulative Dose Allogeneic Bone Marrow-Derived Mesenchymal Stem Cells in Patients with Idiopathic Pulmonary Fibrosis and Rapid Lung Function Decline/A. Averyanov, I. Koroleva, A. Sotnikova, M. Konoplyannikov, V. Lesnyak, O. Danilevskaya, V. Baklaushev, Moscow, Russian Federation, p.A2640


B18 ENHANCING QUALITY OF LIFE AND DISEASE MANAGEMENT IN PULMONARY CONDITIONS

9:15 a.m. - 11:15 a.m. KBHCCD Room D162/D164 (Level 1)

Chairing: P.M. Meek, PhD, RN, BC, ATSF, Aurora, CO N.E. Bracken, ACNPC, MSN, Chicago, IL

Oral Presentations

9:15 The Impact of a Multicomponent Integrative Intervention on Symptoms and Health Related Quality of Life for Patients with Pulmonary Hypertension/T.T. Von Visger, S. Thane, M.D. Klatt, A. DeVito Dabbs, L.L. Chlan, M.B. Happ, Columbus, OH, p.A2643

9:30 COPD Hospital Admission Reduction Playbook: Incorporating Telehealth in the Home/A. Dowe, B. Finn, S. Lawani, E. Lindholm, Middletown, CT, p.A2644


10:00 Measuring Sedentary Behavior in People with Chronic Obstructive Pulmonary Disease (COPD)/J.L. Larson, K. Webster, R. Dechert, Ann Arbor, MI, p.A2646

B19 ADVANCES IN THE TREATMENT OF NTM

9:15 a.m. - 11:15 a.m. KBHCCD Ballroom A Two (Level 2)

Chairing: K.L. Winthrop, MD, MPH, Portland, OR R. Thomson, MBBS, PhD, Greenslopes, Australia D.E. Griffith, MD, Tyler, TX

Oral Presentations


**BASIC • CLINICAL • TRANSLATIONAL MINI SYMPOSIUM**

**LUNG TRANSPLANTATION: MODELS AND MECHANISMS**

**B20** 9:15 a.m. - 11:15 a.m.  
Ballroom A Three (Level 2)

Chairing: J.F. McDyer, MD, Pittsburgh, PA  
D.E. Byers, MD, PhD, ATSF, St. Louis, MO  
C.M. Shaver, MD, PhD, Nashville, TN

**Oral Presentations**


9:45 Monocyte-Dependent Interleukin-6 Trans-Signaling Induces Lung Allograft Fibrosis/D.S. Wheeler, M.P. Combs, N.M. Walker, R. Braeuer, K. Misumi, R. Vittal, V.N. Lama, Ann Arbor, MI, p.A2660


10:30 Pulmonary Lymphatics Regulate Immune Cell Trafficking and Lung Injury/H. Outtz Reed, M.L. Kahn, Philadelphia, PA, p.A2663


**B21 SEVERE ASTHMA: CLINICAL AND MECHANISTIC STUDIES**

9:15 a.m. - 11:15 a.m.  
Room D222-D224 (Level 2)

**Abstract Summaries 9:15-9:45**

**Viewing/Discussion 9:45-11:15**

Chairing: S.B. Khatri, MD, MS, Cleveland, OH  
M. Kraft, MD, ATSF, Tucson, AZ  
A. Ray, PhD, Pittsburgh, PA


505 Efficacy and Safety of Dupilumab for the Treatment of Uncontrolled Asthma: A Meta-Analysis of Randomized Clinical Trials/X.-F. Xiong, D.-Y. Cheng, Chengdu, China, p.A2670

506 Characterisation of Exacerbations of Severe Eosinophilic Asthma on Mepolizumab Compared to Placebo/R. Shrimanker, O. Keene, D.J. Bratton, S. Yancey, L. Heaney, I.D. Pavord, Oxford, United Kingdom, p.A2671

508 Exhaled Breath Analysis for Prediction of Responders to Mepolizumab in Patients with Severe Asthma/J.M.H. van Bragt, R. de Vries, P.J. Sterk, A.H. Maitland-van der Zee, Amsterdam, Netherlands, p.A2673

509 Meta-Analysis of Asthma Control in Patients with Severe Eosinophilic Asthma Treated with Mepolizumab/J.-P. Llanos Ackert, M.S. Forshag, D. Carstens, B. Mayer, F. Albers, M. Liu, Research Triangle Park, NC, p.A2674


512 Tezepelumab Reduces Multiple Key Inflammatory Biomarkers in Patients with Severe, Uncontrolled Asthma in the Phase 2b PATHWAY Study/T.-H. Pham, P. Ren, J.R. Parnes, J.M. Griffiths, Gaithersburg, MD, p.A2677


403 Sustained Improvement in Sex-Differences in Lung Protective Ventilation in Response to a Simple EHR Order-Set/S.A. Nonas, E. Pohoata, J. Gold, Portland, OR, p.A2690


406 What Happens During Outpatient Visits Immediately Prior to Sepsis Hospitalization?/H.C. Miller, H.C. Prescott, Ann Arbor, MI, p.A2693

407 At What Threshold Do We Initiate Steroids During Septic Shock? A Study of Electronic Health Record Data/A. Law, N. Bosch, J. Stevens, A.J. Walkey, Boston, MA, p.A2694


409 What Do You Think Is Most Likely to Happen? How Intensivists Answered a Surrogate’s Question About Prognosis When They Expected the Patient to Die/S. Vasher, S.E. Zaeh, A.E. Turnbull, Baltimore, MD, p.A2696


413 Neither Vitamin D Levels Nor Supplementation Are Associated with Persistent Critical Illness: A Retrospective Cohort Analysis/E. M. Vigilanti, P. Zajic, T.J. Iwashyna, K. Amrein, Ann Arbor, MI, p.A2700


419 Community Perspective on Medical Futility/T.H. Neville, C. Pavlisch, D.M. Tarn, N.S. Wenger, Los Angeles, CA, p.A2706


422 Community Perspective on Medical Futility/T.H. Neville, C. Pavlisch, D.M. Tarn, N.S. Wenger, Los Angeles, CA, p.A2706

423 CRITICAL CARE: STEP ACROSS THIS LINE - MICROBIOME, GENETICS, AND OTHER BIOMARKERS IN ACUTE CRITICAL ILLNESS

9:15 a.m. - 11:15 a.m.

B23 RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

BIOMARKERS IN ACUTE CRITICAL ILLNESS

9:15 a.m. - 11:15 a.m.

Ballroom D Three (Level 3)

Abstract Summaries
9:15-9:45

Viewing/Discussion
9:45-11:15

Chairing:
A.M. Esper, MD, MS, ATSF, Atlanta, GA
R.M. Baron, MD, Boston, MA
A. Rogers, MPH, MD, Stanford, CA


603 Survivors of Murine Pneumospepsis Exhibit Long-Term Behavior Change and Primed Brain IL-1β Expression/S.J. Denstaedt, M. Newstead, X. Zeng, T.J. Standiford, B. Singer, Ann Arbor, MI, p.A2709


608 Comparison of Alveolar Epithelial Markers of Lung Injury, sRAGE vs SPD, as Markers of Pulmonary and Non-Pulmonary Organ Dysfunction/M.J. Lim, M. Zinter, K. Gala, L. Chen, M. Guglielmo, A. Bera, L. Huard, A. Schwingshackl, A. Sapru, Los Angeles, CA, p.A2714


613 Role of miR-466i in Mesenchymal Stem Cell Microvesicles Treating Pneumonia Caused by Drug-Resistant Pseudomonas Aeruginosa/M. Shi, Y.-G. Zhu, A. Monsel, J.-J. Rouby, J.-M. Qu, Shanghai, China, p.A2719


615 Programmed Cell Death Ligand 1 Inhibition Improves Survival in a Murine Model of Sepsis Due to Staphylococcus Aureus Pneumonia with a Low- but Not High-Dose Inoculum/L.M. Busch, Y. Li, Y. Fitz, C. Curran, J. Sun, P.Q. Eichacker, P. Torabi-Parizi, Bethesda, MD, p.A2721

616 Plasma Concentrations of NOX4 Are Predictive of Successful Liberation from Mechanical Ventilation in Critical Ill Patients/J. Hong, Y. Kim, Y. Hong, Chuncheon, Korea, Republic of, p.A2722


B24 CRITICAL CARE: GONE WITH THE WIND - MECHANICAL VENTILATION: HFNC, NIV AND INVASIVE

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN

Dallas Ballroom E-F (Level 3)

Abstract Summaries 9:15-9:45
Viewing/Discussion 9:45-11:15

Chairing: J.R. Beitler, MD, MPH, New York, NY
B.K. Patel, MD, Chicago, IL
K. Burns, MD, MSCr, MSc, Toronto, Canada


805 Nasal High-Flow in Acute Hypercapnic Exacerbation of COPD/D. Braunlich, H.R. Wirtz, Leipzig, Germany, p.A2736


812 Respiratory Drive of ARDS Patients on ECMO Is Correlated to Dead Space and Lung Edema/E. Spinelli, T. Mauri, D. Tubiolo, A. Lissoni, P. Tagliabue, C. Abbruzzese, G. Grasselli, A. Pesenti, Milan, Italy, p.A2743


820 The Opioid Epidemic: Utilization of Invasive Mechanical Ventilation in Opioid Poisoning/C. Di Felice, R. Masroujeh, M. Matta, Cleveland, OH, p.A2751

821 Reliable Delivery of Pressure Within the Clinically Relevant Range Via a Helmet Interface for Non-Invasive Ventilation/M.A. Tidswell, B. Tiru, C. Frechette, L. Lutfy-Clayton, M.S. Stefan, J.S. Steingrub, Springfield, MA, p.A2752


BASIC • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

B25 OCCUPATIONAL EXPOSURES INCLUDING DEPLOYMENT RELATED, MINING, AND AGRICULTURE

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN

Trinity Ballroom 5-7 (Level 3)

Abstract Summaries

Viewing/Discussion

9:15-9:45

9:45-11:15

Chairing:

C.S. Rose, MD, MPH, Denver, CO
T.D. LeVan, PhD, Omaha, NE
D.C. Christiani, MD, MPH, MS, ATSF, Boston, MA

Malignant and Non-Malignant Findings from 5 Years of Low Dose CT Scans Screening for Lung Cancer in the Western Australian Asbestos Review Program/E. Harris, C. Murray, B. Adler, A. Ho, K. Kong, A. Reid, P. Franklin, N. De Klerk, A.W. Musk, F.J. Brims, Nedlands, Australia, p.A2757


Pneumoconiosis Mortality: Progress Towards Healthy People 2020 Goal/J. Bell, J.M. Mazurek, Morgantown, WV, p.A2760


Epigenetic Signatures of Sensitization and Disease in Beryllium-Exposed Individuals/L.R. Konigsberg, L. Li, K. MacPhail, J. Elliott, M. Mroz, K. Andersen, T.E. Fingerlin, L.A. Maier, I.V. Yang, Aurora, CO, p.A2762


Interaction Between Polygenic Risk for Reduced Pulmonary Function and Farming Exposures in the Agricultural Lung Health Study/S. Sikdar, A. Wyss, M.K. Lee, S. London, Durham, NC, p.A2765


Role of NADPH Oxidases in Organic Dust Induction of Inflammatory Gene Expression in Lung Epithelial Cells/V. Meganathan, C. Hamilton, K. Natarajan, V. Boggaram, Tyler, TX, p.A2768

Organic Dust Induces Inflammatory Gene Expression in Lung Epithelial Cells Via ROS-Dependent STAT-3 Activation/K. Natarajan, V. Meganathan, C. Mitchell, V. Boggaram, Tyler, TX, p.A2769


AREG Blockade Impedes Recovery in Mice Exposed to Agricultural Dust Extract/D.J. Romberger, T.M. Nordgren, A.J. Heires, A.J. Nelson, J.A. Poole, Omaha, NE, p.A2772


B26 CLINICAL STUDIES IN PEDIATRIC SLEEP, HOME VENTILATION AND NEUROMUSCULAR DISEASE

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN

Abstract Summaries
9:15-9:45

Viewing/Discussion
9:45-11:15

Chairing:
O.H. Mayer, MD, Philadelphia, PA
J.E. Maclean, BSc(Hons), MD, PhD, Edmonton, Canada
R. Amin, MD, Toronto, Canada

901 Surgical Intervention After Adenotonsillectomy for Persistent Pediatric Obstructive Sleep Apnea: Phenotypes of Responders Versus Non-Responders/K. Barber, C.D. Smith, S.L. Ishman, S.R. Shott, C. Heubi, R.S. Amin, Cincinnati, OH, p.A2777


906 Contractility and Nuclear Factor Kappa B Activation of Human Embryonic Stem Cell Derived Cardiomyocytes, Is Altered by Exposure to Obstructive Sleep Apnea Children’s Serum, and by Intermittent Hypoxia/A. Goldbart, H. Haddad, J. Gopas, Beer Sheva, Israel, p.A2782

907 Improving Care for Patients with Obstructive Sleep Apnea (OSA); Leveraging Electronic Medical Records (EMR)/R.T. Mohon, S.J. Linstrom, J.T. Brinton, S.L. Hines, S.C.M. Crane, Aurora, CO, p.A2783

908 High Flow Nasal Cannula Treatment in Children with Sleep Disordered Breathing in the Sleep Lab and at Home/D.A. Ignatiuk, B.M. McGinley, B. Schaer, Salt Lake City, UT, p.A2784


910 Continuous Positive Pressure for Obstructive Sleep Apnea in Infants/C.M. Cielo, A. Ciampaglia, M.S. Xanthopoulos, S.E. Beck, I. Tapia, Philadelphia, PA, p.A2786

911 Sleep Wake Disturbances After Acquired Brain Injury in Survivors of Pediatric Neurocritical Care: A Prospective Cohort Study/C. Williams, M. Lim, C. McEvoy, J. Piantino, M. Luther, S. Shea, Portland, OR, p.A2787


914 Treatment of Spinal Muscular Atrophy with Nusinersen Produces Improvement in Pulmonary Function in Children with SMA II and SMA III/G. Sheikh, N.F. Mehdi, R. Katz, Oklahoma City, OK, p.A2790


916 Improving the Rate of Home Ventilator Alarm Use in a Pediatric Pulmonary Medicine Clinic/N.M. Pajor, M.L. Kaiser, M.E. Brammer, L.A. Mullen, D.T. Benscoter, Cincinnati, OH, p.A2792

917 In-Hospital Transition from ICU to Home Ventilator in the Pediatric Chronic Respiratory Failure Population/N.M. Pajor, G. Huang, M.M. Hossain, H. Sawinane, R.S. Amin, D.T. Benscoter, Cincinnati, OH, p.A2793


B27 HEARTBREAKER: HEART FAILURE AND PULMONARY HYPERTENSION

9:15 a.m. - 11:15 a.m. KBHCCD

Poster Viewing
9:15-10:00

Discussion
10:00-11:15

Room C141/C143/C149 (Level 1)
**B28 HOW AIRWAYS MALFUNCTION: NEW CONCEPTS**

9:15 a.m. - 11:15 a.m.  
**KBHCCD**  
Ballroom A Four (Level 2)

**Abstract Summaries**  
9:15-9:45

**Viewing/Discussion**  
9:45-11:15

**Chairing:** S.H. Randell, PhD, Chapel Hill, NC  
V.K. Sidhaye, MD, Baltimore, MD  
F. Polverino, MD, PhD, Tucson, AZ


302 **IL-36γ is Released from Small Airway Epithelial Cells and Drives Macrophage Inflammation in COPD**/J. Baker, P.S. Fenwick, J. Tilman, P.J. Barnes, L.E. Donnelly, London, United Kingdom, p.A2821


307 **Arginine Methylation Epigenetically Regulates Airway Epithelial Cell Injury in COPD Pathogenesis**/T.M. Conlon, G. Günes, R.S.J. Sarker, H. Fehrenbach, A.O. Yildirim, Munich, Germany, p.A2826


310 **DUOX1-Dependent IL-33 Secretion from the Airway Epithelium Involves Positive Feedback Signaling Through Activation of IL-33R/ST2**/C. Dustin, C. Schiffer, D.E. Heppner, M. Hristova, A. Halibovick, A. Van Der Vliet, Burlington, VT, p.A2829


313 **Autophagy Augmentation Alleviates Cigarette Smoke Induced CFTR Dysfunction, Ceramide Accumulation and COPD-Emphysema Pathogenesis**/N. Vi, M. Bolas, G. Pehote, D. Silverberg, E. Gubins, Baltimore, MD, p.A2832


315 **Senescence and Fibrotic Markers Are Induced by Oxidative Stress in Small Airway Fibroblasts from COPD Patients**/C.L. Wrench, J.R. Baker, P.S. Fenwick, L.E. Donnelly, P.J. Barnes, London, United Kingdom, p.A2834


318 **Early Death in SLC26A9-Deficient Mice Is Due to Airway Mucus Obstruction Associated with Epithelial Necrosis and Neutrophilic Inflammation**/J.J. Salomon, P. Millar Buechner, S. Spahn, W. Wagner, M.A. Mall, Heidelberg, Germany, p.A2837


B29 MECHANISMS FOR AIRWAY HYPERRESPONSIVENESS: FROM CELL TO ORGANISM

9:15 a.m. - 11:15 a.m.  

BASIC • CLINICAL • TRANSLATIONAL

Wallroom D Four (Level 3)

Poster Viewing 9:15-10:00

Discussion 10:00-11:15

Chairing: T. Tran, PhD, Singapore, Singapore
C.W. Emala, MD, New York, NY
C.A. Singer, PhD, Reno, NV

701 TMEM16A Agonism Contracts Airway Smooth Muscle in In Vivo and Ex Vivo Models

702 Inhaled Pitavastatin Reduces Airway Smooth Muscle Contraction

703 Budesonide Augments Receptor-Dependent and -Independent Bronchodilatation of Human Small Airways and Localized cAMP Production in Human Airway Smooth Muscle

704 Anti-Remodelling and Anti-Airway Hyperresponsiveness Properties of Anti-Malarial Drug, Artesunate, in a House Dust Mites-Induced Chronic Mouse Model of Asthma

705 Modulation of cAMP Levels for Potentiation of Long-Acting Beta-Agonist and Glucocorticoids in Human Airway Epithelial Cells

706 Potential Differences in Calcium Sensitization Driving Human Small Airway Smooth Muscle Contractility in Obstructive Disease

707 TRPA1 Agonists Have Opposing Effects on Airway Nerves Versus Airway Smooth Muscle

708 Is Rho-Kinase Expression Up-Regulated in Asthmatic Airway Smooth Muscle?

709 The Proprotein Convertase Furin Suppresses the Inflammatory Responses of Airway Smooth Muscle (ASM) Tissues to IL-13 by Modulating Integrin-Mediated Signaling Pathways
W. Zhang, Y. Wu, Y. Huang, S.J. Gunst, Indianapolis, IN, p.A2847

710 S100A4 Regulates Airway Smooth Muscle (ASM) Inflammation by Acting on Receptors for Advanced Glycation End Products (RAGE)
W. Zhang, Y. Wu, S.J. Gunst, Indianapolis, IN, p.A2848

711 Biased Regulation of OGR1 Biased Signaling in Airway Smooth Muscle Cells: GRK2/3 and Arrestin Potluck
T. Pera, E. Tompkins, D.A. Deshpande, A.P. Nayak, R.B. Penn, Philadelphia, PA, p.A2849

712 IL-17A Reduces the Proliferative Capacity of Asthmatic Airway Smooth Muscle Independent of TGF-α1 Concentration via Altered ERK1/2 Signaling and Modulated miR-106b-25-dependent IP3R1 and TGF?R2 Expression

713 Human Rhinovirus Infection Induces the Expression and Secretion of Endothelin-1

714 Dysregulation of microRNA-25 Modulates Airway Smooth Muscle Cell Proliferation via the Mammalian Target of Rapamycin Pathway by Targeting Tuberous Sclerosis Complex 1

715 Modulation of CD4+T Cell Properties by Airway Smooth Muscle Cell Mediated Inflammation
J. Jang, M. Chen, S. Farahani, J.G. Martin, Montreal, Canada, p.A2853


717 Circular RNA Expression in Mild/Moderate Versus Severe House Dust Mite (HDM) Mouse Models of Asthma

718 Inhibition of Acetylcholine Esterase Attenuates In Vivo Airway Hyperreactivity and Lung Inflammation in a Model of Murine Asthma

719 Inflammation Amplifies the Phenomenon of Force Adaptation in a Mouse Model of Allergic Asthma
M. Gazzola, F. Khadangi, K. Lortie, C. Henry, Y. Bosse, Quebec, Canada, p.A2857

720 Dasatinib and Quercetin Reverse Hyperoxia-Induced Airway Hyperreactivity in a Murine Model of Premature Airways Disease

721 Combining Secreted and Lung Tissue Proteome Reveals Unique Pathobiological Pathways Associated with House Dust Mite Challenge in Mice

722 Intranasal Simvastatin Reverses Chronic Allergen Challenge-Induced Lung Inflammation, Remodelling and Dysfunction in a Murine Model of Asthma
B30 SRN: BIG DATA ANALYSIS AND POPULATION BASED STUDIES

9:15 a.m. - 11:15 a.m.  
KBHCCD  
Room C140/C142 (Level 1)

Abstract Summaries  
9:15-9:45

Viewing/Discussion  
9:45-11:15

Chairing:  
P.J. Strollo, MD, Pittsburgh, PA  
K.P. Strohl, MD, Cleveland, OH  
J.-L. Pepin, MD, PhD, Grenoble, France


The Association of Race/Ethnicity and Body Mass Index Within a Multi-Ethnic Cohort of Patients Diagnosed with Obstructive Sleep Apnea/E.T. Sumner, J. Darbinian, N. Ramalingam, M. Durr, D. Tzeng, J. Lo, Oakland, CA, p.A2870


Increased Risk of Sleep Apnea in Patients of Allergic Rhinitis - A Nationwide Population-Based Study/C.-H. Chuang, M.-J. Tsai, Y.-C. Tsai, C.-Y. Kuo, C.-Y. Hsu, J.-Y. Hung, Kaohsiung, Taiwan, p.A2875

Sleep Quality and Quantity, Sleepiness and Cardiovascular Parameters of Bed Partners of Patients with Obstructive Sleep Apnea: Cross-Sectional Data from the SLEEP-PARTNERS Study/S. Giampa, V. Costa-Hong, L.S. Freitas, S.F. Furlan, I.F.B. Azam, L.A. Bortolotto, G. Lorenzi-Filho, L.F. Drager, Sao Paulo, Brazil, p.A2878

B31 LUNG TRANSPLANTATION: CLINICAL AND MECHANISTIC STUDIES

9:15 a.m. - 4:15 p.m. KBHCCD
Area B (Hall F, Level 2)

**Viewing:** Posters will be on display for entire session.

**Discussion:**
- 11:15-12:00: authors will be present for individual discussion
- 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** M.R. Nicolls, MD, Palo Alto, CA

**P133** The Biphasic Flow-Volume Loop in Patients with Chronic Obstructive Pulmonary Disease and Idiopathic Pulmonary Fibrosis with a History of Lung Transplant: Its Prevalence and Significance/B. Liu, A. Baydur, Los Angeles, CA, p.A2880


**P139** Lung Ultrasound to Detect Allograft Dysfunction in Lung Transplant Recipients/T. Narula, A. Banga, D. Sahoo, S. Krishnan, X. Han, X. Wang, M.M. Budev, A.C. Mehta, A. Moghekar, Jacksonville, FL, p.A2886

**Facilitator:** R.G. Barbers, MD, ATSF, Los Angeles, CA


**P144** Nintedanib as Bridge Therapy to Retransplantation for Restrictive Allograft Syndrome: A Case Report/S. Girardo, A. Di Mascio, M. Maschio, E. Barbi, Trieste, Italy, p.A2891

**P145** Does Calcineurin Inhibitors (CNI) Sparing Regimen Improve Kidney Function in Patients Post Lung Transplantation?/C.R. Ju, Q. Lian, B. Wei, X. Xu, R. Chen, J. He, Guangzhou, China, p.A2892

**B32 ASTHMA: MECHANISMS OF DISEASE I

9:15 a.m. - 4:15 p.m. KBHCCD
Area E (Hall F, Level 2)

**Viewing:** Posters will be on display for entire session.

**Discussion:**
- 11:15-12:00: authors will be present for individual discussion
- 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** T.L. Bonfield, PhD, Cleveland, OH

**P655** Aerosolized Toll-Like Receptor Agonists Suppress House Dust Mite Allergic Asthma/D.L. Goldblatt, G. Valverde, S. Tkachman, M. Martinez-Moyagema, D.P. Huston, M.J. Tuvim, B.F. Dickey, S.E. Evans, Houston, TX, p.A2893

P682 Common MicroRNA-mediated Pathobiological Changes in Bronchial Epithelial Cells of Both Asthma and Chronic Obstructive Pulmonary Diseases/M.-J. Tsai, W.-A. Chang, Y.-C. Tsai, Y.-L. Hsu, P.-L. Kuo, C.-C. Sheu, Kaohsiung, Taiwan, p.A2920


Facilitator: J.G. Ledford, PhD, Tucson, AZ


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**B33 ASTHMA: MECHANISMS OF DISEASE II**

**9:15 a.m. - 4:15 p.m.**

**THEMATIC POSTER SESSION**

**KBHCCD**

**Area E (Hall F, Level 2)**

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** C. Lloyd, PhD, London, United Kingdom


**P696 Cavin-1 Regulated IL-33 Release by Living Cells in Mouse Asthma/Y. Ni, J. Hao, W. Du, Y. Yu, T. Chen, G. Shi, B. Li, Shanghai, China, p.A2935**

**P697 Adverse Effects on Bone in Rats Exposed to Chronic Intermittent Hypoxia and Allergen-Induced Asthma/G. Wojdyla, T. Crenshaw, K. Hansen, O. Broytman, M. Teodorescu, Madison, WI, p.A2932**

**P698 TRPA1-Deficient Mice Were Suppressed Airway Inflammation in a Papain Induced Model/T. Matsuyma, K. Machida, K. Sakaue, A. Tanoue, K. Takagi, I. Higashimoto, H. Inoue, Kagoshima, Japan, p.A2933**


**P702 Angiotensin-Converting Enzyme 2 (ACE2) Activator Attenuates Tracheal Attenuates Allergic Asthma by Promoting Th1 Differentiation and the Positive Feedback of IL-27 in the Local Microenvironment/X. Liu, S. Li, J. Jin, T. Zhu, K. Xu, Y. Zeng, R. Mao, X. Wang, Z. Chen, Qingdao, China, p.A2940**

**P703 Effect of Aminophylline on Mouse Bone Marrow-Derived Eosinophils In Vitro/P. Wang, Y.-Q. Fan, T. Liu, G. Wang, Y. Pu, S.-Y. Li, H. Mao, Chengdu, China, p.A2938**

**P704 Preventative Administration of Interleukin-27 (IL-27) Via Tracheal Attenuates Allergic Asthma by Promoting Th1 Differentiation and the Positive Feedback of IL-27 in the Local Microenvironment/X. Liu, S. Li, J. Jin, T. Zhu, K. Xu, Y. Zeng, R. Mao, X. Wang, Z. Chen, Qingdao, China, p.A2940**

**P705 Classic Interleukin-6 Signaling Qualitatively Regulates Airway Inflammation but Not Methacholine Hyperresponsiveness in a Model of Neutrophilic Severe Allergic Asthma/K. Menson, M.M. Mank, L.F. Reed, J.L. Ather, M.E. Poynter, Burlington, VT, p.A2941**


P7  Specific IgE Levels as an Important Diagnostic Marker for the Diagnosis of Children with Allergic Bronchopulmonary Aspergillosis/M. Singh, A. Chauhan, M. Singh, Chandigarh, India, p.A2968

Facilitator: C. Dinakar, MD, Stanford, CA


P12  Prevalence of Peripheral Hypereosinophilia in Respiratory Disease/N. Leverone, S. Tran, P. Akuthota, San Diego, CA, p.A2973


P435  EPIDEMIOLOGICAL STUDIES AND MANAGEMENT OF COPD

9:15 a.m. - 4:15 p.m.  
Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.


P431  Two-Thirds of Long-Term Acute Care Hospital Transfers Are Inappropriate: Findings from a Multicenter Study of Medicare ACO Beneficiaries/R.C. Schumacher, M. Chiu, A. Makam, Dallas, TX, p.A2978

P432  Discharge Plan of Care for COPD (DIPLAC): A Personalized, Telehealth-Based Program to Reduce Frequent Emergency Department Visits of Veterans with Acute Exacerbations of COPD in Inner-City Chicago/Z. Elfessi, M. Tole, H. Pitzele, M. Baumann, J. Hubacek, K. Kolman, A. DePadua, I. Rubinstein, S. Unterman, Chicago, IL, p.A2979


P434  Multidisciplinary Team Approach to Tackling 30 Day COPD Readmissions and the Challenges Faced at Harlem Hospital Center/G.L. Rajhandari, M. Pradhan, L.E. Carrasco Abinader, R. Ayinla, M. Olbrince Saint-Fleur, New York, NY, p.A2981


Facilitator: K. Hoth, PhD, Iowa City, IA


P441 Does Gender Influence Adherence to Inhaled Therapy in COPD? An Observational Study of Patients Treated with Indacaterol/Glycopyrronium 110/50 ug o.d. (IND/GLY)/C. Raherison, L. Decuyperm, M. Pourriel, N. Roche, Bordeaux, France, p.A2988


Facilitator: J. O'Toole, DO, Baltimore, MD

P444 Lithium Therapy Is Associated with Increased Risk of COPD Exacerbation/A. Shojaee, J.L. Gomez, M.F. Perez, New Haven, CT, p.A2991


P448 Delay in PFT Availability and Association with Obstructive Lung Disease Management in a VA Population/T. Pham, O. Abdul-Kafi, M.J. Joo, Chicago, IL, p.A2995

P449 Epidemiology of Chronic Obstructive Pulmonary Disease in Brazil: A Systematic Review and Meta-Analysis/M. Cruz, M. Santos, Barreiras, Brazil, p.A2996

P450 Dyspneic Older Adults with and Without Obstructive Lung Disease Have Increased Mortality/M.T.D.G. Opina, J. Lovato, D.C. Files, B.J. Nicklas, S.B. Kritchevsky, W.C. Moore, Winston-Salem, NC, p.A2997


BEHAVIORAL
THEMATIC POSTER SESSION

B36 ADDICTION AND TOBACCO USE IN PULMONARY AND CRITICAL CARE MEDICINE

9:15 a.m. - 4:15 p.m.  
Area A (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: H. Kathuria, MD, ATSF, Boston, MA


P17 Addressing Barriers to Quitting Cigarettes Among Patients with Opioid Use Disorder/D. Shankar, K. Oleinik, R. Seibert, V. Cobb, Z. Weinstein, B. Borrelli, L. Quintiliani, K. Lasser, T. Palfr, M. Gowarty, E. Helm, R.S. Wiener, H. Kathuria, Boston, MA, p.A2999

P18 Psychiatric Diagnosis and Treatment Success in a Community-Based Smoking Cessation Clinic/L. Offit, M.M. O’Sullivan, R. Lindner, A. Rahim, New York, NY, p.A3000

P19 Predictors of Success for Smoking Cessation After an Outpatient Department Visit in Ningbo, China/C. Cao, N. Xu, Ningbo, China, p.A3001

P20 The Impact of a Diagnosis of Alpha-1 Antitrypsin Deficiency on Smoking Cessation/A.N. Franciosi, A. Woodsmith, L. Aldaihani, S. Lee, T.P. Carroll, N.G. McElvaney, Dublin, Ireland, p.A3002


P22 Smoking Characteristics and Lung Functions Among University Athletes/N. Saiphoklang, O. Poachanukoon, S. Sookapan, Pathumthani, Thailand, p.A3004

Facilitator: S.R. Kher, MD, Boston, MA

P23 Age-Related Changes in Lung Age with Smoking Status at Two-Days Medical Checkup/M. Fukakurasato, Y. Ichikawa, Y. Ishida, K. Masuda, Tokyo, Japan, p.A3005
BEHAVIORAL

THEMATIC POSTER SESSION

B37 NOVEL APPROACHES TO ASTHMA MANAGEMENT AND OUTCOMES

9:15 a.m. - 4:15 p.m. KHBCCD

Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: A.C. Wu, MD, MPH, Boston, MA


P29 Substance Abuse Related Intensive Care Unit Admissions/D. Westerhausen, M.O. Farber, B.A. Khan, Indianapolis, IN, p.A3011

P30 Phenobarbital vs Lorazepam Infusions for Refractory Alcohol Withdrawal/D. Westerhausen, G. Gilroy, Indianapolis, IN, p.A3012


P729 Primary Care Asthma Paediatric Pathway (PCAPP) Study/H. Sharpe, M. Potestio, D.W. Johnson, A. Cave, Calgary, Canada, p.A3016


Facilitator: A. De, MD, NY, New York


P735 Health Care Use by Older Australian Women with Asthma/P. Eftekhari, P.M. Forder, M.L. Harris, J.E. Byles, Newcastle, Australia, p.A3022

P736 Management of Severe Eosinophilic Asthma: A Simulation-Based Assessment of Physicians’ Practice Choices/T. Lambert, Willsmo, United Kingdom, p.A3023


P738 Patients’ Drawings of Their Asthma: Adding Qualitative Depth to a Commonly Used Quantitative Measure of Illness Perceptions/ M.M.Y. Cheung, B. Saini, L. Smith, Sydney, Australia, p.A3025

P740  The Modelling of Correlation Between Internal and External Factors on Self-Assessment of Environmental Impact on Health-Related Quality of Life in Patients with Asthma/N. Perelman, N. Bezrukov, Blagoveshchensk, Russian Federation, p.A3027

P741  Non-Respiratory Symptoms Are as Important as Respiratory Symptoms in Their Impact on Quality of Life in Severe Asthma/R. Jones, J. Lanario, Y. Wei, M. Hyland, M. Masoli, Plymouth, United Kingdom, p.A3028

Facilitator:  S.E. Zaeh, MD, Baltimore, MD


P743  Fractional Exhaled Nitric Oxide Measurement: Comparison Between Sunovou-CA2122 Analyzer and NIOX VERO Analyzer/T. Huang, B. Liu, C. Liu, Chengdu, China, p.A3030


P745  Cultural Sensitivities and Asthma Health Beliefs/M. Ramagopal, S. Rai, New Brunswick, NJ, p.A3032


P747  Differences in the Preferences of Allergists and Pulmonologists for their Ideal Administration Route of Severe Asthma Biologic Therapies/A. Kyle, K. Hanarz, S. Brown, London, United Kingdom, p.A3034

P748  Disease Status Affects Symptomatic Patients' Preferences for Maintenance Inhaler Therapies: Discrete Choice Experiment/N.A. Hanania, T. Tervonen, N. Hawken, I. Gilbert, S. Heidenreich, F.J. Martinez, Houston, TX, p.A3035


Facilitator:  E. Oren, PhD, MS, San Diego, CA

P751  Characterizing a Digital Health Footprint for Asthma/C.L. Carroll, V. Kaul, K.A. Sala, N.S. Dangayach, Hartford, CT, p.A3038


P756  Asthma Readmission at UTMB/A. Ogedegbe, R. Sellappan, W.J. Calhoun, League City, TX, p.A3043


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**THEMATIC POSTER SESSION**

**B38 LUNG CANCER: SCREENING PRACTICES AND TREATMENT OUTCOMES**

**9:15 a.m. - 4:15 p.m.**  
**Area A (Hall F, Level 2)**

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:**  A.C. Melzer, MD, MS, Minneapolis, MN

**P32 Early Patterns in Lung Cancer Screening at an Academic Medical Center**/J. Willoughby, L. Dowling, P. Shah, B.T. Tran, Chicago, IL, p.A3045

**P33 Survey of Lung Cancer Screening Practices of Internal Medicine House Staff**/R. Amirahmadi, A.J. Kumar, J. Deepak, Medicine House Staff, Chicago, IL, p.A3046

**P34 The Waiting Game: Timeliness in Lung Cancer Screening in an Urban Population**/C. Brillante, K. Haas, M.J. Joo, Chicago, IL, p.A3047

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<td>Clinical, Radiological and Pulmonary Function of Patients with Hypersenbility Pneumonia (HP) Followed in a Brazilian Hospital/D. Estrella, T. Prata, G. Pimenta, L.P. Arneguy, G. Cordeiro, Belo Horizonte, Brazil, p.A3076</td>
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<td>P165</td>
<td>Incorporating an Online Decision-Making Algorithm to Assist Sarcoidosis Management/K. H.F.E.M. Santos, M. Mirsaeidi, Miami, FL, p.A3077</td>
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<td>P166</td>
<td>Dr. Sarcoidosis: An Artificial Intelligence Humanoid Virtual Assistant to Answer Patient's Questions/K. H.F.E.M. Santos, M. Mirsaeidi, Miami, FL, p.A3078</td>
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<td>P241</td>
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**CLINICAL**

**THEMATIC POSTER SESSION**

**B40 AUTOIMMUNE LUNG DISEASE CASE REPORTS**

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<th>Time</th>
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<td>9:15 a.m. - 4:15 p.m.</td>
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<td><strong>KBHCCD</strong></td>
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<td>Viewings:</td>
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<td>Facilitator:</td>
<td>M. Gulati, MD, New Haven, CT</td>
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<td>A Case of Diffuse Alveolar Hemorrhage in Rheumatoid Arthritis/N. Mills, E.J. Yoo, Philadelphia, PA, p.A3082</td>
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Facilitator: D. C. Gomez Manjarres, MD, Gainesville, FL

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**P250 The Pneumonia That Won't Resolve in a Patient with Primary Biliary Cholangitis/K. Twomey, L. Domaradzki, M. J. Stefanski, Hershey, PA, p.A3093**


**P252 Recombinant Factor Vila in an Acute Case of Diffuse Alveolar Hemorrhage/L. Nasouf, N. A. Khan, D. G. Washburn, Riverside, CA, p.A3095**


P255 Pump the Brakes: A Case of Etanercept-Induced Accelerated Pulmonary Nodulosis/B.E. DiSilvio, M. Young, E. Bihler, Pittsburgh, PA, p.A3098


P257 Pulmonary Alveolar Proteinosis: A Rare Case of Autoimmune Disruption of GM-CSF Superimposed with Secondary Inhalation Exposure/E. Wilchik, A.C. Mittal, Riverside, CA, p.A3100


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P262 Isolated Pseudotumor as a Presentation of Granulomatosis with Polyangiitis/F. Nayeemuddin, S. Ullah, P. Kyaw, R. Sreedhar, Springfield, IL, p.A3105

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P269 Effect of Pioglitazone Therapy on Alveolar Macrophage Size in a Patient with Refractory Autoimmune Pulmonary Alveolar Proteinosis/D. Vis, M.M. Kelly, E. de Heuvel, P.R. MacEachern, Calgary, Canada, p.A3112


P272 A Rare Case of Pulmonary Hemorrhage Due to IgA Nephropathy/M.R. Caniglia, A. Khan, A. Dodhi, S. Khan, H. Hashm, Joplin, MO, p.A3115

Facilitator: B. Natt, MD, Tucson, AZ


P275 RNA Polymerase III Antibody Positive Systemic Sclerosis with Cystic Interstitial Lung Disease and Pulmonary Hypertension/A. Abdou, A. Kotecha, M. Mendeel, V. Hannosh, G. Krishnamoorthy, Pontiac, MI, p.A3118


P279 The Mysterious Nodule/A. Zamir, J. McClune, K.R. Young Jr., M.F. Reed, Hershey, PA, p.A3122

P280 A Case of Granulomatosis with Polyangiitis Presenting with Bronchus Ulceration/C.-T. Wang, C.-Y. Yang, Taipei City, Taiwan, p.A3123


P283 An Unusual Presentation of Antiphospholipid Antibody Syndrome/A. Andrabi, P. Sundar, M. Seth, K. Aslam, Pittsfield, MA, p.A3126

Rare Case of Interstitial Lung Disease Associated with Autoimmune Hepatitis/C.R. Chada, R. Kunadharaju, Cheyenne, WY, p.A3128


Facilitator: R. Semaan, BS, MD, Pittsburgh, PA

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Air Embolism: A Rare Adverse Consequence of Transthoracic Needle Biopsy/A. Chu, G. Trikha, A. Krishna, S. Arumugam, Syracuse, NY, p.A3142


Bronchoscopic Treatment of Complex Tracheal Stenosis/S. Virdi, A. Sadoughi, Bronx, NY, p.A3144


Novel Use of Spyscope for Placement of Bronchial Catheter in Right Upper Lobe Bronchus to Control Bleeding During Cryobiopsy/R.A. Simon, M.I. Irshad, Cochin, India, p.A3148


Adenoid Cystic Carcinoma of Trachea Treated with Bronchoscopic Resection Followed by Radiotherapy/K.M. Moon, S. Park, J. Lim, K.-W. Min, Seoul, Korea, Republic of, p.A3150

Acute Hemothorax Following Cryobiopsy/R. Helton, J. Kebbe, Oklahoma City, OK, p.A3151

Facilitator: C. Keyes, MD, MPH, Boston, MA


**P313** Streptococcus Mitis Mediastinal Abscess in a Healthy 37 Year Old Woman/C. Ohadugha, D. Moccia, A.W. Bostick, V. Nambudiri, Myrtle Beach, SC, p.A3155

**P314** Incidentally Discovered “Rock Garden”-Tracheobronchoplastica Osteochondroplastica with Associated Left Sided Breast Adenocarcinoma and Severe Esophageal Stictures: A Rare Case Report/G. Sharma, S. Adroja, S. Parasher, R. Kartan, Youngstown, OH, p.A3156


**P318** Anthracosilicosis: A Rare Cause of Endobronchial Tumor/S. Sullivan, K. Deasy, G. Neville, J. McCarthy, L. Burke, D.M. Murphy, M.P. Kennedy, Cork, Ireland, p.A3160

**P319** Bronchiolithiasis: A Rare Cause of Hemothysis Resolved Using Rigid Bronchoscopy and Cryotherapy/A. Awaiz, A.I. Khokar, Gainesville, FL, p.A3161


**Facilitator:** J.L. Bessich, MD, New York, NY

**P321** A New Complication of Transesophageal Echocardiogram/R. Webster, M.T. Morton, Denver, CO, p.A3163

**P322** Snare Electrocautery and Laser Bronchoscopy for a Rare Cause of Endobronchial Metastasis/K. Sandhu, A. Tandon, Tampa, FL, p.A3164


**P324** Primary Pulmonary Alveolar Proteinosis in a Patient with Chronic Lymphoblastic Leukemia/J. Assadi, A.S. Ray, D. Aamarie, A. Sachdeva, Baltimore, MD, p.A3166

**P325** Solitary Pulmonary Nodule Arising in a True Tracheal Bronchus/C. Di Felice, C. Teba, B. Young, Cleveland, OH, p.A3167


**P327** Multiple Pulmonary Abscesses as a Late Complication of Pulmonary Arteriovenous Malformation Embolization/P. Lertjitbanjong, H. Abid, N.A. Lone, Cooperstown, NY, p.A3169

**P328** Serial Bronchoscopic Cryobiopsies Allowing Extubation in a Patient with Central Airway Obstruction from Peripheral T-Cell Lymphoma/B. Kelly, I.H. Romero-Legro, E.S. Edell, Rochester, MN, p.A3170

**P329** Management of a Case of Tracheobronchopatia Osteochondroplastica Causing Airway Obstruction/I.R. Kugasia, S.A. Doumeth, K. Farhat, K.N. Harris, Waxahachie, TX, p.A3171

**P330** The Segment Left Behind/S.F. Cocciardi, A. Borah, W. Abouzgeib, Camden, NJ, p.A3172

**P331** Recurrent Hemoptysis Due to Diffuse Endobronchial Telangiectasia/M. Rudrappa, Joplin, MO, p.A3173

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**B42** DYSPNEA CASE REPORTS

**9:15 a.m. - 4:15 p.m.**

**Area C (Hall F, Level 2)**

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

**P333** Successful Management of Exercise-Induced Laryngeal Obstruction with Manual Laryngoscopy in Community Hospital/S. Yamashiro, H. Nagano, Y. Nei, T. Kishaba, M. Noha, S. Suto, Uruma, Japan, p.A3174


**P335** Severe Refractory Asthma? Consider Acquired Tracheobronchomalacia/C. Sewell, A. Ramiuk, K. Jordan, Columbus, OH, p.A3176

**P336** Using Poppers Until You’re Blue in the Face/R.P. Ramonell, L. Daniels, W.A. Neveu, Atlanta, GA, p.A3177


**P338** Pulmonary Alveolar Proteinosis (PAP)/S. Patel, D. Gandhi, D. Patel, Jamnagar, India, p.A3179

**P339** Pericardial Effusion and Cardiac Hypokinesis Associated with Long-Standing, Multi-Organ System Sarcoidosis/M. Singh, A. Szema, South Setauket, NY, p.A3180

**P340** An Unusual Cause of Dyspnea in a Marathon Runner/C. Campbell, S. Sullivan, R. Rutherford, Galway, Ireland, p.A3181


**P342** Post Esophagogastroduodenoscopy Negative Pressure Pulmonary Edema/S. Khan, V. Srinivasan, S. Varakantam, P.A. Lange, N. Dabage, Bradenton, FL, p.A3183

**P343** A Case of Hepatopulmonary Syndrome/C. Ferguson, E. Keelan, T. Scullion, M. Riley, R. Kerr, Belfast, United Kingdom, p.A3184
B43 PLEURAL DISEASE CASE REPORTS I

9:15 a.m. - 4:15 p.m.  KBHCCD
Area C (Hall F, Level 2)

Viewing: Posters will be on display for entire session.
Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.


P377 Bilothorax: A Rare Complication After Percutaneous Transhepatic Biliary Drainage Placement/D. Zhao, A. Glucksman, K. Fan, Los Angeles, CA, p.A3217


P380 A Rare Complication of Bronchoscopy - Pleural Effusion/M. Beg, A.E. Morfin, K.C. Proud, San Antonio, TX, p.A3220


P383 Primary Pleural Amyloidosis with Isolated Endobronchial Lesion/P. Kanagarajah, L. Ciment, A. Ciment, Tampa, FL, p.A3223

P384 Unusual Cause of Recurrent Hydropleurothorax in a Young Women/C. Campbell, S. Cullinan, D. Breen, Galway, Ireland, p.A3224


P386 A Case of Unilateral Pleural Effusion with Large Thyroid Mass/E. Reid, M. Pillai, Mineola, NY, p.A3226


P395 A Rare Cause of Eosinophilic Pleural Effusion/D. Kay, L. Benninger, J. Wynne, Gainesville, FL, p.A3235


P397 A Rare Case of Eosinophilic Pleural Effusion/M. Yaqoob, S. AbdulMujeeb, A. Ascoli, P.G. Young, Chicago, IL, p.A3237

P398 A Rare Case of Eosinophilic Pleural Effusion/M. Yaqoob, S. AbdulMujeeb, A. Ascoli, P.G. Young, Chicago, IL, p.A3238


P407 A Rare Case of Extrathoracic Pleural Effusion/N. Dudiki, S. Summers, M. Maxfield, Worcester, MA, p.A3247

P408 Candida Thoracis Empyema Presenting as Thoracic Endometriosis/S.K. Matta, A. Omraniyan, Houston, TX, p.A3248

P409 Bilious Airways: A Case of Bilothorax Following Liver Transplantation/K. Pew, S. Thomas, Dallas, TX, p.A3249


P411 A Mystery Case of Chylothorax/R. Alsaggaf, A. Scott, J. McCann, J. Garvey, Dublin, Ireland, p.A3251


P413 Epithelioid Mesothelioma Presenting as Incidental Hydropneumothorax, A Case Series/Y. Ahmad, A. Flora, S. Benzaquen, Cincinnati, OH, p.A3253

P414 Re-Expansion Pulmonary Edema After Drainage of Less than 1 Liter: A Case Report and Literature Review/A. Tagiliaso, C. Yacapin, R. Cinco, C. Ejercito, Muntinlupa, Philippines, p.A3254


P418 Lung Herniation: A Rare Consequence After Thoracotomy/T.T. Aung, A. Chiu, P. Kaul, Syracuse, NY, p.A3258


P420 A Rare Presentation of a Unilateral Pleural Effusion in Newy Diagnosed AL Amyloidosis/L. Sanders, M. Reichmuth, M.J. Junqueira, S. Sicher, Pueblo, CO, p.A3260

P421 Tension Hydrothorax Causing Cardiac Arrest: A Rare Complication of Malignant Effusions/C. Kanitsothan, H. La, J. Kewcharoeng, N. Sriratanaviriyakul, Honolulu, HI, p.A3261

P422 An Unusual Case of Pleural Fluid Eosinophilia/L. Jones, R. Winsett, A.M. Nambar, San Antonio, TX, p.A3262

P423 Renal Biopsy: A Rare Cause of Pneumomediastinum/R. Rajagopal, S. Hussain, New Brunswick, NJ, p.A3263


B44 COPD: TREATMENT AND OTHER TOPICS

9:15 a.m. - 4:15 p.m.              KBHCCD

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.


P454 Assessment of a Harmonization Technique to Reduce the Confounding Factors in Clinical CT Scans/G. Vegas-Sanchez-Ferrero, G.R. Washko, R. San Jose Estepar, Boston, MA, p.A3266


P461 External Validation of the PUMA COPD Diagnostic Questionnaire in a General Practice Sample (Hospital Maciel-Montevideo) and the PLATINO Study Population/M. Montes de Oca, M.V. Lopez Varela, F.C. Wehrmeister, L. Ramirez, C. Rodriguez Flores, Caracas, Venezuela, p.A3273

P462 Are Guidelines Regarding Alpha-1 Antitrypsin Deficiency Management Con0cordant? A Preliminary Analysis/U. Majumdar, C. Rodriguez Flores, Caracas, Venezuela, p.A3274


P469 MUCOSAL40 (MUcus, COugh, SLow walking, Age40) - Increasing The Diagnosis of COPD in Primary Care/S. Vaghela, C.B. Sherter, A.M. Ahasic, Norwalk, CT, p.A3281


P472 A Qualitative Analysis of Patients’ Experience of a COPD Exacerbation and Reasons for Seeking Treatment/P.W. Jones, Q. Ma, J. Xia, P. Chen, C. Wang, V. Li, M. Tabberer, Brentford, United Kingdom, p.A3284


P474 Performance of Bioelectrical Impedance Analysis Compared to DEXA in Individuals with COPD/P.N. Cruz Rivera, R.L. Goldstein, M.M. Polak, M.L. Moy, E.S. Wan, Boston, MA, p.A3286


P482 COPD Diagnostic Accuracy in Hospitalised Patients: A Retrospective and Prospective Single Center Study/F. Darawshy, R. Kuint, A. Abu Rmeileh, N. Berkman, Jerusalem, Israel, p.A3294

P483 Assessment of COPD Assessment Test (CAT) Scores in Stable Ambulatory Patients with COPD/M. Singh, A.G. Duarte, P. Wagner, E.S. Hsu, Y.-F. Kuo, G. Sharma, Galveston, TX, p.A3295

P484 Smoking Cessation in COPD Patients with Nicotine Dependence in a Single-Center Clinic in Japan/H. Tomioka, R. Hashimoto, T. Wada, Kobe, Japan, p.A3296


B45 COPD: TREATMENT

9:15 a.m. - 4:15 p.m.

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

MONDAY MORNING


P510 Pharmacokinetics and Safety of Budesonide/Glycopyrrolate/Formoterol Fumarate in Adults with Moderate-to-Severe Chronic Obstructive Pulmonary Disease: A Phase I, Open-Label, Single-Center Study/P. Dorinsky, L.J. Dunn, K. DeAngelis, M. Mo, M. Gillen, Durham, NC, p.A3321

P511 Clinical Efficacy of a Selective Phosphodiesterase-4 Inhibitor (Roflumilast) in Patients with Chronic Obstructive Pulmonary Disease and Metabolic Syndrome/G. Ignatova, E. Blinova, Chelyabinsk, Russian Federation, p.A3322

P512 Safety and Efficacy of Roflumilast in Chronic Obstructive Pulmonary Disease: An Updated Meta-Analysis of Randomized Controlled Trials/M. Barbarawi, Y. Zayed, O. Barbarawi, E. Armstrong, A. Chahine, G. Bachuwa, Flint, MI, p.A3323


P515 Effect of Age on Efficacy and Safety of Multiple Inhaler Triple Therapy with Umeclidinium Added to Fluticasone Furoate/Vilanterol in Chronic Obstructive Pulmonary Disease/T. Soule, S. Caveney, L. Tombs, I. Boucot, Research Triangle Park, NC, p.A3326


P520 Inhaled Corticosteroids Dose Regimens: Therapeutic Relevance of Lipophilicity, Solubility, Dissolution and Absorption from the Lung/P.T. Daley-Yates, Uxbridge, United Kingdom, p.A3331


P524 Is Triple Therapy in a Single MDI Inhaler Superior to Standard Treatment in Patients with Stable COPD? A 6 Month Prospective Cohort Crossover Study with Patients Acting as Their Own Controls/S. Rustsccheff, Varnamo, Sweden, p.A3335


P526 Medication Effect in COPD Patients Coexistent with Heart Failure/V.Y.-F. Su, K.-Y. Yang, Taipei, Taiwan, p.A3337

P527 Non-Pharma Management of COPD in Primary Care: Guideline Implementation a Continuing Challenge/R.M. Angus, L. Davies, E. McKnight, P. England, K. Sheridan, K. Sargeant, M. Pearson, Liverpool, United Kingdom, p.A3338


To Compare the Efficacy and Safety of Nebulized Short Acting Beta Agonists/Short Acting Mucinolytics (SABA/SAMA) with and Without the Addition of Inhaled LABA/LAMA in Hospitalized COPD Patients/G. Thommi, J.C. Shehan, P.G. Meyers, Omaha, NE, p.A3341

Benefits of Glycopyrrolate/Formoterol Fumurate Metered Dose Inhaler (GFF MDI) in Symptomatic Patients with COPD: A Post-Hoc Analysis from a Phase III, Randomized, Placebo-Controlled Study (PINNACLE-4)/B.J. Lipworth, D.J. Collier, G.J. Feldman, S. Arora, M. Jenkins, C. Reisner, U.J. Martin, Dundee, United Kingdom, p.A3342


The Analysis of Non-Invasive Positive Pressure Ventilation in Treating COPD Patients Accompanied with Chronic Respiratory Failure/T. Ma, Y. Hu, B. Yan, Changchun, China, p.A3344


Improved Perception of Mucus Clearance and Benefit After Nasal High Flow Therapy in Women with COPD and Asthma/J. Given, R. Troyer, L. Girard, M. Ferrall, Canton, OH, p.A3346


Domiciliary Noninvasive Positive Pressure Ventilation Prolongs Time to Death in Patients with Chronic Obstructive Pulmonary Disease/H.C. Kulkarni, S. Patel, S. Parthasarathy, Tucson, AZ, p.A3349

Effects of Inhaler Therapy on Mortality in Patients with Tuberculous Destroyed Lung and Airflow Limitation/H. Kim, T.H. Kim, C.K. Rhee, M. Han, Y.-M. Oh, Seoul, Korea, Republic of, p.A3350


Noninvasive Mechanical Ventilation in Patients with Acute Exacerbation of Chronic Obstructive Pulmonary Disease (AECOPD) Combined with Elevated B-Type Natriuretic Peptide (BNP)/J. Su, R. Zhang, K. Cheng, Shanghai, China, p.A3352


**THEMATIC POSTER SESSION**

**B46 IDIOPATHIC INTERSTITIAL PNEUMONIA: NATURAL HISTORY**

**Area B (Hall F, Level 2)**

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion and 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: L.P. Hariri, BS, MD, PhD, Boston, MA


The Management and Outcomes of Patients with Both Interstitial Lung Disease and Lung Cancer/K.F. Flack, S. Chu, C. Ciunci, A. Berman, M. Kreider, M. Porteous, Philadelphia, PA, p.A3356

The Role of Infection in Acute Exacerbation of Idiopathic Pulmonary Fibrosis/D. Weng, H. Li, Shanghai, China, p.A3357

Analysis of the Clinical Characteristics of 176 Patients with Pathologically Confirmed Cryptogenic Organizing Pneumonia/D. Weng, Y. Zhang, H. Li, Shanghai, China, p.A3358


Non-Acidic Reflux Correlates with Disease Severity in Idiopathic Pulmonary Fibrosis/Y. Wakwaya, D. Ramadurai, J. King, A. Babaei, J.J. Swigris, Denver, CO, p.A3360


P205 Prognosis of Adults with Idiopathic Pulmonary Fibrosis Without Effective Therapies: A Systematic Review and Meta-Analysis/Y.H. Khor, H. Barnes, Y. Ng, N. Goh, C.F. McDonald, A.E. Holland, Melbourne, Australia, p.A3392


Facilitators: A.J. Walkley, MD, MSc, Boston, MA
A. Dooley Thompson, MD, PhD, Ann Arbor, MI


P1107 Systematic Review of Intravenous Acetaminophen After Cardiac Surgery/M.A. Malesker, D.E. Hilleman, L.E. Morrow, Omaha, NE, p.A3396


P1109 CODES: Creating Opportunities to Directly Enhance Simulations for ACLS/J. Lee, A. Beger, L. Wooley, A. Mora, Dallas, TX, p.A3398

P1110 Do Specialties Differ in the Decision to Terminate CPR in In-Hospital Cardiac Arrest? Results of a Physician Survey/A.M. Abdul Hameed, H. Bhatt, B.E. Iriarte, G. Lerman, Darby, PA, p.A3399

P1111 Palliative Care Utilization in In-Hospital Cardiac Arrest at an Urban Academic Medical Center/D. Khateeb, T. Bekker, N. Zahustecher, L. Tang, J. Stout, U. Vaid, F.M. West, Philadelphia, PA, p.A3400


P1113 Changes in Goals of Care Immediately Following In-Hospital Cardiac Arrest in Seriously Ill Adults/P. Patel, S.S. Rajan, Y. Kim, Santa Clara, CA, p.A3402


P1115 Body Mass Index and Initial Rhythm as Predictors of Outcomes of In-Hospital Cardiac Arrests/R. Sawhney, J. Meyer, G. Tsai-Nguyen, C. Morris, A. Perez, A. Mora, Jr., Dallas, TX, p.A3404

P1116 Factors Affecting the Survival-To-Discharge of Patients After In-Hospital Cardiac Arrest/M. Sundhu, B. Alam, F. Covut, A. Sarma, B. Saqi, M. Syed, Cleveland, OH, p.A3405


B48 CRITICAL CARE: MEASURE FOR MEASURE - QUALITY IMPROVEMENT AND IMPLEMENTATION OF BEST PRACTICE

9:15 a.m. - 4:15 p.m.  KBHCCD

Area J (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: M.P. Kerlin, MD, MS, Philadelphia, PA
P. Aguilar, MD, St. Louis, MO


P1126 Review of 780 Intubations in a Community Hospital Using a Team Based Approach in a Critical Care Unit/R.P. Tofts, S. Saleknezhd, V. Allen, M. Hamed, S. Tully, Columbus, MS, p.A3414

P1127 Outcome Measures of Patients Exubated at Night in a High Intensity Medical Intensive Care Unit/A. Milas, S. Patel, D. Barounis, A. Nikamal, N. Anand, E. Estoos, K. Nitti, Oak Lawn, IL, p.A3415


P1134 ABCDEF Bundle Compliance Rate and Hospital Volume of Mechanically Ventilated Patients/J.S. Lee-Kim, J.A. Greenberg, N.G. Panos, A.D. Patel, Chicago, IL, p.A3422


P1140 Following the Guidelines: A Look at Compliance with Surviving Sepsis in a General Medical Unit/O. Ashraf, L. Babar, M. Faruqui, T.J. Cheema, Pittsburgh, PA, p.A3428


P1154  Admission Diagnosis as a Risk Factor for Ventilator Associated Events/J.C. Fazio, Z. Chai, M. Mitchell, S. Tekwani, J.E. Han, Atlanta, GA, p.A3441

P1155  Analyses of 119 Patients Underwent Bronchoscopy at Intensive Care Unit/A. Gürün Kaya, F. Çiftçi, S. Erol, A. Çiledag, A. Kaya, Ankara, Turkey, p.A3442

P1156  What Comes Out on Top: Prone positioning Versus Extracorporeal Membrane Oxygenation for Severe Acute Respiratory Distress Syndrome at Large Quaternary Regional Center/S. Baltaji, M. Naddour, M.A. Kalani, O. Ashraf, E. Biher, Pittsburgh, PA, p.A3443

P1157  Improving Quality of Care in Acute Respiratory Distress Syndrome - Meeting the Goals of Treatment Regarding Proning, Neuromuscular Blockade, Low Tidal Volumes and Low Plateau Pressures/S. Harabaglia, L. Wydro, M. Junqueira, Pueblo, CO, p.A3444

P1158  Preference-Based Quality of Life for Critical Care Patients with Acute Respiratory Failure and Acute Respiratory Distress Syndrome: A Systematic Review and Meta-Analysis/K.A. Barrett, A. Zalucky, B. Sander, Toronto, Canada, p.A3445


Facilitators: N. Hajizadeh, MD, MPH, Manhasset, NY
R. Bakhrud, MD, Winston-Salem, NC

P1160  ICU Mortality Is Less in Septic Obese Patient in a Community Hospital/A. Aburahma, F. Elounais, Y. Zayed, L. Rashdan, Flint, MI, p.A3447


An Uncommon Cause of Infective Endocarditis - Group G


An Unusual Case of Infectious Mycotic Aneurysm Rupture with Complete Destruction (Absence) of Tricuspid Valve Due to Lower Severity of Illness Scores at LTACH Admission Can Predict Discharge Home in Patients with Chronic Critical Illness/D. H. Tran, Z. Nagaria, H. Patel, J. D. Hasday, A. C. Verceles, Bronx, NY, p.A3459


Trends and 30-Day Readmission Rate for Patients Discharged with Septicemia: Analysis of 3,082,888 Admissions/A. S. Bath, M. Farishta, V. Deepak, Kalamazoo, MI, p.A3457


Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: R. S. Stephens, MD, Baltimore, MD T. T. Bellamkonda, DO, Bellevue, WA

Complete Destruction (Absence) of Tricuspid Valve Due to Chronic Endocarditis/M. U. Ali, C. Geller, Upland, PA, p.A3460

An Unusual Case of Infectious Mycotic Aneurysm Rupture with Endocarditis/D. Kumar, M. Saliq, Z. Khan, M. Bachan, Bronx, NY, p.A3461


The Diagnostic Difficulty of Cardiac Sarcoidosis Without Known Systemic Disease/C. Conner, P. Troy, Farmington, CT, p.A3468


Anti-Synthetase Syndrome Presenting with Atrial Ventricular Blockage/G. Sun, M. Bachan, Z. Khan, Bronx, NC, p.A3472

Left Ventricular Noncompaction Presenting as a Cardiac Arrest/A. S. Bath, V. Deepak, M. Farishta, V. Gupta, Kalamazoo, MI, p.A3473


SynCardia Total Artificial Heart Implant for End-Stage Biventricular Heart Failure Secondary to Eosinophilic Myocarditis/S. Savajiyani, R. GarciaOrr, G. Chu, Phoenix, AZ, p.A3475

Heparin Induced Thrombocytopenia Thrombosis Induced STEMI Status-Post CABG/J. J. Chacko, F. Rahim, A. M. Jaffe, A. Hamzka, J. Patel, Ocala, FL, p.A3476

Takotsubo Cardiomyopathy: Is It Really a Benign Disease?/T. Dalia, B. S. Amr, A. Agrawal, V. R. Sethapati, J. Kvapil, Kansas City, KS, p.A3477

End of the Line/G. Orellana, O. Garner, A. Iardino, Odessa, TX, p.A3478

Loculated Pericardial Effusion Causing Tamponade in a Patient with Hodgkin’s Lymphoma/R. Samannan, D. De La Zerda, Miami, FL, p.A3479

Facilitators: P. Sinha, BSc(Hons), MB BCh, PhD, San Francisco, CA M. W. Semler, MD, MSc, Nashville, TN A. Law, MD, Boston, MA


CLINICAL
THEMATIC POSTER SESSION

CRITICAL CARE CASE REPORTS: CARDIOVASCULAR DISEASES IN THE ICU

9:15 a.m. - 4:15 p.m. KBHCCD Area F (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: R. S. Stephens, MD, Baltimore, MD T. T. Bellamkonda, DO, Bellevue, WA

Heparin Induced Thrombocytopenia Thrombosis Induced STEMI Status-Post CABG/J. J. Chacko, F. Rahim, A. M. Jaffe, A. Hamzka, J. Patel, Ocala, FL, p.A3476


P830  An Exaggerated Manifestation of Beozd Jarisch Reflex in ICU/D. Saha, Danville, PA, p.A3483

P831  A Rare Case of Kounis Syndrome Precipitated by “100 Bee Stings”/M. Ali, M. Ramirez, H. Anjum, S.R. Surani, Corpus Christi, TX, p.A3484

P832  Delayed Type-II Endoleak Causing Critical Limb Ischemia/Z. Chauhan, H. Asif, M. Iguina, M. Danckers, Aventura, FL, p.A3485


P834  When High Blood Pressure Becomes Too High: A Rare Case of Hypertensive Emergency Induced Thrombotic Microangiopathy in a Pregnant Patient/X. Cao, J. Odneal, B. Elhalwagi, Longview, TX, p.A3487


Facilitators: M. Wilson, MD, Rochester, MN
N. Bosch, MD, Boston, MA


P838  An Atypical and Acute Presentation of Cardiac Amyloidosis/T. Tran, K. Tsarova, H. Desai, W.G. Carlos, Indianapolis, IN, p.A3491


P840  Blunt Trauma Induced Coronary Artery Dissection/M. Badrinath, P. Pittroda, A. Tambe, T. Szombathy, Aurora, CO, p.A3493

P841  Multiorgan Failure Complicating Endovascular Repair of Type B Aortic Dissection: A Case Report and Literature Review/R. Akkari, S. Donahue, M. Almashtech, VERYL, MD, p.A3494


P845  A Case of Recurrent Takotsubo Cardiomyopathy/P. Zack, A. Tanase, Kalamazoo, MI, p.A3498

P846  Addiction and Polysubstance Abuse Magnifying Chronic Medical Disease: A New Risk for Critical Illness in a Young Adult with Congenital Heart Disease/J.C. West, T. Wiegand, P. Prasad, Rochester, NY, p.A3499

CLINICAL
THEMATIC POSTER SESSION

B51  CRITICAL CARE CASE REPORTS: CARDIOVASCULAR DISEASES IN THE ICU II
9:15 a.m. - 4:15 p.m.  
Area F (Hall F, Level 2)

Facilitators: P. Rali, MD, Philadelphia, PA
M. Brewer, DO, Jackson, MS


P850  Sinus Node Dysfunction Due to West Nile Virus Myocarditis/A. Hudler, M.F. Ragland, A. Neumeier, Aurora, CO, p.A3502


P855  Mitral Valve Destruction by Idiopathic Hypereosinophilic Syndrome/M. Quiñonez, M.E. Vijil, San Pedro Sula, Honduras, p.A3507


P857  Inhaled Refrigerant Exposure: An Unlikely Cause of Fulminant Heart Failure/K. Parikh, J. Quinn, J.E. Denis, A. Mohan, Greenville, NC, p.A3509

Facilitators: J.T. Granton, MD, Toronto, Canada
C.C. Lee, MD, Portland, OR

P858  Hereditary Hemorrhagic Telangiectasia Associated with High-Output Heart Failure/J. Payne, K. Olson, E. Rayyan, R. Saggar, Phoenix, AZ, p.A3510


P864 A Case Report of Severe Immune Mediated Thrombocytopenia After GIIb/IIIa Infusion Following Percutaneous Coronary Intervention/A. Patel, J. Velasco, Oak Lawn, IL, p.A3517


Facilitators: S.J. Hsieh, MD, MS, New York, NY
K. Pendleton, MD, Minneapolis, MN


P868 Transesophageal Echo, a Risk for Pulmonary Hemorrhage/Peters, R. Loynd, S. Shah, West Reading, PA, p.A3521

P869 More than Just Leg Pain: A Rare Presentation of Stanford Type A (Debakey Type I) Aortic Dissection/V.G. Cheetirala, A. Iqbal, A. Gutierrez, J. Schwadron, S. Hasan, S. Muddassir, Brooksville, FL, p.A3522

P870 Giant Cell Aortitis with Dissection/L.F. Henry, P.N. Krupka, Farmington, CT, p.A3523

P871 Age Is Just a Number: An Unexpected Case of Aortic Dissection/G. Josephson, E. Czajkowski, M. Kalinowski, S. Adhikari, M. Dia, Oak Lawn, IL, p.A3524

P872 A Rare Case of Bilateral Subclavian Artery Stenosis Presenting with Chronic Dizziness/A. Jabri, E. Verghese, J. Alzubi, K. Thind, A.H. Ababneh, D. Cutler, A.R. Cucci, Akron, OH, p.A3525


P874 Not All Hot Air: An Unusual Case of Myopericarditis Caused by Pneumomediastinum/J.D. Duke, K.M. Calhoun, S.H. Naqvi, N.G. Reddy, F. Fuentes, Houston, TX, p.A3527


Facilitators: J.L. Gutторpsson, PhD, Milwaukee, WI
B. Balakrishnan, MD, Detroit, MO

P878 Rare but Lethal - Tuberculosis Pericarditis with Cardiac Tamponade in an Immunocompetent Patient/S. Sairkar, Flushing, NY, p.A3531


P881 A Rare Case of Idiopathic Hemorrhagic Pericardial Effusion Presenting as Cardiac Tamponade/V. Deepak, A.S. Bath, M. Farishta, S. Kenth, Kalamazoo, MI, p.A3534

P882 A Rare Case of Streptococcus Pneumoniae Endocarditis in an Immunocompetent Patient/V. Deepak, A. Bath, M. Farishta, J. Kaur, Kalamazoo, MI, p.A3535

P883 Cardiac Tamponade-Induced Severe Ischemic Hepatitis/S. Sazgar, R. Parbani, T.N. Thai, J.M. Campion, Tucson, AZ, p.A3536


P887 Candida Endocarditis: A Diagnostic Challenge with a Fatal Outcome/M. Reaume, A. Shallal, P. Boapimp, Kalamazoo, MI, p.A3540

P888 Multidisciplinary In Situ Longitudinal Simulation Model for Unanticipated Extracorporeal Cardiopulmonary Resuscitation in Pediatric Heart Failure/J. Weller, B. Ralston, S. Hupp, Dallas, TX, p.A3541

**CLINICAL**

**THEMATIC POSTER SESSION**

**B52**

CRITICAL CARE CASE REPORTS: THE LIVER, PANCREAS AND INTESTINES

9:15 a.m. - 4:15 p.m.  KA86
Area F (Hall F, Level 2)

Viewing: Posters will be on display for entire session.
Discussion: 11:15-12:00: authors will be present for individual discussion. 12:00-1:00: authors will be present for discussion with assigned facilitators.
Facilitators: R. Kapoor, MBBS, MBA, Indianapolis, IN
Y. Khan, MD, Toronto, Canada

P901 How Can my Heart Be on the Right Side When I Was Born with It Being on my Left? A. Goel, N. Eid, P. Patel, S. Muddassir, Brooksville, FL, p.A3542

P902 A Unique Case of Fulminant Hepatic Failure/O. Ramadurai, A. Hans, M.F. Ragland, Aurora, CO, p.A3543


P904 Hepatic Compartment Syndrome Caused by a Subcapsular Hematoma from the Hemorrhagic Conversion of Septic Emboli in a Patient with Endocarditis/S. Khan, R. Parikh, H.W. Fairber, Boston, MA, p.A3545

P905 Fulminant Hepatic Failure in a Woman with Hyperleukocytosis/K. DesPrez, Sacramento, CA, p.A3546

P906 Liver Failure Presenting as Refractory Lactic Acidosis Due to the Warburg Effect/S. Tseng, R. Koch, S. Uppalapu, T. Ardiles, Phoenix, AZ, p.A3547


P908 Clostridium Perfringens Liver Abscess with Massive Intravascular Hemolysis/M.F. Farooq, P. Grover, Farmington, CT, p.A3549

P909 Concomitant Autoimmune and Cholestatic Hepatitis Secondary to Epstein-Barr Virus Infection/A. Abboud, H.E. Latham, Kansas City, KS, p.A3550

P910 Fatal Fungus: Invasive Pulmonary Aspergillosis in Severe Alkalemia of Gastric Origin/M. Shieh, Houston, TX, p.A3554

P911 A Rare Case of Gastroenteritis Induced Esophageal, Gastric and Diffuse Intestinal Pneumatosis with Air in the Portal Vein/T.N. Casimire, L. Pickens, Houston, TX, p.A3555

Facilitators: J. Olson, MD, Kansas City, KS
D. Wender, MD, Seattle, WA

P912 A Rare Case of Emphysematous Gastritis with Portal Venous Gas Successfully Treated with Conservative Management/J. D. Price, K. El-Kersh, Louisville, KY, p.A3556

P913 The Alkaline Tide: A Case of Severe Alkalemia of Gastric Perforation and Diffuse Intestinal Pneumatosis with Air in the Portal Vein/T. N. Casimire, L. Pickens, Houston, TX, p.A3556


P916 Hypertriglyceridermia Induced Pancreatitis: Is There a Role for Plasmapheresis?/T. Rehman, A. Milas, D. Saha, J. Chaiban, Oak Lawn, IL, p.A3559

P917 How Can my Heart Be on the Right Side When I Was Born with It Being on my Left? A. Goel, N. Eid, P. Patel, S. Muddassir, Brooksville, FL, p.A3552

P918 Hypertriglyceridermia Induced Pancreatitis: Is There a Role for Plasmapheresis?/T. Rehman, A. Milas, D. Saha, J. Chaiban, Oak Lawn, IL, p.A3559


P921 Sepsis and Acute Renal Failure Secondary to Massive Sigmoid Distension in a Patient Taking Donnatal/A. Poor, R. J. Hiensch, New York, NY, p.A3570

P922 Extensive Pneumomediastinum from Boerhaave’s Syndrome: Diagnostic Dilemma and Management Difficulties/O. Khayyat, G. P. Ranches, Las Vegas, NV, p.A3572

P923 Pathologic or Incidental? A Case of Duodenal Hematomal/R. Sawhney, R. Choudhury, Dallas, TX, p.A3573

P908 Eat or Let It Beat: An Interesting Case of Deglutition Dysphagia/I. Bath, M. Farishta, V. Deepak, V. Gupta, Kalamazoo, MI, p.A3559

P909 Broncho-Gastric Fistula Identified 22 Years Following Esophagectomy for Esophageal Cancer/J. R. Lim, S. G. Meka, G. Grasso-Knight, Royal Oak, MI, p.A3560


P911 Dermatomyositis-Induced Esophageal Ulceration and Life-Threatening Hemorrhage Stabilized by Intravenous Immune Globulin/R. Sawhney, R. Choudhury, Dallas, TX, p.A3562

P912 A Rare Case of Emphysematous Gastritis with Portal Venous Gas Successfully Treated with Conservative Management/J. D. Price, K. El-Kersh, Louisville, KY, p.A3563

P913 The Alkaline Tide: A Case of Severe Alkalemia of Gastric Perforation and Diffuse Intestinal Pneumatosis with Air in the Portal Vein/T. N. Casimire, L. Pickens, Houston, TX, p.A3556

P914 A Rare Case of Gastroenteritis Induced Esophageal, Gastric and Diffuse Intestinal Pneumatosis with Air in the Portal Vein/T. N. Casimire, L. Pickens, Houston, TX, p.A3556

Facilitators: J. Olson, MD, Kansas City, KS
D. Wender, MD, Seattle, WA


B53  SLEEP DISORDERED BREATHING AND LONG-TERM VENTILATION IN PEDIATRICS

9:15 a.m. - 4:15 p.m.  KBHCCD Area K (Hall F, Level 2)

**Viewing:** Posters will be on display for entire session.

**Discussion:**
- 11:15-12:00: authors will be present for individual discussion
- 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** P.D. Robinson, MD, MRCPCH, PhD, Sydney, Australia

**P1197** Utility of Traditional Screening Questionnaires for Obstructive Sleep Apnea in Children with Marfan Syndrome/E. MacKintosh, M. Chen, K. Carlin, L. Young, Seattle, WA, p.A3578

**P1198** Sleep-Disordered Breathing in Infants with Myelomeningocele and Chiari Malformations/A. George, S. Riddle, J. Woodward, G. Beltran Ale, N. Simakajornboon, Cincinnati, OH, p.A3579


**P1200** Characteristics of Sleep Disordered Breathing in Pediatric Spinal Muscular Atrophy/A. Chacko, P.D. Sly, L. Gauld, Brisbane, Australia, p.A3581

**P1201** Validation of Pediatric Sleep Questionnaire in Children with Spina Bifida, Myelomeningocele and Chiari Malformation/G.J. Beltran Ale, A. George, M.M. Hossain, N. Simakajornboon, Cincinnati, OH, p.A3582

**P1202** Feeding Disorders in Pediatric Tracheostomy/J. Henningfeld, C. Lang, P. Goday, Milwaukee, WI, p.A3583


**P1205** Atopy as a Predictor of Obstructive Sleep Apnea (OSA) in Pediatric Patients Evaluated at High Altitude/S.M. Restrepo, M. Villamil, J.C. Gelmex-Nieto, Bogota, Colombia, p.A3586

**P1206** A-pact: The Use of Inhaled Aztreonam to Eliminate or Decrease the Bacterial Burden of Pseudomonas Aeruginosa in Children with Atracheostomy Tube/R. Wadia, M.A. Tablizo, E.W. Fong, Emeryville, CA, p.A3587

**P1207** Central Sleep Apnea (CSA) as a Primary Cause of Hypoxia in Infants Living in High Altitude Can Affect the Diagnosis of Bronchopulmonary Dysplasia (BPD) or Other Diseases/M. Guarin, Denver, CO, p.A3588

**P1208** Maternal Age Plays a Role in Adherence to AAP Safe Sleep Guidelines/S. Lee, C. O’Connor, E.R. Concepcion, Brooklyn, NY, p.A3589


P940 Adult Presentation of Pulmonary Hypertension After a Pediatric Total Pneumonectomy/A. Devarajan, G. Lanier, Valhalla, NY, p.A3596

P941 Use of Riociguat to Liberate from Prolonged Use of Inhaled Nitric Oxide in the Intensive Care Unit/K.M. Swiatek, A. Mytinger, D. Grinnan, Richmond, VA, p.A3597

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Facilitator: H.W. Farber, MD, Boston, MA


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P952 Thrombosed Pulmonary Artery Aneurysm in a Patient with Partial Anomalous Pulmonary Venous Drainage Disguised by an Arterio-Venous Fistula/N. Schoenberg, N. Ruopp, H.W. Farber, Boston, MA, p.A3619


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P955 An Undiagnosed Left Persistent Superior Vena Cava: The Role of POCUS/V. Balasubramanian, MD, Guaynabo, Puerto Rico, p.A3627

Facilitator: A.U. Aranda, MD, Guaynabo, Puerto Rico

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Facilitator: M.J. Ryan, MD, San Luis Obispo, CA

P976 Pulmonary Hypertension Due to Partial Anomalous Pulmonary Venous Return/M. Abidali, A. Fadda, R. Saggar, Phoenix, AZ, p.A3632

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Facilitator: R.L. Benza, MD, Pittsburgh, PA


Facilitator: J.A. Mazurek, MD, Philadelphia, PA


P1006 Pulmonary Veno-Occlusive Disease in Elderly Patients with


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Facilitator: E. Brittain, MD, Nashville, TN

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Facilitator: M. Simon, MD, Pittsburgh, PA


P1007 Sex-Specific Residual Pulmonary Vasodilative Reserve as Predictors in Patients with Idiopathic Pulmonary Arterial Hypertension Pulmonary Arterial Hypertension/ Y. Yu, S. Gong, P. Yuan, Y.L. Yang, R. Jiang, L. Wang, W.H. Wu, W. Xie, J. Liu, Nanjing, China, p.A3662

B56 LET’S GET PHYSICAL: EXERCISE AND BIOMECHANICS OF PAH

9:15 a.m. - 4:15 p.m. KBHCCD

Area G (Hall F, Level 2)

Facilitators: N.C. Chesler, PhD, Madison, WI

R.R. Vanderpool, BS, MS, PhD, Tucson, AZ

P1009 Heart Rate Expenditure During 6MW Correlates with Right Ventricular Function/D. Lachant, A. Light, R.J. White, Rochester, NY, p.A3663


P1011 Invasive CPET to Evaluate Pulmonary Vascular Limitation in Patients with Scleroderma ILD and Pulmonary Hypertension/M. Insel, R.R. Vanderpool, F.P. Rischard, Tucson, AZ, p.A3665


Facilitators: M.B. Brown, PT, PhD, Indianapolis, IN

D. Valdez-Jasso, PhD, La Jolla, CA


P1015 Exercise Pulmonary Hypertension in Intestinal Lung Disease/K.J. Henry, L. Gargani, S. Sultan, R. Saggar, E. Bossone, R. Saggar, Phoenix, AZ, p.A3669


P1032  Bronchoscopic Features, Associations and Outcomes of Organizing Pneumonia Following Allogeneic Hematopoietic Stem Cell Transplantation/J. Frey, K. Brownback, Kansas City, KS, p.A3673


P1035  Follow Up Chest Radiograph in Community Acquired Pneumonia (CAP) - Are We Meeting the Standards?/M.S. Zeb, J. Ibrahim, H. Hamze, A. Ali, M. Annabel, N. Ahmad, K.S. Srinivasan, H. Moudgil, E. Crawford, Telford, United Kingdom, p.A3676


P1037  Analysis for Distribution Range and Drug Resistance of Pathogenic Bacteria in Sputum of Acute Exacerbation of Chronic Obstructive Pulmonary Disease (AECOPD) Inpatients in Changchun China/T. Ma, Y. Hu, B. Yan, Changchun, China, p.A3678

P1038  Plasma Amino Acid in Patients with Bacterial Pneumonia/H. Ikeda, Yonezawa, Japan, p.A3679

Facilitator:  E.M. Mortensen, MD, MSc, Farmington, CT


P1041  Bacterial Distribution and Antimicrobial Resistance Among Patients with Hyperglycemia or Diabetes in a Teaching Hospital in Shanghai/H. Yi, M. Zhou, Shanghai, China, p.A3682

P1042  Multi-Drug Resistance Pathogens Trajectory in Patients with Hospital- Acquired and Ventilator-Associated Pneumonia: Where Are the End of Tunnel?/A.S. Sadigov, R. Baylarov, A. Agayeva, B. Tagiyev, Baku, Azerbaijan, p.A3683


P1044  Survival with Optimal Medical Management in a Cohort of Severe Necrotizing Bacterial Lung Infection/J.-C. Larose, H.T. Wang, K. Chagnon, G. Rakovich, Montreal, Canada, p.A3685


Facilitator:  L.K. Sharma, PhD, New Haven, CT


P1050  Making It Mental - Neurological Manifestations of Legionnaires’ Disease/D. Muscedere, S. Sahni, Y. Malysh, G.K. Upadhya, R. Cofsky, New York, NY, p.A3691

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**THEMATIC POSTER SESSION**

**B58** CLINICAL STUDIES IN LUNG INFECTIONS AND PNEUMONIA: TREATMENT AND OUTCOMES

9:15 a.m. - 4:15 p.m. | KBHCCD

**Discussion:** 11:15-12:00: authors will be present for individual discussion

**Viewing:** Posters will be on display for entire session.

**Facilitator:** N.C. Dean, MD, Murray, UT

**Poster Code**

- P1056 An Antimicrobial Stewardship Initiative to Assist Providers in Utilizing Ordered Procalcitonin Levels
- P1057 Retrospective Review of Video Fluoroscopic Swallowing Studies and Pulmonary Outcomes at Thomas Jefferson University Hospital (TJUH)
- P1058 Positive Expiratory Pressure Devices in Pneumonia: A Review of Efficacy
- P1059 Frequency and Antimicrobial Susceptibility of Bacteria Isolated from Patients Hospitalized with Pneumonia in the United States Medical Centers (2017-2018)
- P1060 Antimicrobial Efficacy and Targeted Nanoparticle Delivery of Silver Ibuprofen to Treat Multi-Drug Resistant Gram-Positive and Gram-Negative Pathogens
- P1061 Community-Acquired and Health Care-Associated Staphylococcus Aureus Pneumonia

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**B59** BACTERIAL INFECTION CASE REPORTS

9:15 a.m. - 4:15 p.m. | KBHCCD

**Discussion:** 11:15-12:00: authors will be present for individual discussion

**Viewing:** Posters will be on display for entire session.

**Poster Code**

- P1062 Association of Procalcitonin Levels and Risk of Mortality in Adults with Hospital Acquired Pneumonia and High Risk Community Acquired Pneumonia
- P1063 Clinical Features and Outcomes of Idiopathic Pulmonary Fibrosis Patients Hospitalized for Pneumonia
- P1064 Characterization of the Microbiome on Various Nebulizer Parts After Short-Term Use by Hospitalized Patients
- P1065 Serial Changes in the Microbiome on Reusable Nebulizers in Hospitalized Patients
- P1066 Regional Features of Morbidity and Mortality from Pneumonias on the Territory of the Far Eastern Region of Russia
- P1067 7-Day and 30-Day Readmission Rate for Patients Discharged with Pneumonia: Analysis of 757,014 Admissions
- P1068 Trends and 30-Day Readmission Rate for Patients Discharged with Pneumonia: Analysis of 2,439,605 Admissions
- P1069 Progression of the Radiologic Severity Index Is Associated with Increased Mortality in Patients with Acute Leukemia Who Develop Pneumonia After Induction Chemotherapy
- P1070 Pneumococcal Vaccination Practices for Adults with Chronic Pulmonary Conditions at a Referral Pulmonary Clinic
- P1071 Vancomycin Utilization for Community-Acquired Pneumonia Patients Admitted to MICU

Facilitator: C. Feldman, MD, PhD, DSc, ATSF, Johannesburg, South Africa

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P1074 Raoultella Plantioca: A Rare but Growing Cause of Nosocomial Infection/C. Morris, L. Sorrell, A. Mora, Dallas, TX, p.A3713


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Facilitator: B. Wu, MD, MSc, New York, NY


P1083 Tortoise and the Air: Salmonella Pneumonia Presenting with Adult Respiratory Distress Syndrome in a Patient with Liver Disease/T. Lane, Y. Wakwaya, B. Graney, Aurora, CO, p.A3722


P1085 Singing Again: Successful Non-Operative Management of a Mediastinal Abscess/A. Goodfellow-Hyder, J. Biberstom, J.S. Parrish, San Diego, CA, p.A3724


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MONDAY • MAY 20

BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

B61 COPD: BASIC DISCOVERY
9:15 a.m. - 4:15 p.m.  KBHCCD
Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.
Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: K.A. Serban, MD, Denver, CO
N. Miyahara, MD, PhD, Okayama, Japan

P545 Systems-Based Resolution of the Complex Relationship Between Cadmium and Zinc in Macrophages/D.L. Knoell, M. Sapkota, C. Kerber, S. Bresnahan, O. Fedoronko, T. Trabucco, E. Klug, T. Wysocki, J. Rogers, Omaha, NE, p.A3754

P546 Role of Reactive Persulfides/Polysulfides in Cellular Senescence of COPD/S. Yamanaka, T. Ichikawa, H. Sugiura, T. Sen, K. Serban, MD, Denver, CO
N. Miyahara, MD, PhD, Okayama, Japan


P549 Increased Susceptibility of Female Mice to Emphysema in an Antisense Oligonucleotide Model of Alpha-1 Antitrypsin Deficiency/M. Ojha, R. Joshi, Q. Fan, S. Guo, B. Monia, B.M. Varisco, Cincinnati, OH, p.A3758
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Facilitator: I.K. Sundar, BSc, MSc, PhD, Rochester, NY

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Facilitator: N.V. Kollipiti, PhD, Tampa, FL

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Emphysema in Mice Lacking uPARAP/S. Stephenson, C. Atkinson, C.L. Wilson, L.M. Schnapp, Charleston, SC, p.A3772

Facilitator: A. Noel, PhD, MSc, BSc, Baton Rouge, LA


Misfolded Alpha-1-Antitrypsin Protein Produced by Alveolar Epithelial Cells Generated from Patient-Derived Induced Pluripotent Stem Cells Is Absent After CRISPR/Cas9 Gene Editing/K.J. Hurley, A. Jacob, J. Kaserman, F.J. Hawkins, A.A. Wilson, D.N. Kotton, Dublin, Ireland, p.A3776

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Facilitator: T.M. Conlon, E. Mitula, R.S.J. Sarker, A.O. Yildirim, Munich, Germany, p.A3777


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Facilitator: K. Cahill, MD, Nashville, TN


P791 Sex-Dependent Effect of TRPM8 rs10166942 Polymorphism on Cold-Induced Airway Hyperresponsiveness in Asthma/D. Naumov, O. Kotova, D. Gassan, A. Prikhodko, V. Kolosov, Blagoveschensk, Russian Federation, p.A3823


Facilitator: A. Van Der Vliet, PhD, Burlington, VT

P794 Fevipiprant, a Selective Prostaglandin D2 Receptor 2 Antagonist, Potently Inhibits Chemotaxis and Cytokine Production by Tc2 cells (type-2 CD8+ lymphocytes)/L. Xue, W. Chen, J. Luo, M.M. Chizari, R. Borst, S. Kazani, V.J. Erpenbeck, D. Sandham, Oxford, United Kingdom, p.A3826


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Facilitator: C.J. Brito-Leon, MD, ATSF, New Haven, CT


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Facilitator: B.M. Smith, MD, MS, Montreal, Canada


P605 Correlation of SPECT-Based Ventilation Patterns with CT Image-Derived COPD Clusters/F. Li, B. Haghighi, J. Choi, S. Choi, E.A. Hoffman, A.P. Comellas, M.M. Graham, C.-L. Lin, Iowa City, IA, p.A3855

P606 The Relationship Between the Modified Medical Research Council (mMRC) Dyspnea Scale and Lung Structure Assessed by Three-Dimensional CT in Patients with Chronic Obstructive Pulmonary Disease/H. Yasui, N. Imi, M. Karayama, K. Mori, H. Hozumi, Y. Suzuki, K. Furushashi, N. Enomoto, T. Fujisawa, Y. Nakamura, T. Suda, Hamamatsu, Japan, p.A3856

P607 A Case of Vanishing Lung Syndrome: A Rare Form of Bullous Emphysema/M. Yasin, V. van Berkel, Louisville, KY, p.A3857


P609 The Effect of Pulmonary Function, Power and Maximum Power Output on Dyspnoea in a Real-World Cohort/I. Sata, R.P. Cusack, M. Matsuoka, Y. Yanquina, P. O’Byrne, K.J. Killian, Hamilton, Canada, p.A3859


Facilitator: P. Chitano, PhD, Vancouver, Canada

P611 Usefulness of Correlation in Peak Flow and Forced Expiratory Volume in One Second in the Diagnosis and Severity Assessment in Patients with Chronic Obstructive Pulmonary Disease/N. Mesina, K. Nangrani, A. Patel, M. Alipour, V. Vasudev, Brooklyn, NY, p.A3861


P620 Effect of Metabolic Syndrome Status on Lung Function and Patient-Reported Facilitator

P621 Use of a Comorbidity Count to Assess the Prevalence of Comorbidities in the GOLDEN 3 and 4 Randomized Clinical Trials in Patients with Moderate-to-Very-Severe COPD/S. Sharma, T. Goodin, A. Ozol-Godfrey, S. Sanjar, Marlborough, MA, p.A3872

P622 Reduced Sleep Quality Correlates with Worse Hyperinflation in Patients with Chronic Obstructive Pulmonary Disease/D. Chapman, K. Jetmalani, C. Thamrin, C.S. Farah, R.R. Grunstein, M. Comas-Soberats, P.M. Young, C.L. Phillips, G. King, Sydney, Australia, p.A3872


P624 Improvement in Lung Function and Patient-Reported Outcomes in Patients with COPD Treated with Nebulized Glycopyrrolate in the GOLDEN 3 and 4 Studies/I.F. Donohue, A. Ozol-Godfrey, T. Goodin, S. Sanjar, Houston, TX, p.A3873

P625 The Impact of Missing Spirometry Data in the GOLDEN 3 and 4 Studies of Patients with Moderate-to-Very-Severe COPD Treated with Nebulized Glycopyrrolate/R. Tosiello, R. Claus, A. Ozol-Godfrey, K. Whicher, R. Carroll, G. Vega, T. Goodin, Marlborough, MA, p.A3875


P629 A Genome Wide Association Study for Lung Function in Korean Population Using Exome Array/K.S. Lee, W. Kim, B. Han, Chuncheon-si, Korea, Republic of, p.A3879

P630 Effects of Glycopyrronium Bromide (GB) Delivered Via a Pressurized Metered-Dose Inhaler (pMDI) in Subjects with Chronic Obstructive Pulmonary Disease (COPD) on Cardiovascular Parameters: Results from the GLIMMER Study/E.M. Kerwin, G. Feldman, C. Beaudot, G. Georges, Medford, OR, p.A7371


B65 SRN: DIAGNOSIS AND MONITORING OF SLEEP AND SLEEP DISORDERS

9:15 a.m. - 4:15 p.m. Area K (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: H.-L. Tan, MBBS, London, United Kingdom


P1215 Translation and Validation of Vietnamese Version of STOP-Bang Questionnaire/K.D. Duong, V.T. Le, V.N. Nguyen, H. Hoang, G.V. Vu, N.V. Tran, Ho Chi Minh City, Viet Nam, p.A3882


P1217 Using a Sedation Monitor to Assess Sleep/C. Kapp, N.M. Punjabi, Baltimore, MD, p.A3884
Facilitator: J.-L. Pepin, MD, PhD, Grenoble, France


P1223 Effect of Acetazolamide on Cerebrovascular Responsiveness to Carbon-Dioxide in Older Adults with Sleep Disordered Breathing/R. Rastogi, M.S. Badr, K. Bakkila, R. Williams, L. Farhana, S. Chowdhuri, Detroit, MI, p.A3894

P1224 Extreme Sport Performance for More than a Week with Power Napping Only/N.C. Netzer, L.K. Rausch, H. Gatterer, M. Burtscher, A.H. Eliasson, S. Pramsohler, Bad Aibling, Germany, p.A3895

P1224 Airflow Limitation as a Measure of Sleep Disordered Breathing in Pregnancy/C. Eid, M. Salameh, K. Ludwig, M. Pengo, M. Hanson Bulblitz, G. Bourjeily, Providence, RI, p.A3889


P1224 Improvement of Central Sleep Apnea with Zolpidem/M. Eshraghi, A. Caruso, H.A. Pereira, K. Akers, A. Salloum, A. Sankari, M.S. Badr, Detroit, MI, p.A3897


P1225 Effect of Acetazolamide on Cerebrovascular Responsiveness to Carbon-Dioxide in Older Adults with Sleep Disordered Breathing/R. Rastogi, M.S. Badr, K. Bakkila, R. Williams, L. Farhana, S. Chowdhuri, Detroit, MI, p.A3894


P1225 Mirtazapine Decreases Susceptibility to Hypocapnic Central Apnea in Patients with Chronic SCI/S.A. Maresh, E. Kruppe, S. Vaughan, B. Alsabri, M.S. Badr, A. Sankari, Detroit, MI, p.A3905

P1225 Prematurity Increases the Odds for Sleep-Disordered Breathing in Children Under 2 Years of Age/A. Gileles-Hillel, I. Sadras, I. Erlichman, J. Reiter, D. Gozal, Jerusalem, Israel, p.A3903

P1225 A Polysomnography Analysis Results in Patients Referred to a Sleep Center in West Texas/H. Edriss, J. Tseng, G. Berdine, Lexington, KY, p.A3902

P1225 Nasal High Flow Reduces Minute Ventilation during Sleep Through a Decrease of Carbon Dioxide Re-Breathing/M. Pinkham, T. Mundel, R. Burgess, S. Tatkof, Auckland, New Zealand, p.A3892

P1225 Are There Age-Related Changes in Cerebrovascular Responsiveness to Carbon-dioxide?/S. Chowdhuri, R. Rastogi, B. Morgan, M.S. Badr, K. Bakkila, R. Williams, L. Farhana, Detroit, MI, p.A3893


P1225 Obstructive Sleep Apnea Patients Do Not Spontaneously Avoid Supine Sleep/P. Genta, A. Mello, G.F. D'Angelo, S. Giatti, R. Santos, G. Lorenzi-Filho, P. Lotufo, L.F. Drager, Sao Paulo, Brazil, p.A3901

P1225 A Polysomnography Analysis Results in Patients Referred to a Sleep Center in West Texas/H. Edriss, J. Tseng, G. Berdine, Lexington, KY, p.A3902

P1225 Prematurity Increases the Odds for Sleep-Disordered Breathing in Children Under 2 Years of Age/A. Gileles-Hillel, I. Sadras, I. Erlichman, J. Reiter, D. Gozal, Jerusalem, Israel, p.A3903


P1225 Mirtazapine Decreases Susceptibility to Hypocapnic Central Apnea in Patients with Chronic SCI/S.A. Maresh, E. Kruppe, S. Vaughan, B. Alsabri, M.S. Badr, A. Sankari, Detroit, MI, p.A3905

P1225 Selective Serotonin Reuptake Inhibitors Decrease Susceptibility to Hypocapnic Central Apnea in Patients with Chronic SCI/S.A. Maresh, E. Kruppe, S. Vaughan, B. Alsabri, M.S. Badr, A. Sankari, Detroit, MI, p.A3906

P1225 Mild Intermittent Hypoxia and Its Multipronged Effect on Obstructive Sleep Apnea/G. Panza, R. Alex, H. Hakim, H.-S. Lin, J.H. Mateika, Detroit, MI, p.A3907
**Discussion:**

**Viewing:** 9:15 a.m. - 4:15 p.m. KBHCCD B67 CASE REPORTS: DIAGNOSTIC AND MANAGEMENT DILEMMAS


**CLINICAL**

**THEMATIC POSTER SESSION**

**B67 CASE REPORTS: DIAGNOSTIC AND MANAGEMENT DILEMMAS**

9:15 a.m. - 4:15 p.m. KBHCCD Area A (Hall F, Level 2)

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** C.M. Kinsey, MD, MPH, South Burlington, VT

- P50 Endobronchial Ultrasound in Diagnosis and Staging of Malignant Pleural Mesothelioma/H. Koneru, M.L. Ayers, R. Evans, Danville, PA, p.A3918
- P51 A Second Primary and the Diagnostic Dilemma/N. Cook, Las Vegas, NV, p.A3919
- P52 A Case of Pulmonary Post-Transplant Lymphoproliferative Disorder Diagnosed by Bronchoalveolar Lavage Flow Cytometry/B. Alzghoul, R. Valentín, P. Li, D.C. Patel, Gainesville, FL, p.A3920
- P54 A Diagnostic Dilemma: SVC Syndrome Caused by a Sarcoid-Like Reaction to Lymphoma/R. Israel, P. VanderLaan, A.C. Chee, Boston, MA, p.A3922

- P58 Atypical Pulmonary Carcinoid and Hyponatremia Should Prompt an Extensive Metastatic Workup/A. Gopalakrishnan, E.Y. Chang, A. Umar, D. Thomas, M. Mosunjac, E. Flenaugh, Atlanta, GA, p.A3926
- P59 Incidental Primary Pulmonary Mucosa-Associated Lymphoid Tissue Lymphoma/A. Gopalakrishnan, T. Olanipekun, D. Thomas, M. Mosunjac, E. Flenaugh, Atlanta, GA, p.A3927
- P60 No Air to Breath: The Role of Early Palliative Care in Lung Cancer/M.Z. Shariff, V. Gupta, R.S. Bajwa, T. Khan, J. Mikhail, Neptune, NJ, p.A3928
**CLINICAL**

**THEMATIC POSTER SESSION**

**B68 ONCOGENIC MUTATIONS, METASTASIS, AND NOVEL THERAPEUTICS**

**9:15 a.m. - 4:15 p.m.**

Area A (Hall F, Level 2)

**Facilitator:** P.P. Massion, MD, Nashville, TN

**Posters will be on display for entire session.**

**Discussion:** 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

**P67 TRAP1 Downregulation Could Overcome Gefitinib Resistance in NSCLC Via EMT Reversal**


**P68 Clinical Significance of Sequential Treatment with Afatinib in the Epidermal Growth Factor Receptor (EGFR) Tyrosine Kinase Inhibitor (TKI) Treatment of Patients with EGFR-Mutant Non-Small Cell Lung Cancer (NSCLC)**


**P69 Relationship Between Severity of Adverse Events of Afatinib and Its Pharmacokinetics and Pharmacogenomics for EGFR Mutation-Positive Non-Small Cell Lung Cancer**


**P70 Sequential Anaplastic Lymphoma Kinase (ALK) Inhibitor Prolongs Overall Survival in Patients with ALK-Fusion Advanced Non-Small-Cell Lung Cancer**

A.C.C. Huang, M.C. Ko, C.-H.S. Kuo, Tapei, Taiwan, p.A3937

**P71 Elder Patients with Stage IV Lung Adenocarcinoma Harrowing Rare EGFR Mutations Treated with a First-Line Tyrosine Kinase Inhibitor Might Have Better Outcome than Younger Patients**

Y.-C. Tsai, C.-J. Yang, M.-J. Tsai, Y.-Y. Hung, M.-H. Lee, Y.-M. Tsai, M.-S. Huang, Y.W. Chung, Kaohsiung City, Taiwan, p.A3938

**P72 Thoracic Meningioma Metastases: A Single-Center Review**

G. Stroh, T. Peikert, Rochester, MN, p.A3939

**P73 Programmed Death Ligand-1 (PD-L1) Expression in Patients with Non-Small Cell Lung Cancer (NSCLC) with Unusual Metastasis: A Case Series**


**P74 Altered Exosomal Transcriptome Profile of Lung Cancer with Brain Metastasis**


**P75 Lymph Nodes in Lung Cancer Patients with Granulomatous Disease: To Be or Not To Be Metastasis**


**P76 Significance of Ground Glass Opacities in Patients with Extra-Pulmonary Malignancies**


**P77 Control of Oligo-Metastases Might Allow Cure of Some Patients with Advanced Non-Small Cell Lung Cancer: A Retrospective Single Institutional Analysis**


**P78 Pulmonary Delivery of Human IgG Antibody Using a Novel Digital Inhaler in a Rodent Animal Model**


**P79 Immune Response to Percutaneous Cryoablation of Lung Cancer**


**P80 Localized Chemotherapy in Early Stage Lung Cancer Through the Design of a Rocaglate-Eluting Superhydrophobic Polymer Mesh**


**P81 Therapeutic Efficacy of Zinc Oxide Nanoparticles Against Small Cell Lung Cancer in an Orthotopic Xenograft Model**


**P82 Enhanced Tumor Regression and Immune Cell Infiltration by Inhaled Submicron Particle Paclitaxel in an Orthotopic Atythic Nude Rat Model of Non-Small Cell Lung Cancer (NSCLC)**


**P83 Mistletoe Lectin as Treatment for Small Cell Lung Cancer Expressing Myc Family Oncoproteins**

M.A. Shatat, E. Yuan, R.T. Lee, Cleveland, OH, p.A3950

**P84 Complement C5a Facilitates Recruitment of Monocytes Via Chemokine CCL2 Produced by PMCs in Malignant Pleural Effusion**


**P85 Altered Exosomal Transcriptome Profile of Lung Cancer with Brain Metastasis**


**P86 Therapeutic Efficacy of Zinc Oxide Nanoparticles Against Small Cell Lung Cancer in an Orthotopic Xenograft Model**


**P87 Enhanced Tumor Regression and Immune Cell Infiltration by Inhaled Submicron Particle Paclitaxel in an Orthotopic Atythic Nude Rat Model of Non-Small Cell Lung Cancer (NSCLC)**


**P88 Mitochondrial Drp1 Binding Partners MiD49 and MiD51 Are Epigenetically Upregulated in Lung Cancer: A Novel Mitochondrial-Targeted Approach to Cell Cycle Regulation and Cancer Therapy**


P89  Nanotechnology Based Repositioning of an Anti-Viral Drug for Non-Small Cell Lung Cancer (NSCLC)/V. Parvathenani, M. Goyal, V. Gupta, Queens, NY, p.A3956


P91  Expression and Clinical Significance of Hsa_circ_0001640 in Lung Adenocarcinoma/H. Han, Y. Feng, G. Shi, Shanghai, China, p.A3958


P93  Comprehensive Glycomics Study in Chronic Obstructive Pulmonary Disease and Lung Cancer for Biomarker Discovery/X. Ji, Atlanta, GA, p.A3960


P100  Myokines Exert an Anti-Proliferative Effect on Lung Adenocarcinoma Through a Proposed Mechanism of Decreased EGFR Activity/M. Zhang, M. Dela Cruz, S. Datta, H. Roy, Boston, MA, p.A3967


B69  THORACIC ONCOLOGY: OPTIMIZING DIAGNOSIS AND MANAGEMENT

9:15 a.m. - 4:15 p.m. KBHCCD

Area A (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: Authors will be present for discussion with assigned facilitators.

Facilitator: M.K. Gould, MD, MS, Pasadena, CA

P103  Real World Clinical Efficacy of Lung Cancer Screening/J. Safi, H. Singh, R. Alpizar-Rivas, J. Breeze, P. LaCamera, Boston, MA, p.A3969


P106  Diagnostic Pitfall of Small Sclerosing Pneumocytoma/Z. Shang, H. Chen, Shanghai, China, p.A3972


Facilitator: J. Diaz-Mendoza, MD, Detroit, MI


P119 Results of Surgical Resection for Stage III Locally Advanced Non-Small Cell Lung Cancer Who Was Successfully Treated by Docetaxel and Cisplatin with Concurrent Thoracic Radiation Therapy/A. Matsuo, N. Matsumoto, M. Nakazato, Miyazaki, Japan, p.A3985

P120 Epidemiology of Classic Driver Oncogene Mutations and Its Relation with Thyroid Transcription Factor-1 (TTF-1) in Lung Cancer Patients: Data from an Eastern Indian Hospital/P.R. Mohapatra, S. Bhuniya, M.K. Panigrahi, S. Sahoo, S. Patra, S.K. Ball, M. Rahman, S. Ghosh, S.P. Mantha, Bhubaneswar, India, p.A3986

P121 Defining Time to Chemotherapy and Radiation in Newly Diagnosed Late Stage Lung Cancer Patients Seeking Care at the National Cancer Institute Designated Cancer Center in New Mexico/E. Sheehan, A.E. Wright, L.N. Stalter, F. Qeadan, G. Gan, A.I. Saeed, Albuquerque, NM, p.A3987

P122 Comparing Clinical Practice Outcomes for Non-Small Cell Lung Cancer (NSCLC) and Neuroendocrine Lung Cancer Patients Receiving Care at the NCI Designated Cancer Center of New Mexico/A. Wright, E. Sheehan, A.I. Saeed, L.N. Statler, F. Qeadan, Albuquerque, NM, p.A3988

P123 Proposed Treatment Algorithm for the Management of Checkpoint Inhibitor Pneumonitis/D.K. Duong, M. Ramsey, Stanford, CA, p.A3989

P124 Primary Cardiac Lymphoma: Characteristics, Treatment, and Survival Utilizing the National Cancer Database (NCDB)/D.A. Ermann, V.V. Noble, J.D. Parekh, V. Kapoor, A. Latif, P.T. Silberstein, Omaha, NE, p.A3990

P125 Lung Cancer in the Northern Territory, Australia: A Comparison Between Indigenous and Non-Indigenous Australians/T. Basnayake, P. Valery, P. Carson, P. De Ieso, Tiwi, Australia, p.A3991

P126 Real World Experience of Nivolumab Induced Pneumonitis in Metastatic Non-Small Cell Lung Cancer. Results from a Tertiary Care Cancer Center Catering to a Rural Population/M. Hafiz, A.R. Naqash, C. Cherry, N. Sharma, P.R. Walker, Greenville, NC, p.A3992


WS3  DEMYSTIFYING PEDIATRIC EXERCISE TESTING INTERPRETATION

Registration Fee: $75 (includes box lunch)
Attendance is limited. Pre-registration is required.
Assemblies on Pediatrics; Clinical Problems; Pulmonary Rehabilitation
11:45 a.m. - 1:15 p.m.  KBHCCD
Room C144-C145 (Level 1)

Target Audience
Pediatric pulmonology trainees and clinicians

Objectives
At the conclusion of this session, the participant will be able to:
• recognize the technical elements of a successfully completed maximal progressive exercise test;
• identify the factors leading to exercise limitation;
• analyze the results of a maximal progressive exercise test and apply the results to patient management.

Exercise testing is useful for defining functional capacity, understanding symptoms, identifying limitations to exercise capacity, assessing responses to therapeutic interventions, and prognosis. The overall aim of this workshop is to improve the competence in interpreting pediatric progressive exercise testing.

Chairing:
L.C. Lands, MD, PhD, ATSF, Montreal, Canada
S.R. Boas, MD, Glenview, IL

11:45 The Response of the Healthy Child to Progressive Exercise and the Assessment of Test Quality and Outcome Measures
L.C. Lands, MD, PhD, ATSF, Montreal, Canada
S.R. Boas, MD, Glenview, IL

12:15 How Exercise Responses Are Affected by Chronic Disease and the Detection of the Factors Limiting Exercise Ability
S.R. Boas, MD, Glenview, IL

12:45 An Interactive Session Reviewing and Interpreting Three Characteristic Exercise Tests
L.C. Lands, MD, PhD, ATSF, Montreal, Canada

WS4  PROMOTING WELLNESS IN HEALTH CARE TEAMS: A PRACTICAL APPROACH

Registration Fee: $75 (includes box lunch)
Attendance is limited. Pre-registration is required.
Assemblies on Behavioral Science and Health Services Research; Nursing; Pediatrics; Section on Medical Education
11:45 a.m. - 1:15 p.m.  KBHCCD
Room D171/D173 (Level 1)
Target Audience
Students, trainees, nurses, physicians, other allied health professionals and healthcare system administrators as well as those who focus on clinical work, education, research and/or administration

Objectives
At the conclusion of this session, the participant will be able to:
• describe institutional and individual factors contributing to burnout;
• implement at least one strategy to mitigate an institutional driver of burnout;
• implement at least one strategy to increase personal resiliency.

During this workshop, we will describe the framework of burnout factors and well-being factors at the institutional and personal levels. We will review studies that have been shown to reduce burnout. Tools from change management, implementation science and business case development will be used to demonstrate how the strategies from these studies can be transformed into achievable goals. We will facilitate collaborative group discussions during which attendees will develop personal action plans. Attendees will leave with practical strategies to improve wellness, both to address system issues contributing to burnout at their home institutions and to enhance their personal resilience.

Chairing:
R. Adamson, MBBS, ATSF, Seattle, WA
N.S. McAndrew, PhD, RN, ACNS-BC, CCRN, Milwaukee, WI
A. Patel, MD, MPH, Chicago, IL
M. Sharp, MD, MHS, Baltimore, MD

11:45 Introduction
R. Adamson, MBBS, ATSF, Seattle, WA

11:50 Strategies to Address Institutional Factors Contributing to Burnout
A. Patel, MD, MPH, Chicago, IL

12:05 Group Discussion

12:30 Individual Factors Contributing to Burnout
M. Sharp, MD, MHS, Baltimore, MD

12:37 Strategies to Address Individual Factors Contributing to Burnout
N.S. McAndrew, PhD, RN, ACNS-BC, CCRN, Milwaukee, WI

12:45 Group discussion

1:10 Summary
R. Adamson, MBBS, ATSF, Seattle, WA
• learn more about the ways in which correlating clinical and genomics data in MVP may be used to characterize subgroups of Veterans with lung cancer.

In the VA's Million Veteran Program (MVP), data from surveys, electronic medical records (EMR), and genomic studies have been obtained from over 650,000 Veterans. The goal is to improve understanding of genetic influences on cause, prevention, and treatment of specific diseases. Safeguards to protect patient identities have been used throughout. This session will describe information for pulmonary investigators on applying for research support from the VA for studies related to MVP, on development of algorithms to identify patients with specific lung diseases from the VA EMR, and on results from MVP correlating clinical findings and genomic data in lung cancer.

Chairing:
J.K. Brown, MD, San Francisco, CA
E. Garshick, MD, West Roxbury, MA
M. Moy, MD, MSc, Boston, MA

12:15 Million Veteran Program: What You Need To Know
S. Muralidhar, PhD, Washington, DC

12:45 Pulmonary Phenotyping Using the VA Electronic Medical Record
E.S. Wan, MD, MPH, Boston, MA

1:00 Early and Late Stage Lung Cancer: Correlating Clinical Data and Genomics in MVP
A. Zimolzak, MD, MMSc, Houston, TX

### NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

L13 UPDATE ON CLASSIFICATION OF CHEST RADIOGRAPHS AND THE B READER PROGRAM

12:15 p.m. - 1:15 p.m. KBHCCD
Ballroom D One (Level 3)

Target Audience
Providers of clinical, research, administrative and legal services to individuals with suspected or known dust-induced lung disease (pneumoconiosis) or with exposures putting them at risk for pneumoconiosis.

Objectives
At the conclusion of this session, the participant will be able to:
• recognize what an ILO classification is, when it needs to be obtained, and the meaning of classification results;
• learn what a B Reader is, why B Readers are important, and how to become a B Reader;
• learn about new study materials to prepare for the B Reader Certification Examination and the availability of a chest digital image repository containing chest images potentially useful for teaching and research.

The International Labour Organization (ILO) maintains an international system for classifying chest radiographs for the presence and severity of changes associated with dust-induced interstitial lung disease (pneumoconiosis). This session will describe the ILO classification system and current efforts to update it. It will also provide an update on the National Institute for Occupational Safety and Health (NIOSH) B Reader Program, which provides opportunities to learn about the ILO classification system and certification testing to document the ability to use it. Attendees will also learn about updates to B Reader training materials and the B Reader certification examination.

Chairing:
D.N. Weissman, MD, ATSF, Morgantown, WV

12:15 Chair Introduction
D.N. Weissman, MD, ATSF, Morgantown, WV

12:18 International Effort to Update the ILO Classification System
C.N. Halldin, PhD, Morgantown, WV

12:37 Overview of the NIOSH B Reader Certification Program
A.S. Laney, PhD, Morgantown, WV

12:56 Developing an Updated B Reader Training Syllabus and Certification Examination
R.A. Cohen, MD, Chicago, IL

### NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES, NIH

L14 ASTHMA PREDICTION: NEW FINDINGS FROM COHORTS

12:15 p.m. - 1:15 p.m. KBHCCD
Ballroom D Two (Level 3)

Target Audience
Providers of asthma and/or pediatric care, Researchers in asthma or public health

Objectives
At the conclusion of this session, the participant will be able to:
• Learn about a new asthma risk score developed from birth cohorts.
• Improve understanding of how the gut microbiome influences the risk of asthma
• Learn new findings of how the risks for asthma are different or similar for urban and rural children.

This session will present the latest research on risk factors that help determine whether a child will develop asthma.

Chairing:
H. Kim, MD, Detroit, MI
J. Biagini Myers, PhD, Cincinnati, OH

C.C. Johnson, PhD, MPH, Detroit, MI

12:34 Risk Factors for Respiratory Infections and Asthma Phenotypes in Rural and Urban Birth Cohorts
J.E. Gern, MD, Madison, WI

12:53 Personalized Asthma Risk Score from CCAAPS and the Isle of Wight
J. Biagini Myers, PhD, Cincinnati, OH
L15  PULMONARY UPDATE FROM THE U.S. FOOD AND DRUG ADMINISTRATION

12:15 p.m. - 1:15 p.m.  KBHCCD
Room C147/C148/C154 (Level 1)

Target Audience
Clinicians in practice, researchers, pharmaceutical industry representatives, international regulators

Objectives
At the conclusion of this session, the participant will be able to:
• understand the recent regulatory framework and approvals in the past year;
• understand the current risk/benefit framework of several prominent safety reviews over the following year;
• understand the regulatory considerations in reviewing eosinophil targeted therapies.

The most recent regulatory FDA actions, including recent approvals for pulmonary diseases will be discussed. Safety issues, including the Agency’s decisions regarding the completed LABA safety studies, as well as other prominent safety issues will be discussed. Finally, the current regulatory considerations for eosinophil targeted drug therapies will be discussed.

Chairing: B. Karimi-Shah, MD, Silver Spring, MD

12:15  Introduction
B. Karimi-Shah, MD, Silver Spring, MD

12:20  Pulmonary Update from the FDA
S. Seymour, MD, Silver Spring, MD

12:35  Important Safety Issues: Update from the FDA
R. Lim, MD, Silver Spring, MD

12:50  Regulatory Considerations for Eosinophil Targeted Drug Therapies
R. Busch, MD, MMSc, Silver Spring, MD

1:10  Question and Answer Period
B. Karimi-Shah, MD, Silver Spring, MD

L17  NHLBI MACS/WIHS COMBINED COHORT: A RESOURCE FOR APPLIED RESEARCH ON HIV-RELATED PULMONARY COMPLICATIONS

12:15 p.m. - 1:15 p.m.  KBHCCD
Room D167/D174 (Level 1)

Target Audience
Providers of lung health, medical fellows in training, and clinical and basic researchers on lung biology, HIV researchers and clinicians, virologists, immunologists, microbial pathogenesis, and infectious disease doctors and scientists.

Objectives
At the conclusion of this session, the participant will be able to:
• gain knowledge about the new combined cohorts and data available to perform HIV research;
• learn about future opportunities and collaborations in HIV pulmonary research;
• learn about advances in HIV-related pulmonary research and apply new knowledge to own research.

This session will give an overview of the Multicenter AIDS Cohort Study (MACS) and Women’s Interagency HIV Study (WIHS), two very large comprehensive cohorts studies that are now under the direction and management of the National Heart, Lung and Blood Institute. Both previously independent studies have been combined in one comprehensive study and will provide an avenue to investigate questions at the forefront of HIV co-morbidities research, and continue to provide a wealth of data that can be leveraged to investigate the progression of HIV-associated disease in women, gay and bisexual men. The combined cohort will be composed of over

L16  THE COPD NATIONAL ACTION PLAN: 2019 UPDATE

12:15 p.m. - 1:15 p.m.  KBHCCD
Room D163/D165/D170/D172 (Level 1)

Target Audience
COPD patients, COPD advocates, Pulmonologists, Industry representatives, Health Care providers, Payors

Objectives
At the conclusion of this session, the participant will be able to:
• Increase awareness and knowledge about the COPD national Action Plan
• Alert the audience on the CNAP and ways to contribute to its implementation
• Improve on disease management

The COPD National Action Plan, the first blue print for the Nation to be used as a guideline to tackle the disease, was launched during the 2017 ATS International Conference. This session will update ATS 2019 attendees on the progress made and future perspectives as related to the audience by three government agencies (NHLBI/NIH, CDC & HRSA) and two advocacy groups (ALA & COPD Foundation), all of which were among the instrumental contributors to the development of the plan.

Chairing: A. Punturieri, MD, PhD, Bethesda, MD

12:15  NHLBI Update on the COPD National Action Plan
A. Punturieri, MD, PhD, Bethesda, MD

12:20  CDC Update on the COPD National Action Plan
J.B. Croft, PhD, Atlanta, GA

12:32  ALA Update on the COPD National Action Plan
D.P. Brown, BS, MS, CHES, Washington, DC

12:44  HRSA update on the COPD National Action Plan
P. Moore, MD, Rockville, MD

12:56  COPD Foundation Update on the COPD National Action Plan
J.L. Sullivan, MPH, Washington, DC
6,000 participants, including new enrolled subjects from centers across the US. This session will outline specifically the value of the combined resource from the perspective of the investigators, and how it can be used for the advancement of understanding and treatment of HIV-driven pulmonary complications in PLWH.

**Chairing:** K.M. Kunisaki, MD, MSCR, Minneapolis, MN
E. Caler, PhD, Bethesda, MD

**12:15** Leveraging MACS and WIHS for Mechanistic Studies
A.M. Morris, MD, MS, Pittsburgh, PA

**12:27** Published Results Regarding Respiratory Disease in the MACS and WIHS Cohorts
K.M. Kunisaki, MD, MSCR, Minneapolis, MN

**12:51** Potential for Analyses of Lung Function Across Macs/WIHS Cohorts
M.B. Drummond, MHS, MD, ATSF, Chapel Hill, NC

**1:03** Lessons Learned and Future Opportunities for Cardiometabolic Research in the Combined MACS/WIHS Cohort
P. Tien, MD, San Francisco, CA

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**DIVISION OF LUNG DISEASES, NHLBI/NIH**

**L18** RESIDENT DUTY HOURS, PATIENT SAFETY, AND RESIDENT SLEEP: RESULTS OF THE ROSTERS AND iCOMPARE TRIALS

**12:15 p.m. - 1:15 p.m.** KBHCCD

Room D221/D225/D226 (Level 2)

**Target Audience**
Sleep clinicians and researchers, clinicians involved in graduate medical education, and clinical researchers would benefit from this session. This includes students, residents, fellows, and other medical professionals.

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

- understand questions being addressed by ROSTERS and iCOMPARE, and the study designs;
- learn and understand how resident duty hours affect resident sleep;
- understand how resident duty hours affect patient outcomes.

This session will discuss two NHLBi-funded trials examining the effect of resident duty hours on patient safety and resident sleep. The Multi-center Clinical Trial of Limiting Resident Work Hours on ICU Patient Safety (ROSTERS) examines the effect of two different resident work hour schedules on patient safety, resident safety, resident performance, and resident sleep in the pediatric intensive care unit setting. The Individualized Comparative Effectiveness of Models Optimizing Patient Safety and Resident Education (iCOMPARE) trial examines the effect of two internal medicine resident duty hour standards on patient safety, resident education and resident sleep. Study results will be presented.

**Chairing:** L. Reineck, MD, Bethesda, MD
M. Twery, PhD, Bethesda, MD

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**U.S. FOOD AND DRUG ADMINISTRATION**

**L19** NICOTINE AND THE FDA PERSPECTIVE: REGULATION, SCIENCE, PATIENT EDUCATION, AND CLINICAL PRACTICE

**12:15 p.m. - 1:15 p.m.** KBHCCD

Room C155-C156 (Level 1)

**Target Audience**
Clinicians trying to help adult smokers quit and those trying to educate youth and others about nicotine and tobacco products, smoking cessation counselors trying to motivate current smokers to quit.

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

- improve understanding of FDA policies related to nicotine;
- better advise patients of the addictiveness of nicotine and the dangers of newer tobacco products;
- refer patients for smoking cessation counseling and treatments earlier and more consistently.

We will focus on nicotine from the FDA perspective; specifically, the science of nicotine and how this affects FDA policy and regulation. We will describe FDA’s “The Real Cost” and “The Fresh Empire” campaigns which focused on helping youth understand the dangers of tobacco use including addiction to nicotine and provide data on the campaigns’ effectiveness. We will describe FDA’s new campaign designed to help motivate current smokers to quit and conclude with a discussion of the applicability of the information to clinical practice. Eliminating use of tobacco products in the United States requires a multifaceted approach and team effort.

**Chairing:** P. Callahan-Lyon, MD, Silver Spring, MD

**12:15** Nicotine: FDA Policy and Regulation
M. Zeller, JD, Silver Spring, MD

**12:35** Nicotine: The Science Behind the Products and the Policies
P. Callahan-Lyon, MD, Silver Spring, MD

**12:55** FDA’s Public Education Campaigns to Prevent Initiation and Encourage Cessation
M. Zeller, JD, Silver Spring, MD
### MEET THE PROFESSOR SEMINARS

**CME Credits Available: 1**

**Registration Fee:** $70.00 (includes box lunch.)

Attendance is limited. Pre-registration is required.

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<th>Seminar Title</th>
<th>Speaker(s)</th>
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<tr>
<td>12:15 p.m. - 1:15 p.m.</td>
<td>OMNI DALLAS DOWNTOWN</td>
<td>PRIMARY IMMUNODEFICIENCY AND PULMONARY DISEASE</td>
<td>A. Dosanjh, MD, San Diego, CA</td>
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<td>IMPROVING QUALITY OF LIFE AND SURVIVAL IN NEUROMUSCULAR RESPIRATORY FAILURE</td>
<td>K.A. Provost, DO, PhD, Buffalo, NY</td>
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<td>REAL WORLD CHALLENGES IN THE DIAGNOSIS OF IPF</td>
<td>A.M. Nambiar, MD, MSCR, San Antonio, TX</td>
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<td>PEAK INSPIRATORY FLOW RATE TO AID IN SELECTION OF APPROPRIATE INHALER DEVICE</td>
<td>D.A. Mahler, MD, Hanover, NH</td>
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<td>EXTRACORPOREAL MEMBRANE OXYGENATION: PHYSIOLOGICAL CURIOSITIES</td>
<td>N.S. Sharma, MD, Tampa, FL C. Agerstrand, MD, New York NY</td>
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<td>GENETICS IN MODERN DAY PULMONARY PRACTICE</td>
<td>T.B. Kinane, MBChB, MD, Boston, MA</td>
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<td>PULMONARY EMBOLISM: HOW DO I MANAGE THIS CASE?</td>
<td>V.F. Tapson, MD, West Hollywood, CA T. Dahhan, MD, MSEd, Durham, NC</td>
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<td>DIAGNOSTICS AND THERAPEUTIC INTERVENTIONS IN LATENT TB INFECTION IN SPECIAL SETTINGS</td>
<td>P. Escalante, MD, MSc, Rochester, MN</td>
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<td>PULMONARY REHABILITATION STANDARDS AND QUALITY</td>
<td>M. Steiner, MBBS, MD, Leicester, United Kingdom</td>
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<td>BATTLE OF THE BIOLOGICS: UNDERSTANDING TARGETED THERAPY FOR SEVERE ASTHMA</td>
<td>G.S. Skloot, MD, ATSF, New York, NY</td>
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<td>PEDIATRIC SLEEP DISORDERS FOR PULMONOLOGISTS</td>
<td>N. Simakajornboon, MD, Cincinnati, OH</td>
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<td>LUNG CANCER SCREENING: WHAT IS SHARED DECISION MAKING AND WHEN DOES IT MATTER?</td>
<td>D.A. Arenberg, MD, Ann Arbor, MI</td>
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### MEDICAL EDUCATION SEMINAR

**CME Credits Available: 1**

**Registration Fee:** $70 (includes box lunch)

Attendance is limited. Pre-registration is required.

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<tr>
<td>12:15 p.m. - 1:15 p.m.</td>
<td>OMNI DALLAS DOWNTOWN</td>
<td>DESIGNING AN EFFECTIVE SIMULATION CURRICULUM</td>
<td>R.M. Shah, MD, Chattanooga, TN N.G. Shah, MD, Baltimore, MD</td>
</tr>
</tbody>
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**Target Audience**
This session is targeted to health professionals interested in designing and implementing simulation curricula. This will be of specific interest to medical educators.

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

- design specific learning objectives and measurable outcomes for a simulation scenario.
- identify the advantages and limitations of high- and low-fidelity simulation.
- identify three steps for providing effective feedback to trainees after a simulation.

Simulation is a method used in health care education to replace or amplify real patient experiences with scenarios designed to replicate real health encounters. It has been increasingly used in medical education and training. As simulation resources become more available, it is important to recognize key aspects of creating and leading an effective simulation education program. Three educators will actively guide and engage participants through strategic topics for building such a program, including “determining learning objectives and measurable outcomes,” “scenario building,” and “strategies for debriefing and feedback.” The session will be a mix of didactics and facilitated small group discussion.

**Chairing:** G. Winter, MD, Cleveland, OH

**Speakers:** R.M. Shah, MD, Chattanooga, TN N.G. Shah, MD, Baltimore, MD
Target Audience
Practicing internists, subspecialists, registered nurses and advanced practice nurses 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:

• remain current with medical knowledge relevant to their practice in pulmonary, critical care, and sleep medicine;
• evaluate their understanding of key skills and content areas in pulmonary, critical care and sleep medicine, as well as receive feedback on their comprehension of a result of a pre-test/post-test comparison;
• support clinicians who are engaged in maintenance of certification activities by providing updates on subjects included in recertification requirements.

The ATS Clinical Core Curriculum Symposia focus on a 3-year content cycle of key medical content in the areas of Pulmonary, Critical Care, and Sleep Medicine. The topics are also aligned with corresponding MOC Medical Knowledge modules. This symposium is intended to assist clinicians with staying current with the growth of information relevant to their medical practice, as well as provide an opportunity to evaluate individual knowledge and skills while earning MOC Medical Knowledge points.

Chairing:
C.L. Channick, MD, Los Angeles, CA
T.J. Huie, MD, Denver, CO

Awardees:
2:15 Surfactant Protein A Genetic Variants: So What? Interplay of Genetic Variability, Sex, and Oxidative Stress
Joanna Floros, PhD, ATSF, Hershey, PA

2:45 Respiratory Infections and Asthma: The Role of the Microbiome
Nicholas W. Lukacs, PhD, Ann Arbor, MI

3:15 Infection and Immunity in the Lung
Prabir Ray, PhD, Pittsburgh, PA

3:45 Lung Innate Immunity: From Chemokines to Toll Receptors and Beyond
Theodore J. Standiford, MD, Ann Arbor, MI
B81  NURSING YEAR IN REVIEW: PATIENT AND FAMILY ENGAGEMENT

New! The Nursing Year in Review Bibliography is only available via the conference website http://conference.thoracic.org/go/nyir or mobile app. Attendees wishing to access the bibliography should bring a smart phone, tablet or laptop to the session.

Assembly on Nursing
2:15 p.m. - 4:15 p.m.  
KBHCCD Room D162/D164 (Level 1)

Target Audience
Clinicians and researchers interested in integrating or enhancing patient and family engagement in their practice or research.

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

• describe new findings of outcomes related to patient and family engagement in select areas of practice and research;
• describe barriers to patient and family engagement;
• identify methods and have new strategies to enhance patient and family engagement.

Speakers in select topic areas will present the state of current research related to patient and family engagement. Focused areas of practice and research will include critical care, asthma, COPD, pediatrics, and sleep. Specifically each presentation will be a synthesis and integration of results across studies with a summary of the state of the science in the area, discussion of implications for research and clinical practice, and identification of gaps. The symposium will conclude with a panel discussion of implications for clinical practice and research to enhance/support patient and family engagement.

Chairing:
J.L. Guttormson, PhD, Milwaukee, WI
A.M. Russell, MScN, London, United Kingdom

2:15 Patient and Family Engagement in Critical Care
B.D. Hetland, PhD, RN, CCRN-K, Omaha, NE

2:40 Patient and Family Engagement in Sleep
N.S. Redeker, PhD, RN, West Haven, CT

3:05 Patient and Family Engagement in COPD
M.C. Kapella, PhD, RN, ATSF, Chicago, IL

3:30 Patient and Family Engagement in Asthma
W.M. Gibson-Scipio, PhD, FNP-BC, ATSF, Detroit, MI

3:55 Panel Discussion: Implications for Practice and Research
J.L. Guttormson, PhD, Milwaukee, WI
Target Audience
Adult and pediatric pulmonary and sleep physicians and mid-level providers working with patients with neuromuscular respiratory failure, nurses and respiratory therapists

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

• recognize clinical, PFT and PSG findings of respiratory muscle weakness in neuromuscular disease in pediatric and adult population;

• identify and define the stages of neuromuscular respiratory failure and the stepwise implementation of assistive devices of respiration and airway clearance;

• learn options for (1) optimizing home-based NIPPV (2) when to extubate neuromuscular patients who fail conventional spontaneous breathing trials/sprints and (3) when/if tracheostomy should be employed.

Patients with pediatric neuromuscular disorders (muscular dystrophies, spinal muscular atrophy, metabolic myopathies) are surviving longer, and are requiring adult pulmonary providers to effectively transition care. The adult onset neuromuscular disorders are also increasing in prevalence (amyotrophic lateral sclerosis) and survival with advancing technologies in airway clearance and non-invasive ventilation (NIV). The session will address identification of and stage of neuromuscular respiratory failure, implementation of stage specific respiratory assistive devices to maximize patient independence, quality of life and survival, home monitoring and returning these patients to non-invasive ventilation after periods of invasive mechanical ventilation. We will also discuss the hot button issues of if/when tracheostomy and oxygen supplementation fit into the treatment paradigm, and how overnight polysomnography may be helpful in optimizing NIV.

Chearing:
K.A. Provost, DO, PhD, Buffalo, NY
N. Simakajornboon, MD, Cincinnati, OH
M. Cao, DO, Redwood City, CA
H. Sawmani, MD, Cincinnati, OH

2:15 Neuromuscular Respiratory Failure Syndromes: Recognition is Half the Battle
H. Sawmani, MD, Cincinnati, OH

2:33 Mechanisms of Hypoxemia and Hypoventilation in Neuromuscular Respiratory Failure
G. Perez, MD, Washington, DC

2:51 Implementation of NIPPV and Airway Clearance Devices by Disease Stage
K.A. Provost, DO, PhD, Buffalo, NY

3:09 Sleep Disordered Breathing in Neuromuscular Respiratory Failure: The Role of the Overnight PSG, Overnight Transcutaneous CO2 and Oxygen Testing
M. Cao, DO, Redwood City, CA

3:27 Them’s Fighting Words: Hot Button Issues of Extubating the “Un-Extubatable” Patient, Tracheostomy Considerations and Oxygen Supplementation
D. Zielinski, MD, Montreal, Canada

3:45 Daytime Use of NIPPV: Sip and Beyond
L.F. Wolfe, MD, Chicago, IL

4:03 Panel Question and Answer with all the Speakers
B84 CAN’T STOP OR WON’T STOP: THE ROLE OF CLINICAL INERTIA IN CRITICAL CARE MEDICINE

Assemblies on Critical Care; Behavioral Science and Health Services Research; Nursing
2:15 p.m. - 4:15 p.m.  OMNI DALLAS DOWNTOWN
Dallas Ballroom D/H (Level 3)

Target Audience
Critical care clinicians, trainees, clinical researchers

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

• understand how clinical inertia evolves in critical illness;
• recognize the ethical and emotional considerations related to clinical inertia;
• identify tools to address clinical inertia in routine clinical practice and be able to apply them.

Consider the following case: Day 0: elective surgery; Day 1: cardiac arrest; Day 3: ARDS; Day 4: renal replacement therapy; Day 17: tracheostomy; Day 18: feeding tube; Day 21: discharge to LTAC. We’ve all taken care of such patients, where one event leads to the next, and continuing to simply add more treatments becomes easier than considering alternate pathways, and a downhill spiral ensues. To advance patient-centered care, we must identify key moments in a patient’s course to stop and re-consider the trajectory of care and the patient’s goals. This session will examine the concept of clinical inertia and role it plays in our care of critically ill patients—from ICU admission decisions, through hospitalization, and beyond. Leading experts will discuss the longitudinal evolution of critical illness, the role of clinical inertia in clinical decision making, tools to recognize clinical inertia, and strategies to address the consequences of clinical inertia.

Chairing: E.M. Viglianti, MD, MPH, MSc, Ann Arbor, MI
J.M. Kruser, MD MS, Chicago, IL
S.S. Carson, MD, Chapel Hill, NC

2:15 The Marathon No One Prepares You For: The Perspective of a Caregiver
M. Hurley, Austin, TX

2:30 Why Don’t We Stop? Clinical Momentum and Decision Making in the ICU
J.M. Kruser, MD MS, Chicago, IL

2:45 Withholding vs Withdrawing: Is There a Difference?
G.D. Rubenfeld, MD, MSc, Toronto, Canada

3:00 Nudging Clinical Inertia: Living Wills and Advanced Directives
J. Hart, MD, MS, Philadelphia, PA

3:15 2 Weeks in ...Will This Patient Ever Leave the ICU?
E.M. Viglianti, MD, MPH, MSc, Ann Arbor, MI

3:30 How Should We Incorporate Palliative Care in the ICU?
S.S. Carson, MD, Chapel Hill, NC

3:45 Reflecting on the Other End
J.A. McPeake, RN, PhD, Glasgow, United Kingdom

4:00 Is It All About the Patient: What Do We Know and What Can We Learn About Caregiver Burden After Critical Illness
M.S. Herridge, MD, MPH, MSc, Toronto, Canada

B85 THEY’VE GOT THE BEAT: CILIA IN DEVELOPMENT AND DISEASE

Assemblies on Respiratory Cell and Molecular Biology; Pediatrics; Respiratory Structure and Function
2:15 p.m. - 4:15 p.m.  KBHCCD
Ballroom D Two (Level 3)

Target Audience
Basic scientists, clinicians, students and postdoctoral trainees, and providers working in pediatric, neonatal, or adult lung disease who are interested in understanding how cilia impact lung development and a spectrum of lung diseases

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

• provide the latest updates in the genetic and transcriptional control of cilia fate decisions in airway ciliogenesis;
• improve knowledge of the cellular signaling mechanisms regulating ciliogenesis in health and disease;
• improve understanding of the association of airway ciliopathies and other diseases.

Ciliary function has critical implications for lung development and impaired mucociliary clearance is a fundamental feature of many inherited and acquired respiratory diseases including PCD, asthma, chronic bronchitis, and CF. In order to improve diagnosis and develop effective treatments, there is a critical need to understand the cellular signaling components that govern cell fate decisions and functional maturation. This session will provide the latest information on the cellular, molecular, and genetic mechanisms that govern cell fate decisions and ciliary function, with application to a spectrum of lung diseases in adults and children.

Chairing: A.L. Ryan, PhD, Los Angeles, CA
E.K. Vladar, PhD, Aurora, CO
S.L. Brody, MD, ATSF, Saint Louis, MO

2:15 Introduction to Motile Cilia in Health and Disease
S.L. Brody, MD, ATSF, Saint Louis, MO

2:30 A Patient's Perspective
W. Anton, Chicago, IL

2:55 Identification of Cilia-Specific Gene Signatures and SNPs Driving Lung Disease
M.A. Seibold, PhD, Denver, CO

3:15 Identification of Novel Mutations Driving Primary Ciliary Dyskinesia
H. Omran, MD, Muenster, Germany

3:35 Alcohol Induced Ciliary Dysfunction: An Oxidant-Driven Acquired Ciliopathy
J.H. Sisson, MD, Omaha, NE
B86 PULMONARY REHABILITATION IN NON-COPD CHRONIC RESPIRATORY CONDITIONS

Assemblies on Pulmonary Rehabilitation; Clinical Problems; Nursing
2:15 p.m. - 4:15 p.m. OMNI DALLAS DOWNTOWN
Trinity Ballroom 4/8 (Level 3)

Target Audience
Doctors, nurses, allied health professionals, researchers involved in the care of people with non-COPD chronic respiratory disease

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

• understand the role of pulmonary rehabilitation in the management of Interstitial Lung Disease, asthma, pulmonary arterial hypertension and lung transplantation;
• more appropriately refer patients with Interstitial Lung Disease, asthma, pulmonary arterial hypertension and lung transplantation to pulmonary rehabilitation;
• understand the educational needs of people with non-COPD chronic respiratory disease.

The evidence for pulmonary rehabilitation in some of the most common non-COPD chronic respiratory diseases as well as strategies to enable the tailoring of the education component of pulmonary rehabilitation for these diseases will be presented at this scientific symposium.

Chairing:
C. Nolan, PT, BSc, MSc, PhD, London, United Kingdom
R. Goldstein, MD, Toronto, Canada

2:15 A Patient’s Perspective
M. Williams, Plano, TX

2:20 Pulmonary Rehabilitation for Interstitial Lung Disease: Where We Are Now and Where We Are Going
A.E. Holland, PhD, Melbourne, Australia

2:40 Pulmonary Hypertension: To Do PR or Not to Do PR?
C.L. Rochester, MD, New Haven, CT

3:00 Is There a Role for Pulmonary Rehabilitation in the Management of Lung Transplantation?
D. Langer, PhD, PT, Leuven, Belgium

3:20 Pulmonary Rehabilitation in the Management of Asthma
R.H. Crouch, DPT, MS, PT, Chapel Hill, NC

3:40 Tailoring Education in Pulmonary Rehabilitation for Non-COPD Respiratory Disease
S.C. Lareau, RN, MS, ATSF, Aurora, CO

4:00 Panel Discussion

MONDAY • MAY 20
B88 MIGRANT AND REFUGEE MEDICINE: IMPLICATIONS FOR PULMONARY AND CRITICAL CARE CLINICIANS

Assembly on Behavioral Science and Health Services Research
2:15 p.m. - 4:15 p.m.  
KBHCCD Room D167/D174 (Level 1)

Target Audience
All pulmonary care professionals who treat migrant/refugee patients; clinicians interested in migrant and refugee issues both domestically and internationally; providers working in the field of migrant and refugee health

Objectives
At the conclusion of this session, the participant will be able to:
• understand the global migrant crisis and the unique health challenges faced by the migrant and refugee populations;
• understand the cultural, legal and political implications of providing clinical care for refugees and migrants;
• develop an understanding of the clinician’s role in the larger national and international debates on immigration.

This session provides an evidence based, interprofessional lens into topics related to migrant and refugee health. It highlights the clinical, political and medicolegal aspects of the migrant and refugee crisis both locally and globally. By attending this session, pulmonary, critical care and sleep professionals will learn how to provide culturally sensitive, multidisciplinary, patient-centered care to this ever growing vulnerable patient population.

Chairing:
A. Papali, MD,CM, Charlotte, NC
M. Eakin, PhD, Baltimore, MD

2:15 Respiratory Health Implications of the Global Migrant Crisis
D.J. Upson, MD, MA, Albuquerque, NM

2:35 Providing Medical Care to Displaced Populations: A Pulmonologist’s Perspective
A. Elahi, MD, Charlotte, NC

2:55 “I Am Alone in This World”: Impact of Trauma in Refugees
M. Eakin, PhD, Baltimore, MD

3:15 Occupational Health and Safety of Immigrant Workers
M.B. Schenker, MD, MPH, Davis, CA

3:35 Migrant Health: What Is the Role of PAHO and the WHO?
F.C. Becerra, MD, MPH, DrPH, Washington, D.C.

3:55 The New Mexico Approach to Border Migrant Health
A. Achrekar, MD, MPH, Santa Fe, NM

B89 CHALLENGES IN CONDUCTING AND INTERPRETING ARDS AND SEPSIS RANDOMIZED CLINICAL TRIALS

Assemblies on Critical Care; Behavioral Science and Health Services Research; Nursing; Pediatrics
2:15 p.m. - 4:15 p.m.  
OMNI DALLAS DOWNTOWN Dallas Ballroom A-C (Level 3)

Target Audience
Adult and pediatric critical care clinicians and trialists, nurses, research coordinators

Objectives
At the conclusion of this session, the participant will be able to:
• identify challenges in conducting and interpreting randomized controlled trials among a critically ill population;
• review current literature and future directions for innovative strategies for overcoming the challenges in conducting and interpreting randomized controlled trials among a critically ill population;
• understand the patient and surrogate perspectives of participating in randomized controlled trials while critically ill.

This session will present the challenges of conducting randomized controlled trials in critical care. Specifically challenges of recruitment, retention and generalizability and how they may contribute to the paucity of proven efficacious interventions in the ICU. By using recent examples of critical care trials, this session will also appeal to clinicians who seek greater insight on interpreting and applying literature to their patients. We will explore established and emerging research addressing strategies to overcome challenges in ICU randomized controlled trials.

Chairing:
D. Krutsinger, MD, Philadelphia, PA
R.D. Stapleton, MD, PhD, ATSF, Burlington, VT
M.N. Gong, MS, MD, Bronx, NY

2:15 My Story: What Is It like to Be in an ICU Trial?
E. Rubin, JD, Northbrook, IL

2:27 Perspectives of Surrogate Decision Makers and a Nudge Towards Participation in Critical Care Trials
D. Krutsinger, MD, Philadelphia, PA

2:45 Retention in Longitudinal Critical Care Trials
D.M. Needham, MD, PhD, Baltimore, MD

3:03 Lessons Learned From Special Issues in Pediatric Critical Care Trials
M.A.Q. Curley, PhD, RN, Philadelphia, PA

3:21 Personalized Medicine or Big Tent? Issues of Generalizability
A. Deane, MBBS, PhD, Melbourne, Australia

3:39 The Power of Clinical Trial Networks and How You Can Be Involved
K. Burns, MD, MSCR, Toronto, Canada

3:57 Evolution of Modern Critical Care Trials: From the Past to Future
C.W. Seymour, MD, MSc, Pittsburgh, PA
BEHAVIORAL • CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 2

**B90 BIG TOBACCO: LAWYERS, GUNS AND MONEY**

Assemblies on Thoracic Oncology; Behavioral Science and Health Services Research
2:15 p.m. - 4:15 p.m. KBHCCD

Ballroom A Two (Level 2)

Target Audience
Physicians both in training and in practice, Nurses, DNP, ARNP RN, Health Science administrators, Health policy leaders. Health services researches and population health researchers

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

- gain new findings regarding the tobacco settlement between tobacco companies and the states and its impact more than a decade later;
- understand and gain new findings about the role investment, financing and advertising play in tobacco and potential advocacy roles to check this influence;
- gain new findings regarding tobacco policy and the shift to E and vapor

Tobacco related diseases are at the core of the ATS mission. Clinical care is the majority focus of clinicians and the ATS membership. Advocacy and policy work surrounding tobacco is critical to the ATS mission, the ATS community of clinicians, administrators and researchers and most importantly patients. This session aims to explore the much talked about tobacco settlement, the influence of finance and investing as well as the role of advertising. It is critical to learn and engage in the greater policy debate around the tobacco message.

**Chairing:**
J.A. Gorden, MD, Seattle, WA
N.T. Tanner, MD, MSCR, Charleston, SC
D.A. Arenberg, MD, Ann Arbor, MI

2:15 Introduction
J.A. Gorden, MD, Seattle, WA

2:20 Tobacco Settlement: What Was It and Where Did It Go
K.M. Cummings, PhD, MPH, Charleston, SC

2:43 E Cigarette and Vape Pen Science: Technology Solution or Problem?
D.A. Arenberg, MD, Ann Arbor, MI

3:06 Tobacco Policy: Stick and Match to E’s and Vapes Are We Witnessing the Greatest Bate and Switch
E. Stone, MBBS, MMed, Darlinghurst, Australia

3:29 E-Cigs and Vaping for Smoking Cessation: Winning by Quitting or Double Trouble?
M. Carpenter, PhD, Charleston, SC

3:52 Tobacco Control and Public Policy: Keeping Up with the Changes
C. Douglas, JD, Ann Arbor, MI

BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 2

**B91 HAVE A BIGGER IMPACT! EFFECTIVE STRATEGIES TO UTILIZE YOUR PROFESSIONAL EXPERTISE TO ADVOCATE FOR YOUR PATIENTS AND YOUR COMMUNITIES**

Assemblies on Environmental, Occupational and Population Health; Behavioral Science and Health Services Research; Nursing; Pediatrics
2:15 p.m. - 4:15 p.m. KBHCCD

Room D163/D165/D170/D172 (Level 1)

Target Audience
All individuals who are interested in learning how to advocate for their individual patients, communities and populations at large, to improve the availability and quality of healthcare

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

- learn the types of advocacy approaches that have been effective in advancing respiratory health for individual patients, communities and larger populations;
- develop communication skills to effectively advocate through multiple media formats including editorials, broadcast, social media, and public speaking engagements;
- learn from examples of successful advocacy programs and understand a framework through which advocacy can implement change.

This session will describe effective strategies to advance the respiratory health of patients, communities and populations. The Vice President of ATS will first introduce advocacy from the ATS perspective. Two public relations and media experts will then discuss effective communication strategies to disseminate health information and advocate for respiratory health issues through media. Subsequent speakers from the nonprofit sector, patient-advocacy groups, legal aid, and academics will highlight the health professional’s role in advocacy within the clinical environment, as well as through community partnerships, research and health policy.

**Chairing:**
D. Harris, MD, Charlottesville, VA
M.B. Rice, MD, MPH, Boston, MA
C.A. Redlich, MD, MPH, New Haven, CT
S.J. Crowder, PhD, RN, ATSF, Fishers, IN
L.F. Reinke, PhD, APRN, BC, ATS, Seattle, WA

2:15 Understanding The Importance of Advocacy for Respiratory Health
J.C. Celedon, DrPH, MD, ATSF, Pittsburgh, PA

2:25 Using the Media to Increase Your Impact
L. Kryzwick, New York, NY

2:50 Developing Engaging Health Messages
M. Mackert, PhD, Austin, TX

3:15 Advocacy to Impact Public Policy and Legislation at the National and Local Level
G. Ewart, MHS, Washington, DC
3:25 Legal Advocacy to Improve Lung Health
M. Lieberman, JD, Charlottesville, VA

3:35 Lung Doctors, Lawyers, and Labor: Advocating So That Workers Might Breathe
R.A. Cohen, MD, Chicago, IL

3:47 Patient Interview
B. Brock, Wise, VA

3:55 Patient-Centered Advocacy: The Allergy and Asthma Network
T. Winders, MBA, Vienna, VA

4:05 Advocacy Through Community Partnerships: The Not One More Life Story
L.M. Graham, MD, Atlanta, GA

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BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 2

B92 ATS FAMILY OF JOURNALS IN 2019

Publications Policy Committee
2:15 p.m. - 4:15 p.m. KKBCCD
Room C146 (Level 1)

Target Audience
This session is of benefit to both junior and senior clinicians and researchers, including basic researchers. The session will cover all 3 journals of the ATS and will be of interest to all ATS Assemblies and conference attendees.

Objectives
At the conclusion of this session, the participant will be able to:
- discuss the impact and benefits to the research and clinical community of the ATS having a Family of Journals;
- describe common issues in manuscripts submitted to journals, including journal impact factors and metrics, reporting of clinical trials and reporting results of observational studies;
- increase the participation of early career researchers in peer review and editorial activities.

In this session we will address the role of the ATS Journal family and how this can benefit the scientific and clinical community. We will also address some interesting issues in publication and review key papers published on topics across the Blue, White and Red journals.

Chairing: B.D. Levy, MD, ATSF, Boston, MA
F.J. Martinez, MD, MS, New York, NY
G.C. Donaldson, PhD, BSc(Hons), London, United Kingdom

2:15 Benefits of the ATS Family of Journals
J.A. Wedzicha, MD, PhD, ATSF, London, United Kingdom

2:30 Journal Impact Factors and Metrics
P.T. Schumacker, PhD, ATSF, Chicago, IL

2:45 COPD Across ATS Journals
M.K. Han, MD, MS, Ann Arbor, MI

3:00 Airway Biology in the ATS Journal Family
L. Donnelly, BSc(Hons), PhD, London, United Kingdom

3:15 Critical Care Across ATS Journals
L.J. Brochard, MD, Toronto, Canada

3:30 How to Successfully Write Manuscripts on Clinical Trials?
K.F. Rabe, MD, PhD, Grosshansdorf, Germany

3:45 Causal Inference and Reporting of Results in Observational Studies
D.J. Lederer, MD, MS, New York, NY

4:00 Involving Early Career Researchers in Journal Peer Review
J. Allinson, MRCP(UK), London, United Kingdom

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MINI SYMPOSIUM

B93 COPD: MORTALITY AND RISK PREDICTION

2:15 p.m. - 4:15 p.m. KKBCCD
Room C155-C156 (Level 1)

Chairing: D.M.G. Halpin, PhD, Exeter, United Kingdom

Oral Presentations

2:15 Causes and Predictors of Death in Smokers with and Without COPD: An Analysis of the COPDGene Cohort

2:30 Improved COPD Mortality Prediction Using Machine Learning in the COPDGene and ECLIPSE Studies

2:45 In-Hospital Mortality Trends for Alpha-1 Antitrypsin Deficiency in the United States
A. Attaway, U.S. Hatipoglu, U. Majumdar, X. Wang, X. Han, J.K. Stoller, Cleveland, OH, p.A3997

3:00 Creation and Validation of the Summit Score for Mortality and Morbidity Risk Stratification and Therapeutic Use for Chronic Obstructive Pulmonary Disease

3:15 Hypogammaglobulinemia as a Predictor of Hospitalizations in COPD: A Meta-Analysis

3:30 Hemoglobin as a Biomarker for Clinical Outcomes in Chronic Obstructive Pulmonary Disease
### BASIC • BEHAVIORAL

**B94**  
**BEST OF PEDIATRICS**  
2:15 p.m. - 4:15 p.m.  
OMNI DALLAS DOWNTOWN  
Dallas Ballroom G (Level 3)

**Chairing:**  
S.D.M. Dell, MD, Toronto, Canada  
S.A. McGrath-Morrow, MD, Baltimore, MD

**Oral Presentations**

2:15  

2:30  

2:45  

3:00  

3:15  

3:30  

3:45  
**Influence of CFTR Modulators on Immune Responses in Cystic Fibrosis**/B.T. Kopp, S. Zhang, C. Shrestha, Columbus, OH, p.A4008

**Featured Speaker**

4:00  
**Pulmonary Outcomes of Bronchopulmonary Dysplasia**/S.A. McGrath-Morrow, Baltimore, MD

### BASIC • TRANSLATIONAL

**MINI SYMPOSIUM**

**B95**  
**CELLULAR AND MOLECULAR LANDSCAPE OF THE LUNG**  
2:15 p.m. - 4:15 p.m.  
Room D221/D225/D226 (Level 2)

**Chairing:**  
T.J. Mariani, PhD, Rochester, NY  
J.P. Bridges, PhD, Cincinnati, OH  
Z. Borok, MD, ATSF, Los Angeles, CA

**Oral Presentations**

2:15  

2:30  

2:45  
**Dynamic Single-Cell Chromatin Landscapes of Alveolar Type 1 Cell Populations in the Developing Lung**/T.E. Duong, B. Sos, J.S. Hagood, K. Zhang, San Diego, CA, p.A4011

3:00  

3:15  

3:30  

3:45  

4:00  
B96  COMPLEX CELL BEHAVIORS IN PULMONARY FIBROSIS

2:15 p.m. - 4:15 p.m.  
KBHCCD Room D220/D227 (Level 2)

Chairing:  
D.W.H. Riches, PhD, Denver, CO  
K.E. Black, MD, Boston, MA  
C.E. Barkauskas, MD, Durham, NC

Oral Presentations


2:30  Archetype Analysis Reveals Distinct Disease-Specific Archetypes of Fibroblast and Myofibroblast Co-Occurring Within the IPF Lung/T. Adams, J. Schupp, N. Neumark, S. Poli De Frias, F. Ahangari, G. Delulisi, S. Chu, M.S.B. Raredon, X. Yan, I.O. Rosas, N. Kaminski, New Haven, CT, p.A4018

2:45  Beneficial Interstitial Matrix Fibroblasts Are Lost with Age, a New Perspective on Idiopathic Pulmonary Fibrosis/A.-K.T. Perl, J. Gokey, J. Snowball, J. Green, Y. Xu, Cincinnati, OH, p.A4019


B97  SRN: UPPER AIRWAY PATHOPHYSIOLOGY AND TREATMENT IN SLEEP DISORDERED BREATHING

2:15 p.m. - 4:15 p.m.  
KBHCCD Room C147/C148/C154 (Level 1)

Chairing:  
A. Malhotra, MD, ATSF, La Jolla, CA  
B.J. Petrof, MD, Montreal, Canada  
M. Teodorescu, MD, MS, Madison, WI

Oral Presentations


2:45  Lower Loop Gain and Reduced Ventilatory Response to Arousal Are Associated with Mandibular Advancement Device Treatment Efficacy/S. Op de Beeck, S.A. Sands, A. Azarbarzin, M. Willemen, J. Verbraecken, M. Braem, D.A. Wellman, O.M. Vanderveken, Wiltrop (Antwerpen), Belgium, p.A4027

3:00  Effects of the Combination of Atomoxetine and Oxybutynin on Obstructive Sleep Apnea Phenotypic Traits/L. Taranto Montemurro, L. Messineo, A. Azarbarzin, D. Vena, L. Hess, N. Calianese, R. Salant, D.P. White, D.A. Wellman, S.A. Sands, Boston, MA, p.A4028


B98  TARGETING THE IMMUNE SYSTEM IN LUNG CANCER PROGRESSION

2:15 p.m. - 4:15 p.m.  
KBHCCD Ballroom A One (Level 2)

Chairing:  
A.M. Houghton, MD, Seattle, WA  
V. Keshamouni, PhD, Ann Arbor, MI
### Featured Speaker

**2:15**  
**Featured Speaker**/S.M. Dubinett, Los Angeles, CA

### Oral Presentations

**2:30**  

**2:45**  

**3:00**  

**3:15**  

**3:30**  
**Use of SPD-CD40L to Recruit Immune Cells to the Tumor Microenvironment**/G.E. Holt, G.W. Stone, Miami, FL, p.A4036

**3:45**  

**4:00**  

### BASIC • TRANSLATIONAL

**RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION**

**B101 ADVANCES IN COPD PATHOGENESIS**

**2:15**  
**Featured Speaker**/S.M. Dubinett, Los Angeles, CA

**2:30**  

**2:45**  

**3:00**  

**3:15**  

**3:30**  
**Use of SPD-CD40L to Recruit Immune Cells to the Tumor Microenvironment**/G.E. Holt, G.W. Stone, Miami, FL, p.A4036

**3:45**  

**4:00**  
B102 DISPARITIES IN ASTHMA MANAGEMENT

Abstract Summaries
2:15-2:45

Viewing/Discussion
2:45-4:15

Chairing: M. Valerio, PhD, MPH, San Antonio, TX
N. Thakur, MD, MPH, San Francisco, CA
I. Riley, MD, Durham, NC


507 Family Barriers to Asthma Management as Perceived by Head Start Staff/S.E. Zaeh, E. Ruvalcaba, C.S. Rand, M. Eakin, Baltimore, MD, p.A4066


509 Addressing Health Disparities: The Impact of a Pediatric Medical-Legal Partnership on Asthma Control/A. Mainardi, A. Rosenthal, D. Harris, A. Fenick, New Haven, CT, p.A4068


514 Asthma Is Associated with E-cig Use in Non-Smokers: Results from BRFSS/M.F. Perez, N.C. Atuegwu, C. Oncken, E.M. Mortensen, Farmington, CT, p.A4073
515 The Derivation/Validation of the Severe Asthma Questionnaire (SAQ)-a New Measure of Quality of Life in Severe Asthma/R. Jones, M. Hyland, J. Lanario, M. Masoli, Plymouth, United Kingdom, p.A4074


519 Indirect Costs Due to Lost Work Time for Patients with Asthma Who Received Global Initiative for Asthma (GINA) Step 4/5 Therapy: Analysis of United States Administrative Claims Data/R.A. Settipane, J.L. Kreindler, Y. Chung, J. Tkacz, Providence, RI, p.A4078

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B103 ILD: THERAPY

2:15 p.m. - 4:15 p.m.                  KBHCCD

Room C140/C142 (Level 1)  2:15-2:45  2:45-4:15

Abstract Summaries

Viewing/Discussion

Chairing: J. Oldham, MD, MS, Sacramento, CA
J. Solomon, BS, MD, Denver, CO
J. Behr, MD, Munich, Germany


103 A Pilot Randomised Controlled Trial of Ambulatory Oxygen Versus Air Via Portable Concentrator in Fibrotic Interstitial Lung Disease/Y.H. Khor, N. Goh, B. Miller, I. Glaspole, A.E. Holland, C.F. McDonald, Melbourne, Australia, p.A4081

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Sharing Experiences and Offering Mutual Support: An Evaluation of the Peer Connect Service for People with Pulmonary Fibrosis/A.E. Holland, J. Lee, J. Maloney, J. Walsh, Melbourne, Australia, p.A4091
114 Baseline Characteristics of All Patients Randomized in a Phase IIb Trial of Sildenafil Added to Pirfenidone in Patients with Advanced Idiopathic Pulmonary Fibrosis and Risk of Pulmonary Hypertension

115 Evaluating the Role of Support Group Participation on Palliative Care Referral and Mortality in Idiopathic Pulmonary Fibrosis

116 Rates of Adherence and Persistence of Antifibrotic Therapies in the U.S. Medicare Population

117 ENDOBRONCHIAL VALVES FOR MANAGEMENT OF PERSISTENT AIR LEAKS IN DIFFUSE PARENCHYMAL LUNG DISEASE

118 A WORLD CAFE APPROACH TO PALLIATIVE CARE AND PLANNING FOR THE FUTURE IN FIBROTIC LUNG DISEASE

119 TREATMENT WITH ANTIFIBROTIC AGENTS IN PLEUROPARENCHYMOAL FIBROELASTOSIS WITH USUAL INTERSTITIAL PNEUMONIA

120 IMPROVING ADVANCE CARE PLANNING FOR PEOPLE WITH IPF/M. Kalluri, D. Laverty, K. Whitfield, Edmonton, Canada, p.A4098

CLINICAL
RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

B104 CRITICAL CARE: CATCH-22 - BEYOND THE VENTILATOR: THE CHALLENGES OF DELIRIUM, ICU-ACQUIRED WEAKNESS, AND REHABILITATION
2:15 p.m. - 4:15 p.m. OMNI DALLAS DOWNTOWN
Trinity Ballroom 1-3 (Level 3)

Abstract Summaries
2:15-2:45

Viewing/Discussion
2:45-4:15

Chairing:
D.C. Files, MD, Winston-Salem, NC
T.D. Girard, MD, MSci, Pittsburgh, PA
D.K. Costa, PhD, RN, Ann Arbor, MI

901 DELIRIUM... "UNABLE-TO-ASSESS"? AN ELECTRONIC RECORD-BASED EVALUATION OF INAPPROPRIATE "UNABLE-TO-ASSESS" CONFUSION ASSESSMENT METHOD FOR THE INTENSIVE CARE UNIT (ICU) DOCUMENTATION IN A MEDICAL ICU
A. Awan, R.G. Buhr, B.B. Kamdar, Los Angeles, CA, p.A4099

902 UNDERSTANDING “UNCLASSIFIED” DELIRIUM: A POST-HOC ANALYSIS OF THE BRAIN-ICU COHORT

903 DECREASING DELIRIUM THROUGH MUSIC (DDM): A RANDOMIZED CONTROLLED FEASIBILITY TRIAL

904 PREDICTORS OF HIGHER-LEVEL MOBILITY IN ICU PATIENTS WITH DELIRIUM

905 COMPARISON OF HALOPERIDOL VERSUS ARIPIPRAZOLE FOR DELIRIUM MANAGEMENT IN A MEDICAL INTENSIVE CARE UNIT AT A TERTIARY CARE CENTER

906 THE EFFECTS OF CAM-ICU VERBAL REPORTING DURING ACADEMIC ROUNDS ON ICU MORTALITY AND LENGTH OF STAY

907 THE USE OF METALONIN TO PREVENT DELIRIUM IN THE CRITICALLY ILL ELDERLY
M. Forte, J. Gordon, A. Patel, M. Harris, Pueblo, CO, p.A4105

908 RELATIONSHIP OF LEVEL OF CONSCIOUSNESS IN CRITICAL ILLNESS WITH DISABILITY AND QUALITY OF LIFE

909 RESULTS OF A RESPIRATORY THERAPIST DRIVEN WEANING PROTOCOL COMBINED WITH EARLY MOBILITY IN A LONG TERM ACUTE CARE HOSPITAL
J. Stienecker, M. Komarek, D. Rampe, Lima, OH, p.A4107

910 EARLY REHABILITATION IN PATIENTS REQUIRING CONTINUOUS RENAL REPLACEMENT THERAPY IS SAFE AND FEASIBLE: A QUALITY IMPROVEMENT INITIATIVE

911 THE EFFICACY AND SAFETY OF LEG CYCLE ERGOMETRY IN CRITICALLY ILL ADULTS: A SYSTEMATIC REVIEW AND META-ANALYSIS
A. Takaoka, R. Utgjar, B. Rochwerg, D.J. Cook, M. Kho, Hamilton, Canada, p.A4109

912 APPLICATION OF A MOBILITY INTERVENTION BUNDLE TO IMPROVE EARLY MOBILITY PRACTICES OF CRITICALLY ILL PATIENTS
C.J. Ellison, W.D. Schweickert, A. Liou, K. Kellner, V. Golightly, P.E. Morris, D.C. Files, R. Bakhrui, Winston-Salem, NC, p.A4110

913 UNDERSTANDING VARIABILITY IN MOBILITY PRACTICES: DO HIGHER PERFORMING HOSPITALS MOBILIZE MORE COMPLEX PATIENTS?

914 PHYSICAL REHABILITATION CORE OUTCOMES IN CRITICAL ILLNESS: A MODIFIED DELPHI CONSSENSUS STUDY TO ESTABLISH A CORE OUTCOME SET

915 IMPROVED OUTCOMES IN REAL WORLD SETTINGS: THE EFFECT OF ABCDE BUNDLE DELIVERY AT COMMUNITY HOSPITALS
J. DeMellow, P. Romano, C. Drake, M. Balas, T.Y. Kim, Stockton, CA, p.A4113

916 RELATIONSHIP BETWEEN BASELINE MUSCLE MASS AND ICU-ACQUIRED WEAKNESS UPON HOSPITAL DISCHARGE IN CRITICALLY ILL MECHANICALLY VENTILATED PATIENTS


818 Decreased ATP Export from Erythrocytes in Murine Sepsis/D. Lopez Domowicz, J.A. Herbert, T.J. McMahon, Durham, NC, p.A4138

819 Reduced Circulating Gamma Delta T Cell Number and Effector Phenotype Is Associated with Mortality in Gram-Negative Bacteremia/S.W. Wright, P. Ekchariyawat, S. Sengyee, B. Cai, R. Phunpang, T. Kollmann, N. Chantratita, T.E. West, Seattle, WA, p.A4139

820 Transfusion to a Higher Hemoglobin Target Is Associated with Shorter Hospital Length of Stay in Medical Intensive Care Unit Patients with Sickle Cell Disease Acute Chest Syndrome/J.L. Simonson, J. Rosentsveng, S.Y. Chung, N. Schwartz, S.J. Koenig, G.Z. Zaidi, Manhasset, NY, p.A4140


832 1010 The Timing of Family Meetings in the Medical Intensive Care Unit/G. Piscitello, W. Parham III, M. Huber, M. Siegler, W. Parker, Chicago, IL, p.A4154

1012 Evolution of Goals of Care and Code Status at the End of Life in a Medical Intensive Care Unit/N. Sung, S.O. Acquah, New York, NY, p.A4156


1018 Prevalence, Variation, and Acute Comorbidities of Alcohol Withdrawal Syndrome in General Hospital and Intensive Care Unit Patients in the Veterans Health Administration/T.L. Steel, C.A. Malte, K.A. Bradley, C.L. Hough, S. Lukhandwala, E.J. Hawkins, Seattle, WA, p.A4162


1025 Feasibility, Acceptability, and Preliminary Efficacy of VidTalk™ Communication Application in Family Caregivers of Mechanically Ventilated ICU Patients/J.W. Shin, M.B. Happ, A. Tan, J. Tate, Columbus, OH, p.A7379


710 Does Dual Use of Electronic Cigarettes and Conventional Cigarettes Confer a Pulmonary Health Advantage? A Baseline and 12 Month Prospective Cohort Analysis/W. Bringgold, K. Berg, S. Smith, M. Piper, D. Jorenby, Madison, WI, p.A4178


713 E-cigarettes Rapidly and Profoundly Affect the Transcriptome of Primary Human Bronchial Epithelial Cells/A. Altraja, K. Kilik, M. Mitt, S. Altraja, Tartu, Estonia, p.A4181


718 JUUL e-Cigarette and Vape Pen Flavors Impose Oxidative Stress and Inflammatory Responses in Lung Epithelial Cells and Macrophages/I. Rahman, T. Lamb, T. Muthumalage, Rochester, NY, p.A4186


721 E-cigarette Aerosol Stimulates Changes in Structural Proteins of the Lung/J.E. Bozier, D. Xenaki, B. Oliver, Glebe, Australia, p.A4189


METABOLIC SIGNS OF EXERCISE-INDUCED PULMONARY HYPERTENSION SUGGEST IT PHYSIOLOGICALLY PRECEDES OVERT PULMONARY HYPERTENSION/J. Sanders, Y. Han, D.M. Systrom, A.B. Waxman, Boston, MA, p.A4198

ESTROGEN IMBALANCE IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION: PROFILING METABOLITES USING LC-MS/MS/N. Denver, N.Z.M. Homer, N.W. Morrell, R. Andrew, M.R. MacLean, Glasgow, United Kingdom, p.A4199


ROLE OF PAXILLIN AND PAXILLIN TYROSINE PHOSPHORYLATION IN LPS-INDUCED MITOCHONDRIAL REACTIVE OXYGEN SPECIES GENERATION AND MITOCHONDRIAL DYNAMICS IN LUNG ENDOTHELIAL CELLS/P. Fu, J.R. Jacobson, A. Crews, J.G.N. Garcia, V. Natarajan, Chicago, IL, p.A4203


Effects of Nasal Alkalization on Bacterial Colonization in Healthy Subjects/Z. Holliday, J.L. Launsbach, L. Durairaj, M. Abou Alawi, D.A. Stoltz, J. Zabner, Iowa City, IA, p.A4218


C-Reactive Protein of 15 mg/dl on Admission Is Associated with Prolonged Length of Stay in Patients Hospitalized with Community-Acquired Pneumonia/Y. Chenchanok, J. Ognibene, W. Southern, S. Arora, Bronx, NY, p.A4221

Addition of C-Reactive Protein to Pneumonia Severity Index Better Predicts Length of Stay in Hospitalized Patients with Community-Acquired Pneumonia/Y. Chenchanok, J. Ognibene, W. Southern, S. Arora, Bronx, NY, p.A4222

Inaccurate Empiric Antibiotic Selection in Severe Pneumonia in the Intensive Care Unit/J. Bailey, M.T. Bender, M.S. Niederman, New York, NY, p.A4223


Cardiovascular Events and 1-Year Mortality in Pneumococcal Community- Acquired Pneumonia (CAP) Compared to Non-Pneumococcal CAP/H. Saikumar, A. Anzueto, M.I. Restrepo, San Antonio, TX, p.A4230


B110 MYCOBACTERIAL HOST DEFENSE AND PATHOGENESIS

2:15 p.m. - 4:15 p.m.  KBHCCD

Abstract Summaries

2:15-2:45

Viewing/Discussion

2:45-4:15

Chairs: M. Divangahi, PhD, Montreal, Canada
N.W. Schluger, MD, New York, NY
K.N. Olivier, MD, MPH, Bethesda, MD


Mycobacterium Tuberculosis Promotes Autophagy in THP-1 Macrophages via Nrfl2/Y. Zhang, F. Fang, F. Wu, J. Lv, T. Wang, Z. Qian, H. Wang, Bengbu, China, p.A4233


305 Increased Frequency and Modulating Effects of Granulocytic Myeloid-Derived Suppressor Cells on Mycobacterial Survival in Patients with Tuberculosis/A. Pooran, M. Davids, F. Thompson, K. Dheda, Cape Town, South Africa, p.A4236


310 The Human Respiratory Epithelium Exhibits a Robust Inflammatory Response to Mycobacterium Abscessus Infection/S. Mehta, S.L. Brody, S. Khader, St. Louis, MO, p.A4241


313 NLRP3 Inflammasome Is Attenuated in Patients with Mycobacterium Avium Complex Lung Disease and Correlated with Decreased IL-1ß Response and Host Susceptibility/C.-C. Shu, M.-F. Wu, C.-J. Yu, Taipei, Taiwan, p.A4244

The fourteen Assemblies are the primary groups of the American Thoracic Society. Each Assembly holds an annual Membership Meeting at the International Conference. All Assembly members and other interested individuals are invited to attend.

The Assembly Membership Meetings provide an update on the Assembly’s activities via the Assembly’s Leadership and provide Assembly members the chance to have input on future directions, information on how to get involved and networking opportunities. Voting results for the Assembly’s future leaders will also be announced.

The Assemblies on Behavioral Science and Health Services Research and Pediatrics meetings are held on Sunday, May 19th.

<table>
<thead>
<tr>
<th>Assembly</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Chairing</th>
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<tbody>
<tr>
<td>Allergy, Immunology and inflammation</td>
<td>MONDAY • MAY 20</td>
<td>4:30 p.m. - 7:00 p.m.</td>
<td>HYATT REGENCY DALLAS</td>
<td>Bethany B. Moore, PhD, ATSF, Ann Arbor, MI</td>
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<td>Clinical problems</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Mei Lan K. Han, MD, MS, Ann Arbor, MI</td>
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<td>Critical care</td>
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<td>HYATT REGENCY DALLAS</td>
<td>John Kress, MD, Chicago, IL</td>
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<td>Environmental occupational and population health</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Howard M. Kipen, MD, MPH, Piscataway, NJ</td>
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<td>Nursing</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Linda Chian, PhD, RN, ATSF, Lakeville, MN</td>
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<td>Pulmonary circulation</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Karen A. Fagan, MD, Spanish Fort, AL</td>
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<td>Pulmonary infections and tuberculosis</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Kristina A. Crothers, MD, Seattle, WA</td>
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<tr>
<td>Pulmonary rehabilitation</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Richard Casaburi, MD, Rancho Palos Verdes, CA</td>
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<td>Respiratory cell and molecular biology</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Melanie Koenigshoff, MD, PhD, ATSF, Aurora, CO</td>
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<td>Respiratory structure and function</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Gwen S. Skloot, MD, ATSF, New York, NY</td>
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<tr>
<td>Sleep and respiratory neurobiology</td>
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<td>HYATT REGENCY DALLAS</td>
<td>Sanjay R. Patel, MD, Pittsburgh, PA</td>
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<td>Sleep and respiratory neurobiology reception</td>
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<td>7:00 p.m.-10:00 p.m.</td>
<td>HYATT REGENCY DALLAS</td>
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<tr>
<td>Thoracic oncology</td>
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<td>HYATT REGENCY DALLAS</td>
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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:
• remain current with medical knowledge relevant to their practice in pediatric pulmonology;
• evaluate their understanding of key skills and content areas in pediatric pulmonology as well as receive feedback on their comprehension of a result of a pre-test/post-test comparison;
• 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. The symposia will address topics that have been identified by an ATS pediatric working group, which is comprised of members of the ATS Education Committee and the International Conference Committee, who have identified important areas within pediatric medicine (including severe asthma, ILD, BPD, pulmonary hypertension and pulmonary manifestations of pulmonary disease). Attendees will increase their medical knowledge as a result of attending this symposium, and this will be measured by a comparison of pre-test vs. post-test results on the corresponding maintenance of certification module. The ATS Pediatric Core Curriculum will focus on a 3-year content cycle of key medical content in the area of pediatric medicine.

Chairing: D.M. Boyer, MD, Boston, MA

6:45 Pulmonary Vascular Malformations in Children
D. Benscoter, DO, Cincinnati, OH

7:15 Pulmonary Lymphatic Disease in Children
A.I. Quizon, MD, San Diego, CA
SS212  HIDING IN PLAIN SIGHT: ETIOLOGIES OF PULMONARY 
HYPERTENSION YOU MAY BE MISSING
H.W. Farber, MD, Boston, MA
N. Ruopp, MD, Boston, MA
N. Schoenberg, MD, Boston, MA
South Side 1 (Level 3)

SS213  BRONCHOALVEOLAR LAVAGE IN THE IMMUNOCOMPROMISED 
HOST: MOVING BEYOND TRADITIONAL DIAGNOSTIC METHODS 
FOR FUNGAL INFECTION
O. Epelbaum, MD, ATSF, Valhalla, NY
Fair Park 1 (Level 3)

SS214  REACHING THE HARD TO REACH PATIENTS
S. Roark, MD, Denver, CO
Fair Park 2 (Level 3)

SS215  THE USE OF CARDIOPULMONARY EXERCISE TESTING IN 
PULMONARY VASCULAR DISEASE
T. DeCato, MD, Spokane, WA
M.J. Hegewald, MD, Salt Lake City, UT
Oak Cliff 2 (Level 5)

SS216  EVALUATION OF RESPIRATORY FUNCTION AND SLEEP IN 
NEUROMUSCULAR DISORDERS: WHY, WHEN, HOW
R. Amin, MD, Montreal, Canada
Victory Park 2 (Level 5)

SS217  THE ROLE OF THE PULMONOLOGIST IN THE DIAGNOSIS AND 
STAGING OF LUNG CANCER
M. Triplette, MD, MPH, Seattle, WA
White Rock 1-2 (Level 5)

FD2  USING DIGITAL SCHOLARSHIP STRATEGICALLY 
FOR CAREER ADVANCEMENT
Conference badges are required for admission. Space is limited and 
admittance is on a first-come, first-served basis. There is no additional fee.
6:45am - 7:45 a.m. OMNI DALLAS DOWNTOWN
Katy Trail (Level 2)

Target Audience
Early and mid-career clinical and/or research faculty, clinical and postdoctoral 
fellows, medical & graduate students, residents, nurses, and allied health 
professionals involved in or seeking careers in pulmonary, critical care and/or 
sleep medicine.

Objectives
At the conclusion of this session, the participant will be able to:
• learn about various digital scholarship opportunities, including the philosophy, 
reach, content curation mechanics, impact potential and pitfalls specifically in 
terms of applicability to academic promotion;
• identify strategies to monitor impact and effectively describing their digital 
scholarship using a standard framework;
• engage in a hands-on exercise to create a digital scholarship portfolio.

The last decade has seen a rapid growth in the amount, type, reach and 
dissemination methods for digital scholarship. As institutions across the nation are 
taking a lead and formalizing criteria for digital scholarship, the clinicians, 
researchers and educators of current times are in a unique position to capitalize on 
these opportunities and in turn strategically use them for career advancement. The 
speakers, each with vast experience in various aspects of digital media use in 
medicine, will discuss the numerous opportunities, how to build a successful digital 
scholarship portfolio and tools to measure the impact of one’s digital scholarship.

Chairing: V. Kaul, MD, Elmhurst, NY
Speakers: N.H. Stewart, DO, Omaha, NE
M.A. Stiegler, MD, Research Triangle Park, NC
C.L. Carroll, MD, ATSF, Hartford, CT
C1 CLINICAL YEAR IN REVIEW 3

New! The Clinical Year in Review Bibliography is only available via the conference website http://conference.thoracic.org/go/cyir or mobile app. Attendees wishing to access the bibliography should bring a smart phone, tablet or laptop to the session.

9:15 a.m. - 11:15 a.m. KBHCCD Hall A (Level 2)

Target Audience
Providers including physicians, nurses, respiratory therapists, nurse practitioners, physician assistants; trainees including residents and fellows; clinical researchers

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

The annual Clinical Year in Review symposia provides concise summaries of the most impactful clinical research publications related to specific clinical topics. Speakers are asked to conduct a literature review of the prior year’s scientific publications and develop a written summary of the top 20 articles and highlight 5 of the most important and influential publications on their topic in written format and during their talks at the International Conference Clinical Year in Review sessions.

Chairing:
V.E. Ortega, MD, PhD, ATSF, Winston Salem, NC
J.S. Lee, MD, Aurora, CO
P.A. Kritek, MD, EdM, EdM, Seattle, WA

9:15 General Critical Care
R.M. Baron, MD, Boston, MA

9:44 ICU Rehabilitation
D.C. Files, MD, Winston-Salem, NC

10:13 ILD
J.S. Lee, MD, Aurora, CO

10:42 Tobacco Dependence
E.R. Neptune, MD, Baltimore, MD

11:11 MOC Questions

This session and the International Conference are supported by educational grants from Boehringer Ingelheim Pharmaceuticals, Inc., Genentech, Inc.

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

C2 CLOSING THE EVIDENCE GAP IN LUNG DISEASE WITH REAL WORLD DATA

Assemblies on Clinical Problems; Behavioral Science and Health Services Research

9:15 a.m. - 11:15 a.m. KBHCCD Ballroom C One-Two (Level 2)

Target Audience
Broad audience of clinicians, researchers and administrators interested in learning about the landscape of real world evidence

Objectives
At the conclusion of this session, the participant will be able to:
• identify sources of real world data, the key stakeholders in this discussion, and the operational and technical resources needed for successful use;
• understand the practical applications of real world data in clinical research, including the specific study design and methodologic issues unique to its use;
• work collaboratively within and across his/her health care system to apply the concepts of real world data and real world evidence in order to advance clinical research.

This session will provide a general overview of the landscape of real world data, highlight several clinical studies that are currently using real world data to advance our understanding of lung disease using both observational and interventional study designs, provide a framework for understanding the major challenges to routine integration of real world data into clinical research, and finally discuss opportunities to promote broad use of real world data through regulatory, legislative and cultural changes.

Chairing:
E.D. Farrand, MD, San Francisco, CA
G.R. Bernard, MD, Nashville, TN
H.R. Collard, MD, San Francisco, CA

E.D. Farrand, MD, San Francisco, CA

9:30 Questions

9:35 Exploring the New Realms of Computational Health and Big Data Management in Medicine
K.F. Sarmiento, MD, MPH, San Francisco, CA

9:55 Questions

10:00 The Power of Observational Cohorts: How Real World Cohorts Can Inform the Future of Clinical Care
A.S. Go, MD, Oakland, CA

10:20 Questions

10:25 Interventional Applications of Real World Data: The Emergence of Pragmatic Clinical Trials
M.W. Semler, MD, MSc, Nashville, TN

10:45 Questions
Despite studies showing that individuals with asthma COPD overlap (ACO) have higher risks for adverse outcomes compared to those with asthma or COPD alone, the group with ACO has been difficult to characterize, and definitions of ACO have not been validated in any systematic manner. Regardless, studies have made substantial progress in better characterizing the role of eosinophils, Th2 inflammation and allergic disease in individuals with COPD, therefore providing potentially important insights into ACO. This session will discuss important new clinical, genetic, and translational studies relevant to asthma and COPD with the ultimate goal of advancing strategies to treat this high-risk group.

Chairing:
S. Christenson, MD, MS, San Francisco, CA
N. Putcha, MD, Baltimore, MD
M. Van Den Berge, PhD, Groningen, Netherlands

9:15 Eosinophilic COPD: Phenotyping and Treatment Regimens
C.E. Brightling, BSc(Hons), MBBS, PhD, Leicester, United Kingdom

9:35 Allergic COPD: Don’t Forget the Environment
N. Putcha, MD, Baltimore, MD

9:50 Findings from Genetic Studies of Asthma and COPD: Clues for Asthma COPD Overlap?
C.P. Hersh, MD, MPH, ATSF, Boston, MA

10:05 The Type 2 Paradigm and Beyond
S. Christenson, MD, MS, San Francisco, CA

10:20 The Severe Asthma Molecular Phenotype as a Mimic of COPD
S.E. Wenzel, MD, ATSF, Pittsburgh, PA

10:40 The Role of Mucin Gels in Asthma COPD Overlap
R.C. Boucher, MD, Chapel Hill, NC

11:00 The Genomics of Inhaled Corticosteroid Response
A. Faiz, PhD, Groningen, Netherlands

This session and the International Conference are supported by educational grants from Genentech, Inc., Novartis Pharmaceuticals Corporation, Sanofi Genzyme and Regeneron Pharmaceuticals.

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Target Audience
Individuals involved in care of patients with COPD and basic, clinical, and translational researchers focused on COPD

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

• gain new findings about eosinophilic COPD and evidence for differential treatment responses in this subtype;

• learn new findings about the allergic subtype of COPD and evidence for the importance of environmental triggers in this population;

• understand and learn new findings about the role of Th2 inflammation in COPD and implications for treatment strategies and drug development.

In this session, we will explore the different world of the ICU at night from multiple stakeholders’ (physicians, nurses, patients, families) perspectives. Our aims are to elucidate unique challenges faced overnight and to explore potential and/or proven interventions (e.g., changing staffing, using technology, altering the ICU environment, considering pharmacologic therapies) to address these issues. Coming out of this session, learners will understand (1) how and why the ICU is different at night compared to during the day and (2) what is known about how best to optimize care delivery “when the sun sets” to provide the highest quality patient care.

Chairing:
H.B. Gershengorn, MD, ATSF, Miami, FL
M. Hua, MD, MSci, New York, NY
S.J. Hsieh, MD, MS, New York, NY

9:15 Why Nighttime Isn’t Just Daytime Without the Sun
S.J. Hsieh, MD, MS, New York, NY

9:25 Up-Staffing: Intensivists Onsite Overnight
M.P. Kerlin, MD, MS, Philadelphia, PA

9:39 Night vs Day: The Nursing Perspective
N.S. McAndrew, PhD, RN, ACNS-BC, CCRN, Milwaukee, WI
**C5**

**DISCOVERING THE ROLE OF STEM CELL FATE IN LUNG INJURY AND FIBROSIS**

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

9:15 a.m. - 11:15 a.m.  
KBHCCD Ballroom D Two (Level 3)

**Target Audience**

Providers of lung health and those with clinical and research responsibilities

**Objectives**

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

- determine the role of mesenchymal stem cells in lung injury and fibrosis;
- discuss the molecular mechanisms by which mesenchymal stem cells interact with lung resident cells upon lung tissue injury and repair;
- discuss clinical data on mesenchymal stem cells as a potential therapeutic target in acute respiratory distress syndrome (ARDS) and idiopathic pulmonary fibrosis.

Recent high impact basic science and clinical papers show the critical role of mesenchymal stem cells in the pathogenesis of acute lung injury and pulmonary fibrosis. Mesenchymal stem cells are emerging as an activator of cellular function to repair damaged lung tissue. The goal of this symposium is to highlight recent exciting data that describes how resident cells and the microenvironment interact with mesenchymal stem cells to modulate lung injury and fibrosis. Targeting these pathways has the potential to lead to a novel therapeutic approach to treat acute lung tissue injury and fibrosis.

**Chairing:**

R.G. Scheraga, MD, Cleveland, OH  
B.D. Southern, MD, Cleveland, OH  
B.R. Stripp, PhD, Los Angeles, CA

9:15 Mitophagy and Mesenchymal Stem Cell Survival  
L.A. Ortiz, MD, Pittsburgh, PA

**9:35** Inflammatory Lung Environment Effects on MSC Behaviors  
D.J. Weiss, MD, PhD, ATS, Burlington, VT

**9:55** Allogeneic Human Mesenchymal Stem Cells for the Treatment of Acute Lung Injury/ARDS  
M.A. Matthay, MD, San Francisco, CA

**10:15** Fibroblast Cell Origin in Idiopathic Pulmonary Fibrosis  
C.A. Henke, MD, Minneapolis, MN

**10:35** Role of Pericytes in Pulmonary Fibrosis  
L.M. Schnapp, MD, ATS, Charleston, SC  
C. Hung, MD, Seattle, WAS

**10:55** Stem Cell Therapy for Patients with Idiopathic Pulmonary Fibrosis (IPF)  
M.K. Glassberg, MD, Miami, FL

**BASIC • TRANSLATIONAL**

**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 2

**C6**

**THE FORGOTTEN CELL: RED BLOOD CELLS AS MODULATORS OF IMMUNITY**

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

9:15 a.m. - 11:15 a.m.  
KBHCCD Room C147/C148/C154 (Level 1)

**Target Audience**

Basic and translational scientists

**Objectives**

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

- obtain a basic understanding of the immunomodulatory capability of RBCs. Completion of this objective may lead to further research in this rich but understudied field which has relevance to all inflammatory disease states;
- understand the role of cell free hemoglobin in both sterile and pathogen induced inflammation;
- obtain an understanding of the role of immature RBCs in neonatal host defense.

This symposium will provide attendees with a basic understanding of the role of RBCs and their byproducts in regulating the innate immune response and inflammation during sterile and pathogen mediated inflammation. Given the vast number of erythrocytes in circulation and their extraordinary potential to influence immune function, research into the immunologic function of RBCs may yield unique insights into the mechanisms of immune regulation during critical illness.

**Chairing:**

N.S. Mangalmurti, MD, Philadelphia, PA  
M.T. Gladwin, MD, Pittsburgh, PA

9:15 Heightened RBC Disposal Impairs Host Immunity During K. Pneumoniae Sepsis  
J. Lee, MD, ATS, Pittsburgh, PA

9:40 Hemolysis as a Mechanism for Human Disease: From Sickle Cell Disease to Precision Transfusion Medicine  
M.T. Gladwin, MD, Pittsburgh, PA
C7 WHAT PULMONOLOGISTS NEED TO KNOW ABOUT CANCER IMMUNOTHERAPY

Assemblies on Thoracic Oncology; Allergy, Immunology and Inflammation; Clinical Problems

9:15 a.m. - 11:15 a.m. KBHCCD
Ballroom A Two (Level 2)

Target Audience
Pulmonary providers: practicing and in-training physicians, NP and PA in either private and academic settings who care for patients undergoing cancer immunotherapy or see patients with pulmonary complications of cancer immunotherapy.

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

• understand the immunological mechanism of immune checkpoint inhibitor therapy;
• recognize and diagnose pulmonary complications of immune checkpoint inhibitors;
• appropriately manage patients with iAE of immune checkpoint inhibitors to balance the risks (decreased anti-tumor immunity) and benefits (need for therapeutic immunosuppression).

Cancer immunotherapy and immuno-oncology are rapidly expanding fields in Medicine. Immune checkpoint inhibitors targeting CTLA4 and PD1/PDL1 are now FDA approved for a number of cancers including first and second line therapy of metastatic NSCLC (IV) and Stage III (NSCLC) as well as an increasing number of other malignancies. This represents the fastest expanding therapy in oncology. Pulmonary providers are increasingly involved with many aspects of cancer immunotherapy. This mainly include assessment of predictive biomarkers such as (PD-L1) and the management of an increasing number of pulmonary complications of these agents which occur in S to up the 29% of these patients. Understanding the mechanisms of immune checkpoint inhibitors and the appropriate recognition, diagnosis and management of these potentially life threatening complications are crucial to patient outcomes. This multi-disciplinary session will provide attendees with the skills to do this in their daily practice in a case based fashion.

Chairing:
M.P. Rivera, MD, ATSF, Chapel Hill, NC
C.R. Sears, MD, Indianapolis, IN
P. Camus, MD, CHU Le Bocage, Dijon, France

C8 BRONCHIECTASIS: MOVING BEYOND THE VICIOUS CYCLE

Assembly on Pulmonary Infections and Tuberculosis

9:15 a.m. - 11:15 a.m. KBHCCD
Ballroom A Three (Level 2)

Target Audience
Pulmonologists, Post-graduate trainees, Advanced Practitioners, Respiratory Therapists

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

• learn about potential biomarkers for disease severity in bronchiectasis;
• understand recent development in the study of the lung microbiome;
• discuss strategies for future studies in bronchiectasis: phenotyping study populations, drugs in the pipeline.

Cole's vicious cycle of infection, inflammation, and airway damage has traditionally been the accepted model of bronchiectasis pathophysiology. This session will highlight recent research that has uncovered more detailed mechanisms that underlie this simple paradigm. Discovery of genetic variants in the bronchiectasis patient is providing perspective as to how a patient may be vulnerable to the vicious cycle. Biomarkers have been proposed to measure inflammation and infection. Data from research into the bronchiectasis microbiome and mycobiome is challenging the validity of the traditional use and application of sputum cultures. Efforts to better phenotype the heterogeneous bronchiectasis population are underway. Priorities for future drug trials will be discussed.

Chairing:
P.J. McShane, MD, Chicago, IL
K.L. Winthrop, MD, MPH, Portland, OR
A.E. O'Donnell, MD, Washington, DC
C9 DIFFICULT TO TREAT AND SEVERE ASTHMA IN THE PEDIATRIC POPULATION

Assemblies on Pediatrics; Allergy, Immunology and Inflammation
9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN
Dallas Ballroom A-C (Level 3)

Target Audience
Pediatricians, pediatric pulmonologists, pediatric intensivists, adult asthma specialists

Objectives
At the conclusion of this session, the participant will be able to:
- distinguish severe treatment refractory asthma from difficult to treat asthma;
- have new strategies to manage the care of children with difficult to treat asthma;
- learn new findings about the evaluation and treatment options for difficult to treat asthma.

This session will cover various aspects of difficult to treat asthma including cutting edge therapeutics. This session will be of interest to clinicians who care for children with asthma, as well as researchers in this field. This session will address the following topics: asthma comorbidities, medication adherence, biologic therapies, and the use of bronchoscopy in children with asthma.

Chairing: H. Hoch, MD, Aurora, CO
S.J. Szefler, MD, Aurora, CO
M. Kattan, MD, New York, NY

9:15 Introduction
S.J. Szefler, MD, Aurora, CO

9:19 A Patient’s Perspective
M. Papazis, MD, Washington, IL

9:24 Immune Dysfunction in Children with Obese Asthma
D. Rastogi, MBB, MS, Bronx, NY

9:53 The Role of Medication Adherence in Difficult to Treat Asthma in Children
H. Hoch, MD, Aurora, CO

10:17 The Use of Biologic Therapies in Childhood Asthma
S. Lovinsky-Desir, MD, New York, NY

10:46 Bronchoscopy in the Diagnosis and Management of Asthma
A. Vicencio, MD, New York, NY
9:39  Weight Loss Strategies in Kids and Adolescents and the Impact on OSA: From Lifestyle Intervention to Bariatric Surgery  
N. Simakajornboon, MD, Cincinnati, OH

10:00  CON: The Discovery of Novel PAH Disease Genes Will NOT Help Us Understand AND Treat PAH  
M. Humbert, MD, PhD, Bicetre, France

10:03  What Is the Real Impact of Lifestyle Intervention and Anti-Obesity Drugs on OSA Severity and Intermediary Outcomes in Adults?  
M.T. Naughton, MD, ATSF, Prahran, Australia

A. Hemmes, MD, ATSF, Nashville, TN

10:27  Efficacy and Safety of Bariatric Interventions in Adults with OSA and Obesity Hypoventilation Syndrome  
S.R. Patel, MD, Pittsburgh, PA

H. Olschewski, MD, Graz, Austria

10:51  Sleep Extension: Can We Improve Weight and Metabolic Profile in Sleep-Deprived Patients?  
E. Tasali, MD, Chicago, IL

10:51  PRO: The Discovery of Novel PAH Disease Genes Will Help Us Understand AND Treat PAH  
W.C. Nichols, PhD, Cincinnati, OH

11:00  CON: Precision Medicine is NOT Needed to Find Beneficial Therapies for PAH Patients - I Am a Lumper Not a Splitter  
S.M. Kawut, MD, MS, Philadelphia, PA

C11  FUTURE DIRECTIONS IN PAH RESEARCH: A PRO/CON DEBATE

Assembly on Pulmonary Circulation

9:15 a.m. - 11:15 a.m.  
Room C155-C156 (Level 1)

Target Audience
Basic, translational and clinical researchers, clinicians (adult and pediatrics) interested in pulmonary vascular disease and right heart failure

Objectives
At the conclusion of this session, the participant will be able to:
• critically evaluate whether the right ventricle should be a therapeutic target in PAH or whether our research should rather focus on reversing the pulmonary vascular disease
• summarize the pros and cons of animal models in PAH
• learn about the importance of genetics in PAH- will be able to more appropriately discuss the values as well as the false promises of precision medicine in PAH

This session will debate the future focus of research in pulmonary arterial hypertension (PAH). By employing a pro/con debate style, this session will critically evaluate opposing views of the most promising research directions with the ultimate goal to reach a consensus how best to improve pulmonary vascular disease and and right heart failure.

Chairing:  
E.F. Spiëkerkoetter, MD, Palo Alto, CA  
S.S. Pullamsetti, PhD, Bad Nauheim Hessen, Germany  
W. Kuebler, MD, Berlin, Germany

9:15  PRO: The RV Should Be a Therapeutic Target in PAH  
F. De Man, PhD, Amsterdam, Netherlands

9:30  CON: The RV Should NOT Be a Therapeutic Target in PAH  
P.M. Hassoun, MD, Baltimore, MD

9:45  PRO: The Discovery of Novel PAH Disease Genes Will Help Us Understand AND Treat PAH  
W.C. Nichols, PhD, Cincinnati, OH

10:00  CON: The Discovery of Novel PAH Disease Genes Will NOT Help Us Understand AND Treat PAH  
M. Humbert, MD, PhD, Bicetre, France

10:03  What Is the Real Impact of Lifestyle Intervention and Anti-Obesity Drugs on OSA Severity and Intermediary Outcomes in Adults?  
M.T. Naughton, MD, ATSF, Prahran, Australia

A. Hemmes, MD, ATSF, Nashville, TN

10:27  Efficacy and Safety of Bariatric Interventions in Adults with OSA and Obesity Hypoventilation Syndrome  
S.R. Patel, MD, Pittsburgh, PA

H. Olschewski, MD, Graz, Austria

10:51  Sleep Extension: Can We Improve Weight and Metabolic Profile in Sleep-Deprived Patients?  
E. Tasali, MD, Chicago, IL

10:51  PRO: The Discovery of Novel PAH Disease Genes Will Help Us Understand AND Treat PAH  
W.C. Nichols, PhD, Cincinnati, OH

11:00  CON: Precision Medicine is NOT Needed to Find Beneficial Therapies for PAH Patients - I Am a Lumper Not a Splitter  
S.M. Kawut, MD, MS, Philadelphia, PA

This session and the International Conference are supported by an educational grant from Bayer US.

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9:15  Development and Functional Specialization of Pulmonary Macrophage Subsets  
A. Misharin, MD, PhD, Chicago, IL

9:35  Macrophages: Efferocytosis in Viral Illness and Asthma  
T. Hussell, PhD, Manchester, United Kingdom

9:55  Macrophage Reprogramming in Acute Lung Injury  
K. Mould, MD, MPH, Denver, CO

10:10  Macrophage-Mediated Inflammation in Cystic Fibrosis  
K.B. Hisert, MD, PhD, Seattle, WA

10:25  Lung Macrophage Metabolism and the Immune Response to Mycobacterium Tuberculosis Infection  
M.P. O’Sullivan, PhD, Dublin, Ireland

10:40  Genetic Variation and Lung Macrophage Phenotypes  
E. Sajti, MD, PhD, San Diego, CA

11:00  Macrophages and the Biologic Response to Ozone and Environmental Pollutants  
R.M. Tighe, MD, Durham, NC

C13  CLIMATE CHANGE AND RESPIRATORY HEALTH: WIDENING U.S. DISPARITIES

Assemblies on Behavioral Science and Health Services Research; Environmental, Occupational and Population Health; Environmental Health Policy Committee; Health Equality and Diversity Committee

9:15 a.m. - 11:15 a.m.  
Room D163/D165/D170/D172 (Level 1)  
KBHCCD

Target Audience  
Pulmonary and critical care physicians, sleep physicians, fellows in training, physician extenders, respiratory therapists, public health and health policy professionals and health service researchers

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

• gain a greater understanding of vulnerable US populations and communities at risk for climate change;
• gain enhanced ability to assess risk, implement risk-reduction interventions and evaluate the effectiveness of risk-reduction efforts;
• gain knowledge of current policy that facilitates or impedes respiratory health of our patients, our communities and our planet.

Climate change produces alterations to the natural and built environments that will increase respiratory disease burden. In this session we will provide an overview of the climate change events that can impact respiratory health with a focus on vulnerable communities in the United States (e.g., racial/ethnic minorities, children, elderly, poor). We will use chronic obstructive pulmonary disease, asthma, and respiratory infectious diseases as examples in which to examine the threats to human health if these risks are not lessened and demonstrate how strategies and US-based policies could potential lessen these effects. An enhanced understanding of vulnerability is needed to identify the potentially differential impact of climate change on subpopulations, and the social factors that may foster adaptation or alter risk.

Chairing:  
M.R. George, PhD, RN, New York, NY
N. Thakur, MD, MPH, San Francisco, CA
F. Holguin, MD, MPH, Aurora, CO
M.B. Rice, MD, MPH, Boston, MA

9:15  Introduction: Why Climate Change Matters for Respiratory Health Disparities  
M.R. George, PhD, RN, New York, NY

9:22  A Patient’s Perspective: How Hurricane Harvey Impacted My Health  
C. Darrington, Spring, TX

9:35  Long-Term Effects of Hurricane Sandy on Indoor Heat and Air Pollution on Pediatric Asthma in Vulnerable U.S. Populations  
M. Perzanowski, PhD, New York, NY

9:55  Effects of Climate Change on COPD Morbidity in Vulnerable U.S. Populations  
M.C. McCormack, MHS, MD, Baltimore, MD

10:15  Potential Rise of Hantavirus Pulmonary Syndrome in Native American Populations in the Face of Climate Change  
A. De St. Maurice, MD, MPH, Los Angeles, CA

10:35  Policies That Protect Vulnerable Populations The Role of the EPA in the Current Climate  
G.D. Thurston, DSc, New York, NY

10:55  Panel Discussion

C14  CRITICAL CARE: THE CRUCIBLE - OPTIMIZING MECHANICAL VENTILATION: INNOVATIVE TRIALS AND TOOLS

9:15 a.m. - 11:15 a.m.  
OMNI DALLAS DOWNTOWN  
Trinity Ballroom 4/8 (Level 3)

Chairing:  
E.C. Goligher, MD, PhD, Toronto, Canada
S. Sahetya, MD, Baltimore, MD

Oral Presentations


C15 OCCUPATIONAL EXPOSURES OF THE 21ST CENTURY

9:15 a.m. - 11:15 a.m. KBHCCD Room D167/D174 (Level 1)

Chairing: S.D. Krefft, MD, MPH, Denver, CO
K.L. Bailey, MD, ATSF, Omaha, NE
L.A. Maier, MSPH, MD, Denver, CO

Oral Presentations


C16 CLINICAL STUDIES IN BRONCHOPULMONARY DYSPLASIA

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN Dallas Ballroom G (Level 3)

Chairing: L.P. Hayden, MD, Boston, MA
L.M. Rhein, MD, MPH, Boston, MA
J.M. Collaco, MD, Baltimore, MD

Featured Speaker

9:15 BPD: Keeping Pace with an Evolving Disease/S.H. Abman, Aurora, CO

Oral Presentations


9:45 Molecular Characterization of Tracheal Epithelial Cells from Premature Infants with Evolving Bpd/L.C. Eldredge, R.S. Creasy, J.S. Debley, S. Presnell, S.F. Ziegler, Seattle, WA, p.A4263


10:30  High pCO2 Levels at 36 Weeks Is Associated with Longer Duration of Home Oxygen in Infants with Bronchopulmonary Dysplasia (BPD)/S. Dawson, L. D’Andrea, R. Lau, J. Lagatta, Milwaukee, WI, p.A4266


11:00  The Urinary Metabolome and Bronchopulmonary Dysplasia in Preterm Infants Treated with Inhaled Nitric Oxide/D.G. Torgerson, R. Keller, R. Ballard, P. Ballard, Montreal, Canada, p.A4268


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### BEHAVIORAL

#### MINI SYMPOSIUM

**C17  PULMONARY REHABILITATION 2019**

9:15 a.m. - 11:15 a.m.  KBHCCD  Room C146 (Level 1)

**Chairing:**  W. Man, MD, PhD, Harefield, United Kingdom

**Featured Speaker**  9:15  Top Two Publications in Pulmonary Rehabilitation 2019/  Speaker to be announced

**Oral Presentations**


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### BASIC • CLINICAL • TRANSLATIONAL

#### MINI SYMPOSIUM

**C18  RARE LUNG DISEASES**

9:15 a.m. - 11:15 a.m.  KBHCCD  Room D220/D227 (Level 2)

**Chairing:**  F. X. McCormack, MD, Cincinnati, OH  E. P. Henske, MD, Boston, MA  J. A. Wambach, MD, MS, St. Louis, MO

**Featured Speaker**  9:15  The Bones of Fibrosis/F. X. McCormack MD, Cincinnati, OH

**Oral Presentations**


10:00  NEK10 Loss of Function Causes a Novel Human Motile Ciliopathy/R. Chivukula, H. M. Leung, D. Montoro, A. Waghray, K. E. Black, L. P. Hariri, D. M. Sabatini, G. Tearney, J. Rajagopal, Boston, MA, p.A4278


10:30  Disruptive Effect of LAM-Derived Smooth Muscle Cells on Human Lung Progenitors Is Dependent on Expression of Translationally Controlled Tumour Protein/M. Ho, M. Ho, L. M. Julian, W. L. Stanford, D. J. Stewart, Ottawa, Canada, p.A4280


**BASIC • CLINICAL • TRANSLATIONAL**

**MINI SYMPOSIUM**

**C19**

NEW PATHWAYS REGULATING AIRWAY SMOOTH MUSCLE CONTRACTION: POTENTIAL TARGETS FOR ASTHMA THERAPY

9:15 a.m. - 11:15 a.m. Room D162/D164 (Level 1)

Chairing: S.V. Naga Prasad, PhD, Cleveland, OH
R.D. Brit, PhD, Columbus, OH
D.D. Tang, MD, PhD, ATSF, Albany, NY

Oral Presentations


9:30 Photo-Relaxation of Mouse Trachea Increases Intracellular Cyclic Amp/P.D. Yim, A. Wu, W. Dan, C.W. Emala, New York, NY, p.A4284


10:00 Dexamethasone Reduces Effects of Brain-Derived Neurotrophic Factor on Human Airway Smooth Muscle/R.D. Brit, M. Thompson, S.A. Wicher, B. Yang, S. Sasse, A.N. Gerber, C.M. Pabelick, Y.S. Prakash, Columbus, OH, p.A4286

10:15 Extracellular Stimuli Regulate Transitions in Airway Smooth Muscle (ASM) Phenotype Through the Differential Activation of the Integrin-Linked Kinase (ILK)/PINCH/Parvin (IPP) Complex/Y. Huang, S.J. Gunst, Indianapolis, IN, p.A4287


10:45 The Anti-IL-4Rα Antibody Dupilumab, Decreases Carbachol Induced MLC and AKT Phosphorylation and Blocks Cytokine Release from HASM Cells/B.T. Deeney, G. Cao, S. Orfanios, J. Williams, E. Gage, R.A. Panettieri, New Brunswick, NJ, p.A4289


**RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION**

**MINI SYMPOSIUM**

**C21**

DETERMINANTS OF BURNOUT AND WELLNESS AMONG PHYSICIANS AND TRAINEES

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN

Abstract Summaries 9:15-9:45

Viewing/Discussion 9:45-11:15

Trinity Ballroom 5-7 (Level 3)

Chairing: R. Adamson, MBBS, ATSF, Seattle, WA
M. Sharp, MD, MHS, Baltimore, MD
T.G. Weinstock, MD, Cambridge, MA


1002 Low ICU Burnout in a Safety Net Hospital/M.M. Leclaire, S. Poplau, K. Prasad, C. Audi, R. Freese, M. Linzer, Minneapolis, MN, p.A4292


1005 ICU Shift Related Effects on Sleep, Fatigue and Alertness Levels/S. Bihari, A. Venkatapathy, S. Prakash, E. Everest, A.D. Bersten, Bedford Park, Australia, p.A4295


1010 Active Coping in Medical Students Is Associated with Less Burnout and Higher Resilience/P.M. Dodek, A. Culjak, E.O. Cheung, M.M. Hubinette, C. Holmes, B. Schreve, K. Wisener, P. Crowell, Vancouver, Canada, p.A4300

1012 Internal Medicine Resident Burnout: Effect of Time and Place/E. Crosby, L. Oshima, J. Nakamatsu, M. As Sayaidheh, J. Kagihara, R. Olds, G. Devendra, Honolulu, HI, p.A4302

I. Glaspole, MBBS, PhD, Melbourne, Australia
Chairing:
Discussion 10:00-11:15

Poster Viewing 9:15-10:00

9:15 a.m. - 11:15 a.m. KBHCCD
C22 ILD: DIAGNOSIS Room C140/C142 (Level 1)


1014 Metrics of Ethics: How to Measure the Work and Build Medical Ethics Consultative Expertise to Support the ICU and Hospital/ M.H. Ieong, K. Seim, A. Cann, C. Fabrizi, Boston, MA, p.A4304

1015 The Feasibility of Introducing a Wellness Curriculum into a Pulmonary and Critical Care Medicine Fellowship Training Program/S. Dua, R. Potter, New York, NY, p.A4305


103 Assessing the Clinical Utility of Serum Angiotensin-Converting Enzyme, Soluble IL-2 Receptor, and 1-25 Vitamin D in the Diagnosis of Extra-Pulmonary Sarcoidosis/S. Gause, M.L. Ribeiro Neto, D.A. Culver, Cleveland, OH, p.A4309

104 Missed Opportunities for Diagnosis in Patients with Idiopathic Pulmonary Fibrosis: A Population-Based Cohort Study/A.K. Gerke, A.C. Miller, P.M. Polgreen, Iowa City, IA, p.A4310


Pleural Disease, CF, and Other Magical Creatures

Chairing: A.C. Chee MD, Boston, MA
G. Hong, MD, MHS, Philadelphia, PA
H.E. Davies, MD, FRCP, Cardiff, United Kingdom

Discussion 10:00-11:15

Biomarkers in the Multicenter IPF-PRO Registry Cohort/P. Acosta Lara, S. Gulati, R. O’Beirne, Birmingham, AL, p.A4324


Pleural Effusion Outcomes in Intensive Care: Analysis of a Large Clinical Database/M. Bateman, T. John, M. Parikh, A. Alkhatib, F. Kheir, New Orleans, LA, p.A4341

C24: ENHANCING THE TREATMENT ENVIRONMENT TO IMPROVE PATIENT AND CAREGIVER OUTCOMES

9:15 a.m. - 11:15 a.m.  
Room D222-D224 (Level 2)

Abstract Summaries  
9:15-9:45

Viewing/Discussion  
9:45-11:15

Chairing: K.O. Lindell, PhD, RN, ATSF, Pittsburgh, PA
J.B. Seaman, PhD, RN, Pittsburgh, PA
T.L. Perez, RN, Philadelphia, PA

Preshift Nurses’ Huddle Exercise -- Does It Need to Be Refined?  

Responding to Clinical Deterioration: Diurnal Variation in Afferent Limb Failure  

Code Blue Simulation Training Reveals Potential Need for Designated Order Set  
A. Mora, L. Wooley, K.A. Schertz, Dallas, TX, p.A4355

Hospital Variation in Gastrostomy Tube Use in the Critically Ill  
A. Law, J. Stevens, A.J. Walkey, Boston, MA, p.A4356

Agreement Between ED and ICU Depth of Sedation Scores During Mechanical Ventilation  

Assessing the Importance of Predictors of Successful Ventilator Weaning of Patients on Prolonged Mechanical Ventilation at Long Term Acute Care Hospitals  
H. Dunn, S. Corbridge, L. Quinn, K. Eldeirawi, M.C. Kapella, B. Rakel, Iowa City, IA, p.A4358

Burnout in Intensive Care Nurses Caring for Veterans  

Effect of Nursing Organizational Factors on ICU Utilization Among Medical and Surgical Patients  
A. Krupp, K. Lasater, M. McHugh, Philadelphia, PA, p.A4360

The Impact of Family Caregiver Psychophysiological Characteristics on the Caregiver Role in the Intensive Care Unit  
B. Hetland, B. Pozehl, K. Kupzyk, J. Heusinkveld, L. Krabbenhoft, E. Grotts, E. Rubenfeld, Omaha, NE, p.A4361

What Makes Family Caregiving Positive from ICU Hospitalization to Four Months Post-ICU Discharge?  
J. Choi, J. Tate, Seoul, Korea, Republic of, p.A4362

Parent Posttraumatic Growth After a Child’s Critical Illness  
L. Yagiela, C. Edgar, K. Meert, Detroit, MI, p.A4363

Management of Home Emergencies for Children on Home Mechanical Ventilation (HMV)  
R. Evans-Agnew, J. Postma, J. Keens, Los Angeles, CA, p.A4364

Environmental Justice and Indoor Air Quality Sampling: Asian Pacific Islander and Latino Youth Citizen Scientists for Asthma and Lung Health  
R. Evans-Agnew, J. Postma, J. Keens, Los Angeles, CA, p.A4364

The Correlation Between Asthma Control and Psychological Health in Pediatric Severe Asthma  
G. Dinglasan-Panlilio, Tacoma, WA, p.A4366
Evaluating and Refining a Preliminary Stigma Questionnaire for People with Chronic Obstructive Pulmonary Disease (COPD): A Cognitive Interviewing Study/S. Woo, J.L. Larson, Ann Arbor, MI, p.A4367

A Patient-Centered Definition of Severe Asthma: The Patient Understanding Leading to Severe Asthma Referral (PULSAR) Initiative/T. Winders, A. Wilson, M. Fletcher, A. McGuinness, D. Price, Vienna, Austria, p.A4368


Understanding the Educational Needs of Interstitial Lung Disease (ILD) Nurses in Referring Centres in Order to Improve Patient Care in the UK/D. Footitt, J. Chapman, S. Carr, A. Pain, D.L. Clarke, Bracknell, United Kingdom, p.A4370


Characterization of Pulmonary Function in Children with Hermansky-Pudlak Syndrome/W. De Jesus-Rojas, E. Rivera, San Juan, PR, p.A4375


Pulmonary Manifestations and Outcomes in ANCA Associated Vasculitides: A Single Center Experience/E. Sayad, D.S. Moreno McNeill, D.R. Spielberg, M. De Guzman, M.D. Silva Carmona, Houston, TX, p.A4378


Primary Ciliary Dyskinesia (PCD) Diagnostic Testing Before and After Establishment as a PCD Clinical Center/M.G. O’Connor, T.J. Hochstetler, N. Vanderbilt, L.R. Young, Nashville, TN, p.A4381


Primary Ciliary Dyskinesia (PCD) Registry in Alberta/R. Har-Even Cohn, I. Amirav, Edmonton, Canada, p.A4383


Higher Pulmonary Disease Burden among Hispanic Children with Sickle Cell Disease/L. Chen, J. Gong, E. Matta, K. Morrone, D. Manwani, D. Rastogi, A. De, Bronx, NY, p.A4387


C26 LET IT BLEED: ENDOThelial INJURY and ANGIOGENESIS IN PULMONARY HYPERTENSION

9:15 a.m. - 11:15 a.m. KBHCCD

Poster Viewing
9:15-10:00
Discussion
10:00-11:15

Chairing:
A. J. Bryant, MD, Nashville, TN
M. Rabinovitch, MD, Stanford, CA
A. Smith, MD, Philadelphia, PA

201 Does Veno-Venous Extracorporeal Membrane Oxygenation Reduce Pulmonary Arterial Pressure at Alveolar Hypoxia? A Porcine Experimental Study/B. Holzgraefe, H. Kalzén, A. S. Larsson, Uppsala, Sweden, p.A4390


203 Targeting ADORA1/PDE10A Signalosome Regulated cAMP Microenvironment as a Novel Therapeutic Approach for Treating Pulmonary Hypertension/C. Valasarajan, J. C. P. Laria, N. C. P. Laria, A. Wietselmann, F. Grimminger, W. Seeger, S. S. Pullamsetti, Bad Nauheim, Germany, p.A4392

204 Locus 7q36.1 Harbors a Flow-Sensitive Endothelial Enhancer/H. T. Duong, D. L. Harrison, M. D. Krause, R. T. Huang, Y. Fang, Chicago, IL, p.A4393


206 ACTRIIA-Fc (Sotatercept) Reverses Pulmonary Vascular Remodeling to Attenuate Pulmonary Arterial Hypertension (PAH) by Rebalancing TGF-b/BMP Signaling in a Preclinical Model/S. R. Joshi, J. Liu, R. S. Pearsall, G. Li, R. Kumar, Cambridge, MA, p.A4395


211 NEDD9 Is a Modifiable Target of Platelet-Pulmonary Artery Endothelial Cell Adhesion/G. A. Alba, Y.-Y. Zhang, A. Samokhin, B. Wertheim, E. Arons, S. Seo, R. N. Channick, E. Battinelli, B. Maron, Boston, MA, p.A4400


217 Inhaled PLGA Particles of Spermine Nonoate, Nitric Oxide Donor, as a Promising Targeted Therapy to Reduce Pulmonary Arterial Pressure in PAH/A. Alobaida, F. Ahsan, Amarillo, TX, p.A4406

218 Female Sex Hormones Can Prevent but Not Reverse Established Pulmonary Arterial Hypertension in the SU5416/Chronic Hypoxia Model/K.R. Chaudhary, Y. Deng, A. Yang, K. Rowe, D.J. Stewart, Ottawa, Canada, p.A4407


224 Targeting Pathologic Hyaluronan Synthesis in Pulmonary Hypertension/V. Tseng, J. Kienhenz, T. Murphy, E. N. Grayck, C. M. Hart, Atlanta, GA, p.A4413

225 Treatment Outcome of Tuberculosis Patients in a Directly Observed Treatment Shortcourse (DOTS) Referral Centre in Delta State, Nigeria: A Five Year Review (2012 - 2016)/N. S. Awunor, I. Alenoghena, A. Akpodiete, Abraka, Nigeria, p.A4414


229 Treatment Outcomes of Tuberculous Meningitis in Adults: A Systematic Review and Meta-Analysis/M. Wang, J.-Q. He, Chengdu, China, p.A4418

230 Changes in Body Weight According to Smear Positive or Negative Before and After Anti-Tuberculosis Treatment/Y. Ko, Y. I. Hwang, Seoul, Korea, Republic of, p.A4419


235 Effect of Diabetes Mellitus on Treatment Outcomes and Side Effects in Drug-Resistant Pulmonary Tuberculosis Patients Receiving DR-TB Regimens in Dr. Soetomo Hospital. A Retrospective Study/S. Soedarsono, Surabaya, Indonesia, p.A4424


237 Targeting PD-1 Rescues Protective T Cell Response to Facilitate Bacillary Clearance and Modulation of the Efflux Pump Expression of Mycobacterium Tuberculosis/D. Mitra, S. Chakraborty, New Delhi, India, p.A4426

238 Isoniazid as an Immunomodulatory Agent for Latent Tuberculosis Infection Treatment in View of Invariant Natural Killer T (iNK T) Cells/W.-J. Su, S.-F. Huang, J.-Y. Feng, Y.-Y. Yang, Taipei, Taiwan, p.A4427
315 Preliminary Results of an Experimental Medicine Trial of Linezolid Interruption in Patients with Extensively Drug Resistant Tuberculosis Receiving a Bedaquiline-Based Treatment Regimen/O. Olanyanju, A. Esmail, P. Gina, K. Dheda, Cape Town, South Africa, p.A4428


320 Chronic TGFβ1-Signaling in Pulmonary Arterial Hypertension Induces Sustained Canonical Smad3 Pathways in Vascular SMCs/L. Calvier, P. Chouvarine, E. Legchenko, G. Kokeny, M.M. Mozes, G. Hansmann, Dallas, TX, p.A4435


325 Wnt5a/OR2 Signaling is Associated with Bronchial Development and Bronchiectasis in Patients/D. Wang, B. Liu, C. Liu, Chengdu, China, p.A4440

326 Multigorgan Abnormalities Due to Beta-Catenin Stabilization in CD11c+ Myeloid Cells/E. Malins, S.-J. Kim, A. Flozak, A. Yeldandi, C.J. Gortardi, A. Lam, Chicago, IL, p.A4441

327 Trachealis Muscle Organization Requires Epithelial Signaling Mediated by Wls/D. Sinner, R. Rosenzweig, K. Burra, J. Amegadzie, N. Hilvano, A. Negri, R. Shah, Cincinnati, OH, p.A4442

328 Krüppel-Like Factor 4 (Klf4) is a Stat3-Smad2 Regulator in ATII Cells Determining ATII Cell Fate During Lung Development and Hypoxia-Induced Lung Injury/J. Mohr, M. Koch, S. Danopoulos, L. Ebert, N. Okonomou, C. Vohlen, D.V.B. Hirani, D. Al Alam, B. Schermer, J. Dötsch, M.A. Alejandre Alcazar, Cologne, Germany, p.A4443

329 Krüppel-Like Factor 4 (Klf4) is a Novel Regulator of Forkhead Box Protein O1 (FOXO1) and of Neonatal Lung Fibroblast Function and Reduced in Hypoxia-Induced Lung Injury/ D.V.B. Hirani, M. Koch, J. Mohr, K. Dinger, C. Vohlen, C. Klaudt, J. Dötsch, M.A. Alejandre Alcazar, Cologne, Germany, p.A4444


Stat3 Is Critical for Alveolar Epithelial Regeneration/Type 2 Cell Low Density Lipoprotein Receptor Related Protein 238

Leptin Receptor Positive Neurons in the Dorsomedial Thalamus Maintain Upper Airway Patency During Sleep/A.L. Peker, M.S. Badr, MD, Detroit, MI


Chronic Intermittent Hypoxia Causes Hepatic Mitochondrial Dysfunction in a Mouse Model of Nonalcoholic Fatty Liver Disease/O. Mesari, P. Wegbrans Gird, A. Lucas, E. Moya Cespedes, F. Powell, E. Breen, A. Malhotra, La Jolla, CA, p.A4456


Effect of Continuous Positive Airway Pressure Treatment on Systemic and Ocular Inflammatory Cytokines in Patients with Obstructive Sleep Apnea and Lax Eyelid Syndrome/J.L. Sanchez, S. Kumar, B. Karcher, O. Iqbal, C. Bouchard, Maywood, IL, p.A4461

Measuring Carotid Plaque Inflammation in Moderate to Severe Sleep Apnea Using Hybrid Positron Emission Tomography/Magnetic Resonance Imaging (PET/MRI)/V. Kundel, A. Salhotra, Z. Fayad, V. Mani, N.A. Shah, New York, NY, p.A4462


Predictive Value of N-Terminal Pro-Brain Natriuretic Peptide for Obstructive Sleep Apnea in Patients with Coronary Artery Disease/Z. Huang, L. Wang, Y. Liu, K. Huang, Y. Xu, G. Li, J. Luo, J. Chen, Guangzhou, China, p.A4464

Obstructive Sleep Apnea: Correlation of Brain Natriuretic Peptide Levels with Cardiovascular Diseases/N. Uzma, A. Hasan, C. Narasimhan, V.D. Reddy, Hyderabad, India, p.A4465
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<td>Clinical Significance of Infectious, Inflammatory and Structural Pulmonary Incidental Findings Identified on Initial Lung Cancer Screening Exams</td>
<td>A.E. Fabbrini, A.C. Melzer, K.L. Rice, B. Clothier, A. Bangerter, T. Do, S. Fu, Minneapolis, MN</td>
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<td>Correlation of a Co-Morbidity Index with Time-to-Death from Baseline Lung Cancer Screening Computed Tomography in a Veteran Population</td>
<td>A. Schiff, S. Greene, E.J. Gartman, M.D. Jankowich, L. Nici, Providence, RI</td>
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**CLINICAL**

**RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION**

**C30 LUNG CANCER SCREENING: LESSONS FROM THE FRONT-LINE**

9:15 a.m. - 11:15 a.m.  
Arena (Level 2)

**Abstract Summaries**  
9:15-9:45

**Viewing/Discussion**  
9:45-11:15

**Chairing:**  
P.J. Mazzone, MPH, MD, Cleveland, OH  
P. Sather, APRN, BC, New Haven, CT  
A.C. Melzer, MD, MS, Minneapolis, MN

**401 Prevalence, Symptom Burden and Under-Diagnosis of COPD in a Lung Cancer Screening Cohort**  

**402 Clinical Significance of Infectious, Inflammatory and Structural Pulmonary Incidental Findings Identified on Initial Lung Cancer Screening Exams**  
A.E. Fabbrini, A.C. Melzer, K.L. Rice, B. Clothier, A. Bangerter, T. Do, S. Fu, Minneapolis, MN

**403 Occupational Risk, Race, and Lung Cancer Incidence in the National Lung Screening Trial**  
U. Barta, M. Rojupote, M. Lake, R. McIntire, H. Juon, Philadelphia, PA

**404 Quantitative Body Composition is Associated with the Development of Lung Cancer in a Large Lung Cancer Screening Cohort**  

**405 Correlation of a Co-Morbidity Index with Time-to-Death from Baseline Lung Cancer Screening Computed Tomography in a Veteran Population**  
A. Schiff, S. Greene, E.J. Gartman, M.D. Jankowich, L. Nici, Providence, RI

**406 Prevalence and 12-Month Downstream Costs of Incidental Findings in a Single-Center Lung Cancer Screening Program**  
M.S. Godfrey, P. Sather, L.T. Tanoue, M.A. Pisani, New Haven, CT

**407 Lung Cancer Risk (PLCOm2012) and Surgical Rates for Lung Cancer in a Post-Hoc Analysis of the National Lung Screening Trial (NLST-ACRIN, N=10,054)**  
R.J. Hopkins, F. Duan, C. Chiles, G. Gamble, G.A. Silvestri, R.P. Young, Auckland, New Zealand

**408 Lung Cancer Risk (PLCOm2012) and Pre-Existing Respiratory Morbidity in a Post-Hoc Analysis of the National Lung Screening Trial (NLST-ACRIN, N=10,054)**  
R.J. Hopkins, F. Duan, C. Chiles, G.D. Gamble, G.A. Silvestri, R.P. Young, Auckland, New Zealand

**409 The Association Between Emphysematous Changes on Lung Cancer Screening Low-Dose CT Scans and Lung-RADS Scoring**  
P. Kirupaharan, S. Vehr, R. Yadav, P.J. Mazzone, H. Choi, Cleveland, OH

**410 Selection Criteria for Lung Cancer Screening in African Americans**  
K. Spencer, H. Mengiste, R. Ogunti, P. Whitesell, C. Williams, Washington, DC

**411 Changes in Perceptions and Practice in Lung Cancer Screening Among Primary Care Physicians in Kentucky**  

**412 Genetic Susceptibility to Lung Cancer and COPD in the National Lung Screening Trial (NLST): COPD Masks AGER Gene Susceptibility to Lung Cancer**  
R.P. Young, R.J. Hopkins, F. Duan, C. Chiles, D. Aberle, G.A. Silvestri, P. Billings, G. Gamble, Auckland, New Zealand

**413 Computed Tomographic Calcium Scoring Scan Should Include the Upper Lung Fields to Screen for Lung Cancer: A Cost Effectiveness Analysis**  
B. Jiang, P. Linden, S. Worrell, V. Ho, C. Towe, Cleveland, OH

**414 The Challenge of Achieving Appropriate Follow-Up in a Community Lung Cancer Screening Program**  
M.A. Bernstein, S. Gold, M. Ronk, L. Drysdale, J. Krinsley, M.I. Ebright, Stamford, CT

**415 High Variability in Radiologist Reporting of Incidental Findings During Lung Cancer Screening in a Community-Based Healthcare Network**  

**416 Assessing the Optimal Management of Early Stage Lung Cancer in Veterans**  
J.P. Wisnivesky, K. Sigel, S. Bates, K. Stone, J. Kong, New York, NY

**417 The Influence of Patient Comorbidities on Clinician Approaches to Lung Cancer Screening: A Qualitative Analysis**  

**418 Frequency, Significance, and Outcome of Incidental Findings Identified on Initial Lung Cancer Screening Exams**  
A.C. Melzer, A.E. Fabbrini, K.L. Rice, B. Clothier, A. Bangerter, S.S. Fu, Minneapolis, MN


BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

C31 TRANSLATIONAL STUDIES IN SARCOIDOSIS

9:15 a.m. - 4:15 p.m. KBHCCD

Area C (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: A.K. Gerke, MD, Iowa City, IA


P239 Clinical Significance of Anti-SSA Antibodies in Patients with Sarcoidosis/C. Vagts, C. Ascoli, N. Sweiss, Chicago, IL, p.A4491


P241 CXCL9 and CXCL10 Predict Different Aspects of Sarcoidosis Disease Severity/N. Arger, M. Ho, P. Woodruff, L. Koth, San Francisco, CA, p.A4493


P243 PET/CT Scan as a Surrogate for Treatment Outcomes in Sarcoidosis/N. S. Khakoo, S. Jabeen Isma, M. A. Campos, G. Holt, M. Mirsaeidi, Miami, FL, p.A4495

P244 Characteristic of PET/CT Scan in Sarcoidosis/S. Jabeen Isma, N. S. Khakoo, G. Urdaneta, M. Mirsaeidi, Miami, FL, p.A4496


Facilitator: R. Raj, MD, Palo Alto, CA


P247 Metals and Silica as Possible Antigens in Dutch Sarcoidosis Patients/E. Beijer, H. Kromhout, B. Meek, M. Veltkamp, Nieuwegein, Netherlands, p.A4499


P252 The Role of IL-17A in the Mouse Model of Sarcoid Granulomatous Mice Induced by Propionibacterium Acnes/D. Weng, J. Song, H. Li, Shanghai, China, p.A4504


Facilitator: A. Sclafani, MD, Boston, MA

P255 A Study of Lymphocyte Subsets in Sarcoidosis/A. Sommer, San Francisco, CA, p.A4507


C32  COPD: TRANSLATIONAL AND MECHANISTIC STUDIES

9:15 a.m. - 4:15 p.m.  KBHCCD

Area F (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: B.T. Suratt, MD, Burlington, VT


P810  Effects of Cigarette Smoke Exposure on Tartrate-Resistant Acid Phosphatase Expression in Murine Lung Tissue/A. van der Veen, P. Lång, M.H. de Jager, G. Andersson, B.N. Melgert, Groningen, Netherlands, p.A4519

P811  Dysfunctional Macrophage Polarization in a COPD Exacerbation Model of Smoke and Influenza Co-Exposure in Mice/A. van der Veen, M.H. de Jager, E. Post, L.E.S. De Groot, R. Lutter, B.N. Melgert, Groningen, Netherlands, p.A4520


P813  Smoke-Induced Genomic Instability in the Airway Epithelium: Role of IL-17-Mediated Inflammation/C. Cao, H. Shen, S. Ying, Ningbo, China, p.A4522

P814  Namiralisib in Patients Experiencing an Acute Exacerbation of COPD: Design of a Double-Blind, Randomized, Placebo-Controlled, Dose-Ranging Phase IIb Study/W. Fahy, F. Homayoun-Valiani, A. Cahn, J. Robertson, A. Templeton, W. Meeraus, R. Wilson, M. Lowings, M. Marotti, M. Tabberner, S. West, E. Hessler, Uxbridge, United Kingdom, p.A4523

P815  Clinically Important Deterioration Among Patients with Chronic Obstructive Pulmonary Disease (COPD) Treated with Glycopyrrolate Eflow® Closed System (CS) (nebulized Glycopyrrolate) in Pooled Data from Two Randomized, Double Blind, Placebo-Controlled Studies/E.M. Kerwin, L. Murray, V. Ganapathy, C. Dembek, K. Rajagopal, Medford, OR, p.A4524

P816  Glucagon-Like Peptide-1 Receptor (GLP-1R) Signaling Ameliorates Dysfunctional Immunity in COPD Patients/J. Huang, Shanghai, China, p.A4525


Facilitator: C.M. Freeman, PhD, Ann Arbor, MI


P822  Erythromycin Restores Corticosteroid Sensitivity Induced by CSE Through Inhibition of JNK/C-JUN Pathway/Z. He, Y. Bin, Y. Liang, J. Zhang, M. Li, X. Zhong, Nanning, China, p.A4531


P826 Sputum Analysis by Chipcytometry Following LPS Inhalation Challenge/S. Carstensen, O. Holz, M. Müller, J.M. Hohlfeld, Hanover, Germany, p.A4535

P827 The Association Between Ratio of Innate Lymphoid Cell 1 (ILC1) to ILC2 and Acute Exacerbation of Chronic Obstructive Pulmonary Disease (AECOPD)/H. Zhu, H. Ge, Y. Zheng, L. Pan, J. Long, Shanghai, China, p.A4536

P828 The Role of Neutrophils Phenotype in Chronic Obstructive Pulmonary Disease/H. Zhu, H. Ge, L. Pan, J. Long, Y. Zheng, Shanghai, China, p.A4537


P833 Seasonal Pattern of COPD Exacerbations in the DYNAGITO Trial/C.R. Jenkins, P.M.A. Calverley, A. Anzueto, A. de la Hoz, F. Voss, K.F. Rabe, J.A. Wedzicha, Sydney, Australia, p.A4542

Facilitator: A. Gagger, MD, PhD, Birmingham, AL


P839 Variant and Potentially Pathogenic Stem Cells in COPD Lung/W. Xian, W. Rao, F. Mckeon, Houston, TX, p.A4548


P843 Gene Expression-by-Environment Interaction for COPD Phenotypes: Results from a Novel Method/M. Seo, D. Qiao, S. Lee, R. Chase, J.H. Yun, P. Castaldi, C.P. Hersh, Boston, MA, p.A4552


P846 Gene Expression Signature of Asthma COPD Overlap/A. Saferali, J.H. Yun, S. Lee, R. Chase, P. Castaldi, C.P. Hersh, Boston, MA, p.A4555

P847 Asthma Chronic Obstructive Pulmonary Disease Overlap Syndrome in a University Outpatient Pulmonary Practice/B. Li, A.T. Scardella, Spotswood, NJ, p.A4556
C33  CASE REPORTS IN AUTOIMMUNE AND INFAMMATORY LUNG DISEASES

9:15 a.m. - 4:15 p.m.  KBHCCD

Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: S.B. Montesi, MD, Boston, MA


P432  Diffuse Alveolar Hemorrhage in a Case of Catastrophic Polymicrobial Vasculitis M. Prado, J.M.D. Racoma, Chicago, IL, p.A4574

P433  Severe Pulmonary Alveolar Proteinosis in a Patient with ANCA-Associated Vasculitis/M. Mohamed, A. Koirala, Morgantown, WV, p.A4576

P434  COPA Syndrome: A Rare Occurrence of Familial ILD with Rheumatoid Arthritis/S. Beshay, S. Sahay, Houston, TX, p.A4562


P438  Severe Pulmonary Alveolar Proteinosis in a Patient with GATA2 Deficiency/I. Shetty, A. Arora, K. Gunasekaran, J.S. Kwon, A.A. Geeti, Bridgeport, CT, p.A4580

P439  Pulmonary IgG4 Disease - The New Masquerader?/J. Lenka, N. Sharma, M.-Y. Chow, M. Garg, Rochester, NY, p.A4566


P442  Nephrotic Syndrome - A Rare Presentation of Necrotizing Sarcoidosis/A. Jasrotia, A. Jabri, Y. Radhakrishnan, A. Cucci, Akron, OH, p.A4570


P444  Patient with Known Rheumatoid Arthritis Presenting with ANCA-Associated Vasculitis Complicated by Diffuse Alveolar Hemorrhage and Acute Respiratory Distress Syndrome/J. Barry, M.F. Odish, M. Guma, O. Mesarwi, D.R. Crouch, La Jolla, CA, p.A4572


P446  Doctor I Cannot Breathe: A Case of Microscopic Polyangiitis with Diffuse Alveolar Hemorrhage/C. Trujillo, A. Asharaf, V. Prado, J.M.D. Racoma, Chicago, IL, p.A4574


P448  Idiopathic Pulmonary Renal Syndrome - A Rare Case of ANCA Negative Diffuse Alveolar Hemorrhage/M.F. Khaliq, H. Mohamed, A. Koirala, Charleston, WV, p.A4576


P451  Airway and Bone Marrow Involvement in a Patient with IgG4-Related Disease/X. Zhan, M. Jin, Z. Wang, Beijing, China, p.A4579


P454  Two Negatives Leading to a Positive Diagnosis/A. Krishnan, S. Thomas, A. Desai, S. Sathyan, Farmington, CT, p.A4582

P455  You’re Never Too Old! A Delayed Diagnosis of Microscopic Polyangiitis in an Atypical Population/D. McQuade, M. Young, T.J. Cheema, Pittsburgh, PA, p.A4583

P1047 Nrf2 Inhibits Fibroblast to Myofibroblast Differentiation Via Blocking Wnt3a-ß-catenin Pathway in Pulmonary Fibrosis/J. Gao, HeFei, China, p.A4608


Facilitator: B.D. Southern, MD, Cleveland, OH


P1052 The 5-Year Experience at a Pulmonary Genetics Center: Diverse Presentations, Rapid Growth, and Frequent Molecular Diagnosis/N. Carmichael, S. Gampala-Sagar, K. Regan, J. Frias, L. DiGianni, J.C. Kennedy, B.A. Raby, Boston, MA, p.A4613


P1054 Ruxolitinib Inhibits Cytokine Production and Alters Phagocytosis of Human Lung Macrophages/H. Salvator, N. Mantov, M. Brollo, E. Belloli, E.S. White, K.R. Flaherty, Ann Arbor, MI, p.A4621

P1055 Dysregulation in the Expression of Tumor Necrosis Factor (TNF) and TNF Receptors Obtained in Bronchoalveolar Lavage Cells from Acute and Chronic Hypersensitivity Pneumonitis Patients/K. Castillo, I. Buendia-Roldan, M. Preciado, H. Mateos-Toledo, M. Mejia, M. Gaxiola, L. Chavez-Galan, Ciudad de Mexico, Mexico, p.A4616


Facilitator: K.J. Ramos, MD, MS, Seattle, WA


Patient Factors and Disease Severity Impact Cough-Specific Quality of Life in Patients with Intestinal Lung Disease/J. Lee, M.B. Scholand, J. Moore, E. Green, M.E. Strek, A. Podolanczuk, N. Patel, Salt Lake City, UT, p.A4633


Clinical Response of Incident Mycobacterium Avium Culture in Cystic Fibrosis/D. Low, B. Wagner, J.A. Nick, Denver, CO, p.A4637


Risk Factors Associated with Recurrence Hemoptysis After Bronchial Artery Embolization (BAE) Among Patients with Bronchiectasis/C. Zhang, Chengdu, China, p.A4641


Interventional Pulmonology Case Reports II

9:15 a.m. - 4:15 p.m.

Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: E.J. Seeley, MD, San Francisco, CA

My Oh! A Case of Endobronchial Leiomyoma/V. Kaul, R. Mocerino, E. Shostak, Elmhurst, NY, p.A4642


Chest CT Scan with or Without Contrast - A Decision That Can Save a Life/T. Singh, K. Gaurav, S. Pandey, A. Shafl, A. Maskey, Lexington, KY, p.A4644

Gastric Perforation as a Complication of Nasopharyngeal Catheter Use During Flexible Bronchoscopy: A Rare but Critical Complication/H. Sarwar, S. Awadallah, O.N. Obi, M.R. Bowling, Greenville, NC, p.A4645

A Rare Case of Pyogenic Granuloma Involving the Distal Airways Treated with Argon Plasma Coagulation (APC) Debulking and Balloon Dilation/A.C. Boulos, J. Gordon, Pueblo, CO, p.A4646


C37  SYMPTOMS, PLEURAL DISEASE, BEHAVIORAL
SCIENCE, AND OTHER TOPICS

9:15 a.m. - 4:15 p.m.  KBHCCD
Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: Authors will be present for discussion with assigned facilitators.

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Imai, A. Mizuno, H. Kanemura, R. Tsugitomi, K. Okafuji, A.
Kitamura, Y. Tomishima, T. Jinta, N. Nishimura, T. Tamura, Tokyo,
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P512  Estimating Inspiratory Flow Rate and Volume of Inhalation in the Ellipta Using Audio-Based Methods/T. Taylor, Y. Zigel, E.
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P513  VTE Prophylaxis in Hospitalized Medicine Patients: Too Much of a Good Thing?/S. Zahid, R. Mazurkiewicz, L. Kirschenaum,
New York, NY, p.A4689

P514  Camped - Experience with Rapid Response Checklist at a Community Hospital/A. Thota, A. Afghan, S. Ali, N. James,
Boston, MA, p.A4690

P515  The Pulmonary Manifestations in End Stage Renal Disease Patients Undergoing Hemodialysis at Bhagwan Mahaveer Jain Hospital/P.
Kagendra, H.V. Suryanarayana, Bengaluru, India, p.A4691

P516  Measuring the Positive Impact of Joint Palliative and Respiratory Care in Patient’s with End Stage Respiratory Disease/P. Chohan, F. Hakakk, H. Ward, Wolverhampton, United Kingdom, p.A4692

P517  The Effects of Support Group Therapy on Patients with Pulmonary Hypertension: A Quality of Life Questionnaire Survey/G.

P518  Multiple RRTs: How Can We Stop Them/?A. Hilewitz, A.

Ahmad, K. Sinivasan, H. Moudgil, Telford, United Kingdom, p.A4695

P520  Effect of Increasing Gas Flow and Resulting Increase in Peak Expiratory Pressure (PEP) from a New Positive Airway Pressure (PAP) Device/D.P. Coppolo, J. Suggett, V. Kushnarev, Syracuse, NY, p.A4696

P521  Chronic Cough: Differences in Characteristics Between Obese and Non Obese Subjects/M.M. Descazeaux, D. Brouquieres, A.
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P522  Effect of Continuous Positive Airway Pressure (CPAP) Vs. Sham CPAP in Chronic Unexplained Cough: A Randomized Study (Interim Analysis)/K. Sundar, A. Willis, S. Smith, H.
Fletcher, X. Wang, N. Hu, S.S. Birring, Salt Lake City, UT, p.A4698

P523  Prolongation of Recent-Onset Cough: A Prospective Follow-Up Study Among Finnish Adult Employee Population/A.M. Lätthi, H.
Koskelo, J. Pekkanen, Kuopio, Finland, p.A4699

P524  Rationale and Design of Two, Phase 3, Randomized Controlled Trials (COUGH-1 and COUGH-2) of Gepafixant, A P2x3 Receptor Antagonist, in Refractory and Unexplained Chronic Cough/D. Muccino, A.H. Morice, S.S. Birring, L. McGarvey, P.
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C. Assaid, J. Smith, Rahway, NJ, p.A4700

P525  The Diagnostic Utility of Frequency Scale for the Symptoms of Gastroesophageal Reflux Disease (GERD) in the Diagnosis of GERD-Related Cough/R. Kurokawa, Y. Kanemitsu, K. Fukumitsu,
N. Takeda, J. Mariés, H. Nishiyama, K. Ito, S. Fukuda, H. Okubo,

P526  Different Phenotypes and Severity According to Different Causes of Chronic Cough/H.-K. Koo, H.K. Kang, H.K. Park, S.H.
Park, S.-S. Lee, D.-K. Kim, Goyang-si, Korea, Republic of, p.A4702

P527  Clinical Characteristics and Outcomes in Adult Cystic Fibrosis Patients with Severe Lung Disease in Southern Brazil/P. De Tarso Dalcin, G. Figueiredo da Silva, N. Simmonds, Porto Alegre, Brazil, p.A4703

P528  Use of Point of Care Ultrasound on the Inpatient Pulmonary Consult Service/N. AlQsous, A. Quintos, P.K. Valestra, M.

P529  Prevalence and Therapeutic Management of Chronic Breathlessness in COPD in a Tertiary Center/M. Zysman, C.
Hortense, C. Morélot-Panzini, P. Julie, G. Emmanuel, G. Anne,
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J.F. Chabot, N. Roche, Creteil, France, p.A4705

P530  Impact of Energy Demand in the Assessment of Dyspnea in Patients with Comorbid and Neuromuscular and Orthopedic Disorders/C.G. Risk, C. Canavan, Marlborough, MA, p.A4706

P531  Feasibility of a Multi-Component Intervention to Reduce Dyspnea in Patients with Chronic Lung Disease and Severe Obesity: A Pilot Study/K.L. Dupuy-McCauley, R. Benzo,
Rochester, MN, p.A4707

P532  Dyspnea Rating During the Initial Assessment for Pulmonary Function Testing/P. Chandrika, R.L. ZuWallack, Greenville, NC, p.A4708


Clinical Observation: 5 Cases of Wen San Ding Transdermal External Treatment for Idiopathic Pulmonary Alveolar Proteinosis/B. Yang, Beijing, China, p.A4733


Sirolimus Related Lung Toxicity on Radiologic Evaluation/F.M. Khateeb, R.M. Assaly, H.A. Badi, Toledo, OH, p.A4735

Role of Infliximab in Immune Check Point Inhibitor Induced Pneumonitis/K. Lai, V.R. Shannon, D. Balachandran, A. Sheshadri, L. Bashoura, S.A. Faiz, Houston, TX, p.A4736


Clinical Utility of Bronchoalveolar Lavage Flow Cytometry in Lung Transplant Patients with Active Rejection - A Retrospective Study/J.J. Lee, L. Wang, S. Wong, T. Kaleekal, S. Yau, Houston, TX, p.A4743


Acute Colonic Pseudo-Obstruction in Lung Transplant Recipients/D. Djondo, K. Young, B. Bemiss, Maywood, IL, p.A4747

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The Dartmouth-Hitchcock Pulmonary and Rheumatology Registry: An Initial Analysis/J. Munchel, D. Dustin, J.D. Nuschke, D. Albert, A.H. Gifford, Lebanon, NH, p.A4753


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Early Permanent Discontinuation of Nintedanib Due to Adverse Events in Patients with IPF in a Real-Life Setting/O. Nishiyama, R. Yamazaki, S. Saeki, A. Sano, H. Sano, T. Iwanaga, R. Haraguchi, H. Kume, Y. Tohda, Osakasayama, Japan, p.A4764


Facilitator: M. J. Hamblin, MD, Kansas City, KS


Supplemental Oxygen Use in Patients with Fibrotic Interstitial Lung Disease: An International Qualitative Study/C. J. Humphreys, R. Lim, J. Morisset, A. E. Holland, K. A. M. Johannson, Calgary, Canada, p.A4771

Expression of GR-α and HDAC2 in Steroid-Sensitive and Steroid-Insensitive Interstitial Lung Disease/Z. He, Y. Bin, L. Wu, Y. Liang, J. Bai, J. Zhang, M. Li, X. Zhong, Nanning, China, p.A4772


P1103 Description of Palliative Care Models in ILD Clinics and Their Impact on IPF Care/M. Kalluri, S. Younus, H. Adamali, S. Barratt, M.G. Morales, N. Rippon, Edmonton, Canada, p.A4776

P1104 Elderly Patients with Interstitial Pneumonia Frequently Discontinue Pirfenidone Due to Adverse Events/Y. Matsumoto, H. Kage, T. Ando, H. Urushiyama, T. Nagase, Tokyo, Japan, p.A4777

BEHAVIORAL

THEMATIC POSTER SESSION

C40 CRITICAL CARE: THE ART OF WAR - INNOVATIONS IN EDUCATION

9:15 a.m. - 4:15 p.m. KBHCCD Area B (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: A.P. Trivedi, MD, Chicago, IL M.M. Hayes, MD, Boston, MA


P140 Resident and Student Perspective on the Clinical Aspects of Caring for the Incarcerated Patient in the Intensive Care Unit/A. Ataya, I. Faruq, Z. Zaidi, Gainesville, FL, p.A4785


P142 Medical Intensive Care Unit Intern Curriculum/A.M. Shiolelo, K. Rajwani, New York, NY, p.A4787

P143 Evaluation of a Formal Medical Intensive Care Unit Curriculum for Housestaff/J. Willoughby, P. Duncan, A. Trivedi, Chicago, IL, p.A4788

P144 Implementation of a Formal Medical Intensive Care Unit (MICU) Curriculum for Medical Students/N. Kapur, V. Birk, A.P. Trivedi, Chicago, IL, p.A4789

Facilitators: A.J. Smith, MD, Maspeh, NY J.H. Badulak, MD, Seattle, WA

P145 Critical Care Knowledge and Skills Among Health Care Workers at Kanifing General Hospital in The Gambia/S. Touray, B. Sanyang, S. Sillah, I. Touray, Albuquerque, NM, p.A4790


P147 Standardized Work-Flow as a Method of Improving EHR Utilization During Pre-Rounding/M. Miller, G. Scholl, V. Mohan, J.A. Gold, Portland, OR, p.A4792


P149 The Effect of Dedicated Critical Care Ultrasonography Across Multiple Centers in Fellow Knowledge in Point-of-Care Ultrasonography/S. Thapa, C. Thao, A.F. Shorr, A.K. Mallia, Washington, DC, p.A4794


**C41 CRITICAL CARE CASE REPORTS: TOXICOLOGY AND POISONINGS**

**9:15 a.m. - 4:15 p.m.**

**Area B (Hall F, Level 2)**

**Viewing:** Posters will be on display for entire session.

**Discussion:**
- 11:15-12:00: authors will be present for individual discussion
- 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitators:** M. St-Onge, MD, PhD, Quebec, Canada
- J. Spring, MD, Toronto, Canada

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Cyanide Toxicity at “Safe” Dose of Sodium Nitroprusside Within 24 Hours of Treatment/A. Karim, M.I. Khan, M.S. Panhwar, F. Nadeem, D. Carroll, A. Kalra, Cleveland, OH, p.A4804

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Metformin Associated Lactic Acidosis/S. Raoof, Tucson, AZ, p.A4805

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Levetiracetam as a Cause of High Anion Gap Metabolic Acidosis/M.A. Megri, W.A. Abusnina, H.S. Bukamur, Y.R. Shweihat, Lexington, KY, p.A4808

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Managing the Cardiotoxicity of Loperamide Overdose, an Emerging Issue in the Opioid Crisis/B. Stone, A. Zariwala, M. Acho, I. Barbash, Pittsburgh, PA, p.A4809

**P166**
Fast and the NitroFurious: Nitrofurantoin Induced Acute Liver Injury with Concomitant Hemotoxicity/Y. Deepak, A. Tanase, M. Farishta, M. Parmar, Kalamazoo, MI, p.A4810

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**P168**
Fatal Case of Lactic Acidosis in a Post-Partum HIV Patient on Nucleoside Reverse Transcriptase Inhibitor with New Diagnosis of Pulmonary Arterial Hypertension/A. Sagasli, N. Kirsch, K. Modi, Las Vegas, NV, p.A4812

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Oxacillin-Induced DRESS with Agranulocytosis/A. Sharpe, B. Mourad, T. Reilly, C. Hardwick, E. Dweck, E. Bondarsky, New York, NY, p.A4822

**P179**
Ethylene Glycol Poisoning: Lactate Can Be Misleading/S. Kunwar, N. Yadav, S. Bakhtiar, K. Bashir, Omaha, NE, p.A4823

**P180**
C42  CRITICAL CARE CASE REPORTS: TOXICOLOGY AND POISONINGS 2

9:15 a.m. - 4:15 p.m.  KBHCCD

Area B (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators:  M. de Wit, MD, Richmond, VA
I. Peltan, MD, MSc, Murray, UT

P185  Shaking Up a Storm: Levetiracetam Induced Rhabdomyolysis - An Exceedingly Rare Complication/M.P. Patel, L. Zuniega, Norfolk, VA, p.A4828


P188  A Case of Pembrolizumab-Induced Respiratory Failure/A. Hornick, S. Tackett, R.B. Hejal, Cleveland, OH, p.A4831


P190  A Case of Toxic Hypoglycemic Syndrome Secondary to Akee Fruit Poisoning/B. Bangash, A. Arora, A.J. Wolff, Bridgeport, CT, p.A4833

P191  Glass Half Full: Reversible Cerebral Edema Due to Acute Water Intoxication/A. Austin, F. AL-Faris, S.H. Beegle, Albany, NY, p.A4834


P193  NSAID-Induced Seizures After an Intentional Overdose/E. Reid, L. Winnicka, S. Chawla, S.V. Thomas, Mineola, NY, p.A4836

P194  Nivolumab Toxicity: Myasthenic Crisis and Myocarditis/A.W. Pickens, M.C. Miles, Winston-Salem, NC, p.A4837

P195  A Rare and Fatal Case of Rivaroxaban Induced Acute Liver Failure/K. Helmkamp, L. Gonzalez, R.M. Davis, D. Taneja, Peoria, IL, p.A4838


Facilitators:  M. de Wit, MD, Richmond, VA
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P201  Synthetic Cannabinoid Overdose Presenting with Life-Threatening Hyperthermia/M. Spring, R. Parikh, Boston, MA, p.A4844


P203  Acute Respiratory Distress Syndrome as an Acute Complication of Amiodarone/N. Hotchandani, W. Khan, New Brunswick, NJ, p.A4846


P207  Life-threatening Sinus Bradycardia Caused by Combination of Haloperidol and Donepezil/G. Sun, M. Chang, M. Bachan, Z. Khan, Bronx, NY, p.A4850


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P212 A 60 Year Old Female with Rheumatoid Arthritis and Psoriatic Arthritis Presents with New Onset Pancytopenia and Coffee Ground Emesis/V. Kuppuswamy, J.A. Haspel, St. Louis, MO, p.A4855

BEHAVIORAL

THEMATIC POSTER SESSION

C43 COPD AND POPULATION HEALTH

9:15 a.m. - 4:15 p.m. KBHCCD Area F (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion. 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: M.B. Rice, MD, MPH, Boston, MA


Facilitator: D.L. DeMeeo, MD, Boston, MA


P864 Vitamin B12 Mediated Hyperhomocysteinemia and Adverse Pulmonary Functions: A Population Based Study from Rural North India/S. Yadav, K. Chandik, S. Joshi, N. Kiranmala Devi, K.N. Saraswathy, New Delhi, India, p.A4871

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### CLINICAL • TRANSLATIONAL

#### THEMATIC POSTER SESSION

#### C45 EFFECTS OF THE ENVIRONMENT ON PULMONARY HEALTH

9:15 a.m. - 4:15 p.m.  
Area D (Hall F, Level 2)

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**Facilitator:** N.E. Alexis, PhD, Chapel Hill, NC


**P612** Can Indoor Black Carbon Concentration Be Reduced by an Air Purifier?/L.C. Koh, J.M. Grigg, London, United Kingdom, p.A4919


**P614** Hypoxia Predicts Lower Respiratory Tract Diseases in Adults Living at High Altitudes/J.A. Leon-Abarca, R.A. Accinelli, Lima, Peru, p.A4921

**P615** Whole-Genome Genotyping Identifies Risk Variants for High-Altitude Pulmonary Edema in the Indian Population/S. Sharma, G. Mohammad, T. Thinlas, M.A.Q. Pasha, Indianapolis, IN, p.A4922

**P616** Time-Lagged Effects of Meteorological Conditions on Asthma Exacerbation Among US Veterans in Different Climate Zones, 2010-2013/N. Kumar, Miami, FL, p.A4923


**P618** Levels of Secondary Inorganic Aerosols and Their Relationship with Poor Visibility in Ibadan, Nigeria/T.D. Osatuyi, Ibadan, Nigeria, p.A4925

**P619** Effect of the Altered Geometry of Diseased Proximal Airways on Site Specific Delivered Dose of Reactive Air Pollutants/M. Kim, S. Borhan, A.E.F. Dimmock, J. Utman, R. Bascom, A. Borhan, University Park, PA, p.A7398

P661 Foreign Body Aspiration Presenting as Status Asthmaticus/J. Paskaradevan, L. Barber, D.R. Spielberg, Houston, TX, p.A4952


P663 A Case of Pediatric Autoimmune Pulmonary Alveolar Proteinosis That Has Been Refractory to ‘Standard’ Treatment/J. Fierro, E.M. Behrens, B.C. Trapnell, J.C. Piccione, Philadelphia, PA, p.A4954

P664 Pulmonary Manifestations of Behcet’s Disease/A. Parra, J. Garcia, L. Munera, L.M. Cadavid, J. Uribe, Medellin, Colombia, p.A4955

P665 Granulomatosis with Polyangiitis in a Pediatric Patient Presented with Bell’s Palsy and Pulmonary Involvement/M. Alsharif, M. Abdou, M. Fouad, T. Vo, Amarillo, TX, p.A4956


P667 It’s Not the Heart: An Unusual Case of Medium Vessel Vasculitis and Pulmonary Hypertension/N. Hong, D. Ivy, J. Lai, B.S. Frank, A. Grenolds, P.C. Stillwell, P. Houin, Aurora, CO, p.A4959

P668 A 7 Year-Old-Female with Bronchiectasis Found to Have RAG1 Mutations/S.A. Al Baroudi, K.N. Olivier, A. Freeman, A. Widge, P.J. Mogayzel, Baltimore, MD, p.A4960

P669 Fungal Pulmonary Cyst Secondary to Hyperimmunoglobulin E Syndrome, Which Organ to Transplant?/S. Louey, P. Robinson, Melbourne, Australia, p.A4961


TUESDAY MORNING

CLINICAL

THEMATIC POSTER SESSION

C47 CASE REPORTS: PEDIATRIC CYSTIC FIBROSIS, LUNG INFECTION, AND SLEEP DISORDERED BREATHING

9:15 a.m. - 4:15 p.m.

Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.
Facilitator: D.R. Rao, MD, Dallas, TX

P699 Eradication of First Isolation Burkholderia Cenocepacia in a Young Patient with Cystic Fibrosis/H. Staples, C.L. Cannon, Houston, TX, p.A4969

P700 Invasive Cavitary Aspergillus Infection Complicated by ABPA/Y. Yu, C.R. Esther, Chapel Hill, NC, p.A4970

P701 Mediastinal Invasion/S. Meledathu, U. Hasan, Newark, NJ, p.A4971


P703 Tuberculosis: A Rare Case of Anterior Mediastinal Mass in a Twelve Month Old Child/M.A. De La Torre Enteria, M.D. Requiron-Sy, Quezon City, Philippines, p.A4973


Facilitator: K. Kotha, MD, BS, Columbus, OH

P705 Sustainable Agriculture and Shortness of Breath/C. Sendon, A. Rebaza, M.E. Egan, New Haven, CT, p.A4975


Facilitator: D.B. Sanders, MD, MSc, Indianapolis, IN


P709 Altered Mental Status in Mechanically Ventilated Children/P.A. Nourani, V.H. Nayak, H.H. Gutierrez, A.S. Alishash, Birmingham, AL, p.A4979


Facilitator: D. Zielinski, MD, Montreal, Canada

P711 Multiple Subspecialists Involved in Late Diagnosis of Rapid-Onset Obesity with Hypothalamic Dysregulation, Hypoventilation, and Autonomic Dysregulation Syndrome/M. Vieldkind, K. Tommerdahl, S. Hawkins, R.T. Mohon, Aurora, CO, p.A4981


P713 Snoring in Children Could Be Due to Serious Problem/P. Gummalla, A.E. Esquibies, Brooklyn, NY, p.A4983

P714 Behavioral Disorders in Children and Adolescents from 6 to 18 Years of Age with Hypopnea Sleep Apnea Syndrome/A. Quimbayo Romero, M. Villamil, C.E. Rodriguez-Martinez, R. Vasquez, S.M. Restrepo, Bogota, Colombia, p.A4984


P716 Home High Flow Nasal Cannula as a Novel Therapy for Improvement of Severe OSA in a Child with NEHI/S.G. Bickel, E. Senthilvel, N.S. Eid, Louisville, KY, p.A4986

BEHAVIORAL

THEMATIC POSTER SESSION

C48 CASE REPORTS: NEONATAL LUNG DISEASE, CONGENITAL MALFORMATIONS, AND MORE

9:15 a.m. - 4:15 p.m.  
KBHCCD
Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion. 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: J.C. Piccione, MS, DO, Philadelphia, PA

P718 Saber-Sheath Airway with Multiple Areas of Tracheal Stenosis Caused by Mucolipidosis Type II/T.S. Poore, P. Houin, A. Larson, Aurora, CO, p.A4987


P752  Central Conducting Lymphatic Anomaly Leading to Respiratory Failure/J. Palla, I. Iacobas, J. Margolin, D.R. Spielberg, Houston, TX, p.A5021


P754  Congenital Acinar Dysplasia: Familial Cause of Severe Primary Lung Hypoplasia/A.M. Asseri, A. Aldurah, E. Salem, B. Hanif ALqahtani, Abha, Saudi Arabia, p.A5023

P755  Late Clinical Presentation of a Complete Vascular Ring/A.M. Arenas-Rojas, S.Y. Moreno-Lozano, A.M. Nieto-Pico, Bucaramanga, Colombia, p.A5024

Facilitator: T.M. Martinez-Fernandez, MD, Coppell, TX

P756  De Novo Variant of the SAMD9 Gene: Mirage Syndrome/C. Sendon, Y.A. Collado, A.E. Esquibies, New Haven, CT, p.A5025

P757  A Rare Case of Esophageal Lung with Systemic Arterial Supply/A.I. Chavez, W. Chan, Spokane, WA, p.A5026

P758  A Laryngeal Cleft Disguised as Difficult to Control Asthma/R. Kahanowitch, N. Mor, M. Marcus, J.P. Needleman, Brooklyn, NY, p.A5027

P759  ABCA3 Related Surfactant Dysfunction Presenting as Neonatal Respiratory Failure and Clinical Improvement with Supportive Care/M. Prero, D.I. Craven, S.D. DeBrosse, Cleveland, OH, p.A5028


P761  Not All ABCA3 Mutations Are Created Equal/X.C. Si, M. Tracy, Palo Alto, CA, p.A5030


P763  Importance of the Study of the Lamelar Bodies in Respiratory Failure of the Newborn/J. Caceres, S.M. Restrepo, J.G. Piñeros, M. Baldion, D. Cañon, R. Andrade, Bogota, Colombia, p.A5032

P764  Alveolar Capillary Dysplasia with Misalignment of Pulmonary Veins (ACDMPV): A Case Series/R. Har-Even Cohn, A. Bates, A. Carroll, A. Lacson, A. Hicks, Edmonton, Canada, p.A5033

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C49  TICKET TO RIDE: EXPERIMENTAL MODELS OF PAH

9:15 a.m. - 4:15 p.m.  KBHCCD

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: H. Karmouty-Quintana, PhD, Houston, TX

P1105  Methamphetamine Promotes Right Ventricular Hypertrophy Independently of Change in the Right Ventricular Systolic Pressure in Female Mice/H. Labazi, M. Nilssen, M.R. MacLean, Glasgow, United Kingdom, p.A5034

P1106  Quantification of Right Ventricular Macrophages in Two Murine Models of Pulmonary Hypertension/S. Gu, C. Mickael, R. Kumar, L. Sanders, B. Kassa, B.B. Graham, Aurora, CO, p.A5035


Facilitator: I. Al Ghouleh, PhD, Pittsburgh, PA

P1109  Validating the Zebrafish Aortic Arch Development as a Model to Study the Molecular Mechanisms Underlying Idiopathic Pulmonary Arterial Hypertension/P.L. Carr, Z. Jiang, A.M. Savage, E.S. Noél, R.N. Wilkinson, A. Lawrie, Sheffield, United Kingdom, p.A5038

P1110  Gender Differences and Mitochondrial Dysfunction in Experimental Pulmonary Hypertension/I.S. Bazan, T.A. Ardito, Y. Zhang, M. Sauler, P. Lee, New Haven, CT, p.A5039

P1111  Uptake of Schistosoma Mansoni Egg Antigens by Ly6-C+ Interstitial Macrophages in Schistosome-Induced Pulmonary Hypertension/C. Mickael, R. Kumar, L. Sanders, B. Kassa, R.M. Tudor, B.B. Graham, Aurora, CO, p.A5040


Facilitator: L.A. Shimoda, PhD, Baltimore, MD

P1113  Chronic Hypoxia Is Not Associated with Pulmonary Hypertension in Sickle Cell Disease Mouse Model/A.S. Alqahtani, Abha, Saudi Arabia, p.A5042
P1114 **Pulmonary Emphysema in Rats with Severe Pulmonary Hypertension Induced by SU5416 and Hypoxia**/B. Kojonazarov, S. Hadzic, H.A. Ghofrani, F. Grimminger, N. Weissmann, W. Seeger, R.T. Schermuly, Giessen, Germany, p.A5043


Facilitator: M. Gu, MD, PhD, Palo Alto, CA


P1118 **Pressure Myography Implicates Altered Purinergic Signaling in the Pathobiology of the Sugen Rat Model of Pulmonary Hypertension**/P. Robichaud, C. Johnson, D. Petrovic-Djergovic, D.J. Pinsky, S.H. Visovatti, Ann Arbor, MI, p.A5047


Facilitator: A.L. Frump, MS, PhD, Indianapolis, IN

P1121 **Transient Receptor Potential Canonical Channel 4 Modulates the Spread of Basal Pulmonary Artery Endothelial Calcium Signals in Pulmonary Arterial Hypertension**/J. Knighten, M. Taylor, T. Stevens, C.M. Francis, Mobile, AL, p.A5050


P1123 **Variability in Stretch Amplitude Regulates Vascular Smooth Muscle Cell Phenotype: Implications for Pulmonary Arterial Hypertension**/E. Bartolak-Suki, B. Suki, Boston, MA, p.A5052

P1124 **Selective Activation of Estrogen Receptor α Stimulates Pulmonary Vascular Homeostatic Regulator Apelin in Pulmonary Artery Endothelial Cells (PAECs) from Patients with Pulmonary Arterial Hypertension**/A.L. Frump, B. Yakukob, M. Albrecht, S.A. Comhair, S.C. Erzurum, D. Tabima Martinez, N.C. Chesler, T. Lahm, Indianapolis, IN, p.A7399

P1125 **Right and Left Ventricle Cardiomyocytes Show Distinct Mitochondrial Bioenergetic Profiles**/Q. Nguyen, M. Simon, S. Shiva, Pittsburgh, PA, p.A7400

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**THEME: BASIC • TRANSLATIONAL**

**THEMATIC POSTER SESSION**

**C50 THE PERFECT DRUG: EXPERIMENTAL TREATMENTS OF PAH**

9:15 a.m. - 4:15 p.m.  
Area J (Hall F, Level 2)

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion. 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitators:** A.A. Desai, MD, Indianapolis, IN  
K. Tran-Lundmark, MD, PhD, Lund, Sweden


P1128 **A 5HT1B Antagonist Reverses Pulmonary Hypertension and Right Ventricular Failure and Fibrosis in the Sugen/hypoxic Rat**/C.K. Docherty, S. Fisher, M. Nilsen, D. Hillyard, M.R. MacLean, Glasgow, United Kingdom, p.A5054


P1130 **Extended Release of Inhaled Liposomal Treprostinil Able to Prolong and Improve Reduction of Pulmonary Arterial Pressure in Hypoxia-Induced Pulmonary Hypertension Rats**/P. Kan, K.-J. Chen, C. Han, Taipei, Taiwan, p.A5056

P1131 **Comparative Evaluation of Two Different Modalities of Oral Delivery of Macitentan in Experimental Pulmonary Hypertension**/S. Cantoni, M. Cont, F. Pastore, S. Cavalli, F. Dardi, A. Fioni, M. Milioli, G. Villette, F. Facchinetti, Parma, Italy, p.A5057

Facilitators: K. Suresh, MD, Baltimore, MD  
J.X. Yuan, MD, PhD, La Jolla, CA

P1132 **Reversal Effect of Lonidamine on Monocrotaline-Induced Pulmonary and Right Ventricular Remodeling in Rats**/C. Li, G. Lu, M. Liu, J. Su, R. Jiang, R. Zhang, Shanghai, China, p.A5058

P1133 **BMP9 Reverses Pulmonary Hypertension in Mice Over-Expressing the Serotonin Transporter**/K. Mair, P. Murray, M. Nilsen, N.W. Morrell, M.R. MacLean, Glasgow, United Kingdom, p.A5059


P1136 Inhibition of Matrikine Signaling Ameliorates Hypoxic Mediated Pulmonary Hypertension/D. Xing, J.W. Barnes, S. Krick, C. McNicholas, E.S. Helton, Y. Wu, L. Viera, J.E. Blalock, J.M. Wells, Birmingham, AL, p.A5062

P1137 Mitomycin C Induces Pulmonary Vessel Endothelial-To-Mesenchymal Transition and Pulmonary Veno-Occlusive Disease via Smad3-Dependent Pathway in Rats/C. Zhang, S. Liu, X. Luo, Guangzhou, China, p.A7401


P1143 A Single Center Experience of Translating Stable Pulmonary Arterial Hypertension Patients from Parenteral Prostacyclin Therapy to Oral Selexipag/T. G. Shah, O. Igenoza, S. Bartolome, F. Torres, M. Kingman, S. Harden, K.M. Chin, Dallas, TX, p.A5067

P1144 Use of Aerosolized Prostacyclins in Critically Ill Patients and Association with Clinical Outcomes/S. Hussain, H.A. Jaliawala, J. Tsui, B.R. Brown, R.J. Bernardo, Oklahoma City, OK, p.A5068


P1147 Continuous Parenteral Prostanooids in Severe Group III Pulmonary Hypertension/C. A. Hinkamp, T. G. Shah, S. Bartolome, F. Torres, K. M. Chin, Dallas, TX, p.A5071

Facilitators: R. J. White, MD, PhD, Rochester, NY
D. B. Badesch, MD, Aurora, CO

P1148 Effect of Transitioning from Phosphodiesterase Type 5 Inhibitors to Riociguat/K. Sun, T. Kendzerska, L. Mielniczuk, D.J. Stewart, V. Contreras-Dominguez, C. Pugliese, R. Dunne, R. Davies, J. Foxall, G. Chandy, Ottawa, Canada, p.A5072

P1149 Treprostinil as a Bridge Therapy to Heart-Lung Transplants in Severe Pulmonary Arterial Hypertension/C. Ju, Q. Lian, B. Wei, X. Xu, J. He, R. Chen, Guangzhou, China, p.A5073


P1151 The Long Term Experience on Treatment for Adult Patients with Eisenmenger Syndrome/Z. Dai, I. Chen, J. Hsu, Y. Wu, Y. Liu, Kaohsiung


C52 USE YOUR ILLUSION II: CLINICAL RESEARCH IN PAH

9:15 a.m. - 4:15 p.m. KBHCCD
Area J (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: E.R. Swenson, MD, Seattle, WA

P1157 Real-World Evidence from the OPUS Registry: An Insight into Pulmonary Arterial Hypertension Risk Assessment Parameters in Clinical Practice/K.M. Chin, R.N. Channick, N.H. Kim, M. Brand, A. Morganti, M. Selej, V.V. McLaughlin, Dallas, TX, p.A5079

P1158 Infection-Related Hospitalization in Pulmonary Arterial Hypertension Patients/Z. Salmon, S. Beshay, Z. Safdar, Houston, TX, p.A5080


P1161 Pulmonary Hypertension and Obstructive Sleep Apnea (OSA): A Retrospective Review in a Community Based Setting/M. Reichmuth, A. Patel, K. Shapiro, J. Gordon, Pueblo, CO, p.A5083

P1162 Pulmonary Hypertension in Chronic Kidney Disease After Renal Transplant: Risk Factor or Consequence/D.J. De La Zerda, R.A. Alvarez, J. Villamizar, Miami, FL, p.A5084


P1164 Prognostic Factors and Hospital Mortality in Patients with Acute Decompensated Pulmonary Arterial Hypertension Admitted to ICU/M. Garcia, B.R. Macedo, R. Souza, P. Caruso, Sao Paulo, Brazil, p.A5086


P1166 When Pulmonary Hypertension Is Due to Sequelae of Pulmonary Tuberculosis/C.F. Koudessi, M. Fafa Cissé, S. Koné, N.M.J. Ouehtry, Dakar, Senegal, p.A5088

Facilitator: K. Goss, MD, Madison, WI


P1170 A Description of the Pulmonary Vascular Changes in Combined Pulmonary Fibrosis and Emphysema from Explanted Lung Pathology Specimens/N. Tobey, A. Banga, Y. Butt, T.G. Shah, Dallas, TX, p.A5092


Facilitator: B.B. Graham, MD, Aurora, CO


P1173 Characterizing the Accessibility and Burdens of Medications in the Treatment of Pulmonary Arterial Hypertension/S. Huang, D.R. Fraidenburg, R.H. Anguiano, Chicago, IL, p.A5095


Facilitator: J.S. Fritz, MD, Philadelphia, PA


P1179 Right Ventricular Dysfunction and BODE Index as Predictors of Clinical Outcomes in a Cohort of Adults with COPD in Nigeria/G.A. Amusa, B.I. Awokola, M. Akanbi, Jos, Nigeria, p.A5101


P1181 A Port in the Storm: How to Address the Needs of Pulmonary Hypertension Patients During Natural Disasters/M.P. George, R.L. Benza, M. Reeseman, C. Hicks, L. Appleby, W. Farber, Richmond, VA, p.A5103

Facilitator: A.B. Waxman, MD, PhD, Boston, MA

P1182 Pulmonary Hypertension and the Fertile Female - Optimizing Contraceptive Protocols at an Accredited Center for Comprehensive Pulmonary Hypertension Care/M. Kakol, S. Medrek, L. Melendres-Groves, Albuquerque, NM, p.A5104

P1183 Use of PAH Specific Therapy in Diffuse Parenchymal Lung Disease with Severe Pulmonary Hypertension: A Systematic Review and Meta-Analysis/M.I. Ghanbar, A. Shujaat, New York, NY, p.A5105


Facilitator: J.S. Fritz, MD, Philadelphia, PA


P2 A Case of Multiple Cavitary Lung Lesions/L. Aljundi, S. Katta, A. Shiri, W.A. Ventimiglia, A. Bhargava, Detroit, MI, p.A5107

P3 Pulmonary Coinfection by Strongyloides Stercoralis and Tuberculosis/O.M. Garcia Morales, J.L. Galindo, P.R. Gil Torres, J.R. Lutz, Bogota, Colombia, p.A5108

P4 Cryptic Miliary Tuberculosis Presenting with Acute Respiratory Distress Syndrome/R. Commins, A. Alzeer, R. Sonti, Washington, DC, p.A5109

P5 Severe Paradoxical Reaction in a 20 Year Old Woman with Disseminated Tuberculosis/I. Storms, C. Magis-Escurra, W. Hoefsloot, Groesbeek, Netherlands, p.A5110

P6 Cystic Lung Disease Secondary to Primary Tuberculosis/I. Storms, C. Magis-Escurra, W. Hoefsloot, Groesbeek, Netherlands, p.A5110


P8 Serotonin Syndrome Induced by Drug Interaction of Isoniazid and Metoclopramide/J. Huang, T. Shim, T.S. Shim, Seoul, Korea, Republic of, p.A5113

P9 Disseminated Mycobacterium Bovis After Bacillus-Calmette-Guerin Bladder Instillation/B. Sanville, B.T. Kuhn, Sacramento, CA, p.A5114

P10 The Italian Masquerade/L. Miranda, A. Devarajan, O. Epelbaum, Valhalla, NY, p.A5115

A Case of Multiple Intracranial Tuberculomas as a Presentation of Tuberculosis Immune Reconstitution Inflammatory Syndrome (TB IRIS) in a Patient with Mycobacterium Bovis Tuberculosis/S. Roche, A.M. McLaughlin, J.M. Keane, Dublin, Ireland, p.A5118

Facilitator: E. Karamooz, MD, Portland, OR

TB or Not TB: A Case of Subacute Pulmonary Mucormycosis Masquerading as Tuberculosis in a Patient with Poorly Controlled Diabetes/J.C. Fazio, M.E. Schimmel, K. Van Nostrand, Atlanta, GA, p.A5120


Invasive Spinal Mass in a Patient with Sarcoidosis - Is It Potts?/A.A. Syed, B. Wiese, T. Iden, H. Syed, Richmond, VA, p.A5121

A Case of Drug Induced Acute Hepatitis Resulting from Isoniazid Therapy with Concomitant Green Tea Extract Supplementation in a Patient with Latent Tuberculosis/S. Roche, L. O'Murchadha, J.M. Keane, A.M. McLaughlin, Dublin, Ireland, p.A5117

A Case of Massive Hemoptysis: Rasmussen Aneurysm: A Rare and Potentially Fatal Cause of Hemoptysis/J. Jaber, P. Nabizadeh, D.C. Patel, Gainesville, FL, p.A5126

A Stubborn Case of Massive Hemoptysis: Rasmussen Aneurysm/R. Kim, A. Gearhart, H.L. Rivas-Perez, J.J. Guardiola-Sala, Louisville, KY, p.A5120

A Case of Multiple Intracranial Tuberculomas as a Presentation of Tuberculosis Immune Reconstitution Inflammatory Syndrome (TB IRIS) in a Patient with Mycobacterium Bovis Tuberculosis/S. Roche, A.M. McLaughlin, J.M. Keane, Dublin, Ireland, p.A5118

P14


Could this Be TB?/D. Guadarrama, T. Sabharwal, J.V. Meharg, Providence, RI, p.A5136


A Rare Cause of a Pulmonary Mass in a Patient with Lung Adenocarcinoma/K. Abu-Ihweij, A.S. Patrawalla, Newark, NJ, p.A5139

Mediastinal Abscess as a Complication of EBUS/R. Mathur, P.S. Pandyana, London, United Kingdom, p.A5140

Delamanid Containing Regimen for Treating Multi Drug Resistant Tuberculosis in 11 Years Old Girl with Turner’s Syndrome/A. Krisnanda, Jakarta Pusat, Indonesia, p.A5141


The Covert Military Coup of Miliary TB/C. Nayar, New York, NY, p.A5142

When Everything Goes Left, Go Right/V. Kumar, P. Michael, M.E. Ismail, Paterson, NJ, p.A5131

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Viewing: Posters will be on display for entire session.

BEHAVIORAL

THEMATIC POSTER SESSION

C54 TUBERCULOSIS EPIDEMIOLOGY

9:15 a.m. - 4:15 p.m. KBHCCD

Area A (Hall F, Level 2)

ATS 2019 • Dallas, TX
Facilitator: E.A. Nardell, MD, Boston, MA

P41  The Burden of HIV/AIDS and Tuberculosis Co-Infection in East Asia and the Pacific from 1990-2016: Findings from the Global Burden of Disease Study/J. Zhang, T. Yu, S. Kern-Alleye, St. Louis, MO, p.A5145


P45  Gene Xpert Assay Utilization for Early Diagnosis of TB Disease at Houston Methodist Hospital/S. Agarwal, D.T.M. Nguyen, E. Graviss, Houston, TX, p.A5149

P46  Multi Drug Resistant Tuberculosis at Dr Zainoel Abidin Hospital (A Case Study After 13 Years of Tsunami Disaster in Aceh)/M. Muljadi, R. Mulia, T. Mamfaluti, Band Aceh, Indonesia, p.A5150

Facilitator: C. Yoon, MD, MPH, MSCR, San Francisco, CA


P48  Primary Cases Among Drug Resistant Tuberculosis in Dr. Soetomo Hospital Surabaya, Indonesia/T. Kusmiati, S. Soedarsono, E. Burhan, Surabaya, Indonesia, p.A5152

P49  Diabetes Mellitus Increases Risk of Multi-Drug Resistant Tuberculosis in Jakarta, Indonesia/I. Fajarwati, D. Handayani, E. Burhan, Jakarta Timur, Indonesia, p.A5153

P50  The Risk of Tuberculosis and Other Infections in Diabetic Patients Using Statins Versus Nonstatin Lipid-Lowering Agents/S.-W. Pan, Y.-J. Chan, W.-J. Su, Taipei, Taiwan, p.A5154

P51  Body Mass Index in Children with Tuberculosis/L. Gorbach, Minsk, Belarus, p.A5156

Facilitator: J.J. Saukkonen, MD, West Roxbury, MA

P52  Relative Risks of Pulmonary Tuberculosis in Children and Adolescents with Upper Respiratory Tract Infections/L. Gorbach, Minsk, Belarus, p.A5157


P55  Burden and Clinical Characteristics of High Grade Tuberculosis-Destroyed Lung: A Nationwide Study/D. Han, C.K. Rhee, Y.-M. Oh, Seoul, Korea, Republic of, p.A5160

P56  Latent Tuberculosis Infection (LTBI) in the Private Healthcare Sector: Do Persons with LTBI Have Health Insurance and Usual Sources of Healthcare?/E. Annan, E.L. Stockbridge, T.L. Miller, Fort Worth, TX, p.A5161


C55  TUBERCULOSIS DIAGNOSIS
9:15 a.m. - 4:15 p.m.  Area A (Hall F, Level 2)

Facilitator: D.L. Cohn, MD, Denver, CO

P60  A Bacteriophage-Based Method Identifies Low Level Mycobacterium Tuberculosis Bacteremia in Immunocompetent Patients with Active and Incipient Disease/R. Verma, B. Swift, W. Headley, J. Lee, C. Rees, P. Haldar, Leicester, United Kingdom, p.A5163


Facilitator:  P. Escalante, MD, Rochester, MN


P68  Role of Loop Mediated Isothermal Amplification Assay in Detecting Mycobacterium Tuberculosis/K. Jana, K.V.V.V. Kaminedi, Visakhapatnam, India, p.A5171


P70  Diagnostic Utility of Endobronchial Ultrasound Guided Trans-Bronchial Needle Aspiration for Suspected Tubercular Mediastinal Lymphadenopathy at a Tertiary Care Center in North India/A. Mian, A.D. Singh, A. Ray, S. Mathur, S. Sinha, New Delhi, India, p.A5173


Facilitator:  T. Scriba, PhD, Cape Town, South Africa


P75  Diagnostic Yield of Sputum Induction in Pleural Tuberculosis Patients at a Tertiary Care Hospital in Karachi/N.A. Rizvi, K.K. Sumalani, N. Akhter, D. Chawla, Karachi, Pakistan, p.A5178

P76  Clinical Significance of Isolation of Mycobacterium Tuberculosis Among Patients with Non-Tuberculous Mycobacteria/C. Nishio, H. Konishi, T. Ochi, K. Oh, H. Tomioka, Kobe, Japan, p.A5179


BEHAVIORAL

THEMATIC POSTER SESSION

C56  HIV: CLINICAL STUDIES AND BASIC SCIENCE MODELS

9:15 a.m. - 4:15 p.m.  KBHCCD Area A (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator:  K.A. Crothers, MD, Seattle, WA


P85  MicroRNA-144 Mediates Alveolar Macrophage Dysfunction in HIV-1 Transgenic Rats/S. Murray, X. Fan, B.S. Statieh, D.M. Guidot, Atlanta, GA, p.A5188
P303 Cellular Consequences of Uncharacterized Surfactant Protein-A2 (SFTPA2)-Gene Mutations Associated with Familial Idiopathic Pulmonary Fibrosis (IPF) and Lung Cancer/M. Korfei, K. Guenther, W. Seeger, A. Guenther, Giessen, Germany, p.A7407

Facilitator: B.R. Gochuico, MD, Bethesda, MD


Facilitator: P.A. Reyfman, MD, Chicago, IL

P314 A Therapeutic Approach for Idiopathic Pulmonary Fibrosis (IPF) by Targeting miR-96/R. Nho, J. Im, Minneapolis, MN, p.A5269


P317 Fibrocyte-Derived Exosomes Contain Profibrotic miRNAs Consistent with Serum miRNAs from Patients with Idiopathic Pulmonary Fibrosis/S.G. Chong, P. Nadarajan, A. Fabre, M.P. Keane, Dublin, Ireland, p.A5272


P320 The Role of Histone Methyltransferase EZH2 in a Mouse Model of Bleomycin-Induced Pulmonary Fibrosis/S. Kagawa, T. Betsuyaku, Tokyo, Japan, p.A5275

P321 Disease Specific Upregulation of Protein Arginine Methyltransferases in IPF/C. Lambers, S. Blumer, F. Lei, A. Benazzu, K. Hoetzenecker, P. Jaksh, M. Tamm, M. Roth, Vienna, Austria, p.A5276


P325 Changes of Lung Transcriptome During Aging/M.D.J. Calyeca, Y.I. Balderas-Martinez, M. Selman, A. Pardo, Mexico City, Mexico, p.A7410
C61 LUNG DEVELOPMENT, BPD, AND STEM CELLS

9:15 a.m. - 4:15 p.m. KBHCCD

Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: D. Al Alam, PhD, MS, Los Angeles, CA


Meeting: The Functional Role of Brain-Derived Neurotrophic Factor (BDNF)-Pathway in the Homeostasis of Alveolar Epithelial Cells and in the Pathogenesis of Bronchopulmonary Dysplasia/L. Fahle, C. Vohlen, D. Hirani, J. Dötsch, M.A. Alejandro Alcazar, Cologne, Germany, p.A5308

P772 Hydroxymethylation and Ten-Eleven Translocation Levels in a Mouse Model of Bronchopulmonary Dysplasia/J.L. Davies, H. Li, M. Lee, Y. Huang, Houston, TX, p.A5309

Facilitator: D.T. Swarr, MD, Cincinnati, OH


P774 Hyperoxia Leads to Early Senescence in Neonatal Lungs and Lung Epithelial Cells: Consequences for Alveolar Simplification/P.A. Dennery, A. Peterson, S. Bullock, A. Scaffa, Providence, RI, p.A5311


P776 Oral Maternal Administration of the Cytochrome P450 (CYP)1A1/1B Inducer, Beta-Naphthoflavone (BNF), Attenuates Oxygen-Mediated Lung Injury in Newborn Mice: Implications for Bronchopulmonary Dysplasia (BPD)/X. Couroucli, Y.W. Liang, K. Lingappan, P. Maturu, W. Jiang, B. Moorthy, Houston, TX, p.A5313

P777 Adrenomedullin Deficiency Potentiates Lipopolysaccharide-Induced Experimental Bronchopulmonary Dysplasia in Neonatal Mice/B. Shivanna, A. Shrestha, R. Menon, Houston, TX, p.A5314

P778 Integrative Epigenomic/Transcriptomic Analysis of Sex-Biased Differences in a Murine Model of Neonatal Hypoxic Lung Injury/K. Lingappan, T. Katz, R. Kumar, C. Walker, B. Moorthy, C. Coarfa, Houston, TX, p.A5315


The Large Conductance Potassium (BK) Channel Increases Calcium Signaling, Fibroblast Proliferation and Mitochondrial Dysfunction in Normal and IPF Fibroblasts/A. Scruggs, D. Beard, J. Anumonwo, S.K. Huang, Ann Arbor, MI, p.A5325

Wnt1-Inducible Signaling Protein 1 (WISP1) Augments Nuclear Factor (NF)-kB Signaling in Primary Human Lung Fibroblasts/M. Lehmans, S. Klee, D.E. Wagner, M. Koenigshoff, Munich, Germany, p.A5326


Role of Galectin-3 in Idiopathic Pulmonary Fibrosis Development/N.R. Parmar, A.C. Mackinnon, F. Zetterberg, P. Ford, R.G. Jenkins, Nottingham, United Kingdom, p.A5328

Alteration of CK2/XRCC1-Dependent DNA Repair Activity in Apoptosis-Resistant Lung Fibroblasts Could Be a Risk Factor for IPF/R. Nho, J. Im, Minneapolis, MN, p.A5329

Overexpression of Twist1 in COL1A2+ Cells Leads to Increased Bleomycin-Induced Pulmonary Fibrosis/J. Tan, J. Dutta, H. Bahaduhanapati, D. Kass, Pittsburgh, PA, p.A5330


Lung Resident Mesenchymal Stem Cells Give Rise to Lung Epithelial Progenitor-Like Cells In Vitro/P. Khan, M. Boesch, L. Fang, M. Tamrn, M. Brutsche, F. Baty, K.E. Hostettler, Basel, Switzerland, p.A5335
P900 Chymotrypsin-Like Elastase 1 Is Required for Late Lung Telomere Length in COPD: Relationships with Physical Expression of Receptor Interacting Protein Kinase-3 and Mixed Effects of Long-Acting Bronchodilators on Airway Mucus Iron-Responsive Element-Binding Protein 2 (IRP2) Mediates Systemic Inflammation Is Key to Understanding the Link Characterization of Immune Cell Subsets in Blood and Sputum Role of Lysocardiolipin Acyltransferase in Lung Epithelial Cell Adaptive NKG2C+ Natural Killer Cells Increase in COPD Cigarette Smoke Exposure Enhances TACC2 Degradation That 5'-Aminolevulinate Synthase 2 (ALAS2) Expression Is a Facilitator


Inhibition of Nasal and Systemic IgA Responses by Cigarette Smoke Exposure in Mice/J. McGrath, D. Thayaparan, S. Cass, B. Ly, R. Heo, S. Alkhami, J. Koenig, M. Fantauzzi, L.P. Schenck, M. Stampfl, Hamilton, Canada, p.A5379

Microarray Analysis of Noncoding RNA in Lung Tissue of COPD Patients/A. Zhou, Z. Zhou, P. Chen, Changsha, China, p.A5380


NEIL2 Activity a Sign of Oxidative Stress in COPD?/J. Seashore, N. Tapryal, S. Sur, T. Hazra, V.J. Cardenas, Galveston, TX, p.A5383

Elastase Activity as an Indicator of Exacerbation and Disease Severity in COPD/M. Fischer, A. Kirkman-Thomas, P. Mallia, S.L. Johnston, S. Johnson, Nottingham, United Kingdom, p.A5384


Functional Characterization of Alveolar Macrophages (AM) Derived from Alpha-1 Antitrypsin (AAT) Deficient (AATD) Human Induced Pluripotent Stem Cells/A. Mikosz, D. Cao, A.A. Wilson, D.N. Kotton, I. Petraceh, K.A. Serban, Denver, CO, p.A7426


Epigenome-Wide Association Study of Exercise Capacity and Physical Activity in COPD/E.S. Wan, E. Garshick, D.L. DeMeo, M. Moy, Boston, MA, p.A7429


Nicotine Plays a Key Role on Inflammation Driven by Monocyte-Derived-Macrophages of Subjects with Alpha-1 Antitrypsin Deficiency/L. Benninger, J. Lee, K. Krotova, J. West, J. Lascano, M. Brantly, Gainesville, FL, p.A7431

The Potential Role of Structurally Altered Elastic Fibers in COPD Exacerbation/S. Mehraban, S. Ma, X. Liu, G. Turino, J. Cantor, Queens, NY, p.A7432


Multiple Single Nucleotide Polymorphisms (SNPs) of the Transient Receptor Potential Vanilloid 1 (TRPV1) Genes Are Associated with Cough Response to Capsaicin in Healthy Subjects/P. Maestrelli, F. Liviero, M. Campisi, S. Pavanello, Padova, Italy, p.A7443


Facilitator: C.M. Hogaboam, PhD, Los Angeles, CA

P399 Collagen Prolyl 4-Hydroxylase as a Therapeutic Target in Idiopathic Pulmonary Fibrosis/B.Gary, A.R. Savage, B.Summers, R.B. Silver, New York, NY, p.A5390

P400 A Novel siRNA-Based Oligonucleotide, TRK-250, and Its Efficacy for Treatment of Idiopathic Pulmonary Fibrosis (IPF)/A. Shibata, T. Matsumoto, M. Uchida, M. Yamada, Y. Miyamoto, H. Inada, Y. Eguchi, W. Toriumi, Kurume, Japan, p.A5391


Facilitator: M.N. Ballinger, PhD, Columbus, OH

P406 CCL2/12 from Injured Alveolar Epithelial Cells Initiated and Promoted Progressive Pulmonary Fibrosis/J. Yang, M.agarwal, K.K. Kim, Ann Arbor, MI, p.A5397


P408 Time-Resolved Proteome and Transcriptome Landscape of Paraquat-Induced Pulmonary Fibrosis/L. Fan, H. Sun, Y. Wu, F. Zhang, J. Zhang, Nanjing, China, p.A5399

P409 Deletion of Alveolar Epithelial Type II Sine Oculis Homeobox Homolog 1 (Six1) Attenuates Established Pulmonary Fibrosis/C. Wilson, T. Mertens, S. Collum, W. Bi, A. Guha, R. Thandavarayan, K. Rajagopal, S.S. Jyothula, H. Karmouty-Quinta, Houston, TX, p.A5400


Facilitator: Y.T. Ghebre, PhD, ATSF, Houston, TX

P413 The Neuraminidase 1 (NEU1) - Epidermal Growth Factor Receptor (EGFR) Axis in Pulmonary Fibrosis/S.P. Atamas, S.W. Hyun, N.W. Todd, S.E. Goldblum, I.G. Luzina, Baltimore, MD, p.A5404


P415 TINCR, a Long Intergenic Noncoding RNA Decreased in IPF, Is a Novel Regulator of Airway Epithelial Cell Differentiation/N. Kaminski, New Haven, CT, p.A5406


P418 Myeloid-Derived HB-EGF in Pulmonary Fibrosis/E. Hult, D.N. O’Dwyer, C.A. Wilke, B.B. Moore, Ann Arbor, MI, p.A5409

Facilitator: K. Bernau, DPhil, Madison, WI

P420 Therapeutic Anti-Fibrotic Effect of Nintedanib in a Rat Model of Lung Fibrosis Induced by a Double Bleomycin Intratracheal Administration/V. Pitozzi, P. Caruso, S. Pontis, M.G. Pittelli, M. Bonatti, C. Frati, D. Madeddu, F. Quaini, C. Lagrasta, G. Villetti, M. Civelli, M. Trevisani, Parma, Italy, p.A5411


P424 Pirfenidone Partially Alleviated Paraqat-Induced Pulmonary Inflammation and Fibrosis in Rats/Q. Ye, Y. Yan, S. Li, J. Ma, Beijing, China, p.A5415


P427 In Vitro Modelling and Characterising of Epithelia-Fibroblast Interactions in Idiopathic Pulmonary Fibrosis/J.P. Garnett, V. Schroeder, J. Schütt, J. Wirth, M.J. Thomas, F.E. Herrmann, L.H. Quang, Biberach an der Riss, Germany, p.A7439

Facilitator: J.C. Horowitz, MD, ATS, Ann Arbor, MI

P937 Use of Quantitative CT to Determine Disease Extent and Identify UIP Pattern in Rheumatoid ArthritisILD/S.M. Humphries, A.M. Notary, J.P. Centeno, D.A. Lynch, Denver, CO, p.A5417


P941 Global Deletion of COMP Does Not Protect from Bleomycin-Induced Pulmonary Fibrosis/K. Miller, C. Wilson, S. Callum, J. Hecht, H. Karmouty-Quintana, J.L. Alcorn, Houston, TX, p.A5421


Facilitator: F. Xu, PhD, Vancouver, Canada


Facilitator: J.C. Horowitz, MD, ATS, Ann Arbor, MI


P946 Lipid Accumulation Leads to Inhibition of M1 Response in Alveolar Macrophages/W. Slovinsky, H. Shaghagi, A. Bhushan, F. Romero, R.S. Summer, Philadelphia, PA, p.A5426


Facilitator: G. Ruffenach, PhD, MSc, Los Angeles, CA


Facilitator: G. Ligresti, PhD, Rochester, MN


P957  Pulmonary Fibrosis Due to a Novel Surfactant Protein Mutation/R.A. Arciniegas Flores, I.A. Vital, K. Medepalli, D. Miller, S.H. Kaczka, Aurora, CO, p.A5437


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**THEMATIC POSTER SESSION**

**C66  MECHANICAL VENTILATION**

9:15 a.m. - 4:15 p.m.  
Area B (Hall F, Level 2)

** viewing: Posters will be on display for entire session.**

**Discussion:** 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitators:**
- D.W. Kaczka, MD, PhD, Iowa City, IA
- Z. Karakurt, MD, Instabul, Turkey


**P215** Comparing Noninvasive Ventilation with Bilevel St and Average Volume Assured Pressure Support in Obese Hospitalized Patients with Decompensated Hypercapnic Respiratory Failure/K. Zuidema, M.J. Junqueira, M. Harris, P. Bongat, Pueblo, CO, p.A5441


**Facilitator:** B.J. Smith, PhD, Aurora, CO


**P220** Trouble with Bubbles; Management of Bronchopleural Fistula with Intrabronchial Valve in a Critically Ill Patient/A. Khan, A. Suresh, D. Bornstein, R.G. Khemani, Los Angeles, CA, p.A5446


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C67 LUNG FUNCTION TEST
9:15 a.m. - 4:15 p.m. KBHCCD

Area G (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: G.N. Maksym, PhD, Halifax, Canada


P967 Repetability of Cardiopulmonary Exercise Test (CPET) Biocontrols: Time for an Evidence-Based Approach to Quality Control/T. DeCato, M.J. Hegewald, Spokane, WA, p.A5454

Facilitator: U. Peters, MSc, PhD, Burlington, VT


P970 Pulmonary Function in Patients with Congenital Heart Disease/R.P. Cusack, I. Satia, P. O’Byrne, K.J. Killian, Hamilton, Canada, p.A5457


P972 Prevalence of Abnormal Spirometry in Patients with Congenital Heart Disease/D. Cerrone, K. Lewinter, I. Masood, P. Shah, A. Hakan, J. Detterich, A. Sabat, R.M. Kato, Los Angeles, CA, p.A5459

Facilitator: E.J. Gartman, MD, Providence, RI


P975 Decreased Aerobic Capacity in Hispanic Patients with Congenital Heart Disease/K. Lewinter, D. Cerrone, I. Masood, A. Hakan, P. Shah, J. Detterich, A. Sabat, R.M. Kato, Los Angeles, CA, p.A5462


C68 SLEEP DISORDER
9:15 a.m. - 4:15 p.m. KBHCCD

Area K (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: N.A. Shah, MD, MPH, MSci, New York, NY

P1197 Maternal Symptoms of Sleep Disordered Breathing a Risk Factor for Apnea of Prematurity?/M. Salameh, M. Hanson Bublitz, G.R. Bourjellly, Providence, RI, p.A5464

P1198 Development of a Novel Airway Obstructive Device for OSAHS Animal Model with Intermittent Swinging Pleural Pressure/X. Zhao, G. Li, F. Zhao, L. Yang, Y. Li, Q. Wu, Tianjin, China, p.A5465

P1199 The Impact of Pregnancy on Obstructive Sleep Apnea Event Duration and Arousal Index/M. Stanchina, P. Walia, M. Bublitz, M. Miller, G. Bourjelly, Providence, RI, p.A5466


P1201 Establishing the Baseline Sneeze Route in a Study Population: Mouth, Nose, Does It Matter?/B. Zavala, A. Alexis, North Bay Village, FL, p.A5468


P1204 Changes in HIF-1alpha Protein Concentration Level Among Obstructive Sleep Apnea Patients - Pilot Study/A. Gabryelska, M. Panek, J. Zemraj, P. Kuna, P. Bialasiewicz, Lodz, Poland, p.A5471

C69 LUNG CANCER

9:15 a.m. - 4:15 p.m. KBHCCD

Facilitator: C.S. Sassoon, MD, Long Beach, CA


P1007 Clustering the Risk: Quantitative Imaging Features of Chronic Obstructive Pulmonary Disease Associated with Lung Cancer/J.M. Uthoff, S. Bell, B. Smith, J.C. Sieren, Iowa City, IA, p.A5476


C70 NEONATAL AND PEDIATRIC LUNG DISEASE

9:15 a.m. - 4:15 p.m. KBHCCD

Facilitator: S. Dakshinamurti, MD, MS, Winnipeg, Canada


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C71 PULMONARY HYPERTENSION
9:15 a.m. - 4:15 p.m.

Area J (Hall F, Level 2)

Viewing: Posters will be on display for entire session.
Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: M. Eghbali, PhD, Los Angeles, CA


P1188 Thymic Stromal Lymphopoietin Role in Human Pulmonary Artery Smooth Muscle Proliferation and Contractility/B. Roos, M. Thompson, S. Venkatachalem, L. Manlove, J. Miller, C.M. Pabelick, Y.S. Prakash, Rochester, MN, p.A5498

P1189 CXC-Chemokine Ligand 10 as a Biomarker for Chronic Thromboembolic Pulmonary Hypertension/R. McEvoy, L. Tian, R.A. Dweik, G.A. Heresi, Cleveland, OH, p.A5499


P1191 Temporal Echocardiographic Assessment of Pulmonary Hypertension in Patients with Idiopathic Pulmonary Fibrosis Treated with Nintedanib, Pirfenidone and Other Agents/M. Eghbali, PhD, Los Angeles, CA, p.A5501

Facilitator: S. Dua, MD, New York, NY

P1192 Correlation of FVC/DLCO to Mean Pulmonary Artery Pressure in Scleroderma-Associated Pulmonary Artery Hypertension/S. Korzan, C. Halasan, R.J. Foley, D. Datta, Farmington, CT, p.A5502

P1193 Significance of End-Tidal PCO2 and Its Relation to Functional Capacity in IPAH and CTEPH Patients/J. Liu, X. Shi, J. Guo, L. Wang, Q. Zhao, S. Gong, Shanghai, China, p.A5503

P1194 Value of Heart Rate Recovery in Female Patients with Pulmonary Arterial Hypertension Due to Systemic Lupus Erythematosus/J. Liu, G. Yang, J. Guo, W. Yang, L. Wang, Q. Zhao, S. Gong, Shanghai, China, p.A5504

P1195 Difference in Exercise Capacity and Ventilatory Efficiency Between Chronic Obstructive Pulmonary Disease Associated Pulmonary Hypertension and Idiopathic Pulmonary Hypertension/J. Liu, H. Liu, J. Guo, L. Wang, Q. Zhao, S. Gong, Shanghai, China, p.A5505

BASIC • CLINICAL

THEMATIC POSTER SESSION

C72 CASE REPORTS OF RARE DISEASES
9:15 a.m. - 4:15 p.m. KBHCCD
Area G (Hall F, Level 2)

Viewing: Posters will be on display for entire session.
Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.
Facilitator: M.L. Padilla, MD, New York, NY


P979 Polycystic Liver Disease as a Cause of Severe Restrictive Lung Disease, a Case Report/C. Abreu-Ramirez, J.L. Pean, R. Huang, C. Chang, Edinburg, TX, p.A5507


P982 Clinical Response of Hepatopulmonary Syndrome to Transjugular Intrahepatic Portosystemic Shunting/O. Olatunde, V.V. Tambe, A. Kattamanchi, V. Jasti, Syracuse, NY, p.A5510


P985 A Rare Case of Cor Triatriatum and Hypoplastic Right Lung Syndrome/S. Quintiliani, M. Mody, P.S. Patel, T. Anandarangam, Newark, NJ, p.A5513

Facilitator: J. Budde, MD, MPH, Long Island City, NY


ATS 2019 • Dallas, TX
Facilitator: P. Genta, MD, ATSF, Sao Paulo, Brazil

P1206 Cheyne Stokes Respiration in a Pediatric Patient Awaiting Heart Transplantation/N. Rai, C.I. Lamm, New York, NY, p.A5530


P1208 Periodic Limb Movements During Sleep Noted on Ventral Thigh Surface Electromyography in an Above the Knee Amputated Stump/A. Chada, R. Hoque, Atlanta, GA, p.A5532


P1211 Obstructive Sleep Apnea in the Setting of Large Mandibular Tori, Intolerant to Positive Airway Pressure Through Full-Face Mask, Responsive to Positive Pressure Therapy Through Nasal Mask/F. Zahiruddin, R. Hoque, Atlanta, GA, p.A5535

P1212 Narcotic Associated Bradypnea Mimicking Central Sleep Apnea/F. Zahiruddin, I.H. Ittkhar, R. Hoque, Atlanta, GA, p.A5536

Facilitator: I. Tapia, MD, Philadelphia, PA

P1213 Pompe Disease: An Unusual Cause of Hypercapnia in An Adult/L. Estep, Tucson, AZ, p.A5537

P1214 High Grade AV Nodal Block in Severe Obstructive Sleep Apnea/S. Yenigalla, N. Kaur, S. Hasan, Pittsburgh, PA, p.A5538


P1216 Severe Sleep Disordered Breathing During Pregnancy and Intrauterine Fetal Demise: Is There a Causal Link?/L.M. Domaradzki, K. Twomey, P. Haouzi, Hershey, PA, p.A5540

P1217 Obstructive Sleep Apnea at Its Most Severe - Apnoea-Hypopnea Index 130/S. Roche, E.D. Moloney, Dublin, Ireland, p.A5541


Facilitator: K.A. Steiling, MSc, MD, Boston, MA


P1017 Does Presence of Pleural Plaques and Smoking Predispose to Develop Mesothelioma? A Quality Improvement Project/A. Banerjee, Southport, United Kingdom, p.A5544

P1018 The Prognostic Value of ABCG2 and ABCC1 Expression in Lung Cancer: A Meta-Analysis/H. Yu, W. Li, Chengdu, China, p.A5545

P1019 Red Blood Cell Distribution Width Correlates with Prognosis in Patients with Lung Cancer/Y. Gan, H. Yu, W. Li, Chengdu, China, p.A5546

Facilitator: M.S. Godfrey, MD, New Haven, CT


P1022 Combining Data from TCGA, GEO Database, and RT-qPCR Validation to Identify Gene Prognostic Marker in Lung Cancer/X. Liu, J. Wang, M. Chen, S. Liu, X.D. Yu, F.Q. Wen, Cheng Du, China, p.A5549

P1023 The Influence of Pulmonary Diffusion Impairment on Prognosis of Unresectable Stage III Non-Small Cell Lung Cancer Patients Who Received Concurrent Chemoradiotherapy/T. Tozuka, M. Seike, H. Hayashi, A. Miyanaga, Y. Minegishi, R. Noro, Y. Saito, K. Kubota, A. Gemma, Tokyo, Japan, p.A5550

P1024 TNF-c308g>A Polymorphism Associates with Survival of Cancer Patients/F. Yi, Beijing, China, p.A5551


P1026 The Characterization of Lung Microbiome in Sputum of Lung Cancer Patients with Different Clinicopathology/H. Dong, D. Huang, M. Yuan, S. Cai, Guangzhou, China, p.A5553


WS5 DESIGNING A COMPREHENSIVE CRITICAL CARE ULTRASOUND CURRICULUM

Registration Fee: $75 (includes box lunch)
Attendance is limited. Pre-registration is required.

Assemblies on Critical Care; Behavioral Science and Health Services Research
11:45 a.m. - 1:15 p.m. KBHCCD Room C144-C145 (Level 1)

Target Audience
All providers involved in teaching trainees critical care ultrasound including Ultrasound key faculty, program directors and APDs, and fellows in training

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

• recognize the need for a comprehensive critical care ultrasound curriculum in a fellowship training program;
• create a comprehensive critical care ultrasound curriculum that is specifically tailored to your unique fellowship program
• devise practical approaches to combat barriers to implementation of specific curricular elements of a critical care ultrasound curriculum

ACCP/SRLF guidelines define competency in critical care ultrasonography to guide training. However, only 42% of Critical Care training programs have a formal curriculum for their trainees (2014 study), with similar results in a 2017 APCCMPD survey. Participants of this workshop will work together to devise practical approaches to designing and implementing a comprehensive ultrasound curriculum specific to their individual fellowship needs. Topics will include resources for addressing ultrasound knowledge including novel teaching methods for adult learners, methods for improving image acquisition and image interpretation skills, faculty development as a necessary part of a successful curriculum, and competency assessment/quality assurance.

Chairs:
D. Pradhan, MD, New York, NY
G.W. Garrison, MD, Burlington, VT

11:45 a.m. – 1:15 p.m.

ATS PLENARY SESSION
KBHCCD
Ballroom A One (Level 2)

The ATS Plenary Session will feature a keynote talk by acclaimed photojournalist Ed Kashi who will speak on the Role of Photojournalism in Promoting World Health. The Plenary Session will also feature the introduction of the ATS slate of officers for 2019-2020, the presentation of several Respiratory Health Awards, and remarks from ATS President Polly Parsons, MD, ATSF and ATS President-Elect James Beck, MD, ATSF

The following awards will be presented:

Outstanding Educator:
Richard M. Schwartzstein, MD, Boston, MA
Research Innovation and Translation Achievement:
Marcus Y. Chen, MD, Bethesda, MD
Han Wen, PhD, Bethesda, MD
Outstanding Clinician:
Octavius D. Polk, Jr., MD, Washington, DC

11:45 Session Introduction
G.W. Garrison, MD, Burlington, VT

11:50 Educational Resources in Critical Care Ultrasound
K.E. Lyn-Kew, MD, Denver, CO

12:10 Faculty Development and Educational Resources in Critical Care Ultrasound
D. Pradhan, MD, New York, NY

12:30 Competency Assessment in Critical Care Ultrasound
S. Millington, MD, Ottawa, Canada

12:50 Quality Assurance in Critical Care Ultrasound
M. Narasimhan, DO, New Hyde Park, NY

1:10 Session Wrap-Up
G.W. Garrison, MD, Burlington, VT
WS6 CANCELED: HEALTH POLICY ADVOCACY 101: EFFECTIVELY INFORM YOUR ELECTED OFFICIALS

This session has been canceled

Assembly on Nursing; Health Policy Committee
11:45 a.m. - 1:15 p.m. KBHCCD
Room D171/D173 (Level 1)

Target Audience
Beneficial to all international conference attendees with an interest in advocacy

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

• prepare for and effectively communicate advocacy requests during a meeting with a legislative representative;
• prepare for and effectively provide answers during an interview on a health policy topic;
• deliver targeted health policy advocacy messages using social media.

This session is intended to provide an introduction to federal and state advocacy. Using a mix of didactic lectures and small group role playing, attendees will learn how to prepare for and participate in legislative visits, craft a letter to the editor on an important advocacy issue, deliver targeted advocacy messages using social media and prepare for and participate in media interviews. We envision attendees being seated at round tables (10-12 people each) with each table having 1-2 facilitators volunteers solicited from the Health Policy Committee, PAR, CCR and prior Hill Day attendees. Materials for the small group role playing will be developed in advance (from prior Hill Day materials) and circulated along with instructions to registrants prior to the meeting.

Chairing:
S.C. Sweet, MD, PhD, Saint Louis, MO
D.J. Upson, MD, MA, Albuquerque, NM

11:45 Overview of Effective Federal Advocacy
G. Ewart, MHS, Washington, DC

11:55 Getting the Most out of a Congressional Visit
N. Moore, MA, Washington, DC

12:05 Role Playing: Congressional Visit

12:25 Feedback / Q&A

12:30 Engaging the Media on Statue and Local Issues: Physician’s Perspective
D.J. Upson, MD, MA, Albuquerque, NM

12:40 Engaging the Media on Statue and Local Issues: Communications Professional Perspective
D. Morris, MSW, New York, NY

12:50 Role Playing: Media Engagement

1:10 Feedback / Q&A / Wrap Up
ME3  OPTIMIZING LEARNER-CENTERED EDUCATION IN THE AMBULATORY CLINIC

Registration Fee: $70 (includes box lunch)
Attendance is limited. Pre-registration is required.

Assembly on Behavioral Science and Health Services Research
12:15 p.m. - 1:15 p.m.  OMNI DALLAS DOWNTOWN
Katy Trail (Level 2)

Target Audience
Clinical faculty who work in an ambulatory setting and work with physician trainees and those with a formal role in pulmonary fellowship trainee education.

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

- Identify barriers to and targeted methods for improving ambulatory education at the participants’ home institution.
- Define previously described methods for efficient and effective precepting in the outpatient setting.
- Recognize opportunities and resources for implementation of structured ambulatory teaching within the clinic setting.

Optimizing ambulatory education is paramount in today’s fellowship training programs, particularly given the mismatch between limited exposure of trainees to outpatient pulmonology during the course of training and the substantial role of ambulatory medicine in pulmonary practice. Yet, time pressures, visit complexity, and variability in trainee experience can impede learning in a setting otherwise ripe with educational opportunities. This interactive workshop aims to enhance learner-centered ambulatory education by providing a framework for effective precepting in the ambulatory clinic. Participants will learn active precepting techniques, practice implementation of these strategies, and learn techniques for overcoming barriers to effective and efficient precepting.

Chairing: S.M. Kassutto, MD, Philadelphia, PA
C82 CHALLENGES IN THE LONG-TERM CLINICAL MANAGEMENT OF SARCOIDOSIS

Assemblies on Clinical Problems; Allergy, Immunology and Inflammation
2:15 p.m. - 4:15 p.m. KBHCCD
Ballroom C One-Two (Level 2)

Target Audience
Providers who see patients with sarcoidosis and other interstitial lung diseases

Objectives
At the conclusion of this session, the participant will be able to:
• appropriately utilise long term surveillance assessments for sarcoidosis;
• become better equipped to utilise non-steroidal treatments in the long-term management of sarcoidosis;
• improve the quality of life of patients with sarcoidosis by focusing on the common but non-organ-specific symptoms of fatigue, depression and pain.

Most clinicians feel comfortable initiating systemic corticosteroids in newly diagnosed patients with symptomatic or organ-threatening sarcoidosis. Yet, most feel ill equipped for long-term clinical management. This includes how to communicate the long-term treatment and screening roadmap to patients. This symposium will address key areas of long-term management, including guidance on how to recognise and treat recurrent disease, how and when to add corticosteroid-sparing immunosuppressive therapies, and how to assess for and manage systemic symptoms, such as fatigue, which are common and often debilitating in sarcoidosis.

Chairing:
A.S. Morgenthau, MD, New York, NY
W.P. Drake, MD, Nashville, TN

2:15 Introduction to Sarcoïdosis Pathogenesis
E.S. Chen, MD, Baltimore, MD

2:35 A Patient’s Perspective
S. Deter, Frisco, TX

2:40 Disease Recurrence and Exacerbations
K.C. Patterson, MD, Palmer, United Kingdom

2:59 Beyond Steroids: What to Use and How They Work
W.P. Drake, MD, Nashville, TN

3:18 Fighting Fatigue and Other Systemic Symptoms in Sarcoïdosis
M. Gering-Voortman, MD, Maastricht, Netherlands

3:37 Screening for Silent Disease: How Far Do We Have to Go
M.A. Judson, MD, Albany, NY

3:56 The Road to Eternity: How to Explain a Chronic Disease to Patients
M.S. Balter, MD, Toronto, Canada

This session and the International Conference are supported by educational grants from Boehringer Ingelheim Pharmaceuticals, Inc., Mallinckrodt Pharmaceuticals. All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.
C84 CLINICAL TRIALS IN THE CRITICALLY ILL: ECMO AS A CAUTIONARY TALE

Assemblies on Critical Care; Clinical Problems; Nursing
2:15 p.m. - 4:15 p.m.  OMNI DALLAS DOWNTOWN
Dallas Ballroom DH (Level 3)

Target Audience
Adult and pediatric critical care clinicians and researchers

Objectives
At the conclusion of this session, the participant will be able to:
• incorporate lessons and perceptions from survivors of ARDS;
• learn about the challenges of designing clinical trials of complex interventions in the critically ill, and learn novel strategies for future evaluations of these interventions;
• gain new strategies for the evidence-based management of patients with severe ARDS.

This session will provide an overview of the challenges in conducting clinical trials in critically ill patients, using recent trials on VV ECMO in severe ARDS as an example. The session incorporates 10 brief presentations highlighting key issues and insights related to clinical trial design, implications for clinical practice, and future ICU research followed by a panel Q&A discussion.

Chairing:  E. Fan, MD, PhD, Toronto, Canada
C.T.L. Hough, MD, MSc, Seattle, WA

2:15 Patient Perspective on ECMO for Severe ARDS
E. Rubin, JD, Northbrook, IL

2:20 VV ECMO: Ready for Primetime!
A. Combes, MD, PhD, Paris, France

2:30 VV ECMO for ARDS: Not So Sure ...
M.N. Gong, MS, MD, Bronx, NY

2:40 How Should We Interpret “Negative Trials” in 2019?
A.J. Walkey, MD, MSc, Boston, MA

2:50 How Do We Prepare Clinicians To Deliver ECMO?
J.H. Badulak, MD, Seattle, WA

3:00 How Should We Design the Next ECMO Trial?
E. Fan, MD, PhD, Toronto, Canada

3:10 What Are the Right Outcomes to Study in ECMO Trials?
C.T.L. Hough, MD, MSc, Seattle, WA

3:20 Is There a Role for Precision Medicine?
C.S. Calfee, MD, San Francisco, CA

3:30 What’s in the Pipeline for Extracorporeal Support in ARDS
D. Brodie, MD, New York, NY

3:40 OK, So What Now?
S.S. Carson, MD, Chapel Hill, NC

3:55 Panel Q&A
C.T.L. Hough, MD, MSc, Seattle, WA

C85 SCIENTIFIC BREAKTHROUGHS IN LUNG BIOLOGY

Assemblies on Respiratory Cell and Molecular Biology; Allergy, Immunology and Inflammation; Respiratory Structure and Function
2:15 p.m. - 4:15 p.m.  KBHCCD
Ballroom D Two (Level 3)

Target Audience
Basic and translational scientists, physicians, and trainees

Objectives
At the conclusion of this session, the participant will be able to:
• describe the latest scientific advances in basic and translational science;
• utilize novel techniques and approaches to the study of lung development and disease;
• apply knowledge from basic and translational research towards development of novel therapeutic strategies.

This session will focus on recent high impact discoveries and novel approaches to study of lung development and diseases. This session will span basic biology to cutting edge therapeutics. Presentations from experts in the field will be complemented by abstract presentations related to the topic being discussed.

Chairing:  L.R. Young, MD, ATSF, Nashville, TN
E.R. Neptune, MD, Baltimore, MD

2:15 Introduction to Scientific Breakthroughs Session
L.R. Young, MD, ATSF, Nashville, TN

2:16 Advances in Human Lung Stem Cell Organoids
T. Desai, MD, MPH, Stanford, CA

2:39 The Driving FORCE in Alveolar Regeneration and Diseases
N. Tang, PhD, Beijing, China

3:03 New Concepts in Surfactant Homeostasis
B.C. Trapnell, MD, Cincinnati, OH

3:27 Reducing Protein Oxidation Reverses Lung Fibrosis in Multiple Pre-Clinical Models
Y.M.W. Janssen-Heininger, PhD, Burlington, VT

3:51 Neutrophil Exosomes Are Novel Pathogenic Entities in COPD
A. Gaggar, MD, PhD, Birmingham, ALT
C86  LUNGMAP-ING CELL LINEAGES IN HUMAN DEVELOPMENT AND DISEASE

Assemblies on Pediatrics; Respiratory Cell and Molecular Biology
2:15 p.m. - 4:15 p.m.  OMNI DALLAS DOWNTOWN
Trinity Ballroom 4/8 (Level 3)

Target Audience
Researchers, investigators in basic and clinical science, clinical and research fellows in pulmonology training, clinical and research scientists interested in human lung development and disease; junior professionals

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

• understand the latest advances in our knowledge of human lung development;
• identify innovative approaches for defining the molecular and functional attributes of human lung cells;
• better understand the different cell types in the developing human lung.

Most of our knowledge of lung development and cell lineage hierarchy is derived from animal models. Therefore, there exists an important gap of knowledge in our understanding of cell lineages and cell fates in human lung development, and how they may relate to lung disease. In order to address these knowledge gaps, the LungMap Consortium has begun to create a molecular and cellular atlas of the developing mouse and human lung. This session will provide an overview of several novel aspects of human lung development, uncovered by the application of innovative technologies by experts in the field, with a focus on cell lineage and cell fate.

Chairing:
D. Al Alam, PhD, MS, Los Angeles, CA
T.J. Mariani, PhD, Rochester, NY
A.T. Perl, PhD, Cincinnati, OH
N. Ambalavanan, MD, Birmingham, AL

C87  PHYSIOLOGICALLY-GUIDED MECHANICAL VENTILATION

Assemblies on Respiratory Structure and Function; Critical Care
2:15 p.m. - 4:15 p.m.  KBHCCD
Ballroom D One (Level 3)

Target Audience
Providers involved in administering mechanical ventilation to critically ill patients. Basic and translational scientists studying mechanisms of ventilator-induced lung injury.

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

• articulate the principle mechanisms of ventilator-induced lung injury;
• describe the key shortcomings of the current approaches to ventilator management of ARDS patients;
• list 2-4 novel approaches that are currently being investigated for the assessment of individual patient status during mechanical ventilation.

This symposium will cover various approaches in which mechanical ventilation can be delivered in a manner that is optimal for a given patient based on an understanding of that patient’s unique physiological status and the manner in which the stresses and strains of mechanical ventilation can worsen existing lung injury.

Chairing:
D.W. Kaczka, MD, PhD, Iowa City, IA
C.E. Perlman, PhD, Hoboken, NJ
J.H.T. Bates, PhD, DSc, ATSF, Burlington, VT
C88 COMPLEMENT AS A NOVEL TARGET TO MITIGATE LUNG DISEASE

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

2:15 p.m. - 4:15 p.m.  
KBHCCD  
Room D220/D227 (Level 2)

Target Audience
Students, fellows, and basic/translational scientists of all career levels (physician-scientists, PhD scientists) and those focusing on the immunology of lung diseases, such as asthma, COPD, pulmonary fibrosis, lung transplantation and pneumonia

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

• understand the emerging mechanisms by which key complement proteins modify lung inflammation, with the goal of mitigating diseases such as asthma, pulmonary fibrosis and transplant rejection;

• define the relative contribution of complement proteins in driving cell lineage and fate in both immune and non-immune cells, especially stem cells;

• critically evaluate cutting-edge technologies being currently used to investigate the role of complement in lung inflammation to be able to broadly apply these to mitigating disease.

The complement system has been associated with various lung diseases; however, the extent and the relative contribution from hepatic versus extra-hepatic sources remains ill-defined. Through this session, we will integrate emerging concepts in how complement affects fundamental biological processes, identify model systems and therapies to evaluate how it modulates lung inflammation and answer key questions such as: are complement proteins still predominantly proinflammatory? Do their effects differ in acute lung injury versus chronic lung fibrosis?

Chairing:
H.S. Kulkarni, MD, MSc, ATSF, Saint Louis, MO  
R. Vittal, PhD, Ann Arbor, MI  
J. Kohl, MD, Lubeck, Germany

3:45 Complement Resistance and Host Susceptibility to MDR K. Pneumoniae Infection  
J. Lee, MD, ATSF, Pittsburgh, PA

4:05 Panel Discussion (Question and Answers)

C89 TRANSLATIONAL DEVELOPMENTS IN TB: TOWARDS IMPROVING PREVENTION AND MANAGEMENT STRATEGIES

Assemblies on Pulmonary Infections and Tuberculosis; Allergy, Immunology and Inflammation; Clinical Problems

2:15 p.m. - 4:15 p.m  
KBHCCD  
Ballroom A Three (Level 2)

Target Audience
Clinicians and physician scientists caring for patients with latent tuberculosis infection (LTBI) and active tuberculosis (TB), and/or working in the field of tuberculosis would benefit the most

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

• learn new concepts from translational studies and human host defense mechanisms against TB to be better able to diagnose and manage the various forms of TB infections in low and high TB endemic settings;

• learn new findings and translational data from TB vaccine research development and trials to be better prepared for future implementation of optimal preventive strategies to improve TB control in low and high TB endemic areas;

• learn new diagnostic and therapeutic strategies, including promising technologies to optimally manage patients at risk of TB infection in the U.S. and resource limited settings.

This session will present new and emerging data from recent basic and translational studies in TB to update our ATS membership with evolving concepts in TB pathogenesis and novel technologies and strategies for optimal prevention, diagnosis and management of latent TB infection and TB disease.

Chairing:
P. Escalante, MD, MSc, Rochester, MN  
J.M. Keane, MD, Dublin, Ireland

2:15 Human Host Responses in TB: Recent Lessons From the Translational World  
J.M. Keane, MD, Dublin, Ireland

2:35 Evolving Concepts and Interventions in Host Response Against TB: From Host Resistance to Host Tolerance  
M. Divangahi, PhD, Montreal, Canada

2:55 Enhancing Conventional and Non-Conventional Adaptive Responses in TB: Are We Close to Improve BCG Vaccination Response?  
D.M. Lewinsohn, MD, PhD, Portland, OR
3:15  Novel TB Vaccines: Correlates of Protection and Lessons From Clinical Trials  
M. Ruhwald, MD, PhD, Copenhagen, Denmark

3:35  Lessons from the Field: TB Infection State Profiling and Biomarker-Based TB Prevention Strategies  
T.J. Scriba, PhD, Cape Town, South Africa

3:55  Update in Diagnostics and Therapeutic Interventions in Latent TB Infection in Low TB Endemic Areas  
P. Escalante, MD, MSc, Rochester, MN

BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 2

C90  BENCH TO BEDSIDE: HOW DIETARY N3-PUFAS MODULATE THE PULMONARY RESPONSE TO ENVIRONMENTAL EXPOSURES

Assemblies on Environmental, Occupational and Population Health; Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology

2:15 p.m. - 4:15 p.m.  
Room D163/D165/D170/D172 (Level 1)

Target Audience
Basic and clinical researchers and clinicians interested in learning about emerging literature indicating a pivotal role for diet and n-3 PUFAs in environmental lung diseases

Objectives
At the conclusion of this session, the participant will be able to:
• understand the potential for diet and n-3 PUFAs as a therapeutic option against the adverse health outcomes from environmental exposures;
• understand the underlying mechanisms by which n-3 PUFAs may mitigate the effects of environmental exposures on relevant pulmonary health outcomes;
• compare and contrast the findings in basic, translational, and clinical studies related to the effects of n-3 PUFA intake on pulmonary response to environmental exposures.

Environmental exposures (both ambient and occupational) contribute to the onset and exacerbation of lung diseases. Defining novel therapeutic strategies to limit the adverse health effects of environmental exposures is critical. Diet is increasingly recognized as an important factor in immune health. Within diet, n-3 polyunsaturated fatty acids (PUFAs) are a critical nutrient that has demonstrated immunomodulatory properties in inflammatory diseases such as obesity, cardiovascular diseases, and arthritis. A novel paradigm has been proposed linking n-3 PUFA intake and reductions in environmental lung diseases. This session will introduce novel mechanisms wherein diet, with a focus on n-3 PUFAs, can mitigate effects of environmental respiratory exposures.

Chairing:  K.M. Gowdy, BS, MS, PhD, Greenville, NC  
J.G. Wagner, MBA, PhD, East Lansing, MI  
E. Brigham, MD, MHS, Baltimore, MD

BEHAVIORAL • CLINICAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 2

C91  IMPROVING CARE QUALITY WHILE REDUCING COST: IS HIGH VALUE CARE FOR COPD ACHIEVABLE?

Assemblies on Behavioral Science and Health Services Research; Clinical Problems; Nursing

2:15 p.m. - 4:15 p.m.  
Room C155-C156 (Level 1)

Target Audience
Inter-professional providers of care for patients with lung disease including those interested in learning about emerging evidence for effective strategies to provide high value care for patients with COPD

Objectives
At the conclusion of this session, the participant will be able to:
• distinguish value based care from cost effectiveness;
• identify high value interventions that could be implemented in their institutions;
• learn about the diverse stakeholder perspectives in value-based care.

COPD is a frequent target of calls to improve the value of health care. Yet, improving value requires meeting the often-opposing goals of increasing quality while reducing costs. In this session, experts will discuss the evidence surrounding several areas to improve the value of care provided during COPD-related hospitalizations. Specifically, we will discuss recent science addressing the value implications of 1) where we provide care for acute exacerbations, 2) how we pay for it, and 3) how we protect patients from readmissions after discharge.

Chairing:  V.G. Press, MD, MPH, Chicago, IL  
A.J. Admon, MD, MPH, Ann Arbor, MI  
L. Myers, MD, Boston, MA

ATS 2019 • Dallas, TX
2:15 Introduction: Is High Value Care for COPD Achievable?  
A.J. Admon, MD, MPH, Ann Arbor, MI

2:30 Thinking Outside the Hospital: The Role of Hospital-at-Home in Reducing Costs of COPD Care  
C. Echevarria, MD, Newcastle, United Kingdom

2:45 Achieving Value by Delivering NIV for COPD Outside of the ICU  
L. Myers, MD, Boston, MA

3:00 NIV and How It Can Help the Patient with COPD  
D. Hart, PhD, Auckland, New Zealand

3:15 Bundled Payments and COPD: An Early Adopter Experience  
S.P. Bhatt, MD, Birmingham, AL

3:30 An Evolving Bundled Payment for Care Improvement (BPCI) COPD Initiative: Next Steps After Round One  
V.G. Press, MD, MPH, Michig, Chicago, IL

3:45 Organizational Drivers of COPD Readmissions  
S. Rinne, MD, PhD, Boston, MA

4:00 Impact of the Hospital Readmissions Reduction Program on COPD Readmissions  
L.C. Feemster, MSc, MD, Seattle, WA

C92 ATS CLINICAL PRACTICE GUIDELINES: CLINICAL PRACTICE ON THE CUTTING EDGE

Assemblies on Clinical Problems; Pediatrics; Pulmonary Infections and Tuberculosis; Sleep and Respiratory Neurobiology; Thoracic Oncology; Documents Development and Implementation Committee; Quality Improvement and Implementation Committee

2:15 Welcome  
R.A. Dweik, MD, ATSF, Cleveland, OH

2:20 Grading Strength of Recommendations and Quality of Evidence  
K.C. Wilson, MD, ATSF, Boston, MA

2:30 Management of Malignant Pleural Effusions  
D.J. Feller-Kopman, MD, Baltimore, MD

2:50 Management of Obesity for OSA  
S.R. Patel, MD, Pittsburgh, PA

3:10 Diagnosis of Fungal Infections  
A.H. Limper, MD, Rochester, MN

3:30 Pediatric Supplemental Oxygen  
D. Hayes, MD, MS, MEd, ATSF, Columbus, OH

3:50 IPF Diagnosis 2018: Lung Biopsy or Not? -Addressing the ATS-ERS-JRS-ALAT Guideline Recommendation  
G. Raghu, MD, Seattle, WA

4:10 Closing Remarks  
B. Patel, MD, Houston, TX

C93 MECHANISMS OF AIRWAY INFLAMMATION IN ASTHMA AND COPD

2:15 Broader Impact of IL-4Rα Blockade than IL-5 Blockade on Mediators of Type 2 Inflammation and Lung Pathology in a House Dust Mite-Induced Asthma Mouse Model  
J. Allinne, G. Scott, D. Birchard, S. Asrat, K. Nagashima, A. Le Floc’h, M.A. Sleeman, A.J. Murphy, J.M. Orengo, Tarrytown, NY, p.A5555

2:30 Airway Basal Cell Notch Signaling Coordinates Immune Cell Localization and Activation in Asthma  

2:45 MiR-1165-3p Downregulated in Th2 Cells Inhibits Th2 Differentiation in Allergic Asthma by Targeting PPM1A/M. Huang, Z. Wang, Z. Chen, Nanjing, China, p.A5555
3:00 Cell-Specific Deletion of Secreted Phospholipase A2 Group X Differentially Impacts the Development of Allergic Airway Disease

3:15 Surfactant Protein-A Mediates Eosinophil Induced Upregulation of Epidermal Growth Factor Receptor
W. Pederson, J.G. Ledford, Tucson, AZ, p.A5559

3:30 Metabolomic Regulation of B Cells Drives the Pathogenesis of COPD/Günes Günes, T.M. Conlon, R. Sarker, J. Jia, K. Heinzelmann, D. Tasdemir, H. Bayram, O. Eickelberg, A.O. Yildirim, Münich, Germany, p.A5560

3:45 Inhibition of Mac-1 Associated with PMN Exosomes Attenuates Emphysema in a COPD Mouse Model


**BEHAVIORAL MINI SYMPOSIUM**

**C94 THE IMPACT OF SOCIAL DETERMINANTS IN PULMONARY AND CRITICAL CARE**

**KBHCCD**

**Room C146 (Level 1)**

Chairing: A.J. Apter, MA, MD, MSc, ATSF, Philadelphia, PA
D. Koinis-Mitchell, PhD, Providence, RI

Featured Speaker

2:15 Strategies for Addressing the Social Determinants of Health in Clinical Practice/J.D. Thornton MD, MPH, ATSF, Cleveland, OH

Oral Presentations


**CLINICAL MINI SYMPOSIUM**

**C95 ENHANCING PATIENT-CENTERED CARE IN CRITICAL CARE**

**OMNI DALLAS DOWNTOWN**

Dallas Ballroom G (Level 3)

Chairing: M.P. Kerlin, MD, MS, Philadelphia, PA
A.J. Walkey, MD, MSc, Boston, MA

Oral Presentations


3:00 Communicating with Awake Mechanically Ventilated Patients/P.R. Menon, J. Kirchick, R.D. Stapleton, J.H.T. Bates, Burlington, VT, p.A5573


**Clinical • Translational**

**MINI SYMPOSIUM**

C97 **DON’T STOP BELIEVING: CLINICAL TRIALS IN PULMONARY VASCULAR MEDICINE**

Chairing: M. Humbert, MD, PhD, Bicetre, France
W. Seeger, MD, Giessen, Germany
R.T. Zamanian, MD, Stanford, CA

Oral Presentations


2:30 PVDOMICS: World Symposium Classification (WSPH) Group 1 vs Mixed WSPH Group 1 Disease: Splitters or Lumpers/E. Horn, New York, NY, p.A5586


3:30 Decrease in Intraparenchymal Small Vessel Fraction in Exercise Pulmonary Arterial Hypertension/F.N. Rahaghi, I. de Jesus Perez, A. Dubra, R.T. Zamanian, New York, NY, p.A5590


4:00 Retinal Vascular Tortuosity, a New Feature of Systemic Manifestation of Pulmonary Arterial Hypertension/N.P. Nickel, V. De Jesus Perez, A. Dubra, R.T. Zamanian, Stanford, CA, p.A5592
C98 Host Response to Lung Infections: Insights into New Mechanisms

2:15 p.m. - 4:15 p.m.  
KBHCCD Ballroom A Two (Level 2)

Chairing:  
S.E. Evans, MD, Houston, TX  
J.C. Deng, MS, MD, Ann Arbor, MI  
H. Koziel, MD, Boston, MA

Oral Presentations


2:45 Streptococcus Pneumoniae Pneumonia Induces Mitochondrial Biogenesis and Antioxidant Responses in Mice/A. J. Losier, L.K. Sharma, Y. Zhang, W. Liu, P. Lee, C. Dela Cruz, New Haven, CT, p.A5595


3:15 Synergistic Gene and Protein Expression Analyses Reveal Roles of NFkB and JUN in Inducible Epithelial Resistance Against Infection/J. Pantaleon-Garcia, V. Kulkarni, Y. Wang, S.E. Evans, Houston, TX, p.A5597


C99 SRN: Cardiometabolic Consequences of Sleep Disordered Breathing and the Role of CPAP Therapy

2:15 p.m. - 4:15 p.m.  
KBHCCD Room D167/D174 (Level 1)

Chairing:  
E. Tasali, MD, Chicago, IL  
N.M. Punjabi, MD, PhD, Baltimore, MD  
S.S. Redline, MD, MPH, Boston, MA

Oral Presentations


2:45 Effect of CPAP on Circulating Exosomal MicroRNAs in Patients with Morbid Obesity and Obstructive Sleep Apnea (OSA)/D. Sanz Rubio, L. Pastor, J. Lazaro, I. Martin-Burriel, J.M. Marin, Zaragoza, Spain, p.A5603


C101 NON-IDIOPATHIC INTERSTITIAL PNEUMONIA
NATURAL HISTORY AND PROGNOSIS AND ILD THERAPY

2:15 p.m. - 4:15 p.m.  
Room C140/C142 (Level 1)

Poster Viewing  
2:15-3:00

Discussion  
3:00-4:15

Chairing:  
L. Richeldi, MD, PhD, Rome, Italy
M. Porteous, MD, Philadelphia, PA
E.A. Renzoni, PhD, London, United Kingdom

101 Evaluation of the Natural History of Sarcoidosis in a Population-Based Cohort/J. Simmering, P.M. Polgreen, J.L. Kuntz, A. Gerke, Iowa City, IA, p.A5608

102 Role of Baseline Dyspnea Index (BDI) and Transition Dyspnea Index (TDI) as a Measure of Self-Reported Health Related Quality of Life in Sarcoidosis Patients/O.N. Obi, M.A. Judson, L.A. Maier, A.U. Wells, R.P. Baughman, Greenville, NC, p.A5609

103 Epidemiology and Healthcare Utilization of Spontaneous Pneumothorax and Diffuse Cystic Lung Diseases in the United States/A.M. Cattran, N. Gupta, K. Meglanathan, Cincinnati, OH, p.A5610

104 The Value of High Resolution Computed Tomography and Surgical Lung Biopsy in Predicting Outcome for Patients with Fibrotic Hypersensitivity Pneumonia/K.T. Hughes, Ann Arbor, MI, p.A5611


112 Advanced Care Planning (ACP) Model in Idiopathic Pulmonary Fibrosis/A. Daoud, J. Richman-Eisenstat, M. Kalluri, Edmonton, Canada, p.A5619


115 Treatment Patterns in Patients with Idiopathic Pulmonary Fibrosis (IPF): Data from the IPF-PRO Registry/M.L. Salisbury, C.S. Conoscenti, D.A. Culver, E. Yow, M. Neely, S. Bender, N. Hartmann, S. Palmer, T. Leonard, Ann Arbor, MI, p.A5622


118 Consistent Effect of Nintedanib in Patients with IPF and Degrees of Impairment in Gas Exchange/L. Richeldi, M. Kolb, S. Jouneau, W.A. Wuyts, I. Tschoepe, S. Stowasser, M. Quaresma, G. Raghu, Rome, Italy, p.A5625


121 Clinical Phenotypes Using Cluster Analyses Predicts Homogeneous Outcomes in the Pulmonary Fibrosis Foundation Registry/A.O. Adegunsoye, E. Freiheit, M.E. Strek, Chicago, IL, p.A5628
Facilitating Factors for Home and Hospice Deaths in Interstitial Lung Disease (ILD) Patients
N. Archibald, Edmonton, Canada, p.A5629


C102 COPD: RISK PREDICTION AND PROGNOSIS

2:15 p.m. - 4:15 p.m.
Room C141/C143/C149 (Level 1)

Poster Viewing
2:15-3:00
Discussion
3:00-4:15

Chairing:
W.W. Labaki, MD, Ann Arbor, MI
K.F. Rabe, MD, PhD, Grosshansdorf, Germany


203 Factors Capturing the Covariance Structure of COPD Related Change Over Time Separate Change in Pulmonary Function from Change on CT Measures in COPDGene/G.L. Kinney, K. Young, M. Ragland, M. Strand, E.A. Regan, B.J. Make, J.D. Crapo, J.E. Hokanson, Aurora, CO, p.A5633

204 Pulmonary Subtypes Are Associated with Progression from Normal Spirometry to PRISm and GOLD 1 in COPDGene/K. Young, G.L. Kinney, M.F. Ragland, M.J. Strand, E.A. Regan, B.J. Make, J.D. Crapo, J.E. Hokanson, Aurora, CO, p.A5634


Comparison of ZZ- and SZ-Genotype Patients in a Canadian Alpha-1 Antitrypsin Deficiency Population Based on the Rate of FEV1 Decline and other Clinical Characteristics/S. Gurupatham, S. Mohan, K.R. Chapman, Toronto, Canada, p.A5638


PROMIS-29 Scores Associated with Longitudinal Changes in Cough and Phlegm Severity in Patients with COPD Within the Chronic Obstructive Pulmonary Disease Patient-Powered Research Network (COPD PPRN)/R. Choate, C.B. Pasquale, N.A. Parada, V. Prieto-Centurion, B.P. Yawn, Lexington, KY, p.A5643


Impact of Bronchiectasis on Clinical Outcome and Medical Utilization in Chronic Obstructive Pulmonary Disease Patients/Y. Kim, K. Kim, S.W. Ra, C.K. Rhee, Chuncheon-si, Korea, Republic of, p.A5645

C103 CRITICAL CARE: THE LONG WALK - ELUCIDATING OUTCOMES: DEATH, FUNCTIONAL STATUS AND COGNITION

2:15 p.m. - 4:15 p.m.  OMNI DALLAS DOWNTOWN
Dallas Ballroom E-F (Level 3)

Abstract Summaries  2:15-2:45
Viewing/Discussion  2:45-4:15

Chairing: B. Singer, MD, PhD, Ann Arbor, MI
E. Wilcox, MD, MPH, Toronto, Canada
M. Hua, MD, MSci, New York, NY


804 Trends of Change in Diaphragm Thickness on Bedside Ultrasonography Among Critically Ill Patients/V. Hadda, R. Kumar, K. Madan, P. Tiwari, S. Mittal, A. Mohan, G.C. Khilnani, R. Gulieria, New Delhi, India, p.A5658

805 Prehospital Angiotensin Receptor Blocker Use Is Associated with Reduced Mortality in Critically Ill Patients/A.H. Patel, C. Wang, C.M. Shaver, J.A. Bastarache, L.B. Ware, Nashville, TN, p.A5659

806 Functional Status Is an Important Predictor in Chronic Critical Illness/K.J. Haley, G. Santos, R.N. Nace, J. Zuis, A. Massaro, K. Laskowski, Boston, MA, p.A5660


809 Arrival by Ambulance Versus Private Vehicle to the Emergency Department Is Not Associated with Improved Mortality for Patients with Critical Illness/B. Borg, J.M. Mosier, Tucson, AZ, p.A5663

810 Mental Health Symptoms Are Associated with Sleep Disturbances in Intensive Care Unit Survivors/J. Meeker, S. Wang, A. Perkins, S. Gao, S.H. Khan, N. Siguia, S. Manchanda, M. Boustani, B.A. Khan, Indianapolis, IN, p.A5664


221 Competing Risk Analysis for In-Hospital Mortality in Patients with Chronic Obstructive Pulmonary Disease Between 2016 and 2017/T. Yang, F. Dong, K. Huang, X. Ren, M. Lu, J. Jiao, Beijing, China, p.A5651

222 Pneumonia Risk in Patients with COPD with High Blood Eosinophilia: How Does Impact Inhaled Corticosteroids to Development of Pneumonia in Such Patients?/I.A.S. Sadigov, S. Akhundov, I. Mammadova, Baku, Azerbaijan, p.A5652


229 Competing Risk Analysis for In-Hospital Mortality in Patients with Chronic Obstructive Pulmonary Disease Between 2016 and 2017/T. Yang, F. Dong, K. Huang, X. Ren, M. Lu, J. Jiao, Beijing, China, p.A5651

230 Pneumonia Risk in Patients with COPD with High Blood Eosinophilia: How Does Impact Inhaled Corticosteroids to Development of Pneumonia in Such Patients?/I.A.S. Sadigov, S. Akhundov, I. Mammadova, Baku, Azerbaijan, p.A5652


Patient Classification Either by Severity of Illness or Risk for Mortality Predicts Mortality and Length of Stay/H. Edriss, S. Yang, K.M. Nugent, Lexington, KY, p.A5667


Correlation Among Electrical Activity of the Respiratory and Accessory Muscles with Pulmonary Function, Respiratory Muscle Strength, Overall Muscle Strength and Activity Level in Patients After Discharge from the Intensive Care Unit/C. Fu, Sao Paulo, Brazil, p.A5671


Predictors of Functional Decline Among Older Intensive Care Unit (ICU) Survivors/E. Ferrante, T.E. Murphy, B.C. Vander Wyk, L.S. Leo-Summers, M.A. Pisani, T.M. Gill, New Haven, CT, p.A5674

Pre-Hospital Frailty and Cognitive Impairment in Older Adult Survivors of Intensive Care: An Observational Cohort Study/A.A. Hope, J. Verghese, M.N. Gong, Bronx, NY, p.A5675

The Relationship Between Frailty and Outcomes in Elderly Patients Suffering In-Hospital Cardiac Arrest/J.D. Salciccioli, M.C. Casasola, J. Boise, P. Patel, A. Coker, J. Watson, M. Donnino, K. Berg, Cambridge, MA, p.A5676


Mathematical Model Predicting Level of Care for Patients Admitted from the Emergency Department Does Not Perform Better than Physician Assessment/S. Almaaitah, G. Khirfan, B. Hu, M. Rothenburg, A. Brateanu, Cleveland, OH, p.A5678


Bronchodilator Response in Children with Cystic Fibrosis Pulmonary Exacerbations/M. Pollak, D. Wilson, M. Klingel, M. Solomon, H. Grasemann, Toronto, Canada, p.A5682

Measurement of Fractional Exhaled Nitric Oxide (FeNO) Helps Differentiate Between Asthmatic and Non-Asthmatic Etiologies of Dyspnea in Children/O.J. Lakser, N. Srdanovic, J.M. Salazar, Chicago, IL, p.A5683

Measurement of Fractional Exhaled Nitric Oxide (FeNO) May Help Differentiate Between Asthmatic and Non-Asthmatic Etiologies of Chronic Cough in Children/O.J. Lakser, N. Srdanovic, J.M. Salazar, Chicago, IL, p.A5684


Risk Factors for Haemoptysis in 1804 Adults with Non-Cystic Fibrosis Bronchiectasis in Southwestern China: A Retrospective Cohort Study/X. Wang, B. Liu, J. Luo, D. Wang, C. Liu, Chengdu, China, p.A5711


Inhaled Ciprofloxacin (ARD-3150) in Patients with Non-Cystic Fibrosis Bronchiectasis and Frequent Pulmonary Exacerbations: A Pooled Analysis from ORBIT-3 and ORBIT-4/J.D. Chalmers, A.M. Davis, G. Tino, I. Gonda, J. Freehlich, Cambridge, United Kingdom, p.A5713


Two Years of High frequency Chest Wall Oscillation (HFCWO) Outcomes in a Large Registry of Non-CF Bronchiectasis Patients/T. Barto, D.J. Maselli, S. Daignault, J. Porter, C. Kraemer, G. Hansen, Houston, TX, p.A5718

High Frequency Chest Wall Oscillation (HFCWO) Responder Analysis in a Large Registry of Non-CF Bronchiectasis Patients/T. Barto, D.J. Maselli, S. Daignault, J. Porter, C. Kraemer, G. Hansen, Houston, TX, p.A5719

Benefits of Simeox Airway Clearance Technology in Non-Cystic Fibrosis Patients with Bronchiectasis/P. Sliwinski, D. Klatka, A. Gladźka, L. Morin, K. Iwan, Warsaw, Poland, p.A5720

C106 PULMONARY REHABILITATION

2:15 p.m. - 4:15 p.m.  OMNI DALLAS DOWNTOWN

Abstract Summaries 2:15-2:45

Viewing/Discussion 2:45-4:15

Chairs: B.W. Carlin, MD, Sewickley, PA
M. Steiner, MBBS, MD, Leicester, United Kingdom
C.M. Nolan, MSc, PhD, Harefield, United Kingdom

1001 The Importance of Nutritional Support in Lung Transplant Candidates/K. Chohan, S. Dales, R. Varughese, L. Wickerson, L.G. Singer, B. Stewart, D. Rozenberg, Toronto, Canada, p.A5721


1007 L-Carnitine Supplementation in COPD Patients Significantly Improved Walking Distance in a Randomized Double-Blinded Pilot Study/S. Mizra, R. Benzo, Rochester, MN, p.A5727


Associations Between Lung Function Trajectories and Emphysema Type/J. Ross, A. Diaz, G. Vegas-Sanchez-Ferrero, D.A. Lynch, G.R. Washko, R. San Jose Estepar, Boston, MA, p.A5768


Effect of Family with Sequence Similarity 13 Member A (FAM13A) on the Risk of Chronic Obstructive Pulmonary Disease and Its Role in Small Airway Disease/J. Zhu, Yinchuan, China, p.A5774

111 Change in Diaphragm Thickness in Mechanically Ventilated Children/T. Pedigo, J. Hotz, S. Shah, M. Elkhunovich, R.G. Khemani, Los Angeles, CA, p.A5796


115 Bone Marrow-Derived Macrophages of Duchenne Muscular Dystrophy (mdx) Mice Are Differentially “Educated” Based on Muscle Disease Stage/S. Bhattarai, F. Liang, Q. Li, E. Kaufmann, M. Divangah, B.J. Petrof, Montreal, Canada, p.A5800


119 In Vivo Susceptibility of Cystic Fibrosis Mice to Inflammation-Induced Diaphragm and Limb Muscle Dysfunction/B. Jung, F. Gusev, F. Liang, D. Radzioch, Montreal, Canada, p.A5804

120 A Role for Interleukin-6 in the Pathogenesis of Ventilator-Induced Diaphragmatic Dysfunction/B. Jung, F. Gusev, F. Liang, D. Radzioch, Montreal, Canada, p.A5805


122 Effect of Hydroxymethylbutyrate and Eicosapentaenoic Acid on Diaphragm and Quadriceps Strength in MICU Patients/G.S. Supinski, P. Netzel, L.A.P. Callahan, Lexington, KY, p.A5807


C110 THE FUTURE OF LUNG CANCER BIOMARKERS: WHERE SHOULD WE LOOK?

2:15 p.m. - 4:15 p.m. KBHCCD Arena (Level 2)

Abstract Summaries
2:15-2:45

Viewing/Discussion 2:45-4:15

Chairing: J.C. Aerts, MD, PhD, Rotterdam, Netherlands
M.M. Fuster, MD, San Diego, CA
A.V. Gonzalez, MD, MSc, Montreal, Canada


403 Prevalence and Significance of APOBEC-Mediated RNA Editing in Lung Cancer Tumors/F. Zhang, S. Yendamuri, S. Patnaik, Hanover, NH, p.A5811


406 Reliability of PD-L1 Assays Using Small Tissue Samples Compared with Surgical Specimens/M.K. Lee, J.S. Eom, Busan, Korea, Republic of, p.A5814


409 Xeroderma Pigmentosum Group C (XPC) Is Reduced in Human Lung Adenocarcinoma/B. Lee, E.A. Mickler, R.S. Stearman, M.W. Geraci, C.R. Sears, Indianapolis, IN, p.A5817


411 Potentially Functional Genetic Variants in the TNF/TNFR Signaling Pathway Genes Predict Survival of Non-Small Cell Lung Cancer Patients in the PLCO Cancer Screening Trial and mRNA Expression Levels in the TCGA/Y. Guo, Y. Feng, H. Liu, Q. Wei, Shanghai, China, p.A5819


414 Increased miRNA-30a Levels in Bronchoalveolar Lavage Fluid as a Diagnostic Biomarker for Lung Cancer/W. Zhu, Chengdu, China, p.A5822

415 Correlation of Pretreatment Neutrophil to Lymphocyte Ratio and Clinical Outcomes in Patients with Lung Cancer Receiving Immunootherapy/J. Jin, D. Liu, P.W. Tian, W.M. Li, Chengdu, China, p.A5823

416 TOP2A and HER2neu Evaluation in Malignant Pleural Mesothelioma/F.M.A. Abou Elkasem, M. Rahouma, I. Loay, O. Badawi, M. Kamel, D.A. Ibrahim, G. Ghaly, M. Amin, A.M. Abdelrahman, Cairo, Egypt, p.A5824


418 Interaction of Estrogen Receptor ß5 and Interleukin 6 Receptor in the Progression of Non-Small Cell Lung Cancer/J. Zhao, H. Tang, Y. Bai, L. Xiong, L. Zhang, Wuhan, China, p.A5826

419 Clinical Potential of Sputum in Detecting Driver Mutations in Patients with Non-Small Cell Lung Cancer: A Preliminary Study/V. De Sa, C.A. De Paula, H.C. Freitas, G. Torrenzan, D.M. Carraro, Sao Paulo, Brazil, p.A5827


PEDIATRIC CLINICAL CORE CURRICULUM

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:

• remain current with medical knowledge relevant to their practice in pediatric pulmonology;
• evaluate their understanding of key skills and content areas in pediatric pulmonology as well as receive feedback on their comprehension of a result of a pre-test/post-test comparison;
• 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. The symposia will address topics that have been identified by an ATS pediatric working group, which is comprised of members of the ATS Education Committee and the International Conference Committee, who have identified important areas within pediatric medicine (including severe asthma, ILD, BPD, pulmonary hypertension and pulmonary manifestations of pulmonary disease). Attendees will increase their medical knowledge as a result of attending this symposium, and this will be measured by a comparison of pre-test vs. post-test results on the corresponding maintenance of certification module. The ATS Pediatric Core Curriculum will focus on a 3-year content cycle of key medical content in the area of pediatric medicine.

Chairing: J.R. Rettig, MD, Boston, MA

6:45 Pulmonary Complications of Hematopoietic Cell Transplant
E. Melicoff-Portillo, MD, Houston, TX

7:15 Pulmonary Complications of Solid Organ Transplant
J. Blatter, MD, MPH, Saint Louis, MO
**SS313** RECOMMENDATIONS FOR THE DESIGN AND ANALYSIS OF HUMAN LUNG MICROBIOME STUDIES  
A. Pragman, MD, PhD, Minneapolis, MN  
Fair Park 1 (Level 3)

**SS314** ENGINEERING 3D MODELS OF HUMAN PULMONARY DISEASE  
C.M. Magin, PhD, Aurora, CO  
Fair Park 2 (Level 3)

**SS315** APPROACH TO DEVELOPMENTAL LUNG ANOMALIES IN ADULTS  
S.V. Cherian, MBBS, MD, Houston, TX  
R.M. Estrada-Y-Martin, MD, Houston, TX  
Oak Cliff 2 (Level 5)

**SS316** CIRCADIAN MISALIGNMENT IN THE ICU  
M.P. Knauert, PhD, MD, New Haven, CT  
Victory Park 2 (Level 5)

**SS317** LUNG CANCER HETEROGENEITY AND ITS CLINICAL APPLICATIONS  
J. Akulian, MD, MPH, Chapel Hill, NC  
White Rock 1-2 (Level 5)

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**FD3** NEGOTIATING FOR YOUR FUTURE: SKILLS AND STRATEGIES FOR SUCCESS

Conference badges are required for admission. Space is limited and admittance is on a first-come, first-served basis. There is no additional fee.

6:45 a.m. - 7:45 a.m.  
OMNI DALLAS DOWNTOWN  
Katy Trail (Level 2)

**Target Audience**  
Early and mid-career clinical or research faculty, subspecialty clinical and postdoctoral fellows, medical and graduate students, residents, nurses, and allied health professionals involved in pulmonary, critical care and/or sleep medicine.

**Objectives**  
At the conclusion of this session, the participant will be able to:
- describe the resources to use in preparing for and during negotiations to advance his/her career;
- discuss how to accurately identify his/her goals prior to engaging in negotiations;
- learn about the concept of principled negotiation focused on basic interests, mutually satisfying options, and fair standards to arrive at an outcome that is amicable to both parties involved in a negotiation.

Often early career faculty are burdened with challenging and competing expectations without having adequate resources to succeed, leading to disenfranchisement and burnout. However, negotiating for resources that are needed for one's success can be complex, especially for early career faculty, due to limited negotiation skills and minimal experience negotiating. In addition, the critical questions of "what to ask for" and "how much to ask" are significant challenges to effective negotiations for trainees and early career faculty. Furthermore, it can be difficult to obtain objective guidance on negotiating one's position because mentors and current and potential future employers are stakeholders in these arbitrations and may be inherently conflicted. This session will provide attendee's strategies to employ when negotiating, and insight into available resources for future career development.

**Chairing:** N. Sharma, MD, Tampa, FL  
**Speakers:** M.M. Budev, DO, MPH, Cleveland, OH  
V.B. Antony, MD, Birmingham, AL  
J.L. Denson, MD, MS, New Orleans, LA  
S.B. Liggett, MD, Tampa, FL

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**K7** WHAT SHOULD PULMONOLOGISTS KNOW ABOUT ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING?  
8:00 a.m. - 8:45 a.m.  
Ballroom C One-Two (Level 2)

**Speakers:** Michael D. Howell, MD, MPH, Mountainview, CA

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**CLINICAL YEAR IN REVIEW 4**  
9:15 a.m. - 11:15 a.m.  
Hall A (Level 2)

**Target Audience**  
Providers including physicians, nurses, respiratory therapists, nurse practitioners, physician assistants; trainees including residents and fellows; clinical researchers

**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
The annual Clinical Year in Review symposia provides concise summaries of the most impactful clinical research publications related to specific clinical topics. Speakers are asked to conduct a literature review of the prior year’s scientific publications and develop a written summary of the top 20 articles and highlight 5 of the most important and influential publications on their topic in written format and during their talks at the International Conference Clinical Year in Review sessions.

Chairing:
V.E. Ortega, MD, PhD, ATSF, Winston Salem, NC
J.S. Lee, MD, Aurora, CO
P.A. Kritek, MD, EdM, Seattle, WA

9:15 Lung Cancer
S. Janes, PhD, London, United Kingdom

9:44 Palliative Medicine
R. Aslakson, MD, PhD, Stanford, CA

10:13 Update on Pulmonary Vascular Diseases
V. De Jesus Perez, MD, ATSF, Palo Alto, CA

10:42 Medical Education
P.H. Lenz, MD, MEd, Cincinnati, OH

11:11 MOC Questions

This session and the International Conference are supported by educational grants from AstraZeneca LP, Bayer US.

All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

D2 STATE OF THE ART PLEURAL DISEASE MANAGEMENT: CLINICAL TRIALS CHANGING CARE PRACTICE

Assembly on Clinical Problems
9:15 a.m. - 11:15 a.m. KBHCCD
Ballroom C One-Two (Level 2)

Target Audience
Clinicians and allied health professionals with clinical and/or research responsibilities in respiratory diseases; chest physicians, interventional pulmonologists, oncologists, nurses, thoracic surgeons, internists, GPs, emergency physicians.

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

• review the latest clinical trial evidence on best management of malignant pleural effusions, especially regarding the use of indwelling pleural catheters vs/plus pleurodesis; highlighting recently practice changing trials in the field;
• understand and review the latest clinical trial evidence on best management of pleural infection, especially intrapleural therapy with tPA DNase, and the ongoing work on their best delivery regimes;
• understand the latest research finding spontaneous pneumothorax management.

The last two years have seen many multicentered pleural disease trials completed with major impact on clinical care. These studies have been published in high impact journals: including trials on malignant effusions (especially IPC-PLUS in NEJM 2018; AMPL-E in JAMA 2017 and TIME-1 and -2 trials both in JAMA), mesothelioma (SMART trial in Lancet Oncol 2017; MAPPS and Meso-VATS in Lancet) etc. Several large trials eg the AMPLE-2 (under revision), PLEASE, PSP (pneumothorax), TAPPS etc have completed enrollment and will report results in 2018/early 2019. The proposed session will update the audience of the latest exciting advances from RCTs that impact care. In addition, large prognostic series for pleural infection (PILOT) and malignancies (LENT, PROMISE) can inform clinicians in practice. This has prompted a recent review of pleural diseases in NEJM 2018.

Chairing:
C. Broaddus, MD, San Francisco, CA
H. Davies, MD, Cardiff, United Kingdom

9:15 Practice Changing Clinical Trials in Pneumothorax
E. Ball, MBBS, Hobart, Australia

9:40 State of the Art Management of Pleural Infection
D.J. Feller-Kopman, MD, Baltimore, MD

10:05 Management of Tuberculous Pleural Effusions
C.F.N. Koegelenberg, MD, PhD, Cape Town, South Africa

10:25 Practice Changing Clinical Trials in Malignant Pleural Effusions
Y.C.G. Lee, MBChB, PhD, Perth, Australia

10:50 State of the Art Prognostic Tools for Pleural Infection and Malignancies
I. Psallidas, MD, PhD, Oxford, United Kingdom

D3 RURALITY IN COPD: DEFINING THE PROBLEM AND DEPLOYING NOVEL CARE DELIVERY APPROACHES

Assembly on Clinical Problems; Environmental, Occupational and Population Health
9:15 a.m. - 11:15 a.m. KBHCCD
Ballroom C Three-Four (Level 2)

Target Audience
Healthcare professionals of all backgrounds caring for patients with COPD or practicing in a rural environment

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

• improve diagnosis of COPD in rural patients through understanding of specific epidemiological and environmental risk factors;
• improve the care of rural COPD patients by identifying barriers to healthcare delivery in this population;
• consider innovative care delivery techniques when discussing treatment options with rural COPD patients.

Chronic obstructive pulmonary disease (COPD) leads to more respiratory symptoms, healthcare utilization, and mortality among rural patients compared to their urban counterparts. Unique environmental exposures and poorer access
to care all contribute to the negative impact of rural residence on COPD. The interaction of rurality and COPD is of growing interest, but key gaps in knowledge exist. This session will explore the rural COPD disparity by expanding the learners understanding of aspects of rural COPD research as well as novel clinical interventions that improve the care of rural COPD patients.

Chairing: M.C. McCormack, MHS, MD, Baltimore, MD
A. Lambert, MD, MHS, Spokane, WA
R.M. Burkes, MD, Chapel Hill, NC

9:15 Welcome and Introduction
M.C. McCormack, MHS, MD, Baltimore, MD

9:20 Rural Disparities in COPD: Where Are We Now?
J. Croft, PhD, Atlanta, GA

9:40 The Relationship Between COPD Risk and Rural Exposures
L.M. Paulin, MD, Lebanon, NH

10:00 The Role of Health Care Access in Rural COPD
M.B. Drummond, MHS, MD, ATSF, Chapel Hill, NC

10:20 Community Paramedicine as a Novel Care Delivery Model
M. Merrell, PhD, Columbia, SC

10:40 Delivering Pulmonary Rehabilitation to Rural Communities
D. Doyle, MD, Dawes, WV

11:00 Question and Answer Discussion
M.C. McCormack, MHS, MD, Baltimore, MD

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CRITICAL CARE TRACK
CME Credits Available: 2

D4 BIG DATA AND CLINICAL TRIALS: FRIENDS, FOES, OR FRENEMIES?

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

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN
Dallas Ballroom D/H (Level 3)

Target Audience
All healthcare workers caring for critically ill patients. The topics are targeted towards a multidisciplinary audience

Objectives
At the conclusion of this session, the participant will be able to:
• provide an update to attendees about latest innovations in big data analytics;
• enable clinicians to objectively assess research scenario where big data methods can be applied to answer research questions and situations where their application may not be ideal;
• provide healthcare workers with insights into how to perform bigger and smarter clinical trials. Additionally, there will be working illustrations of how to maximize electronic health records for research purposes.

Critical care is one of the most challenging environments to conduct clinical trials. Consequently, many trials have resulted in negative results or failed to adequately answer important research questions. In this symposium, we ask whether emerging methods in “Big Data” can be leveraged to address some of the challenges facing critical care researchers. We explore how Big Data methodologies can be incorporated into trial design to facilitate efficient, timely, and effective patient recruitment. We will explore whether current methods that use traditional structured clinical data to silo patients for trials is a hindrance and how we extract more information from the data that we collect from ICU patients.

Chairing: M.M. Churpek, MD, MPH, PhD, ATSF, Chicago, IL
P. Sinha, BSc(Hons), MBCh, PhD, San Francisco, CA
M.N. Gong, MS, MD, Bronx, NY

9:15 Big Data: The Real Deal or the Emperor’s New Clothes?
M.M. Churpek, MD, MPH, PhD, ATSF, Chicago, IL

9:30 Using Big Data When Clinical Trials Are Unethical or Challenging: The Case of Sepsis
V. Liu, MD, MS, Oakland, CA

9:45 We Still Need Clinical Trials: An Epidemiologist’s Perspective
T.J. Iwashyna, MD, PhD, Ann Arbor, MI

10:00 “Bigger” Not Just “Bigger” Data: Lessons from Oncology in Adaptive Trial Design and Applications to Critical Care
C.S. Calfee, MD, San Francisco, CA

10:30 Clinical Trials of the Future: Utilizing EHR to Facilitate RCTs of Critical Care Fluid Management
M.W. Semler, MD, MSc, Nashville, TN

10:45 Using Big Data for Early Identification of Syndromes for Clinical Trial Enrollment
M.N. Gong, MS, MD, Bronx, NY

11:00 ARDS: From Subphenotype Discovery to Enriched Clinical Trials
P. Sinha, BSc(Hons), MBCh, PhD, San Francisco, CA

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SCIENTIFIC SYMPOSIUM
CME Credits Available: 2
MOC Points Available: 2

D5 SLEEPING WITH THE ENEMY: EXPLORING THE IMPACT OF SLEEP DISORDERED BREATHING ON CANCER

Assemblies on Sleep and Respiratory Neurobiology; Thoracic Oncology

9:15 a.m. - 11:15 a.m. KRBHCCD
Room D163/D165/D170/D172 (Level 1)

Target Audience
Respiratory, primary care and internal medicine specialists, nurses, sleep technicians and investigators who are interested in sleep apnea and/or cancer research, diagnosis and management

Objectives
At the conclusion of this session, the participant will be able to:
• improve critical analysis of the available basic, translational and clinical information regarding the association of OSA with different types of cancer;
• gain new findings about epidemiological and clinical studies and the potential mechanisms involved in the association with OSA and cancer.
Obstructive Sleep apnea (OSA) is associated with higher cancer incidence, tumour aggressiveness and cancer mortality. Basic, translational and clinical studies demonstrate the impact of intermittent hypoxia (IH) and sleep fragmentation (SF) on tumor incidence and progression. Sleep disturbance seems to confer a higher risk to develop some type of cancers. Recently several studies have focused on investigating whether sleep disordered breathing affect overall cancer outcomes. This session will focus on the epidemiology, IH and SF mediated pathophysiological pathways that contribute to cancer biology, immunological mechanisms, tumor microenvironment, and the role of circulating exosomes in both cancer and OSA.

Chairing: L. Kheirandish-Gozal, MD, MSc, ATSF, Columbia, MO  
M. Sanchez De La Torre, PhD, Lleida, Spain  
B. Prasad, MD, Chicago, IL

9:15 Immune Deregulation in OSA as a Booster of Cancer Incidence, Tumor Aggressiveness and Cancer Mortality  
I. Almendros, PhD, Barcelona, Spain

9:45 A Message in a Bottle: Exosomes and Tumor Malignancy in OSA  
D. Gozal, MD, MBA, ATSF, Columbia, MO

10:15 OSA and Types of Cancer: An Epidemiological Overview  
J.-L. Pepin, MD, PhD, Grenoble, France

10:45 Future Perspectives in Lung Cancer: Do We Need to Take Sleep into Account?  
R.A. Winn, PhD, Chicago, IL

D6 SITES FOR PULMONARY REHABILITATION: WHERE CAN AND SHOULD IT BE PERFORMED?

Assemblies on Pulmonary Rehabilitation; Clinical Problems; Nursing; Pulmonary Rehabilitation

9:15 a.m. - 11:15 a.m.  
Room D162/D164 (Level 1)

Target Audience  
Physicians, nurses, respiratory therapists, physical therapists, occupational therapists, psychologists, and others who provide pulmonary rehab services

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

• list three types of program settings for the provision of pulmonary rehabilitation services;
• list three advantages for a home based pulmonary rehabilitation program;
• develop a pulmonary rehabilitation program within a long term acute care or skilled nursing facility.

This session will discuss the various types of settings used for pulmonary rehabilitation including outpatient, home, long term acute care, and research settings. Comparisons of each will be made with implications for the provision of such services for an individualized patient

Chairing: B.W. Carlin, MD, Sewickley, PA

9:15 Pulmonary Rehabilitation: The “Traditional Setting”  
B.W. Carlin, MD, Sewickley, PA

9:40 Telehealth and Rehabilitation: Where Do We Stand?  
A.E. Holland, PhD, Melbourne, Australia

10:05 Pulmonary Rehabilitation in the Home and Research Settings  
J.M. Bon, MD, MS, Pittsburgh, PA

10:30 Pulmonary Rehabilitation in the Long Term Acute Care Setting  
S. Hammerman, MD, Mechanicsburg, PA

10:55 Question and Answer Period
9:35 EVs as Mediators of HIV Mediated Pulmonary Vascular Injury  
N.K. Dhillon, PhD, Kansas City, KS  
Parker B. Francis Speaker

9:55 EVs and Death of Endothelium in Sepsis Mediated Acute Lung Injury  
A. Sarkar, PhD, Columbus, OH

10:15 Airway Exosomes and T helper Responses in Asthma  
J. Deshane, PhD, Birmingham, AL

10:35 The Dichotomy of the Innate Immune Responses to Exosomes: Implications for Cancer  
O. Volpert, PhD, Houston, TX

10:55 Circulating Exosomes in Sleep Apnea: Immune (De) Regulators?  
D. Gozal, MD, MBA, ATSF, Columbia, MO

D8 ENVIRONMENTAL EXPOSURES, THE HUMAN MICROBIOME, AND LUNG DISEASE

Assembly on Environmental, Occupational and Population Health  
9:15 a.m. - 11:15 a.m.  
KBHCCD Ballroom A Two (Level 2)

Target Audience  
Trainees, clinicians, researchers, allied health personnel

Objectives  
At the conclusion of this session, the participant will be able to:
- learn new findings about the interaction between environmental exposures, the microbiome, and lung disease;
- understand principles of microbial ecology research using sequencing of microbial genes;
- obtain new skills to interpret literature on the microbiome and lung disease.

There has been intense interest in how the human microbiome leads to, protects against, or modulates the development of lung disease. We are just beginning to understand the interactions between environmental exposures and the human microbiome, with the realization that while exposures may modify the human microbiome, the human microbiome can also modulate the effect of potentially harmful environmental exposures on health. Because of the broad effect of environmental exposures on the human microbiome during early life when the human microbiome is established, further work in this area may have broad implications for development of chronic lung disease. This symposium will highlight recent research focused on microbes, the environment, and lung disease.

Chairs:  
T.D. LeVan, PhD, Omaha, NE  
P.S. Lai, MPH, MD, Boston, MA  
E. Von Mutius, MD, MS, Muenchen, Germany

9:15 Historical Perspective of the Human Microbiome  
T.D. LeVan, PhD, Omaha, NE

9:35 The Impact of Diet on Immunity and Respiratory Diseases  
P. Hansbro, PhD, Newcastle, Australia

9:45 Ecological Networking of Lung Infections and Targeted Antibiotic Treatment: A Cystic Fibrosis Framework  
F. Rohwer, PhD, San Diego, CA

10:05 Effect of Air Pollution on the Human Microbiome and Lung Disease  
R.P. Dickson, MD, Ann Arbor, MI

10:25 The Home Microbiome, Gut Microbiome, and Asthma Susceptibility  
E. Von Mutius, MD, MS, Muenchen, Germany

10:45 Workplace Animal Exposures and the Human Microbiome  
P.S. Lai, MPH, MD, Boston, MA

11:05 Panel Discussion
9:55 Statins: Good for the Heart and Good for TB?  
P.C. Karakousis, MD, Baltimore, MD

10:15 Metabolic Targeting with Metformin as Host-Directed Therapy for Tuberculosis  
B. Podell, DVM, PhD, DACVP, Fort Collins, CO

10:35 Can HDT Prevent TB Infection, Reinfection, and Progression?  
E.A. Nardell, MD, Boston, MA

BEHAVIORAL • CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 2

D10 BUILDING BLOCKS OF IMPLEMENTATION: HOW TO IMPLEMENT ICU EVIDENCE-BASED CARE

Assemblies on Behavioral Science and Health Services Research; Critical Care; Nursing; Quality Improvement and Implementation Committee

9:15 a.m. - 11:15 a.m.  
OMNI DALLAS DOWNTOWN  
Trinity Ballroom 4/8 (Level 3)

Target Audience  
Nurses, physicians, allied health professionals, junior physicians

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

- define steps in implementation of evidence based care;
- identify how to determine barriers to a particular care practice;
- increase awareness of importance of evaluation in implementation of evidence based care in the ICU.

Translating evidence based care into clinical practice is hard. Extending the scientific symposium in ATS 2017 that introduced participants to implementation science, this session will provide practical steps that ICU clinicians can use to implement evidence based practices (EBP) in community and academic settings, with or without research expertise. ICU clinicians and researchers alike are clamoring for guidance on the how to of implementation and this session will provide foundational knowledge using case based examples of the 5 key steps of implementation.

Chairing:  
D.K. Costa, PhD, RN, Ann Arbor, MI  
C.H. Weiss, MD, MS, Skokie, IL  
C.T.L. Hough, MD, MSc, Seattle, WA

9:15 Overview of 5 Steps of Implementation  
L.C. Feemster, MSc, MD, Seattle, WA

9:30 Evidence-Based Ventilatory Management: What to Implement?  
C.H. Weiss, MD, MS, Skokie, IL

9:45 In Their Own Words: Assessing Qualitative Barriers to Early Mobilization  
M. Eakin, PhD, Baltimore, MD

10:00 At Scale: Assessing Barriers to Minimal Sedation  
S. Mehta, MD, Toronto, Canada

10:15 As Routine as Family Meetings? Tailoring the Implementation  
J.B. Seaman, PhD, RN, Pittsburgh, PA

10:30 Just Do It! Implementing an ICU Safety Checklist  
J. Stevens, MD, MS, Boston, MA

10:45 Evaluation Is the Key to Success  
C.T.L. Hough, MD, MSc, Seattle, WA

11:00 Question and Answer  
C.H. Weiss, MD, MS, Skokie, IL
**D12  ILD: DIAGNOSIS AND PROGNOSIS**

**Oral Presentations**


**10:15 Racial Differences in Age at Diagnosis and Mortality in the Pulmonary Fibrosis Foundation Registry**/A.O. Adegunsoye, J. Moore, E. Green, M.E. Strek, Chicago, IL, p.A5841


**11:00 Use of Artificial Intelligence to Identify Undiagnosed Idiopathic Pulmonary Fibrosis Patients**/A. Knight, S. Meghri, N. Nigmatullina, J. Glasser, A. Smyth, J. Keefer, J. Rigg, Durham, NC, p.A7453

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**D13  TRANSPLANTATION**

**Oral Presentations**


D14 CRITICAL CARE: GREAT EXPECTATIONS - RECOVERY AND OUTCOMES AFTER CRITICAL ILLNESS

9:15 a.m. - 11:15 a.m. Omni Dallas Downtown
Dallas Ballroom G (Level 3)

Chairing: M.S. Herridge, MD, Toronto, Canada
C.T.L. Hough, MD, MSc, Seattle, WA
A.J. Walkey, MD, MSc, Boston, MA

Oral Presentations


10:00 Long-Term Outcomes and Quality of Life of 1,364 General ICU Survivors: A Multicenter Prospective Cohort Study/M.R. Rosa, D. Sganzerla, D. Schneider, E. Sanchez, D. Souza, R. Kochhann, G. Rech, C. Teixeira, Porto Alegre, Brazil, p.A5854

10:15 Epidemiology and Outcomes of Maternal Sepsis in the US/M. Hensley, H.C. Prescott, Ann Arbor, MI, p.A5855


BEHAVIORAL • CLINICAL • TRANSLATIONAL MINI SYMPOSIUM

D15 THE BEST OF PEDIATRIC ASTHMA EPIDEMIOLOGY

9:15 a.m. - 11:15 a.m. Omni Dallas Downtown
Dallas Ballroom A-C (Level 3)

Chairing: P. Subbarao, MD, Toronto, Canada
J. Rice, DO, Baltimore, MD
J.E. Gern, MD, Madison, WI

Oral Presentations


D16  EVERY CELL YOU BREAK: HOW CELLULAR PHENOTYPES CONTRIBUTE TO PAH

9:15 a.m. - 11:15 a.m.  KBHCCD

Chairing: G. Kwapiszewska, PhD, Graz, Austria
W.M. Oldham, MD, PhD, Boston, MA
S. Graf, PhD, Cambridge, United Kingdom

Oral Presentations


9:30  Pulmonary Artery Endothelial Cell Phenotype Switch Impairs Angiogenesis in the Lungs in Persistent Pulmonary Hypertension of the Newborn/G.G. Konduri, U. Rana, B. Entringer, E. Callan, R.-J. Teng, T. Michalkiewicz, Wauwatosa, WI, p.A5868

9:45  Primitive CD117+ Endothelial Cells Are a Putative Source of Mesenchymal Cells in Pulmonary Artery Hypertension/A.R. Bhagwani, D. Farkas, M. Clauss, M. Yoder, R.J. Freishtat, L. Farkas, Richmond, VA, p.A5869

10:00  Pulmonary Hypertension and Metabolic Disease in Rats with Human Mutation in Fe-S Cluster Scaffold Protein NFU1/O. Rafikova, M. Niihori, C.A. Eccles, M. Vasilyev, R. Rafikov, Tucson, AZ, p.A5870


D17  TOWARDS THE NEXT IPF THERAPIES

9:15 a.m. - 11:15 a.m.  Room C147/C148/C154 (Level 1)

Chairing: M.R. Horton, MD, Baltimore, MD
M. Peters-Golden, MD, Ann Arbor, MI
C. Feghali-Bostwick, PhD, Charleston, SC

Oral Presentations


## BASIC • CLINICAL • TRANSLATIONAL
### MINI SYMPOSIUM

### D18  BEST OF NOVEL TECHNOLOGIES AND METHODOLOGIES

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<tr>
<td>9:45</td>
<td>10:00</td>
<td>Prediction of Lung Deformation and Induced Transient Airflow Patterns Using Fluid-Structure Interaction (FSI) Modeling Techniques/Y. Feng, J. Zhao, Stillwater, OK, p.A5885</td>
<td>9:45</td>
<td>11:15 a.m. KBHCCD Room D167/D174 (Level 1)</td>
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<td>11:00</td>
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<td>Basal Epithelial Progenitor Cells for Pulmonary Engineering as Evaluated by Single-Cell Transcriptomics/A. Greaney, M.S.B. Raredon, T. Adams, J.C. Schupp, N. Kaminski, L. Niklason, New Haven, CT, p.A5890</td>
<td>11:00</td>
<td>11:15 a.m. KBHCCD Room D167/D174 (Level 1)</td>
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## BEHAVIORAL • CLINICAL
### MINI SYMPOSIUM

### D19  LUNG CANCER SCREENING: NOVEL INSIGHTS ON PATIENT SELECTION AND OUTCOMES

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<td>9:45</td>
<td>10:00</td>
<td>Genetic Susceptibility to Lung Cancer and COPD in the National Lung Screening Trial: The Differing Role of Genes Conferring Risk in the Screening Setting/R.P. Young, R.J. Hopkins, F. Duan, C. Chiles, D. Aberle, G.A. Silvestri, P. Billings, G. Gamble, Auckland, New Zealand, p.A5893</td>
<td>9:45</td>
<td>11:15 a.m. KBHCCD Room D167/D174 (Level 1)</td>
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<td>10:00</td>
<td>10:15</td>
<td>Filtered, Unfiltered, Light, Ultralight, Regular or Mentholated: The Effect of Cigarette Type on Lung Cancer Incidence and Mortality in the National Lung Screening Trial/N. Thomas, N.T. Tanner, R. Ward, A. Roojewski, M. Gebregziabher, B. Toll, G.A. Silvestri, Charleston, SC, p.A5894</td>
<td>10:00</td>
<td>11:15 a.m. KBHCCD Room D167/D174 (Level 1)</td>
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<td>10:15</td>
<td>10:30</td>
<td>Comparing the Performance of Lung-RADS with the Brock Model to Identify Cancer Risk in the NLST/ S. Nair, V. Sundaram, M.K. Gould, Tampa, FL, p.A5895</td>
<td>10:15</td>
<td>11:15 a.m. KBHCCD Room D167/D174 (Level 1)</td>
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D21 HOST RESPONSE TO LUNG INFECTIONS
9:15 a.m. - 11:15 a.m. KBHCCD

Balroom A Four (Level 2)

Abstract Summaries
9:15-9:45

Viewing/Discussion
9:45-11:15

Chairing: Y.J. Huang, MD, Ann Arbor, MI
C. Dela Cruz, MD, PhD, ATS, New Haven, CT
R.S. Hagan, MD, PhD, Chapel Hill, NC


302 Intranasal Administration of Catalase Ameliorates Respiratory Syncytial Virus-Induced Airway Disease Via Modulation of Innate Immune Responses/M. Ansar, T. Ivanciuc, A. Casola, R.P. Garofalo, Galveston, TX, p.A5899


304 Rhinovirus C15 Infection Induces Eosinophilic Inflammation and Airways Hyperresponsiveness in Naïve and Allergen-Challenged Mice/C. Rajput, T. Ishikawa, M. Han, J. Lei, J.K. Bentley, M.B. Hershenson, Ann Arbor, MI, p.A5901


308 The Aryl-Hydrocarbon Receptor Drives Production of IL-17 and Exacerbates Pneumonitis and Pulmonary Fibrosis in Response to Respiratory Infections Following Bone Marrow Transplantation/ S.J. Gurczynski, B.B. Moore, Ann Arbor, MI, p.A5905


310 Treatment with Small Peptides Derived from the Carbohydrate Region of Surfactant Protein-A2 Differentially Regulate Inflammatory Responses During Mycoplasma Pneumoniae Infection/U.S. Younis, M. Kraft, J.G. Ledford, Tucson, AZ, p.A5907


314 Acid Aspiration Leads to Depletion of Resident Alveolar Macrophages and Impairs Their Bactericidal Activity/J. Matt, C. Malainou, J. Wilhelm, W. Seeger, S. Herold, Giessen, Germany, p.A5911


318 The Macrophage Response to Klebsiella Pneumoniae Involves CD36-Mediated Syk Activation and Type 1 IFN-Dependent Cytokine Production/R. van der Geest, H. Li, J.S. Lee, Pittsburgh, PA, p.A5915


Airway Epithelial Cells from Patients with Asthma and COPD Exhibit Improved Resistance to Rhinovirus Infection Following Treatment with TLR2 Immune Modulators/N.W. Bartlett, S.-L. Loo, J. Girkin, D.C. Jackson, F. Mercuri, C. Demaison, Newcastle, Australia, p.A7456


Controller Adherence and Albuterol Use Among Adult Patients with Asthma on Once or Twice Daily Ics/laba Therapy Using Clip-on Sensor Technology to Assess Outcomes/R.H. Stanford, C.M. Averell, P. Johnson, E. Buysman, M. Carlyle, Research Triangle Park, NC, p.A5929


Ultrasound Evaluation of the Quadriceps Muscle in Patients with Chronic Obstructive Pulmonary Disease: Relationships with Clinical Symptoms, Disease Severity and Diaphragm Contractility/I.-A. Maynard-Paquette, C. Poirier, B.P. Dubé, Montreal, Canada, p.A5949

Characterization of COPD Patients Experiencing Clinically Relevant Improvement Vs Worsening in Health Status 2 Years After a Change of Maintenance Treatment in the ‘Real-life’ Daccord Study/P. Kardos, C.-P. Criée, K. Berschneider, V. Obermoser, C. Vogelmeier, R. Buhl, H. Worth, Frankfurt am Main, Germany, p.A5950


Association Between Low Peak Inspiratory Flow Rate (PIFR) and Inspiratory Muscle Strength as Measured by Hand Grip Strength in Hospitalized Patients with Acute Exacerbation of COPD/A. Samarghandi, C. DeWilde, A. Priday, L. Puckett, D. Khorsandi, R. Qayyum, Richmond, VA, p.A5954


220 Omega-3 Fatty Acid Intake and Respiratory Symptoms Among US Adults with COPD/C.M. Lemoine Soto, E. Brigham, J.L. Woo, C. Hanson, M.C. McCormack, A.L. Koch, N. Putcha, N.N. Hansel, Baltimore, MD, p.A5959


222 Characterization of Chronic Obstructive Pulmonary Disease-Pulmonary Hypertension/A. Balasubramanian, T.M. Kolb, R.L. Damico, P.M. Hassoun, M.C. McCormack, S.C. Mathai, Baltimore, MD, p.A5961

223 Clinical Features Predict New Strain Bacterial Exacerbation of COPD/C. Pu, A. Mohan, S. Sethi, Buffalo, NY, p.A5962

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**D24 AUTOIMMUNE DISEASE, DRUG-INDUCED, AND TRANSPLANT**

9:15 a.m. - 11:15 a.m.  
Room C140/C142 (Level 1)

**Poster Viewing**
9:15-10:00

**Discussion**
10:00-11:15

**Chairs**
A.L. Gray, MD, Durham, NC
A.L. Olson, MD, Denver, CO

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105 Relationship Between Interstitial Pneumonia Related Systemic Sclerosis and Esophageal Motility Abnormalities/K. Hara, K. Yamaguchi, T. Maeno, T. Hisada, Maebashi, Gunma, Japan, p.A5967

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109 Lung Allocation Score Should Be Implemented in China/C.R. Ju, Q. Lian, B. Wei, X. Xu, R. Chen, J. He, Guangzhou, China, p.A5971


111 A Study to Evaluate the Effect of Statin Use on Allograft Function and Survival After Lung Transplantation/N. Bhan, M. Mohanka, S. Bollineni, J. Mullins, V. Kaza, J. Joerns, F. Torres, A. Banga, Dallas, TX, p.A5973


113 L-CsA, a Liposomal Formulation of Cyclosporine A, Demonstrates Therapeutic Potential for Bronchiolitis Obliterans Syndrome (BOS)/N.R. Henig, K. Hoffmann, O. Denk, G. Boerner, Menlo Park, CA, p.A5975

114 Spectrum of Abnormalities on Cardiac Magnetic Resonance Imaging Among Patients with Pulmonary Hypertension and Association with Outcomes After Lung Transplantation/F. Woll, H. Ali, M. Mohanka, S. Bollineni, J. Mullins, J.O. Joerns, V. Kaza, F. Torres, A. Banga, Dallas, TX, p.A5976


119 Clinical Outcomes of Single Lung Transplant: Does Laterality Matter?/K. Young, B. Bemiss, Maywood, IL, p.A5981
120 Incidence of Gallbladder Disease Post Lung Transplant/S. Chandiramani, E. Mancl, S. Quddus, Maywood, IL, p.A5982
121 Establishment of an Ex Vivo Lung Perfusion Program Managed by a Multidisciplinary Team/A. Banga, M. Sepulveda Tran, D. Miller, C.N. Wrenn, F. Torres, M. Wait, M. Jessen, J. Murala, Dallas, TX, p.A5983

Rapid: Rapid Abstract Discussion Session

D25 CRITICAL CARE: HARD TIMES - RESUSCITATING MY PATIENT: FLUID, BLOOD AND OTHER STRATEGIES

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN
Dallas Ballroom E-F (Level 3)

Abstract Summaries 9:15-9:45
Viewing/Discussion 9:45-11:15

Chairing: D.N. Hager, MD, Baltimore, MD
L.K. Vande Vusse, MD, MSCE, Seattle, WA
M. Afshar, MSCR, MD, Maywood, IL

807 Effects of Balanced Crystalloid versus Saline in Patients with Hyperkalemia, a Retrospective Analysis of the SMART Trial/A. Toporek, J.D. Casey, E. Siew, T.W. Rice, M.W. Semler, Nashville, TN, p.A5991
D26 HEALTH EFFECTS ASSOCIATED WITH INDOOR AND OUTDOOR AIR POLLUTION

9:15 a.m. - 11:15 a.m.  

Chairing: K. Cromar, PhD, New York, NY  
P.K. Henneberger, ScD, ATSF, Morgantown, WV  
S. Bose, MD, MPH, Baltimore, MD

BASIC • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER TRANSLATIONAL SESSION

821 Increasing Number of Treatment Decisions Undermines Balance Between Study Arms in Randomized Trials: A Simulation Study/R. Veldhoven, J. Muscedere, D. Maslove, Kingston, Canada, p.A6001


824 Initial Rhythm Mediates Relationship Between End-Tidal CO2 and Return of Spontaneous Circulation During In-Hospital Cardiac Arrest/G. E. Roellke, J. Lam, V. Reddy, T. Williams, S. Pannia, New York, NY, p.A6008

825 Impact of Level of Training on the Decision to Terminate CPR in In-Hospital Cardiac Arrest - Results of a Physician Survey/A.M. Abdul Hameed, H. Bhatt, B.E. Iriarte, G. Lerman, Darby, PA, p.A6009


405 Do Known Sources of Indoor Air Pollution Affect Lung Function in Cystic Fibrosis?/S.W. Carson, J.M. Collaco, G.R. Cutting, K. Psoter, N.E. West, N. Lechtzin, N.N. Hansel, C.A. Merlo, Baltimore, MD, p.A6014

406 The Impact of Fine Particulate Matter on School Absences/D. Mendoza, T.G. Liou, C.S. Pirozzi, Y. Zhang, R. Paine, Salt Lake City, UT, p.A6015


The Effect of Varying Doses and Duration of Particulate Matter (PM2.5) Exposure on Myofibroblast Differentiation/N. Craig, S.K. Huang, Ann Arbor, MI, p.A6024


The Protective Role of Airway Macrophages in Face of Air Pollution/N.M. Liu, L. Miyashita, J.M. Grigg, London, United Kingdom, p.A6026


Mouse Model of Pulmonary Fibrosis Induced by Intranasal Instillation of PM2.5/F. Li, M. Xu, Shanghai, China, p.A6028


Toll-Like Receptor 4-Dependent Suppression of Platelet-Derived Growth Factor Receptor-Alpha Signaling: A Novel Mechanism for Inflammation-Induced Hypoalveolarization/A.P. Popova, T.X. Cui, A. Brady, L. Rosenbloom, C. Fulton, A. Goldsmith, Ann Arbor, MI, p.A6033


Role of Fatty Acid Oxidation in Hyperoxia-Induced EndoMT: Implication in Pathogenesis of Pulmonary Hypertension/J. Gong, Z. Feng, X. Lu, A.L. Peterson, P.A. Denhery, H. Yao, Providence, RI, p.A6035


Sex-Specific miR-30a Mediated Snai1 Inhibition Decreases Pathologic Fibrosis in BPD/K. Lingappan, X. Dong, Y. Zhang, Houston, TX, p.A6037

Interferon Gamma Is Protective in Acute Hyperoxia-Induced Lung Injury/L.C. Eldredge, R.S. Creasy, S.F. Ziegler, Seattle, WA, p.A6038

Endothelial Extracellular Signal-Regulated Kinase 2 (ERK2)-Deficient Mice Display Increased Susceptibility to Hyperoxia-Induced Experimental Bronchopulmonary Dysplasia and Pulmonary Hypertension/B. Shivanna, A. Shrestha, C. Reynolds, R. Menon, Houston, TX, p.A6039


Developmental Transcriptome Signatures for Infant Airway Epithelium Reveals Discordance in Polymeric Immunoglobulin Receptor Expression Between Cell Cultures and Intact Lung/T. Westmont, M.G. dela Pena-Ponce, D. Dugger, H. Ji, V. Kohli, L.A. Miller, Davis, CA, p.A6041


Development and Characterization of Reporter Mice for Canonical Transforming Growth Factor (TGF)-β Signaling/I. Palumbo, T. Likhoshvay, M. Gunjak, W. Seeger, R.E. Morty, Bad Nauheim, Germany, p.A6044


Artificial Intelligence in Assessment of Acute Pulmonary Embolism on Computed Tomographic Pulmonary Angiography/W. Liu, M. Liu, Beijing, China, p.A6051


Acute Pulmonary Embolism in Asthma Exacerbation: Characteristics and Hospital Outcomes/B. Alzghoul, F. Amer, A. Innabi, M. Chizona, E. Papiernick, I. Faruqi, Gainesville, FL, p.A6055

Acute Pulmonary Embolism in Patients with Obstructive Sleep Apnea; Frequency and Associated Mortality/Z.I. Seckin, H. Helmi, T.J. Weister, E. Festic, Jacksonville, FL, p.A6056

Sex Differences in Predicting Acute Pulmonary Embolism Recurrence During the Different Follow-Up Periods/P. Yuan, Y.-L. Yang, J.-L. Li, J. Liu, Shanghai, China, p.A6057

Sex-Specific Performance in Pulmonary Embolism Patients with Different Simplified PESI Score/Y.L. Yang, P. Yuan, L. Wang, S. Gong, R. Jiang, W.H. Wu, C.J. Luo, J. Liu, J. He, L. Yuan, H. Qiu, Shanghai, China, p.A6058


The Efficacy of Direct Oral Anticoagulants on Residual Clot Burden in Obese and Non-Obese Patients with Massive and Submassive Pulmonary Embolism/C. Bach, C. Wright, R.J. White, S.J. Cameron, D. Lachant, Rochester, NY, p.A6060

Relationship Between Timing of Anticoagulation Initiation and Clinical Outcomes in Acute Venous Thromboembolism Patients Who Received Low Molecular Weight Heparin or Direct Oral Anticoagulants/M. Ahmad, K. Gunasekaran, S. Rehman, J. Devasahayam, Danville, PA, p.A6061

D30 ASTHMA: WHAT’S NEW IN ASSESSMENT AND TREATMENT?

9:15 a.m. - 11:15 a.m.

Ballroom D Three (Level 3)

Poster Viewing
9:15-10:00

Discussion
10:00-11:15

Chairing: A.E. Dixon, MD, ATSF, Burlington, VT

B. Marsh, MD, PhD, Portland, OR

S.B. Fain, PhD, Madison, WI


606 Using FEV1/FVC to Predict Outcome of Methacholine Challenge Testing/W. Wee, D. Wilson, T.J. Moraes, Toronto, Canada, p.A6098


615 A Prognostic Study of Clinical Characteristics and Lung Function for Cough Variant Asthma with Small Airway Disease/Z. Chen, H. Yuan, X. Liu, C. Du, Shanghai, China, p.A6107

616 Utility of Cardiopulmonary Exercise Testing to Diagnose Cause of Exercise Intolerance in Pediatric Exercise Induced Dyspnea/R. Bhatia, M. Stout, Akron, OH, p.A6108


**CLINICAL • TRANSLATIONAL**

**THEMATIC POSTER SESSION**

**D31 ALLERGY AND ASTHMA CASE REPORTS**

9:15 a.m. - 3:30 p.m.  

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion  
12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** P. Akuthoda, MD, La Jolla, CA

**P1031** Atypical Presentation of Allergic Bronchopulmonary Aspergillosis Mimicking Lung Cancer/R. Arora, A. Virani, E.X. Wei, S. Kalanjeri, Shreveport, LA, p.A6116

**P1032** Treatment-Responsive Constrictive Bronchiolitis Associated with Non-Asthmatic Allergic Bronchopulmonary Aspergillosis/I. Woods, T.J. Sjulin, Fort Sam Houston, TX, p.A6117

**P1033** Late-Onset Angiotensin-Converting Enzyme Inhibitor Induced Angioedema After 10 Years of Lisinopril Use/M. Saad eldin, A. Khalil, S. Chiravuri, S. Waseem, Johnstown, PA, p.A6118

**P1034** Bulky Nodules: An Atypical Presentation of Hypersensitivity Pneumonitis/C. Brizendine, J.M. Bluhm, Portland, OR, p.A6119

**P1035** Elevated Serum Procalcitonin in the Setting of Allergic Reaction: A Marker of Anaphylaxis/A. Al hillan, F. Ajam, T. Khan, Neptune City, NJ, p.A6120

**P1036** When the Wonder Drug Fails: A Case of Anaphylaxis from Glucocorticoids/D. Patel, E. Matayeva, R.R. Sanivarapu, A. Alaverdian, East Meadow, NY, p.A6121

**P1037** Leukocytoclastic Vasculitis Due to Azathioprine/J. McLaughlin, S. Aryal, Falls Church, VA, p.A6122


**Facilitator:** N. Barrett, MD, Boston, MA

**P1040** Chloridiazepoxide Induced Steven-Johnson Syndrome/B.C. Walsh, New York, NY, p.A6125


“Saved by Sevo” - Sevoflurane in Refractory Adult Status Asthmaticus/L. Littlefield, S. Kagunye, L. Jo, V. Balasubramanian, Fresno, CA, p.A6128


Should a Low FEV1 Exclude a Severe Asthma Patient from Undergoing Bronchial Thermoplasty? We Do Not Think So/K.S. Robinett, H.M.N. Abbas, E. Pickering, A. Sachdeva, Baltimore, MD, p.A6132

Analysis of Hyperoxic Lung Injury in Mice Deficient in Gene for Cytochrome P450 (CYP)1b1, 1a1 or 1a2/C. Coarfa, A.C. Veith, M.J. Robertson, K. Lingappan, B. Mooorthy, Houston, TX, p.A6138


Facilitator: S. Graziani, MD, Geneva, Switzerland

Clinical Diagnostic Accuracy of Respiratory Failure in Critically Ill Hematopoietic Stem Cell Transplant Patients/B.L. Ferreyro, B. Reeta, E.C. Goligher, M.E. Detsky, S. Thyagu, L. Munshi, Toronto, Canada, p.A6141


Aging Decreases Tissue Protective Function of Regulatory T Cells in the Lung/L. Morales-Nebreda, K. Helmin, B.D. Singer, Chicago, IL, p.A6145


Glutamine Metabolism Regulates Neutrophil Clearance and Macrophage Activity in Acute Lung Injury/C.L. Vigeland, H.S. Beggs, C.M. Doerschuk, Chapel Hill, NC, p.A6148

Facilitator: E.D. Morrell, MD, MA, Seattle, WA


P135 Lung CD4


Discussion:

P138 Comparison of Pleural Effusion Features and Biomarkers Between Talaromycosis and Tuberculosis in Non-HIV-Infected Patients: A Prospective and Retrospective Study/J. Zhang, Nanning, China, p.A6160

P139 Early Detection of Bordetella Pertussis and Bordetella Parapertussis Infection with Pertussis Antibody Ig-M, Ig-A, and IgM/IgA Ratio/T. Matsuda, Misato-shi, Saitama, Japan, p.A6161

P140 Extracellular Matrix Proteins Protects Host from Escherichia Coli-Induced Respiratory Infection/V. Pi, X. Zhang, L. Huleihel, N. Remlinger, T.W. Gilbert, Pittsburgh, PA, p.A6162

P141 Human Airway and Alveolar Resident Phagocytes Are Resistant to the Effects of Anthrax Lethal Toxin/J.P. Metcalf, V.I. Patel, J.L. Booth, E. Duggan, Oklahoma City, OK, p.A6163


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

D33 PATHOLOGIC MECHANISMS IN PULMONARY INFECTIONS

9:15 a.m. - 3:30 p.m.  KBHCCD

Area B (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: A.K. Dickey, MD, Boston, MA


P145 A Role for TR2 in Pattern-Based Recognition of Virus Versus Non-Pathogen/A. Rynda-Apple, K. Shepardson, L. Johns, K. Bertrand, B. Schwarz, T. Douglas, Bozeman, MT, p.A6167

P146 Long Noncoding RNA Regulates IRF1/IFNL Responses to Respiratory Viruses/J. Yang, L. Kaphalia, W.J. Calhoun, A. Brasier, Galveston, TX, p.A6168


P148 Simvastatin Inhibits Airway Epithelial H1N1 Influenza Viral Replication/M.G. dela Pena-Ponce, N. Haigh, K. Chmiel, L.A. Miller, A.A. Zeki, Davis, CA, p.A6170


P150 SPLUNC1 Enhances TLR3 Signaling in Mouse Lungs/ N. Schaefer, H.W. Chu, Denver, CO, p.A6172

P840 Neutrophil Function May Impact Sex Based Differences in Disease Outcomes in Cystic Fibrosis/M. Bose, S. Abid, A. Keller, L. Fernandez, L. Schumacher, O. Cavazos, R. Jain, Dallas, TX, p.A6185
Facilitator: P.K. Mohabir, MD, Stanford, CA


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Facilitator: P.K. Mohabir, MD, Stanford, CA

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Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

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Area F (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: C.R. Cooke, MD, Ann Arbor, MI


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P868 SMART PFT: Spirometry by Medical Assistants Vs. Respiratory Facilitator

P867 The Use of “Goals of Care” in the Medical Literature: A

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P863 Validity Wells, Geneva and Pisa Score with Use of Intelligence Artificial for Pulmonary Embolism Diagnosis/A.R. Bastidas, I.


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12:00-1:00: authors will be present for discussion with assigned facilitators.

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Facilitator: J.L. Todd, MD, Durham, NC


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Facilitator: R.J. Shah, MD, MSCE, San Francisco, CA


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Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

CLINICAL
THEMATIC POSTER SESSION
**CLINICAL**

**THEMATIC POSTER SESSION**

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9:15 a.m. - 3:30 p.m.  

**Area D (Hall F, Level 2)**

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion  
12:00-1:00: authors will be present for discussion with assigned facilitators.

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P606  An Unusual Pleural Effusion in a Patient with Heart Failure/D.B. Takizawa, P.F.B. Colares, F.M. da Costa, B.G. Baldi, O.M. Dias, Sao Paulo, Brazil, p.A6423
P607  Eosinophilic Pleural Effusion Due to Topical Minoxidil Use/A. Hudler, M.F. Ragland, J. Sippel, Aurora, CO, p.A6424
P611  Lymphoma in the Chest: A Different Paradigm/W. Rodriguez, A. Candelario, Y. Otero-Dominguez, A. Torres-Palacios, San Juan, W. Rodriguez, A. Livonia, MI, p.A6428
P612  Diagnostic Pressure: A Case of Recurrent Unilateral Effusion Due to Central Vein Stenosis/A. Sundaramoorthy, M.E. Schimmel, M.K. Greer, Atlanta, GA, p.A6429
P613  Antifungal Fallout: Pleural Effusion Caused by Itraconazole Therapy/M. Dhingra, S.E. Randhawa, M. Klug, Z.S. DePew, Omaha, NE, p.A6430
P616  Recurrent Pneumothorax: A Rare Complication of Ascaris Lumbricoides Infestation/E.V. Shah, A.R. Banares, M. Banares, Quezon City, Philippines, p.A6433
P617  Yellow (Toe) Nail Syndrome/E. Kistler, C.L. Channick, Boston, MA, p.A6434
P618  Breaking the Bars of the Imprisoned Lung Trapped Lung Secondary to Fibrothorax Presenting as Cor Pulmonale: A Case Report/R. Yang-Nagano, M. Banares, Quezon City, Philippines, p.A6435
P621  Chylothorax: A Rare Complication of Upper Extremity Deep Venous Thrombosis (DVT)/M. Farishta, P.P. Patel, M. Schauer, Kalamazoo, MI, p.A6438

D43  COPD, CF, AND BRONCHIECTASIS CASE REPORTS
9:15 a.m. - 3:30 p.m.  Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.
Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

P624  Pulmonary Function Testing with Isolated DLCO Decrease and Severity of Emphysema/D. Guadarrama, J.V. Meharg, Providence, RI, p.A6440
P627  An Unusual Association Between Alpha-1 Antitrypsin Deficiency and Interstitial Lung Disease: Case Report/K. Gill, R. Crews, Jacksonville, FL, p.A6445
P629  Do Not Get Tricked; Stop the Nebulizer Treatment. A Case of Ubi Pus, Ibi Evacua: A Case of an Infected Emphysematous Bulla Requiring Percutaneous Drainage/R. Nasim, L. Parra-Rodriguez, E. Poljakova, Chicago, IL, p.A6444
P630  Acute COPD Exacerbation Associated with a Rare Pathogen: A Case of Tsukamurella Pulmonis/H. ODonnell, J. Kirkham, Stratford, NJ, p.A6446
P633  More than Just Chronic Obstructive Pulmonary Disease/K. Gill, D. Lee, Fresno, CA, p.A6449

ATS 2019 • Dallas, TX
P651  Brain Abscess in a Patient with Cystic Fibrosis: Don’t Always Assume It Is the Same Bug/I.A. Innabi, M. Mahendran, J. Lascano, Gainesville, FL, p.A6467

P652  Rare Presentation of an H-Type Tracheoesophageal Fistula in an Adolescent Male with Cystic Fibrosis/T. Klouda, E. Lindholm, E. Pololet, S. Rani, L. Varlotta, J. Velasco, Philadelphia, PA, p.A6468


P654  Tobramycin Pharmacokinetics in a Postpartum Patient with Cystic Fibrosis Receiving ECMO/N. Martin, J.D. Dickinson, G. Peitz, Omaha, NE, p.A6470

CLINICAL

THEMATIC POSTER SESSION

D44  CRITICAL CARE: AN ENCOUNTER - HOW WE MANAGE CRITICAL CARE IN AND OUT OF THE ICU

9:15 a.m. - 3:30 p.m.  KBHCCD

Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion

12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators:  T.J. Iwashyna, MD, PhD, Ann Arbor, MI

K. Fiest, PhD, Edmondton, Canada

P674  Frequency of Omissions After an Intervention to Decrease Incomplete Respiratory Data Presentations During MICU Rounds/R. Sautter, N. Solberg, P. Liu, A. Bhushan, J.A. Gold, K. Artis, Portland, OR, p.A6471


P680  Factors Associated with Unplanned Transfers from the General Medicine Floor to the Medical Intensive Care Unit Within 24 Hours of Emergency Department Admission/J. Jarrah, Q. Radaideh, A. Karim, C. Rios-Bedoya, G. Bachuwa, Flint, MI, p.A6477

P681  Respiratory Failure and Unplanned Intubations in General Floor Patients/A. Bedoya, C. Page, B. Adagatla, N. Bhavsar, B. Goldstein, N.R. MacIntyre, Durham, NC, p.A6478

Facilitators: J.R. Klinger, MD, Providence, RI
F. Angriman, MD, MPH, Toronto, Canada


P683  Use of a Decision Support Tool to Predict and Plan the Safe Inter-Hospital Transfer of a University Affiliated Trauma Hospital Intensive Care Unit/P.G. O’Callaghan, J. Kernick, M. Gowland, T. Jones, Adelaide, Australia, p.A6480


P687  The Intubated Patient’s Experience: Are We Paying Attention?/C. Sung, S.L. Feder, K.A. Crothers, K.M. Akgun, West Haven, CT, p.A6484


P689  Early Therapeutic Bronchoscopy in Mechanically Ventilated Level I Trauma Patients to Prevent Pneumonia at a Community Based Hospital/L. Wydro, J. Gordon, A. Patel, M. Reichmuth, M. Borbely, M. Junqueira, C. Shapiro, K. Fultz, A. Conrad, K. Shapiro, V. Janowski, Pueblo, CO, p.A6486

Facilitators: A. Van de Louw, MD, PhD, Hershey, PA
C. Polito, MD, Atlanta, GA

P691  Early Diagnosis and Management of Sepsis Outside Hospital Setting/S. Singh, H.A.A. Rayes, A.M. Harrison, N. Andrijasevic, O. Gajic, R. Kashyap, Rochester, MN, p.A6487

P692  A Long-Term Mortality Predicting Model in Patients with Sepsis Who Admitted to a Medical Intensive Care Unit Via Emergency Department/K. Lee, M.K. Lee, J. Mok, J.S. Eom, Busan, Korea, Republic of, p.A6488


P699  Decreasing Segment/Monocyte Ratio on Day 3 Compared to Day 1 Predicts Better Survival in Patients with Sepsis Admitted to ICU/-F. Fang, C.-H. Huang, K.-Y. Hung, Y.-M. Chen, C.-Y. Lin, Y.-T. Chang, K.-T. Huang, Y.-H. Wang, C.-C. Wang, M.-C. Lin, Kaohsiung, Taiwan, p.A6495


P702  Can Corticosteroids Reduce the Mortality of Patients with Severe Sepsis? A Systematic Review and Meta-Analysis/Y. Ni, B. Liang, Z. Liang, Chengdu, China, p.A6498

Facilitators: J.E. Sevransky, MD, Atlanta, GA
B.D. Park, MD, Denver, CO


P707 Clinical and Laboratory Predictors of Mortality in Infection-Related Diagnoses: A Retrospective Cohort Study/M. Hayrabedian, J. Park, E. Elueze, Tyler, TX, p.A6503

P708 The Outcome of High Dose Vasopressor Therapy in Septic Shock/C. Meenach, A. Kelly, E. Bensadoun, Lexington, KY, p.A6504

P709 Outcomes of Pulmonary Hypertension Patients Presenting with Sepsis in a Single Large Hospital System/A. Reyes, A.E. Frost, Z. Safdar, E. Graviss, D.T.M. Nguyen, M. Puppala, Houston, TX, p.A6505

P710 In Hospital Outcomes of MRSA Septicemia Among Patients with and Without Substance Abuse/B. Ahmad, K. Cousins, M.M. Munawar, N. Ganta, D. Larbi, Washington, DC, p.A6506

P711 The Evolution of Antibiotic Resistance in Patients with Pseudomonas Aeruginosa Pneumonia in the ICU/J. Treadway, R.G. Wunderink, C. Qi, Chicago, IL, p.A6507

P712 To Study the Epidemiology of Multidrug Resistant Acinetobacter Infections Among Critically Ill Adult Patients Admitted in Medical Intensive Care Unit/A.R. Misri, New Delhi, India, p.A6508

P713 The Epidemiology of Reported Antimicrobial Allergy During Prehospital Care/M. Khalid, J.N. Kennedy, C. Martin-Gill, C.W. Callaway, D.M. Yealy, D.C. Angus, C.W. Seymour, Pittsburgh, PA, p.A6509


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**THEMATIC POSTER SESSION**

D46 CRITICAL CARE CASE REPORTS: HEMATOLOGY, ONCOLOGY, RHEUMATOLOGY AND IMMUNOLOGY

9:15 a.m. - 3:30 p.m. Area E (Hall F, Level 2)

**Viewing:** Posters will be on display for entire session.
**Discussion:** 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitators:** L. Munshi, MD, MSc, Toronto, Canada
K.C. Vranas, MD, Portland, OR


P721 Idiopathic Hemophagocytic Lymphohistocytosis (HLH) Leading to Spontaneous Intracranial Hemorrhage/Y. Ahmad, A. Adeyinka, F.N. Rahaghi, S. Shah, C. Filip, Salem, MA, p.A6515

P722 Rare Case of Hemophagocytic Lymphohistiocytosis (HLH) with Anaplasic Large Cell Lymphoma (ALCL) and Hypereosinophilic Syndrome (HES)/S. Gandhi, D. Attalla, J.H. Rhee, Towson, MD, p.A6516

P723 A Rare Case of Hemophagocytic Lymphohistiocytosis (HLH) Triggered by West Nile Virus/N. Al Nasrallah, D. Patel, Indianapolis, IN, p.A6517

P724 Hodgkin Lymphoma-Associated Hemophagocytic Lymphohistiocytosis: Subtype Matters/L. Delasos, Farmington, CT, p.A6518

P725 A Deadly Trigger of Hemophagocytic Lymphohistiocytosis/ A. Shallal, M. Reaume, S. Kenth, P. Boapimp, Kalamazoo, MI, p.A6519


Facilitators: S. Chawla, MD, New York, NY
P. Rajendram, MD, Cleveland, OH
P730 B Cell Follicular Lymphoma Presenting as Pseudohypoxia/C. Butler, C. Blay, C. Harden, A. Ataya, Gainesville, FL, p.A6524
P731 AML in Crises—an ARDS Mimicker/S. Subramanamy, A. Duggal, Birmingham, AL, p.A6525
P733 A Rare Occult Malignancy Causing Persistent Hypotension/S. Waheed, H.M. Zubair, M.R. Zafar, Buffalo, NY, p.A6527
P734 Severe Tracheal Stenosis: When Invasive Interventions Are Not an Option/R. Farhat, A. Ramirez, A.C. Miller, D. Stoeckel, St. Louis, MO, p.A6528
P737 A Very Atypical Diagnosis/J. Branin, M. Patel, A. Levitov, Norfolk, VA, p.A6531
Facilitator: R.S. Stephens, MD, Baltimore, MD
P744 Multiple Myeloma in a Young Man in the Intensive Care Unit/L. Rashdan, Y. Zayed, A. Aburahma, S. Malladi, Flint, MI, p.A6538
P745 Far from a Blast: Hyperleukocytosis and Intracranial Hemorrhage in the Chronic Stable Phase of Chronic Myeloid Leukemia/E. Reinhart, M. Crowe, Temple, TX, p.A6539
P747 A Rare Complication of Systemic Anticoagulation/M. Alipour, S. Aslam, N. Mesha, E.V. Pinelis, Brooklyn, NY, p.A6541
P748 Myasthenia Gravis: A Rare Immune Related Adverse Event of Pembrolizumab/V.L. Kankanala, N. Kotecha, Summit, NJ, p.A6542
Facilitators: C. Lee, MD, Toronto, Canada
A.J. Admon, MD, MPH, Ann Arbor, MI
P750 Multiple Organ Dysfunction Syndrome in Setting of Sweet’s Syndrome Without Evidence of Underlying Infectious, Rheumatologic, or Oncologic Etiology/A. Kozlova, J.B. Gleason, N. Maroz, Dayton, OH, p.A6544
P752 Tumor Lysis Syndrome from Autolysis in Prostate Cancer/A.V. Sharma, M.L. Lane, Washington, DC, p.A6546
P753 Acute Renal and Hepatic Failure Due to Stiff Man Syndrome/S. Sama, A. Kalles, A. Khurana, P. Grover, D.A. Gerardi, Hartford, CT, p.A6547
P755 Activated Protein C Deficiency: An Over-Driving Mechanism for Sepsis Related Complications in Liver Cirrhosis/A. Bhardwaj, N. Shamsid-Deen, T. Ardiles, Phoenix, AZ, p.A6549
P756 A Rare Cause of Brain Metastases/K.J. Potts, S.B. Choi, M.I. Argyres, E.D. Chan, Farmington, CT, p.A6549
CLINICAL
THEMATIC POSTER SESSION

D47 CRITICAL CARE CASE REPORTS: INFECTION AND SEPSIS I

9:15 a.m. - 3:30 p.m. KBHCCD
Area A (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: P.D. Sottile, MD, Aurora, CO M. Hilty, MD, Zurich, Switzerland


P3 Extensive Hand Hematoma Requiring Urgent Inter-Hospital Transfer Due to Acute Compartment Syndrome/T. Maeda, O. Goicoechea, La Jolla, CA, p.A6558

P4 An Uncommon Cause of Sepsis: A Case Highlighting the Importance of Counseling in Patients with Indwelling Catheters/A. Khawaja, M. Baqir, Rochester, MN, p.A6556

P5 Vasopressor Induced Limb Ischemia/J. Parsons, H. Hirzallah, F.M. Zeid, Huntington, WV, p.A6557


P8 Proteus Mirabilis: A Rare but Dangerous Cause of Osteomyelitis/J. Lamichhane, M. Fafalak, E. Bryll-Perzan, R. Bobde, B. Bhattarai, Yonkers, NY, p.A6560

P9 Aeromonas Veronii Sepsis After Fresh Water Fishing/S. Saleem, O. Rahman, Bronx, NY, p.A6561

P10 Disseminated Coccidioides Mimicking as Skeletal Malignancy/S. Rajasekar, G. Rajashekar, A. Vaikuntam, A. Iardino, Odessa, TX, p.A6562

Facilitators: L.K. Vande Vusse, MD, MSCE, Seattle, WA G.C. Lockhart, MD, St. Louis, MO

P11 Purpura Fulminans Secondary to Streptococcus Pneumoniae/ C. Pinzon Escobar, M. Mody, S.G. Treat, Newark, NJ, p.A6563


P13 A Case of Severe Pneumocystis Jirovecii Pneumonia In Healthy Young Male/M. Nagori, K. Patel, H.L. Paz y Mar, Cleveland, OH, p.A6565

P14 Austrian Syndrome - A Rare Entity in Current Era of Antibiotics/W. Kumar, P. Chung, D.M. Kelley, Los Angeles, CA, p.A6566

P15 Diffuse Alveolar Hemorrhage (DAH)- A Rare Life-Threatening Manifestation of Anaplasmosis/A. Ward, A. Abdullah, K. Young, J.P. Sugunraj, Danville, PA, p.A6567


P18 The Hidden Infection Waiting to Strike: A Rare Case of Strongyloides Hyperinfection Syndrome/X. Cao, A. Scribner, B. Elhalwagi, Longview, TX, p.A6570

P19 A Rare Case of Staphylococcal Scalded Skin Syndrome in an Adult/P. Desai, H. Amin, V.V. Tambe, Syracuse, NY, p.A6571


Facilitators: K. Patel, MD, PhD, Chapel Hill, NC J. Pantaleon-Garcia, MD, Monterrey, Mexico

P21 A Toxic Combination: Clostridium Difficile Infection Leading to Miscarriage/C. Prohaska, M.F. Ragland, Aurora, CO, p.A6573


P24 When a Sore Throat Hits You Hard: Rare Complicated Lemierre’s Syndrome/B. ElBebawy, B. Chouhan, K. Yassa, Cooperstown, NY, p.A6576


P26 Lemieres Syndrome Presenting with Cavernous Sinus Thrombosis and Meningoencephalitis/J. Huston, T. Holowka, C. Dela Cruz, New Haven, CT, p.A6579


A Hunter in Respiratory Failure/C. Cutting, S. Waldman, G. Thompson, N.J. Kenyon, Sacramento, CA, p.A6581

Facilitators: I. Co, MD, Ann Arbor, MI
A.T. Chua, MD, MPH, Stony Brook, NY

Often a Deadly Fungus; Mucor Must Be Among Us: A Case of Angioinvasive Gastric Mucormycosis with a Positive Outcome/A. Sharaan, M.R. Alziadat, Z. Syed, A. Samuel, R. Yelisetti, J. Mathew, M. Ismail, Paterson, NJ, p.A6582

Intractable Ventricular Fibrillation Following Influenza A Virus Infection/S. Saleem, E. Shah, M. Corpuz, M. Karwa, Bronx, NY, p.A6583

Well’s Disease: An Unlikely Cause of Shock/R. Riaz, J.B. Sutter, Wynnewood, PA, p.A6584

Clostridium Septicum Bacteremia Presenting as a Para-Neoplastic Sepsis/Y. Vorakunthada, W. Lilihwat, Lubbock, TX, p.A6585

Disseminated VZV Infection Leading to ARDS in a Patient with Crohn’S Disease on Azathioprine/K. Ilyas, S. adil, B. Hull, Grand Rapids, MI, p.A6586

A Lethal Combination of Disseminated Herpes Simplex Virus-1 (HSV-1) and Varicella Zoster Virus (VZV) Co-Infection in an Immunocompromised Adult/M. Tahiboub, A. Al-Shyoukh, L. Numan, O. Abuqahanimeh, M. Younis, A. Gohar, Kansas City, MO, p.A6587

Too Altered to Be a UTI? A Case of HSV Encephalitis/Immunocompetent Host/R. Zulfikar, Morgantown, WV, p.A6594

Between a Kidney Stone and a Hard Place: Disseminated Candidiasis Following Nephrolithiasis/D. Lee, M. Farishta, K. Patel, Kalamazoo, MI, p.A6595


Neuroinvasive West Nile Virus Infection Presenting as Acute Symmetric Flaccid Paralysis/G.S. Thind, S. Noh, S.P. Dugar, Cleveland, OH, p.A6596


Don’t Forget Doxycycline: A Case of Ehrlichiosis Complicated by Myocarditis and Hemophagocytic Lymphohistiocytosis/Z.B. Strumpf, E. Wilding, Baltimore, MD, p.A6592


Between a Kidney Stone and a Hard Place: Disseminated Candidiasis Following Nephrolithiasis/D. Lee, M. Farishta, P.P. Patel, Kalamazoo, MI, p.A6595

West Nile Virus Infection Presenting as Acute Symmetric Flaccid Paralysis/G.S. Thind, S. Noh, S.P. Dugar, Cleveland, OH, p.A6596


A Role for Empiric Aspergillus Coverage in Immunocompromised Patients with Severe Influenza Pneumonia/U. Shaikh, L. Cordova, L. Concepcion, P. Solari, A. Danyalian, AVENTURA, FL, p.A6600

Facilitators: D.N. Hager, MD, Baltimore, MD
R. Kindle, MD, Boston, MA

Rhinovirus-Induced Rapidly Progressing ARDS in an Immunocompetent Host/S. Ngu, S. Pervaz, A. Avula, M.N. ChaLhoub, Staten Island, NY, p.A6601

Peri-Tonsillar Abscess with Retropharyngeal Extension Leading to Airway Narrowing and Concomitant Pre-Septal Cellulitis/A. Thota, M.O. Sillo, K. Gangu, K. Manzoor, Boston, MA, p.A6602

Late Presenting Severe Plasmodium Ovale Malaria Complicated by Acute Respiratory Distress Syndrome in a Patient with Travel to Sub-Saharan Africa/C.B. Gillombardo, V. Amaral, M. Biehl, Cleveland, OH, p.A6603

Lemi Teach You Something: A Case of Septic Thombophlebitis and Severe Thombocytopenia/L. Jolly, M. Megally, V. Kaul, T. McGarry, Elmhurst, NY, p.A6604

Cryptococcosis in an Immunocompetent Well-Controlled Diabetic/V. Badami, R. Zulfikar, Morgantown, WV, p.A6605

Escaped the Lungs, but Stuck in the Brain! Influenza Associated Encephalitis in an Adult without Pulmonary Involvement/V. Deepak, J.L. Wilt, M. Farishta, Kalamazoo, MI, p.A6606

P767 Comparison of Ultrasound-Guided Retrolaminar Block with Comparative Study on the Ventilator Days of Patients Given Bispectral Index Usage During Neuromuscular Blockade in the Rethinking Sedation Monitoring in the Intensive Care Unit/ Evaluation of Continuous Sedation Usage in the ICU of a Atypical Sleep Architecture Evaluated by Abnormal N3 Level Outcomes of Use of Antipsychotic for Delirium in the ICU: A Prevalence of Delirium Correlates with Pro-Inflammatory
9:15 a.m. - 3:30 p.m. KBHCCD D50 CRITICAL CARE: THE METAMORPHOSIS - PAIN, SEDATION, DELIRIUM, ICU-ACQUIRED WEAKNESS, AND PALLIATIVE CARE

Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session. Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: J.R. Curtis, MD, MPH, Seattle, WA M. Hua, MD, MSci, New York, NY


P762 Atypical Sleep Architecture Evaluated by Abnormal N3 Level Using Polysomnography in Critically Ill Patients. A Pilot Study/T. Kotani, R. Miyashita, M. Mori, D.J. Levendowski, Tokyo, Japan, p.A6673

P763 Evaluation of Continuous Sedation Usage in the ICU of a Community-Based Teaching Hospital/H. Bakhtiar, R. Scatena, A.M. Ahasic, Norwalk, CT, p.A6674

P764 Rethinking Sedation Monitoring in the Intensive Care Unit/C. Kapp, N.M. Punjabi, Baltimore, MD, p.A6675

P765 Bispectral Index Usage During Neuromuscular Blockade in the Intensive Care Unit: Potential for Harm/B. Poole, Z. Reese, S. Li, T. Dechen, N. Tocci, J. Stevens, Boston, MA, p.A6676

P766 Comparative Study on the Ventilator Days of Patients Given Sedatives Versus No Sedation at the ICU of Manila Doctors Hospital/C.D. Roldan, Manila, Philippines, p.A6677


Facilitators: A.A. Hope, MD, Bronx, NY A.C. Long, MD, MS, ATSF, Seattle, WA

P770 Predictors for Disordered Swallowing in Critically Ill Intensive Care Unit Patients/M. Schar, T. Omari, R.J. Fraser, A.D. Bersten, S. Bihari, Bedford Park, Australia, p.A6681

P771 Main Therapeutic Goals of Physical Function Defined by Physical Therapy Professionals During the ICU Period: A Qualitative Analysis and How to Use this Information/C. Fu, Sao Paulo, Brazil, p.A6682


P773 Evaluation of Physical Function and Physical Complaints of Clinical Patients of High Complexity Hospital After Discharge from the ICU/C. Fu, Sao Paulo, Brazil, p.A6684

P774 An Intervention to Get ICU Patients into Chair/P.J. Cozzi, E. Steinorth, F. Cozzi, L. Plotke, Elmhurst, IL, p.A6685

P775 Knowing Your Team in the ICU: Pathways to Familiarity/D.K. Costa, E. Boltey, N.C. Wright, M. Manojlovich, A.E. Sales, Ann Arbor, MI, p.A6686

P776 ICU-Based Palliative Care for Older Adults with Traumatic Head Injuries: A Feasibility Study/A. Jonas, K. Staudenmayer, R. Aslakson, Stanford, CA, p.A6687

P777 Integrating Palliative and Hospice Support Across Intensive Care Units at a Tertiary Academic Medical Center/N.S. McAndrew, C. McCracken, K. Wlaczkak, N. Gouin, R. Hamann, S. Dabrowski, C. Saraspe, W. Peltier, A. Szabo, J. Leske, Milwaukee, WI, p.A6688


D51 CRITICAL CARE: THE FOUNTAINHEAD - FLUIDS, MONITORING AND MANAGEMENT OF SHOCK

9:15 a.m. - 3:30 p.m. KBHCCD

Area E (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: S.A. Magder, MD, Montreal, Canada
S. Bihari, MD, ATSF, Bedford Park, Australia


P783 Comparison of the Shock Index, Modified Shock Index, and Age Shock Index in a Tertiary Hospital/D. Sotello Aviles, S. Yang, K.M. Nugent, Lubbock, TX, p.A6693


P788 Mortality Outcome of Patients in Septic and Hypovolemic Shock Associated with Prolonged Norepinephrine, Phenylephrine, Epinephrine, Vasopressin and/or Dopamine Use/B. Eperjesiova, J. Bogaard, G. Rubin, M. Ehtesham, A.M. Stone, Southfield, MI, p.A6698

P789 The Effects of Phenylephrine versus Norepinephrine on Heart Rate and Rhythm in Patients with Septic Shock: A Retrospective, Observational Study/H. Baloch, M.J. Silverberg, S.G. Chulani, A. Rehman, R. Jain, Newark, NJ, p.A6699

BEHAVIORAL • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

D52 SMOKING-ASSOCIATED MODIFIERS OF LUNG DISEASE

9:15 a.m. - 3:30 p.m. KBHCCD

Area F (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: S. London, MD, DrPH, Research Triangle Park, NC
D. Croft, MD, MPH, Rochester, NY
E. Dagli, MD, Instabul, Turkey

P785 Cardiovascular Disease in Cigarette Smokers Without Evidence of Smoking-Related Lung Disease/M.F. Ragland, K. Young, G.L. Kinney, B.J. Make, J.E. Hokanson, Aurora, CO, p.A6709
**CLINICAL POSTER SESSION**

**PEDIATRIC ASTHMA CLINICAL STUDIES**

9:15 a.m. - 3:30 p.m.  
KBHCCD  
Area H (Hall F, Level 2)

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion  
12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** J. Lang, MPH, MD, Durham, NC


**P1051** Efficacy of a Newly-Developed Cartoon Video Instruction to Improve Dry Powder Inhaler Technique in Thai Children with Asthma/T. Sirimontakan, W. Manuyakorn, P. Wattanarungsun, K. Thongkum, K. Chonpaisan, H. Kamalaporn, Bangkok, Thailand, p.A6717


**P1053** The Effect of Inhaled Corticosteroids on Pediatric Patients Hospitalized with Acute Asthma Exacerbations/C. Toochek, A. Rossetti, M. Moore-Clingenpeel, Columbus, OH, p.A6719

**P1054** Trajectory of Lung Function in Children with Persistent Asthma/A. Mukherjee, R. Lodha, S.K. Kabra, New Delhi, India, p.A6720

**Facilitator:** D. Radhakrishnan, MD, Ottawa, Canada

**P1055** Patient Satisfaction with the VR647 Inhalation System: Data from Two Studies in Pediatric Patients/A. Ribera, R. Surfjubally, A. Scrimgeour, S. Snape, Chippenham, United Kingdom, p.A6721


**P1057** Comparison Between Two Questionnaires to Assess Health-Related Quality of Life in Brazilian Children and Adolescents with Asthma/K. M. Mendonca, K. Monteiro, T. Santino, R. Mendes, C. Amaral, A. Silva, R. Tomaz, T. Santos, Natal, Brazil, p.A6723

**P1058** Pharmacokinetic Modeling of Budesonide Delivery with the VR647 Inhalation System, a Novel Pediatric Inhalation Device, for Phase 3 Study Dose Selection/B. Muellinger, P. Johnson, G. Burgess, S. Snape, Gauting, Germany, p.A6724

**P1059** Successful Use of Omalizumab in Children Under 12 Years of Age/C. Skepko, C.E. Sabogal, Orlando, FL, p.A6725

**P1060** Effect of Addition of Single Dose of Oral Montelukast to Standard Therapy in Acute Moderate Asthma in Children 5 - 12 Years of Age - a Randomised Double Blind Placebo Controlled Trial/S. Venugopal, Alappuzha, India, p.A6726

**Facilitator:** T. Simoneau, MD, Hartford, CT

**P1061** Pharmacokinetics of Budesonide Suspension Delivered by the VR647 Inhalation System in Pediatric Patients with Wheezing, Reactive Airway Disease or Mild Asthma/C.F. Laforce, M. Huyghe, G. Burgess, B. Muellinger, S. Snape, Raleigh, NC, p.A6727

**P1062** Profile of Pre-Schooler Patients Admitted Due to Asthma Exacerbation to a Community Hospital in Puerto Rico/K. Ortiz, C.E. Marcano, C. Ramírez, San Juan, Puerto Rico, p.A6728

**P1063** Exercise Induced Asthma in Urban and Rural School Children Aged 9- 18 Years/R. Somashekar, Bangalore, India, p.A6729


D54 TO LIVE AND LET DIE: THE ENDOTHELIUM IN PAH
9:15 a.m. - 3:30 p.m. KBHCCD

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion
12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitators: D.E. Green, MD, Atlanta, GA
Z. Dai, PhD, Chicago, IL


P939 Hemin Induces Lipid Droplet Biogenesis and MAPK Activation in Human Pulmonary Artery Endothelial Cells/A. Carneiro, N.M. Jones, M.T. Gomes, R.F. Machado, Indianapolis, IN, p.A6740

P940 Model-Dependent Effects of Taurine Supplementation in Experimental Pulmonary Hypertension/C. Copeland, P. Joseph, P. Nguyen, J. Loscalzo, W.M. Oldham, Boston, MA, p.A6741


P942 Increased Endothelial Permeability in Severe Pulmonary Arterial Hypertension/N. Xu, C. Zhou, M.S. Taylor, T. Stevens, Mobile, AL, p.A6743


Facilitators: S. Umar, MD, PhD, Los Angeles, CA
L. Farkas, MD, Richmond, VA

P944 HIV-Nef Containing Extracellular Vesicles Impair Proliferation of Endothelial Colony Forming Cells Via ATP Binding Cassette G2 (ABCG2) and Transmembrane TNFα Downregulation/S. Chelvanambi, M. Claus, Indianapolis, IN, p.A6745


P948 Underexpression of Endothelial Nitric Oxide Synthase in Pulmonary Complex Vascular Lesions in HIV Patients/J.L. Sandoval Gutierrez, Mexico City, Mexico, p.A6749

**D55**  
**CASE REPORTS IN PULMONARY VASCULAR MEDICINE III**  
9:15 a.m. - 3:30 p.m.  
**KBHCCD**  
**Area G (Hall F, Level 2)**

**Viewing:** Posters will be on display for entire session.

**Discussion:** 11:15-12:00: authors will be present for individual discussion  
12:00-1:00: authors will be present for discussion with assigned facilitators.

**Facilitator:** W.H. Fares, MD, MS, New Haven, CT

**P951**  
*A Rare Congenital Pulmonary Malformation in an Adult Patient: Case Report*  

**P952**  
*Cement Emboli and Subsequent Traumatic Hemothorax as a Rare Complication of Vertebroplasty*  
M. Bernshteyn, A. Cortese, M. Rojas, A. Mubarik, K. Gill, A. McNeil, H. Seethamraju, Peoria, IL, p.A6754

**P953**  
*When You Can’t Use a Device*  
N.M. Pradhan, R. Lookstein, H.D. Poor, New York, NY, p.A6753

**P954**  
*Recurrent Hemothysis in the Setting of Eisenmenger Syndrome*  

**P955**  
*A Case of Kyphoscoliosis with Extreme Pulmonary Hypertension*  

**P956**  
*Ultrasound Assisted Catheter-Directed Thrombolysis to the Rescue: Therapeutic Dilemma in Extensive Thromboembolism in Venous and Arterial Vessels*  
S.L. Khin, R. Minkin, Brooklyn, NY, p.A6756

**P957**  
*An Unusual Presentation of Ipsilateral Edema in Upper Extremity Led to the Diagnosis of Rheumatoid Arthritis and Pulmonary Hypertension*  
S. Miyashita, C. Mimken, A. Burger, New York, NY, p.A6757

**P958**  
*Masquerading in Plain Sight! Severe Tricuspid Regurgitation Mimicking Right Heart Strain on CT Imaging*  

**P959**  
*Pulmonary Arterial Hypertension: A Rare, Yet Life-Threatening Complication of Neurofibromatosis Type 1*  

**P960**  
*Acute Pulmonary Embolism in an Extreme Video Gamer*  
S. Tijani, M. Oriaikhi, M. Olalorice Saint-Fleur, New York, NY, p.A6760

**P961**  
*An Incidental Fatal Anomaly*  
Z. Rabeeah, Athens, GA, p.A6761

**P962**  
*Showdown with Sjogren’s - An Acute Presentation with Right Heart Failure and Cardiogenic Shock*  
M. Beutner, K. Gill, V. Balasubramanian, Fresno, CA, p.A6762

**P963**  
*Hyoplasia of the Left Pulmonary Artery Associated with Aspergillum: A Case Report*  

**P964**  
*Cement Pulmonary Embolism as a Complication of Percutaneous Kyphoplasty: A Case Report*  

**Facilitator:** Z. Safdar, MD, MS, ATSF, Houston, TX

**P965**  
*An Unusual Case of a Pulmonary Vascular Filling Defect*  
D. Upadhyay, Fresno, CA, p.A6765

**P966**  
*Recurrent Sub-Massive Pulmonary Embolisms Treated with Catheter Directed Thrombolysis Using Alternative Access Sites*  
R.R. Golamani, J.J. Finley, Darby, PA, p.A6766

**P967**  
*Looks and Smells Like PAH...The Great Mimicker “PVOD”*  
I.A. Khan, T. Marston, K. Olson, S. Santhanakrishnan, T.N. Hodges, R. Sagar, Phoenix, AZ, p.A6767

**P968**  
*An Under-Recognized and Potentially Fatal Complication of Orthopedic Procedures Utilizing Bone Cement: A Case Report*  
A. Cypro, P.R. Montgrand, San Diego, CA, p.A6768

**P969**  
*Right Ventricular Failure Due to Pulmonary Embolism in a Patient with Sickle Cell Disease-Associated Pulmonary Hypertension*  
A.C. Miller, K. Munzer, J.K. Mwangi, St. Louis, MO, p.A6769

**P970**  
*Putting Baby in a Corner: A Case of Postpartum Pulmonary Hypertension*  
T. Pavelek, I. Irukulla, Weatherford, TX, p.A6770

**P971**  
*The Never Ending Battle Between the Heart and the Lung*  
A. Arjuna, M. Mody, G. Visweswaran, S. Paul, H. Seethamraju, Gainesville, FL, p.A6771

**P972**  
*A Rare Case of Recurrent Pneumonia in a Young Healthy Adult with Pulmonary Sequestration*  

**P973**  
*Right Heart Thrombus in Transit Successfully Treated with Half Dose Thrombolitics*  
A. Waqar, R. Davis, J. Michel, R. Dunn, Peoria, IL, p.A6773

**P974**  
*Anomalous Pulmonary Venous Return in Adult as Cause of Shunt*  
A. McCambridge, S.R. Ahmad, Rochester, MN, p.A6774

**P975**  
*CTEPH as a Dangerous Undiagnosed Comorbidity*  
J. Kucharczyk, S. Ashraf, S. Chawla, S.V. Thomas, Mineola, NY, p.A6775

**P976**  
*Seizure as a Prelude for Pulmonary Embolism*  
M. Torres Torres, San Juan, Puerto Rico, p.A6776

**P977**  
*Clot in Transit- A Case for Multidisciplinary Approach for Management*  
A.C. Miller, K. Munzer, A. Pavelek, P. Irukulla, Weatherford, TX, p.A6777

**Facilitator:** S. Mirza, MD, Rochester, MN

**P978**  
*A Case of Massive Pulmonary Embolism Post Knee Arthroscopy*  
A. Cypro, P.R. Montgrand, San Diego, CA, p.A6778

Have You Seen a Pulmonary Embolus this Big in a Guy this Young? A Case Report/M. Tahboub, O. Abughaniem, L. Numan, G. Kumar, M. Younis, A. Bourbia, A. Gohar, Kansas City, MO, p.A6780

Paroxysmal Nocturnal Dyspnea After Atrial Septal Defect Correction: A Case of Pulmonary Hypertension Due to Left Heart Disease/Q. Jin, Q. Luo, Z. Zhao, Q. Zhao, X. Yu, L. Yan, L. Gao, Z. Liu, Beijing, China, p.A6781

Embolic Stoke Due to Pulmonary Arteriovenous Malformation/M.F. Khaliq, M. Yasin, A. Nanjundappa, Charleston, WV, p.A6782

An Unlikely Cause of Persistent Hypoglycemia/C. Leyton, G. Glazman-Kuczaj, C. Reisig, M. Duda, Bronx, NY, p.A6783


Submassive Venothromboembolism Associated Right Ventricular Dysfunction Resolves After Two Weeks of Anticoagulation with Apixiban/A. Tawadros, N. Hotchandi, W. Faquih, B.S. Elhammali, Atlanta, GA, p.A6786


Portopulmonary Hypertension: A Case Report with Management Considerations/S. Randhawa, E. Griffin, R. Dhingra, M. Hiatt, J. Alberts, V.V. Noble, A. Highley, Omaha, NE, p.A6788


Carfilzomib-induced Pulmonary Hypertension: A Rare Complication with Reversal After Discontinuation/M. Hrustanovic-Kadic, B. Jalil, K. El-Kersh, Louisville, KY, p.A6790

Facilitator: M.G. Risbano, MD, MA, Pittsburgh, PA

Increased Platelet Derived Growth Factor (PDGF) and Bone Morphogenic Protein 4 (BMP4) Levels May Indicate Presence of Combined Pre and Post Capillary WHO Group II Pulmonary Hypertension/A. Guha, H. Marcos-Abdala, A.S. Cruz-Solbes, J. Amione-Guerra, H. Karmouty-Quinta, Houston, TX, p.A6791

Spontaneous Echocardiographic Contrast in the Internal Jugular Vein: Is It Useful and Does It Have Clinical Relevance?/M. Spring, R. Parikh, J. Weinberg, C.L. Campbell Reardon, H.W. Farber, Boston, MA, p.A6792


Cardiopulmonary Reserve Index as Predictor of Survival in Patients with Pulmonary Hypertension Due to Left Heart Disease/I. Shafir, C. Gerges, M. Gerges, M. Segel, I.M. Lang, Vienna, Austria, p.A6794


Forearm Microvascular Dysfunction in Patients with Scleroderma Pulmonary Hypertension/A. Almoushref, T. Naal, K.S. Aulak, S. Chatterjee, K.B. Highland, R.A. Dweik, A.R. Tonelli, Cleveland, OH, p.A6796


Rest ETCO2 and Ve/VCO2 Are Superior to Exercise Gas Exchange Parameters with Invasive Cardiopulmonary Exercise Testing to Predict Pulmonary Vasc Disease in Patients with Dyspnea of Unclear Etiology/F. Raza, A. Vaidya, P. Forfia, Madison, WI, p.A6798

Facilitator: R.F. Machado, MD, Indianapolis, IN

Altered Hemodynamic Parameters Induced by Acute Vasoreactivity Testing Predict Outcome in Idiopathic Pulmonary Hypertension/S. Gong, P. Yuan, Y.-L. Yang, Q.-H. Zhao, R. Jiang, L. Wang, W.-H. Wu, J. Liu, Shanghai, China, p.A6799

Acute Pulmonary Vasoreactivity Testing Predicts Outcome in Idiopathic Pulmonary Hypertension with BMPR2 Mutation/S. Gong, P. Yuan, J. Liu, Shanghai, China, p.A6800

Exercise Parameters Predict the Development of Scleroderma-Associated Pulmonary Arterial Hypertension/N. Vasilottos, D. Khanna, V.V. McLaughlin, S.H. Visovatti, Ann Arbor, MI, p.A6801

High-Resolution CT Scan (HRCT) Measurements of Pulmonary Artery (PA) Dimensions Poorly Predict Pulmonary Hypertension (PH)/P. Ratanawatkul, J.C. Richards, A.S. Oh, J. Swigris, Khon Kaen, Thailand, p.A6802

P1005 Low Cardiac Output Pulmonary Hypertension In Chronic Obstructive Pulmonary Disease/L. Wang, J. Liu, Q. Zhao, R. Jiang, W. Wu, S. Gong, J. He, C. Luo, H. Qiu, Shanghai, China, p.A6804


P1007 Accuracy of Chest CT in Diagnosis of Pulmonary Hypertension: Meta-Analysis/N. Garg, A. Shujaat, New York, NY, p.A6806

Facilitator: M.R. Lammi, MD, MSCR, New Orleans, LA

P1008 Echocardiographic Predictors of Outcome in Patients with Severe Pulmonary Hypertension Due to Chronic Lung Diseases/R. Jiang, Q.-H. Zhao, J.-M. Liu, Z.-C. Jing, Shanghai, China, p.A6807


P1012 Changes of Serum Collagen Biomarkers in Patients with Different Types of Pulmonary Hypertension/W. Pang, Z.-G. Zhai, Beijing, China, p.A6811


P1015 Echocardiographic Predictors of Mortality in Acute Decompensated Pulmonary Hypertension in the ICU/B.R. Macedo, M. Garcia, R. Souza, P. Caruso, Sao Paulo, Brazil, p.A6814

Facilitator: H.J. Ford, MD, Chapel Hill, NC


P1017 Increased Main Pulmonary Artery Diameter and Main Pulmonary Artery to Ascending Aortic Diameter Ratio in Smokers Undergoing Lung Cancer Screening/M.F. Siddiqi, R. Yip, D. Yankelevitz, C. Henschke, D. Steiger, New York, NY, p.A6816

P1018 Complete Blood Count Parameters as Predictor of Outcomes in Patients with Pulmonary Arterial Hypertension/S. Podder, O.A. Shlobin, C.S. King, A.W. Brown, S.D. Nathan, Falls Church, VA, p.A6817


P1020 Peripheral Blood Mononuclear Cell Mitochondrial Function Predicts Pulmonary Diffusion Capacity in Healthy Young Adults, but Is Inversely Related in Young Adults Born Premature/K. Goss, S. Kumari, Madison, WI, p.A6819

P1021 Correlation Between Pulmonary Artery and Peripheral Vein Superoxide Levels in Patients with Pulmonary Arterial Hypertension/G.M. Sanchez Palacios, S. Sklare, R. Zolty, M. Zimmerman, T. Wichman, Omaha, NE, p.A6820


P157 Disseminated Nocardiosis as an Obstructive Endobronchial Mass/C. Morris, L. Sorrell, E. Podgaetz, A.A. Mora, J.M. Kopita, Dallas, TX, p.A6826


P160 A Case of Primary Mediastinal Nocardiosis Presenting as an Anterior Mediastial Mass/B. Alvarez Concejo, J.E.T. Marshall, T.J. Brown, Dallas, TX, p.A6829

P161 A Case of Actinomyces Graevinitzii Mimicking Miliary Facilitator: C.R. Marion, DO, PhD, Winston Salem, NC


P164 Actin’ Up All Over The Place. A Case of Invasive Pulmonary Actinomycosis with Thoracic Cord Compression and Paralysis/A. Zanotto, C. Babcock, J. Wallace, Minneapolis, MN, p.A6833

P165 When the Horse Gets Out of the Barn: Rhodococcus Equi in Solid Organ Transplant/R. Purpura, P.H. Hanneman, G.T. Bosslet, Indianapolis, IN, p.A6834

P166 A Rare Presentation of Rothia Muclidiaginosa, Masquerading as a Solitary Nodule in an Immunocompetent Patient/A. Umar, M. Bilal, E.Y. Chang, A. Gopalakrishnan, M.E. Faquih, O. Gabriela, D.J. Thomas, E.L. Flenaugh, Atlanta, GA, p.A6835


P169 Manipulating the Complex Language of Microbes in the Treatment of Acute or Chronic Lung Infection/K. Mahan, J.M. Dunitz, Minneapolis, MN, p.A7474
## D59  FUNGAL INFECTION CASE REPORTS

**9:15 a.m. - 3:30 p.m.**

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<th>Facilitator</th>
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<tr>
<td>P184</td>
<td>Aspergillus Overlap Syndrome: A Rare Presentation</td>
<td>O. Epelbaum, MD, ATSF, Valhalla, NY</td>
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<tr>
<td>P185</td>
<td>A Rare Case of Endobronchial Lesion: Endobronchial Aspergilloma</td>
<td>O. Epelbaum, MD, ATSF, Valhalla, NY</td>
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<td>P187</td>
<td>A Case of Aspergillus Tracheobronchitis in an Immunocompromised Man/R. Story, J.A. Englert, Columbus, OH, p.A6852</td>
<td>O. Epelbaum, MD, ATSF, Valhalla, NY</td>
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<tr>
<td>P192</td>
<td>Pulmonary Mycetoma Due to Concurrent Aspergillus and Neocystalidium Dimidiatum Infection/M. Bailey, K. Kumar, C. Meadows, N.J. Mahmoud, L.E. Meinke, Tucson, AZ, p.A6857</td>
<td>O. Epelbaum, MD, ATSF, Valhalla, NY</td>
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<tr>
<td>P194</td>
<td>Concomitant Cavitary Pulmonary Aspergillosis and Squamous Cell Carcinoma of the Lung Found on Ultrasound Guided Thoracic Needle Aspiration/M. Yaqoob, K. Haas, Chicago, IL, p.A6859</td>
<td>O. Epelbaum, MD, ATSF, Valhalla, NY</td>
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</tbody>
</table>

**Facilitator:** O. Epelbaum, MD, ATSF, Valhalla, NY

**Area (Hall F, Level 2):** Area B

**Viewing:** Posters will be on display for entire session.

**Discussion:**
- 11:15-12:00: authors will be present for individual discussion
- 12:00-1:00: authors will be present for discussion with assigned facilitators.
P239 Pulmonary Nodule in a Low Risk Patient Presenting as an
A Rare Presentation of Disseminated Intravascular
Discussion:
Viewing:
P916 Exercise Induced Laryngeal Obstruction Measured by Vocal
Cord Ultrasonography During Maximal Effort in
P917 Effects of Breathing Oxygen (FIO2=1.0) During
Cardiopulmonary Exercise Testing in Patients with Interstitial
P918 Six Minute Walk Test and Cardiopulmonary Exercise Testing
Elicit the Same Physiological Response in Pulmonary
P257  Eosinophilia in Pulmonary Adenocarcinoma; An Extremely Rare Paraneoplastic Manifestation/M. Alsharif, K. Islam, M. Abdou, T. Vo, Amarillo, TX, p.A6927

P258  Sarcoid-Like Reactions: A Benign Cause of Lymphadenopathy in the Patients with Malignancy/P. Poudel, M. Gutsche, Syracuse, NY, p.A6928


P260  The Spark That Ignited Confusion/S. Donahue, R. Akkari, Cheverly, MD, p.A6930

P261  Cancer Not Cancer: A Rare Case of Metastatic Pulmonary Nodules/H. Deshwal, C.F. Farver, J.G. Parambil, Cleveland, OH, p.A6931

P262  Extra-Abdominal Desmoid Fibromatosis/D. Gandhiraj, E. Charbek, M. Henry, St. Louis, MO, p.A6932


P266  Diffuse Cavitary Lesions- A Rare Presentation of Lepidic Pattern Adenocarcinoma of the Lung/E. Rayyan, J. Payne, G. Horonenko, Phoenix, AZ, p.A6936


P268  A Young Man Presents with Thyrotoxicosis: Months Later, a Large Mediastinal Mass Is Discovered/D. Nguyen, R. Sanchez, Iowa City, IA, p.A6949

P269  Recurrent Pneumonia or a Sticky Situation? A Rare Form of Lung Cancer/S.B. Ogake, A. Lampkin, Winston-Salem, NC, p.A6944

P270  The Thrombus that Stumped Us - A Rare Case of Symptomatic Post-Lobectomy Pulmonary Artery Stump Thrombosis that Appeared as Hilair Adenopathy/M. Young, E. Rabold, B.E. DiSilvio, C. Xu, T.J. Cheema, Pittsburgh, PA, p.A6940


P273  A Rare Case of Inflammatory Myofibroblastic Tumor/F. Ogundipe, T. Ogundipe, V. Poddar, Washington, DC, p.A6943


P276  Diffuse Cavitary Lesions- A Rare Presentation of Lepidic Pattern Adenocarcinoma of the Lung/E. Rayyan, J. Payne, G. Horonenko, Phoenix, AZ, p.A6946


P281  A Young Man Presents with Thyrotoxicosis: Months Later, a Large Mediastinal Mass Is Discovered/D. Nguyen, R. Sanchez, Iowa City, IA, p.A6949

P282  Nonbacterial Thrombotic Endocarditis and Myocardial Infarction in Pancreatic Adenocarcinoma/Y. Saperstein, J. Davidson, I.M. McFarlane, Brooklyn, NY, p.A6951


P285  Unique Presentation of a Rare Neoplasm: Mucoepidermoid Tumor of the Lung/J. Mbae, P.J. Oliveira, S. Khan, Worcester, MA, p.A6952

P286  Nonbacterial Thrombotic Endocarditis and Myocardial Infarction in Pancreatic Adenocarcinoma/Y. Saperstein, J. Davidson, I.M. McFarlane, Brooklyn, NY, p.A6953

P287  Ewing Sarcoma of the Mediastinum/M. Martin, K. Pennington, P. Escalante, Rochester, MN, p.A6955
P307 A Rare, Deadly Cause of Chest Pain in a Young, Healthy Male/N. Phillips, L. Casaus, E. Sheehan, M. Kakol, A.I. Saeed, Albuquerque, NM, p.A6976

P308 A woman with Bilateral Pulmonary Nodules: A Rare Case of Benign Metastasizing Leiomyoma/Z. Sattar, S. Tavakoli, Rancho Mirage, CA, p.A6977

P309 A Rare Case of Primary Malignant Melanoma of the Lung/S. Rao, S.B. Church, M. Elnaggar, F. Youssef, Orange, CA, p.A6978

P310 A Rare Case of Primary Hepatoid Adenocarcinoma of the Lung in a Female Patient/S.A. Malik, K. Keshava, Brooklyn, NY, p.A6979


THEMATIC POSTER SESSION

D63

THORACIC ONCOLOGY CASE REPORTS III

9:15 a.m. - 3:30 p.m.

Viewing: Posters will be on display for entire session.

Discussion: 11:15-12:00: authors will be present for individual discussion 12:00-1:00: authors will be present for discussion with assigned facilitators.

Facilitator: M. New, MD, Aurora, CO


P318 A Fatal Case of Pulmonary Torsion Following Right Upper Lobectomy/K. Zuidema, J. Gordon, Pueblo, CO, p.A6986
P319 Nivolumab Induced Endocrinopathy: A Case of DKA in a Non Diabetic with NSCLC/K.M. Quadri, T. Lau, P. Sharma, R. Ahmed, P. Patel, V. Kumar, Port Jefferson, NY, p.A6987


P325 Case Report: A Rare Epidermal Growth Factor Receptor (EGFR) H773L/V774M Compound Mutation in Advanced Non-Small Cell Lung Cancer with Poor Response to EGFR Tyrosine Kinase Inhibitor/L.-C. Chen, C.-Y. Yang, Taipei City, Taiwan, p.A6993


P328 A Double Check on Cancer Progression: Combined Nivolumab and Iplimumab for Recurrent Small Cell Lung Cancer/N. Lopetegui-Lia, S. Sama, V. Thomas, J. Vredenburgh, Farmington, CT, p.A6996

P329 Can One Be Transformed?/N. Verma, P.H. Patel, S. Patolia, N. Poddar, St. Louis, MO, p.A6997

P330 Near Complete Response in Ros1 Rearranged Stage IV Adenocarcinoma of the Lung/A. Tambe, G. Stephen, M. Badriniath, Syracuse, NY, p.A6998


P334 Transforming or Coexisting: Pleural Mesothelial Hyperplasia and Mesothelioma/A. Malikawi, A.I. Saeed, A. Wright, Albuquerque, NM, p.A7002


P337 Incidental Finding of Two Different Cancers in Separate Lungs/S. Bastakoti, M. Rai, Syracuse, NY, p.A7005

P338 When Antibiotics Fail: Unsuspecting Young Female with Asthma-Like Exacerbations and Recurrent Pneumonias/R. Neupane, J.F. Duranni, M. Krishnamurthy, Easton, PA, p.A7006


Facilitator: A. Vachani, MD, MS, Philadelphia, PA


P342 Between a Centimeter and a Meter: A Nodules Tale/M. Grucia, H. Grewal, S. Bastakoti, M. Rai, Trkika, Syracuse, NY, p.A7010


P344 Small Cell Lung Cancer, Does It Cavitate/E. Jabbour, P. Sidhom, R. El-Bizri, Providence, RI, p.A7012

P345 Malignant Solitary Fibrous Tumor of the Pleura: About a Patient with Pancreatic Cancer/H. Grewal, S. Bastakoti, G. Trikha, Syracuse, NY, p.A7010


P349 A Fortunate Encounter with a Clinical Mimic/D. Quigley, B. Kennedy, Dublin, Ireland, p.A7017

P351  Cardiac Tamponade: A Rare Presentation of Non-Small Cell Lung Cancer/A. Agrawal, A. Gautam, B. Yegneswaran, New Brunswick, NJ, p.A7019

P352  Carcinoid Tumors of Lung and BRCA Mutations: Is There a Connection Between Them?/M.Z. Shariff, V. Gupta, S. Gor, H. Qaisar, J. Mikhail, Neptune, NJ, p.A7020


WS7  CRISPR: BREAKING BAD FOR THE GOOD OF ADVANCING SCIENCE

Registration Fee: $75 (includes box lunch)
Attendance is limited. Pre-registration is required.

Assemblies on Respiratory Structure and Function; Allergy, Immunology and Inflammation; Behavioral Science and Health Services Research; Critical Care; Environmental, Occupational and Population Health; Nursing; Pediatrics; Pulmonary Circulation; Pulmonary Infections and Tuberculosis; Pulmonary Rehabilitation; Respiratory Cell and Molecular Biology; Sleep and Respiratory Neurobiology; Thoracic Oncology

11:45 a.m. - 1:15 p.m. KBHCCD
Room C144-C145 (Level 1)

Target Audience
Faculty, staff, postdoctoral/clinical fellows, and graduate students interested in either starting or advancing their work in the field of CRISPR/Cas9 molecular biology

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

• learn the applications and the various means of delivery of CRISPR/Cas9 gene editing presently being utilized in, but not limited to, the respiratory field;

• learn how this technique is continually being modified and perfected for different contexts;

• understand the advantages and limitations of the ever evolving gene editing technique of CRISPR/Cas9.

Leading scientists primarily from the field of respiratory gene editing will provide a comprehensive overview of their work utilizing CRISPR/Cas9 gene editing with a focus on methods, applications and implications of this novel technique. Limitations and future directions will be discussed by the speaker panel.

Chairing: S. Siddiqui, PhD, Frisco, TX
M.J. O’Sullivan, PhD, BS, Boston, MA
High Efficiency Gene Editing of Primary Airway Epithelial Cells Using Viral and RNP CRISPR-Cas9 Methods
M.A. Seibold, PhD, Denver, CO

Establishing a Primary Epithelial Cell Model Using Non-Lentiviral Delivery of CRISPR/Cas9
S. Siddiqui, PhD, Frisco, TX

Utilizing CRISPR/Cas9 to Insert Modifications to Model Rare Lung Diseases
A.L. Ryan, PhD, Los Angeles, CA

High Throughput CRISPR-Based Analyses of Gene Function
D.J. Erle, MD, San Francisco, CA

CRISPR Screening in Airway Smooth Muscle Cells
Q. Lu, PhD, Boston, MA

In Vivo Delivery of Cas9 RNP and Donor DNA with Gold Nanoparticles
N. Murthy, PhD, Berkeley, CA

Top 10 List: Things I Wish Someone Had Told Me About Clinical Predictive Modeling
M.M. Churpek, MD, MPH, PhD, ATSF, Chicago, IL

In Silico to In Vivo: Moving Predictive Models into Real-World Settings
V. Liu, MD, MS, Oakland, CA

Building a Data Science Team
K.S. Mathews, MD, MPH, New York, NY

Panel Discussion
V. Liu, MD, MS, Oakland, CA

Predictive Modeling in Critical Care: Principles and Practice

Registration Fee: $75 (includes box lunch)
Attendance is limited. Pre-registration is required.
Assembly on Critical Care
11:45 a.m. - 1:15 p.m. KBHCCD Room D171/D173 (Level 1)

Target Audience
Clinicians and researchers practicing acute or critical care interested in utilizing predictive modeling tools for improved patient care

Objectives
At the conclusion of this session, the participant will be able to:
• identify common pitfalls in applying machine learning and predictive modeling in critical care;
• describe best practices for moving predictive models from computing environments into clinical practice;
• evaluate learning opportunities for advancing individual and group skills in machine learning and data science.

Health care is undergoing a profound change driven by emerging applications of advanced analytic techniques to clinical care and research. In particular, rapid expansions in the availability of large-scale data, machine learning and data science methods, and powerful computational platforms are making predictive modeling available at the point of care. This session will give participants an overview of key issues salient to predictive model development and deployment in critical care today.

Chairing: V. Liu, MD, MS, Oakland, CA
M.M. Churpek, MD, MPH, PhD, ATSF, Chicago, IL

Sodium Disorders
B. Butcher, MD, Pittsburgh, PA

Continuous Renal Replacement Therapy
J.H. William, MD, Boston, MA

Toxicology
J.H. Badulak, MD, Seattle, WA
L21  TARGETING OBESE ASTHMA WITHIN THE ALA-ACRC NETWORK

12:15 p.m. - 1:15 p.m.  KBHCCD  
Room C146 (Level 1)

Target Audience
Physicians, clinical scientists, nurses, paraprofessionals, educators, health care providers

Objectives
At the conclusion of this session, the participant will be able to:
• show data on the effect of obesity on airway physiology in asthma, and discuss implications this might have for treatment;
• present data on the genetics linking obesity and asthma;
• discuss the effects of obesity on the risk of respiratory tract infection and to discuss ongoing treatment trials for obese asthma within the network.

The obesity epidemic is having a major effect on the type of asthma commonly encountered in clinical practice. This session will highlight recent and ongoing studies within the ALA-ACRC Network that provide mechanistic insights into the relationship between obesity and asthma, and ongoing treatment trials that are being performed to target poorly controlled asthma in this patient population.

Chairing: W.C. Bailey, MD, Birmingham, AL

12:15  Effects of Obesity on Airway Physiology in Asthma  
U. Peters, MSc, PhD, Burlington, VT

12:25  The Opening Index as a Marker of Airway Closure in Children with Asthma  
E.L. McGuire, MD, Durham, NC

12:35  Risk of Respiratory Tract Infections in Obese Patients with Asthma  
M. Tang, MD, Durham, NC

12:45  Genetics of Obesity and Asthma  
J. Lang, MPH, MD, Durham, NC

12:55  ALA-ACRC Trials in Progress for Obese Patients with Poorly Controlled Asthma  
A.E. Dixon, MD, ATSF, Burlington, VT

1:05  Discussion/Questions and Answers  
R.A. Wise, MD, Baltimore, MD

L22  ASTHMA PHENOTYPES’ RISK FACTORS AND ROLE OF RESPIRATORY VIRUSES AND BACTERIA IN EXACERBATIONS: LESSONS FROM THE NIAID, NIH INNERCITY ASThma CONSORTIUM

12:15 p.m. - 1:15 p.m.  KBHCCD  
Room C155-C156 (Level 1)

Target Audience
Clinicians, researchers, health care administrators, public health specialists, asthma educators

Objectives
At the conclusion of this session, the participant will be able to:
• learn new findings on how phenotypes evolve between 7 and 10 years of age and the implication for asthma;
• learn the risk factors associated with phenotypes;
• understand the pathways through which respiratory viruses and bacteria influence asthma exacerbations.

Data through 10 years of age from the Inner City Asthma Consortium (ICAC) URECA birth cohort will provide insight into the distinct risk factors for asthma phenotypes and the impact these phenotypes on asthma development and persistence. A one year follow-up of 6 to 17 year old asthmatics provides the data necessary to evaluate the pathways through which respiratory viruses and bacteria influence asthma exacerbations.

Chairing: P.J. Gergen, MD, MPH, Rockville, MD

12:15  Distinct Risk Factors for Asthma Phenotypes in Urban Children  
J.E. Gern, MD, Madison, WI

12:45  What Are the Pathways to Asthma Exacerbations with Respiratory Viruses and Bacteria?  
M.C. Altman, MD, Seattle, WA

L23  RESEARCH FUNDING OPPORTUNITIES

12:15 p.m. - 1:15 p.m.  KBHCCD  
Room D162/D164 (Level 1)

Target Audience
Any ATS members who are conducting research and seeking research funding

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 and mechanisms of funding from each agency on the panel;
• identify a funding agency that is most closely aligned with the attendee’s research interest/program of research.

This session will introduce programs and research grant opportunities offered from various funding agencies. Speakers will present current research priorities and mechanisms of research funding available from each agency. Opportunity will be provided for audience questions of the panel of speakers.

Chairing: J.L. Guttormson, PhD, Milwaukee, WI
A.M. Russell, MScN, London, United Kingdom

12:15  ATS Foundation  
E.M. Nebel, MA, New York, NY
**L24 COMMUNITY BASED INTERVENTIONS IN NHLBI’S ASThma EMPOWERMENT COLLABORATIONS TO REDUCE CHILDHOOD ASThma DISPARITIES**

**Target Audience**
Care providers for children with asthma, investigators interested in community based research and investigators interested in how to implement evidence-based interventions in the community

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

- understand how to integrate asthma care from multiple providers;
- learn about adapting an intervention to meet the needs of a community;
- understand the use of nontraditional health care workers to promote asthma care.

In 2017, NHLBI funded cooperative agreements to conduct clinical trials in the Asthma Empowerment Collaborations to Reduce Childhood Asthma Disparities program. Four asthma care implementation programs were funded to provide and assess multilevel (medical care, home, family, and environment) interventions tailored to the needs of the specific communities in which they are delivered. The evidence-based interventions in the 4 independent clinical trials will be discussed, focusing on the considerations to implement the interventions in specific contexts. The types of interventions that will be discussed include school-based programs, the use of community health workers, and home-based evaluations.

**Chairing:** M.M. Freemer, MD, MPH, Bethesda, MD

**12:15 School Based Asthma Interventions in the Asthma Empowerment Program**
A.A. Lowe, BS, Tucson, AZ

**12:30 Community Health Workers and Pediatric Asthma Care in the Asthma Empowerment Program**
T. Bryant-Stephens, MD, Philadelphia, PA

**12:45 Use of Home Visits/Evaluations in Asthma Care in the Asthma Empowerment Program**
R.S. Everhart, PhD, Richmond, VA

**1:00 Panel Discussion**
J.L. Guttormson, PhD, RN, Milwaukee, WI
Target Audience

Providers of lung health, medical fellows in training, and basic and clinical researchers interested in lung biology, developmental biology, chronic lung disease pathogenesis, pediatrics, 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;
- learn the innovative technologies for molecular profiling, imaging, and data analysis of the developing lung;
- learn 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 build an open-access reference resource by creating a comprehensive molecular atlas of the late-stage developing lung with data and reagents available to the research community. Speakers will show how the approach/systems biology/bioinformatics can be used to inform clinical medicine-discovery of biomarkers and processes in development that are recapitulated in disease/repair. The session will also elucidate how understanding alveolar cells and intracellular communication forms the lung and informs the processes altered in disease.

Chairing:

R. Clark, PhD, Durham, NC
S. Lin, PhD, Bethesda, MD

LungMAP.net: A Public Online Resource for Lung Development Research and Education
R. Clark, PhD, Durham, NC

Adaptation of Pulmonary Cells to Air Breathing at Birth at Single Cell Level
J.A. Whitsett, MD, Cincinnati, OH

A Multi Scale View of Lung Alveolar and Airway Development from Anatomy to Cells to Molecules
D. Warburton, MD, ATSF, Los Angeles, CA

Epigenetics in Normal Lung Development
J.S. Hагood, MD, Chapel Hill, NC

Multi-Scale Omics and Imaging Characterization of the Lung During Development on Behalf of PNNL/TACC Team
G. Clair, PhD, Richland, WA

Sharing the BRINDL LungMAP Biorepository
G.S. Pryhuber, MD, Rochester, NY
D82 AUTOIMMUNE ASSOCIATED ILD: A CASE BASED APPROACH TO DIAGNOSIS AND TREATMENT

Assembly on Clinical Problems
1:30 p.m. - 3:30 p.m.  
Ballroom C One-Two (Level 2)

Target Audience
Community pulmonologists and academic physicians with varying levels of interest and expertise in ILD

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

• understand the significance of positive autoimmune serologies and the utility of obtaining a lung biopsy in the context of different ILD patterns;
• utilize alternative diagnostic and therapeutic approaches to ILD patients within their local practice, thus improving outcomes for challenging cases;
• identify and manage comorbidities associated with ILD. This will ultimately improve outcomes of their local patient population.

This session will facilitate an interactive and multidisciplinary discussion about challenging topics related to the diagnosis and management of autoimmune ILD: Interpretation of serologies and physical findings; The utility of a surgical biopsy; choosing an appropriate therapeutic agent; and managing comorbidities that accompany ILD. For each topic, a multiple-choice question will be presented with electronic polling of the audience and an expert panel comprised of pulmonologists, a radiologist, pathologist, and rheumatologist. An expert will then present formally on each topic, and the audience will be polled again to determine if the discussion has changed their responses.

Chairing:  
R. Hallowell, MD, Boston, MA  
S.K. Danoff, MD, PhD, Baltimore, MD  
L.L. Silhan, MD, Dallas, TX  
T.J. Corte, MBBS, BScM, PhD, Sydney, Australia

1:30  Introduction  
R. Hallowell, MD, Boston, MA

1:33  Case Presentation Part 1  
R. Hallowell, MD, Boston, MA

1:35  Audience Question #1  
R. Hallowell, MD, Boston, MA

1:36  How to Approach My ILD Patient With a Positive Autoimmune Serology?  
R. Vij, MD, Chicago, IL

1:56  Case Presentation Part 2  
L.L. Silhan, MD, Dallas, TX

1:58  Expert CT Scan Interpretation in This Patient With ILD  
S. Hobbs, MD, Lexington, KY

2:08  Audience Question #2  
L.L. Silhan, MD, Dallas, TX

2:09  Lung Biopsy in CTD-ILD: A Crazy Idea or Sometimes Worth the Risk?  
V. Cottin, PhD, MD, Lyon, France

2:29  Pathologic Findings in CTD-ILD  
P. Vanderlaan, MD, PhD, Boston, MA

2:39  Case Presentation Part 3  
T.J. Corte, MBBS, BScM, PhD, Sydney, Australia

2:41  Audience Question #3  
T.J. Corte, MBBS, BScM, PhD, Sydney, Australia

2:42  How Do I Choose an Immunosuppressive Regimen in My Patient With CTD-ILD?  
K.B. Highland, MD, Cleveland, OH

2:56  Audience Question #4  
S.K. Danoff, MD, PhD, Baltimore, MD

3:02  Case Presentation Part 4  
S.K. Danoff, MD, PhD, Baltimore, MD

3:05  Managing Comorbidities in Patients with ILD  
J. Oldham, MD, MS, Sacramento, CA

3:25  Brief Conclusions and Questions From the Audience  
R. Hallowell, MD, Boston, MA

This session and the International Conference are supported by educational grants from Boehringer Ingelheim Pharmaceuticals, Inc., Genentech, Inc. All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

D83 NEW ADVANCES IN THE BRONCHOSCOPIC DIAGNOSIS AND TREATMENT OF LUNG CANCER

Assemblies on Clinical Problems; Nursing; Respiratory Structure and Function; Thoracic Oncology;
1:30 p.m. - 3:30 p.m.  
Ballroom C Three-Four (Level 2)

Target Audience
Clinicians, researchers, fellows in training, nurses and therapists who care for patients with lung cancer or solitary pulmonary nodules

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

• become aware of the new bronchoscopic techniques that are capable of diagnosing and assessing staging of lung cancer;
• gain understanding of new bronchoscopic techniques that may have potential to treat early-stage lung cancer;
• understand the importance of comorbid lung diseases in the diagnosis and management of patients that present with solitary pulmonary nodules that may be lung cancer.
The last decade has seen an explosion of new technology dedicated to the bronchoscopic diagnosis and treatment of solitary pulmonary nodules that are concerning for lung cancer. This session will be composed of international experts who will discuss new bronchoscopic approaches to the diagnosis and management of solitary pulmonary nodules and the management of solitary pulmonary nodules that are diagnosed as lung cancer and may be amenable to bronchoscopic treatment.

Chairing: G.J. Criner, MD, ATSF, Philadelphia, PA
M. Phillips, MD, Perth, Australia
F.J. Herth, DrMed, Heidelberg, Germany

1:30 Introduction
G.J. Criner, MD, ATSF, Philadelphia, PA

1:31 Use of Robotic Bronchoscopy to Diagnose Solitary Pulmonary Nodules
F. Bashirzadeh, MD, Herston, Australia

1:46 Use of the Ultraslim Bronchoscope to Diagnose Peripheral Pulmonary Nodule
G.C. Michaud, MD, New York, NY

2:01 Bronchoscopic Transparenchymal Access of a Peripheral Pulmonary Nodule
G.J. Criner, MD, ATSF, Philadelphia, PA

2:15 Cryobiopsy of Small Peripheral Nodules
J. Hetzel, MD, Tuebingen, Germany

2:30 Optimization of TBNA EBUS Yield During Flexible Bronchoscopy
T.R. Gildea, MD, Cleveland, OH

2:45 Use of Elastography to Assess Intrathoracic Lymph Nodes
M. Weir, MBChB, Philadelphia, PA

3:00 Vapor Ablation of Peripheral Lung Nodules to Bronchoscopically Treat Lung Cancer
A. Valipour, MD, Vienna, Austria

3:15 RFA/Microwave Modalities to Treat Solitary Pulmonary Nodules Due to Lung Cancer
F.J. Herth, DrMed, Heidelberg, Germany

This session and the International Conference are supported by educational grants from AstraZeneca LP, Boston Scientific Corporation, Olympus Corporation of the Americas.

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Target Audience
Interprofessional (physicians, nurses, allied health) critical care clinicians and researchers

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

- understand the evidence base for interventions aimed at preventing adverse outcomes within the ICU, enhancing recovery post-ICU and supporting community re-integration;
- learn new knowledge of the challenges of ICU survivorship beyond own area of clinical practice and professional group;
- acquire new strategies and tools to develop and test innovations in ICU survivorship to improve patient and caregiver outcomes.

This symposium will focus specifically on the field of devising and testing interventions to improve outcomes and reduce the burden of ICU survivors. These interventions that can be employed across the arc of care from the ICU, to prevent adverse outcomes, through to post hospital, to support recovery and community reintegration. The state-of-the art for newer innovative interventions will be summarised, practical steps for implementing evidence-based interventions and sign-posting of future research directions provided. This symposium will focus on the positive aspects of survivorship and how we can better work as a team to improve patient and family outcomes during and following critical illness.

Chairing: K.J. Haines, PhD, BHS, Melbourne, Australia
J. McPeake, PhD, RN, Glasgow, United Kingdom
C.M. Sevin, MD, Nashville, TN

1:30  Introduction
K.J. Haines, PhD, BHS, Melbourne, Australia

1:32 Preventing Adverse ICU Outcomes: What Can We Do in the ICU?
C.T.L. Hough, MD, MSc, Seattle, WA

1:52 Targeting the Psychological Recovery of Patients and Families in the ICU
M. Hosey, PhD, Baltimore, MD

2:12 Finding Meaning and Purpose in Survivorship Following Critical Illness
R. Gervasio, , Nashville, TN

2:30 Enhancing Physical Recovery Following Critical Illness
P.E. Morris, MD, Lexington, KY

2:50 Reintegrating Survivors: Family, Work, and Community
J. McPeake, RN, PhD, Glasgow, United Kingdom

3:10 International Collaboration for ICU Survivorship: Research, Implementation, and Practice
M.E. Mikkelsen, MSCE, MD, Philadelphia, PA

**D84 REDEFINING ICU SURVIVORSHIP: PREVENTION, RECOVERY AND REINTEGRATION**

Assemblies on Critical Care; Behavioral Science and Health Services Research; Nursing; Pulmonary Rehabilitation

1:30 p.m. - 3:30 p.m.  OMNI DALLAS DOWNTOWN
Dallas Ballroom D/H (Level 3)
D85 UNFOLDING CIRCADIAN CLOCKS AND ER STRESS IN LUNG DISEASES

Assemblies on Respiratory Structure and Function; Allergy, Immunology and Inflammation; Clinical Problems; Environmental, Occupational and Population Health; Respiratory Cell and Molecular Biology; Sleep and Respiratory Neurobiology

1:30 p.m. - 3:30 p.m. KBHCCD

Ballroom D One (Level 3)

Target Audience
Basic and clinical researchers who are interested in learning role of circadian rhythm and ER stress in several pathologies of the lung and to establish projects in this area of lung biology

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

• learn how circadian rhythm and ER stress play are culprits in pathogenesis of chronic lung disease.

Circadian clocks have been conserved throughout evolution to allow anticipation of physiology and behaviour of the organisms to the environmental changes. As a consequence, most aspects of animal metabolism are under the control of this molecular clock. The endoplasmic reticulum (ER) is a sophisticated luminal network in which protein synthesis, maturation, folding, and transport take place. The unfolded protein response (UPR) is a stress-activated signalling pathway that regulates cell proliferation, metabolism and survival. The circadian clock coordinates metabolism and signal transduction with light/dark cycles. Accumulation of non-functional and potentially cytotoxic, misfolded proteins disease is believed to contribute to lung cell apoptosis, inflammation, and autophagy. Because of its fundamental role as a quality control system in protein metabolism, the UPR is of potential importance in the pathogenesis of many lung diseases such as asthma, COPD and IPF. Both sleep disruption and ER stress are emerging as a common culprit in the pathogenesis of chronic lung diseases which is a result of common environmental stressors or infections leading to the perturbation of the metabolic pathway in the body.

Chairing:
P. Sharma, PhD, MPH, Ultimo, Australia
S.S. Sohal, PhD, Launceston, Australia
R.C. Chambers, PhD, London, United Kingdom

1:30 Introduction
P. Sharma, PhD, MPH, Ultimo, Australia

1:35 Regulation of Lung Inflammation by Circadian Clocks
D. Ray, MBChB, PhD, Oxford, United Kingdom

2:05 The Autophagy-Inflammation-Cell Death Axis in Lung Disease
A.M.K. Choi, MD, New York, NY

2:35 Exosomes and ER Stress as Mediators of Sleep Apnea Morbidity
D. Gozal, MD, MBA, ATSF, Columbia, MO

3:03 Oxidative Stress and Aging in Lung Disease: Revealing New Pathways for Treatment
Y.S. Prakash, MD, PhD, Rochester, MN

D86 METABOLISM AS A LINK BETWEEN LUNG CANCER AND ITS MICROENVIRONMENT

Assemblies on Thoracic Oncology; Respiratory Cell and Molecular Biology

1:30 p.m. - 3:30 p.m. KBHCCD

Ballroom A One (Level 2)

Target Audience
Basic scientists and clinicians interested in new research on how metabolism is altered in lung cancer

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

• gain new findings about alterations in metabolism in lung cancer and the tumor microenvironment;
• obtain a better understanding about new therapies that target metabolic alterations in lung cancer;
• obtain a better understanding of molecular interactions between lung cancers and their microenvironment that may promote or hinder tumor growth.

The development and growth of lung cancers are dependent on complex interactions between cancer cells and the surrounding microenvironment, which includes stromal, inflammatory, and vascular cells. Much work has focused on cytokine and chemokine signaling between these cells. It is becoming clear that metabolic alterations that occur during malignant transformation serve as potent signals as well. These alterations have the potential to serve as diagnostic and therapeutic targets. This session will explore metabolic signaling in the tumor microenvironment.

Chairing:
E. Ostrin, MD, PhD, Houston, TX
R. Savai, PhD, Bad Nauheim, Germany
S.J. Moghaddam, MD, Houston, TX

1:30 Metabolic Heterogeneity and Liabilities in Lung Cancer
R.J. Deberardinis, MD, PhD, Dallas, TX

1:50 Cystine and Glutamate Transport and Metabolic Reprogramming in Lung Tumor Development
P.P. Massion, MD, Nashville, TN

2:10 Metabolic Changes in Tumor Cells and Tumor-Associated Macrophages: A Mutual Relationship
R. Savai, PhD, Bad Nauheim, Germany

2:30 Implications of Cigarette Smoke Induced Metabolic Alterations in Lung Cancer Progression
F. Kheradmand, MD, Houston, TX

2:50 Aberrant Tryptophan Catabolism Marked by High Kynureninase Expression Contributes to Immunomodulation and Poor Outcome in Lung Adenocarcinoma
E. Ostrin, MD, PhD, Houston, TX

3:10 Targeting Cytokine Networks as an Immunotherapeutic Modality for Lung Cancer
S.J. Moghaddam, MD, Houston, TX
**D87 BEYOND THE RIGHT HEART CATHETERIZATION: QUANTITATIVE METHODS FOR INTERROGATING THE PULMONARY CIRCULATION**

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

**1:30 p.m. - 3:30 p.m. KBHCCD Room D162/D164 (Level 1)**

**Target Audience**
Clinicians, basic scientists, translational researchers, fellows, residents and graduate trainees seeking to learn novel insights into pulmonary hypertension and cutting edge approaches to quantitative assessment of the pulmonary circulation.

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

- understand the role of innovative CT, MRI and PET techniques in the clinical classification, prognostication and therapeutic monitoring of patients with pulmonary hypertension;
- describe the emerging role of imaging in the study of pathophysiology of pulmonary hypertension;
- learn about novel noninvasive diagnostic techniques that inform emerging therapeutic strategies and research endeavors in pulmonary hypertension.

Current challenges in pulmonary hypertension include diagnosis, prognosis, identification of treatment responsive subtypes and understanding physiologic response to therapy. Quantitative methods using imaging to characterize pulmonary vascular disease are increasingly becoming available to clinicians and researchers. In this symposium, we review a range of established and emerging methods of quantification of the structure and function of the pulmonary circulation, spanning from the parenchyma to the right ventricle. The audience will learn about the latest clinically available techniques as well as emerging methods that show promise.

**Chairing:**
K.R. Stenmark, MD, Aurora, CO
P. Kohli, MD, Boston, MA
F.N. Rahaghi, MD, PhD, Boston, MA

**1:30 Forecasting Right Ventricular Dysfunction in Pulmonary Hypertension Using Cardiac MRI**
A. Vonk Noordegraaf, MD, PhD, Amsterdam, Netherlands

**1:50 Imaging and RV/PA Coupling in Pulmonary Hypertension**
R.R. Vanderpool, PhD, Tucson, AZ

**2:10 The Role of CT and MRI in Clinical Assessment of Pulmonary Hypertension**
D. Kiely, MD, Sheffield, United Kingdom

**2:30 Emerging Utility of Pulmonary Artery Flow Measures in Pulmonary Hypertension**
A.J. Barker, PhD, Denver, CO

**2:50 Imaging of the Parenchymal Pulmonary Vasculature**
F.N. Rahaghi, MD, PhD, Boston, MA

**3:10 Regional Perfusion Patterns in Pulmonary Vascular Disease**
P. Kohli, MD, Boston, MA

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**D88 NEW-TROPHILS: AN OLD CELL WITH NEW TRICKS IN LUNG DISEASE**

**Assemblies on Allergy, Immunology and Inflammation; Clinical Problems; Respiratory Cell and Molecular Biology; Respiratory Structure and Function**

**1:30 p.m. - 3:30 p.m. KBHCCD Room D221/D225/D226 (Level 2)**

**Target Audience**
Pulmonologists, immunologists, critical care physicians, pulmonary fellows, infectious disease physicians

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

- gain new findings related to neutrophil biology including new signaling pathways and cellular fates;
- apply new neutrophil findings to pathology observed in lung disease;
- identify new therapeutic approaches targeting PMN biology in the treatment consideration of patients with lung disease.

As our immunologic understanding of chronic lung disease evolves, the neutrophil response has become an area of increased focus. Although many of these pathway have been delineated, it is clear that novel mechanisms of PMN-mediated inflammation and tissue injury are operative in these disorders. This session will highlight some of these pathways and potential therapeutic approaches to target these pathways in chronic lung disease.

**Chairing:**
A. Gaggar, MD, PhD, Birmingham, AL
T.S. Blackwell, MD, Nashville, TN
C.M. Doerschuk, MD, Chapel Hill, NC

**1:30 Introduction**
C.M. Doerschuk, MD, Chapel Hill, NC

**1:40 Prolyl Hydroxylase 2 Regulates a Critical Balance in Neutrophil Function**
S.R. Walmsley, MRCP(UK), BM BCH, MD, PhD, Edinburgh, United Kingdom

**2:00 Neutrophil Reprogramming as a Key Trigger for Progressive Lung Damage**
R. Tirouvanziam, PhD, Atlanta, GA

**2:20 Leukotriene A4 Hydrolase: A Janus Enzyme Critical in Neutrophil Influx**
R. Snelgrove, PhD, MA, BSc, London, United Kingdom

**2:40 Neutrophil Exosomes Mediate Matrix Remodeling in Chronic Lung Disease**
D. Russell, MD, Birmingham, AL

**3:00 Bacterial-Driven Neutrophil Recruitment Drives Airway Remodeling**
B.W. Richmond, MD, PhD, Nashville, TN

**3:20 Putting It All Together...**
A. Gaggar, MD, PhD, Birmingham, AL
D89  CONTROVERSIES IN PEDIATRIC PULMONOLOGY

Assemblies on Pediatrics; Allergy, Immunology and Inflammation; Clinical Problems; Respiratory Structure and Function
1:30 p.m. - 3:30 p.m.  OMNI DALLAS DOWNTOWN
Dallas Ballroom A-C (Level 3)

Target Audience
Pediatric pulmonologists; allergists; emergency medicine practitioners; nurses; respiratory therapists; pharmacists

Objectives
At the conclusion of this session, the participant will be able to:
• assess the medical and financial benefits of different methods of administration of inhaled medications;
• assess the strength of the association between obesity and asthma, and determine the best strategies for their prevention and treatment;
• assess the benefits and risks of one of the most commonly used drugs (diuretics) in prematurely born infants with acute and chronic lung disease.

Despite the increasing emphasis on "Evidence Based Medicine" there are still many controversies surrounding the diagnosis and/or management of common conditions encountered in clinical practice. The session presents three controversies surrounding common conditions in pediatrics, pulmonology and neonatology. Discussions will cover obesity and asthma; methods of administration of inhaled bronchodilators and steroids (metered dose inhalers with valved holding chambers vs. nebulizers) and the benefits (and risks) of giving diuretics to prematurely born infants.

Chairing: A.C. Koumbourlis, MD, MPH, ATSF, Washington, DC
S.D.M. Dell, MD, ATSF, Toronto, Canada

1:30  Introduction
A.C. Koumbourlis, MD, MPH, ATSF, Washington, DC

1:33  PRO: MDIs Should Be the Main/Only Method for the Administration of Bronchodilators
J.A. Castro-Rodriguez, MD, PhD, Santiago, Chile

1:51  CON: MDIs Should Be the Main/Only Method for the Administration of Bronchodilators
H.J. Farber, MD, MSPH, ATSF, Houston, TX

2:09  PRO: Obesity and Asthma - A Causal Relationship
D. Rastogi, MBBS, MS, Bronx, NY

2:27  CON: Obesity and Asthma - A Causal Relationship
C.S. Ulrik, PhD, Hvidovre, Denmark

2:45  PRO: Diuretics Should Not Be Given to Prematurely Born Infants
Speaker To Be Announced

3:03  CON: Diuretics Should Not Be Given to Prematurely Born Infants
R.H. Steinhorn, MD, Washington, DC

3:21  Questions and Discussion
S.D.M. Dell, MD, ATSF, Toronto, Canada

D90  IMPROVING (LUNG) HEALTH IN PEOPLE LIVING WITH HIV

Assemblies on Pulmonary Infections and Tuberculosis; Clinical Problems; Environmental, Occupational and Population Health; Pediatrics; Thoracic Oncology
1:30 p.m. - 3:30 p.m.  KBHCCD
Ballroom A Three (Level 2)

Target Audience
Clinicians, allied health professionals and academicians involved in the research and care of people living with HIV

Objectives
At the conclusion of this session, the participant will be able to:
• advance clinician's knowledge about pulmonary diseases in people living with HIV including screening, diagnosis, management, and prevention strategies;
• facilitate and integrate newly acquired knowledge into clinical practice by personalizing and improving management of people living with HIV with different pulmonary conditions;
• offer new strategies to manage the respiratory health of children, adolescents and adults living with HIV.

Antiretroviral therapy has transformed the lives of many people living with HIV. Whilst acute opportunistic infections are less common, bacterial pneumonia and tuberculosis are still an issue, and non-communicable chronic respiratory disease such as COPD and lung cancer is an increasing concern. Smoking rates are exceedingly high and cessation is difficult in people living with HIV. Low and middle income countries face specific challenges in healthcare provision. This includes impact of the local environment (as a result of biomass exposure and high levels of pollution). This session will explore the challenge of maintaining long-term lung and general health in HIV, through the perspective of clinical and translational medicine in adults and children, epidemiology and behavioral science.

Chairing: M.C.I. Lipman, MD, London, United Kingdom
T.Y. Belko, MD, Charleston, SC
E. Attia, MD, MPH, Seattle, WA

1:30  Anti-Infective Interventions to Improve Lung Health in HIV
K.M. Kunisaki, MD, MSCR, Minneapolis, MN

1:50  Managing Non-Communicable Respiratory Disease: COPD and ILD
M.B. Drummond, MHS, MD, ATSF, Chapel Hill, NC

2:10  Prevention and Management of Lung Cancer
M. Triplette, MD, MPH, Seattle, WA

2:30  Children and Adolescents with HIV: What Does the Future Hold?
E. Attia, MD, MPH, Seattle, WA

2:50  HIV and Lung Disease in Low and Middle Income Countries
C. North, MD, Boston, MA
**3:10 Translational Insights from the HIV Lung: Why it Matters in Non-HIV Lung Disease**

A.M. Morris, MD, MS, Pittsburgh, PA

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**D91 USING THE BASIC BIOLOGY OF IPF TO DESIGN NEW THERAPIES**

Assemblies on Respiratory Cell and Molecular Biology; Clinical Problems

1:30 p.m. - 3:30 p.m.  
Room C147/C148/C154 (Level 1)

**Target Audience**

Basic and translational scientists, clinical researchers, and clinicians interested in the mechanisms that underlie lung fibrosis and the bench to bedside development of emerging therapies for idiopathic pulmonary fibrosis

**Objectives**

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

- recognize the mechanisms by which epithelial cells, fibroblasts and macrophages contribute to the complex pathobiology of lung fibrosis;
- understand how basic science discovery and mechanistic biology directly informs the development of feasible therapeutic strategies for the future treatment of IPF;
- learn about emerging pre-clinical and clinical studies targeting specific biologic mechanisms in IPF.

This session will highlight the bench to bedside development of emerging therapeutic strategies for idiopathic pulmonary fibrosis (IPF). Each speaker will discuss how discoveries of fundamental biologic mechanisms in the laboratory have identified novel, feasible and specific targets for current and future clinical trials.

**Chairing:** J.C. Horowitz, MD, ATSF, Ann Arbor, MI  
T.M. Maher, MD, MSc, PhD, London, United Kingdom  
E.F. Redente, PhD, Denver, CO

1:30 Targeting TGF Beta Activation by Epithelial and Fibroblast Integrins  
D. Sheppard, MD, San Francisco, CA

1:54 License to Kill (Myofibroblasts): Targeting Apoptosis Pathways to Reverse Lung Fibrosis  
D. Lagares, PhD, MSc, Charlestown, MA

2:18 Targeting Occult Viral Infection and Immune Dysregulation in IPF  
J. Kropski, MD, Nashville, TN

2:42 Targeting Innate Immunity in IPF  
E. Herzog, MD, PhD, New Haven, CT

3:06 From Redox Biochemistry to a Phase II Clinical Trial in IPF  
V.J. Thannickal, MD, Birmingham, AL

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**D92 THE MICROBIOME AND LUNG DISEASE**

1:30 p.m. - 3:30 p.m.  
Room D220/D227 (Level 2)

**Chairing:** P.S. Lai, MPH, MD, Boston, MA  
R.P. Dickson, MD, Ann Arbor, MI

**Oral Presentations**


3:15 Microbial Regulation of Lung Injury in Mice/A.I. Sperling, N. Fei, V. Leone, G.M. Barron, K.A.M. Mills, J. Gilbert, C.L. Hrusch, Chicago, IL, p.A7029
**BEHAVIORAL • CLINICAL MINI SYMPOSIUM**

**D93 PAYING FOR CARE IN PULMONARY DISEASES**

1:30 p.m. - 3:30 p.m.  
KBHCCD Room C146 (Level 1)

**Chairing:**  
S. Rinne, MD, PhD, Boston, MA  
M.H. Roberts, PhD, MS, Albuquerque, NM

**Oral Presentations**

1:30 Chronic Obstructive Pulmonary Disease (COPD) Bundled Payment Care Initiative (BPCI): Episode: High Value Achieved?/V.G. Press, S. Feehan, H. Giannini, J. Austin, S. Devanagondi, S. Chia, S.R. White, Chicago, IL, p.A7030

1:45 Cost-effectiveness of a Single-Inhaler Triple Therapy Versus a Dual Bronchodilator for Patients with Chronic Obstructive Pulmonary Disease (COPD) in Australia/M. Schroeder, D. Shah, A. Martin, K. Ndirangu, N. Risebrough, A. Thrasis, S. Schembri, P. Bremner, M. Haberl, A. Ismaila, Brentford, United Kingdom, p.A7031

2:00 A Descriptive Analysis of Changes in Home Oxygen Use by COPD Patients Enrolled in the Medicare Fee-For-Service Program 2005-2015/T. Goss, L. Cooper, C. Marquez, G.B. Diette, Boston, MA, p.A7032


**Featured Speaker**

3:15 The Affordability of Prescription Medications/M.R. Patel PhD, MPH, Ann Arbor, MI

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**BEHAVIORAL • CLINICAL MINI SYMPOSIUM**

**D94 COPD: EPIDEMIOLOGY AND THERAPY**

1:30 p.m. - 3:30 p.m.  
KBHCCD Room C155-C156 (Level 1)

**Chairing:**  
C.R. Jenkins, MD, MBBS, Missenden Road, Australia  
C. Pistenmaa Aaron, MD, Boston, MA

**Oral Presentations**


2:15 Use of Adjunct High Dose Rosuvastatin Therapy in Patients Hospitalised for Acute Exacerbations of COPD/S. Peiman, N. Hosseinivand, B. Rahimi, S. Amini, S. Parsa, Tehran, Iran, Islamic Republic of, p.A7040


**Featured Speaker**

**D95  CRITICAL CARE: ALL’S WELL THAT ENDS WELL - TRANSLATING PRACTICE TO OUTCOMES FOR OUR PATIENTS WITH CRITICAL ILLNESS**

**Chairing:**
- A. Amaral, MD, Toronto, Canada
- R.C. Hyzy, MD, ATSF, Ann Arbor, MI

**Oral Presentations:**


2:00 | The Association of Provider Support and Communication with Post-Traumatic Stress Disorder Symptoms for Family Caregivers of Patients with Chronic Critical Illness/B. Wendlandt, A. Ceppe, C. Summer, J.E. Nelson, C.E. Cox, L. Hanson, M. Danis, J. Tulsky, S.S. Carson, Chapel Hill, NC, p.A7046

2:15 | Implementation of Hospital-Based Palliative Care Services and Use of Intensive Care during Terminal Hospitalizations/M. Hua, X. Ma, R.S. Morrison, G. Li, H. Wunsch, New York, NY, p.A7047


3:00 | Noninvasive Ventilation Use in Critically Ill Patients with Acute Asthma Exacerbations/M. Althoff, F. Holguin, M. Moss, R.W. Vandivier, P.M. Ho, T.H. Kiser, E.L. Burnham, Aurora, CO, p.A7050

3:15 | Early Red Cell Transfusion Is Associated with Lower Mortality in Critically Ill Patients with Moderate Anemia/N. Motayar, A.P. Pietropaoli, Rochester, NY, p.A7051

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**D96  ENVIRONMENTAL ASTHMA EPIDEMIOLOGY**

**Chairing:**
- A.A. Litonjua, MD, ATSF, Rochester, NY
- S. Lovinsky-Desir, MD, MS, New York, NY
- E. Suarathana, MD, MSc, PhD, Montreal, Canada

**Oral Presentations:**


2:00 | Historic Redlining and Asthma Exacerbations Across Eight Cities of California: A Foray into How Historic Maps Are Associated with Asthma Risk/A. Nardone, N. Thakur, J.R. Balmes, Berkeley, CA, p.A7054


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**D97  FUNGAL INFECTIONS: FROM BENCH TO BEDSIDE**

**Chairing:**
- E.M. Carmona Porquera, MD, PhD, Rochester, MN
- C.A. Hage, MD, ATSF, Indianapolis, IN
- O. Epelbaum, MD, ATSF, Valhalla, NY
Oral Presentations


2:15  Diagnosis of Pulmonary Aspergillosis by Next Generation Sequencing/D. Zhang, D. Hou, Shanghai, China, p.A7063


Featured Speaker

3:00  Future Directions in Fungal Infection Research/A.H. Limper, MD, Rochester MN

BASIC • TRANSLATIONAL MINI SYMPOSIUM

D98 NEW MECHANISMS OF ACUTE LUNG INJURY

1:30 p.m. - 3:30 p.m.  KBHCCD

Chairing:  P. Chen, MD, Los Angeles, CA
          L. Hecker, PhD, Tucson, AZ
          A.J. Goodwin, MD, MSCR, Charleston, SC

Featured Speaker

1:30  Epithelial Responses to Acute Lung Injury/P. Chen, Los Angeles, CA

Oral Presentations

1:45  The Role of Protein Arginine Methyltransferase PRMT4 in Septic Immunosuppression/C. Zou, Y. Lai, X. Li, Pittsburgh, PA, p.A7066

2:00  Endothelial Cell Integrin Beta4 Knockout Attenuates LPS-Induced Murine Acute Lung Injury/W. Chen, P. Belvitch, T. Hong, A. Cress, V. Natarajan, J.R. Jacobson, Chicago, IL, p.A7067

2:15  Extracellular Enampt Is a Novel Biomarker and Therapeutic Target in Pre-Clinical Models of Trauma-Induced Acute Lung Injury (TIALI)/L. Moreno-Vinasco, S. Sammani, C. Kempf, R.C. Ota, B. Sun, C. Valdez, Y. Li, J.G.N. Garcia, Tucson,, AZ, p.A7068

2:30  Pink1 Mediates the Protective Effects of Thyroid Hormone T3 in Hyperoxia-Induced Lung Injury/Y. Zhang, G. Yu, N. Kaminski, P. Lee, New Haven, CT, p.A7069

2:45  Nanoparticle-Based Delivery of MicroRNA-146a Mitigates Ventilator Induced Lung Injury and Inflammation/S.N. Ghadiali, C. Bobba, M.N. Ballinger, J.A. Englert, Columbus, OH, p.A7070


BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL MINI SYMPOSIUM

D99 SRN: A LOOK TO THE FUTURE OF SLEEP. USE OF NOVEL TECHNOLOGIES AND SOFTWARE ANALYSIS

1:30 p.m. - 3:30 p.m.  OMNI DALLAS DOWNTOWN

Dallas Ballroom G (Level 3)

Chairing:  A. Yadollahi, PhD, Toronto, Canada
          D. Gozal, MD, MBA, ATSF, Columbia, MO
          A. Zinchuk, MD, BS, New Haven, CT

Oral Presentations


2:00  The Efficacy of a Novel In-ear Electroencephalography (EEG) Sensor to Measure Overnight Sleep in Healthy Participants/Y. Alqurashi, T. Nakamura, J. Moss, M.I. Polkey, D. Mandic, M.J. Morrell, London, United Kingdom, p.A7075

2:15  Use of Wavelet Spectral Analysis and Bicoherence to Identify Central Sleep Apnea from Overnight Oximetry/B. Suthers, G. Paech, E. Holliday, Newcastle, Australia, p.A7077

D101 CLINICAL AND TRANSLATIONAL STUDIES IN ASTHMA AND COPD

D101 CLINICAL AND TRANSLATIONAL STUDIES IN ASTHMA AND COPD

1:30 p.m. - 3:30 p.m. KBHCCD
Room D222-D224 (Level 2)

Abstract Summaries
1:30-2:00

Viewing/Discussion 2:00-3:30

Chairing:
B.D. Levy, MD, ATSF, Boston, MA
F. Holguin, MD, MPH, Aurora, CO
L.E. Crotty Alexander, MD, ATSF, San Diego, CA


504 Influence of Prior Treatment Upon the Efficacy of As-Needed Budesonide/Formoterol in Mild Asthma in the SYGMA 1 and 2 Studies/E. Bateman, P.M. O’Byrne, J.M. FitzGerald, P.J. Barnes, N. Zhong, V. Alagappan, G. Whelan, R. Lamarca, M. Puu, H.K. Reddel, Cape Town, South Africa, p.A7082

505 A Low Exhaled Nitric Oxide Level Excludes a Short-Term Benefit from Inhaled Corticosteroids in Suspected Asthma/L. Sutherland, K. Shaw, C. Parrish, T. McKeever, I. Stewart, D. Shaw, T. Harrison, Nottingham, United Kingdom, p.A7083


507 Multiple Components Contribute to Greater Improvements in Quality of Life with IV Reslizumab in the Most Eosinophilic Asthma Patients Compared with the Overall Patient Population/J.F. Maspero, L. Hickey, M.C. Garin, Buenos Aires, Argentina, p.A7085


511 Menopausal Hormone Replacement Therapy and Risk of Asthma/P. Zhang, J.G. Zein, Cleveland, OH, p.A7089


515 Specific Antibody Response to Seasonal Influenza Vaccine in Chronic Obstructive Pulmonary Disease (COPD) and Healthy Older People/N. Snape, A. Jarnicki, L. Irving, G.P. Anderson, J.W. Upham, Brisbane, Australia, p.A7093

516 Post-Hoc Analyses of a Phase 2 and Phase 3 Efficacy Trial of an Unadjuvanted Respiratory Syncytial Virus (RSV) F-Glycoprotein Vaccine in Older Adults in the US: A Consistent Signal of Efficacy Against Hospitalizations for Acute Exacerbation of COPD (AECOP/D).Shinde, I. Cho, N. Thomas, L. Fries, G. Glenn, Gaithersburg, MD, p.A7094

517 Effects of the Novel Inhaled Phosphodiesterase-4 (PDE4) Inhibitor CHF6001 in Targeting Markers of Inflammation in Patients with Moderate to Severe Chronic Obstructive Pulmonary Disease (COPD) and Chronic Bronchitis/D. Singh, M. Govoni, K.M. Beeh, B. Colgan, O. Kornmann, B. Leaker, H. Watz, G.ucci, S. Geraci, E. Calabro Rocco, A. Emirova, M.A. Nandeuil, Manchester, United Kingdom, p.A7095


519 The Impact of GOLD Stage on the Effectiveness of Tiopronium/Olodaterol in Preventing COPD Exacerbations in the DYNAGITO Trial/J.A. Wedzicha, P.M. Calverley, A. Anzueto, A. de la Hoz, F. Voss, K.F. Rabe, C. Jenkins, London, United Kingdom, p.A7097
520 Efficacy of Tiotropium/Olodaterol Compared with Tiotropium in Patients Naive to LAMA, LABA and ICS: Pooled Analysis of Four Clinical Trials/R. Buhl, A. de la Hoz, F. Voss, D. Singh, G.T. Ferguson, Mainz, Germany, p.A7098


522 Overuse of Short-Acting Bronchodilators and the Risk of Exacerbation Among Patients with Chronic Obstructive Pulmonary Disease (COPD) Treated with Nebulized Short-Acting Bronchodilators/Y. Wang, Q. Zhang, L. Xie, C. Dembek, P.S. Kamble, V. Ganapathy, Ann Arbor, MI, p.A7100

523 Treatment of First Exacerbation Predicts Future Risk of Exacerbations in Patients with COPD in the DYNAGITO Trial/P.M. Calverley, C. Jenkins, J.A. Wedzicha, A. de la Hoz, F. Voss, K.F. Rabe, A. Anzueto, Liverpool, United Kingdom, p.A7101


526 Time to NIV and Mortality in AECOPD Hospital Admissions: Real World Insights from the 2008 and 2014 National COPD Audits/A. Jayadev, R. Stone, M. Steiner, M. Roberts, Slough, United Kingdom, p.A7104


531 COPD Is Associated with E-cig Use Among Non-Smokers in BRFSS 2016/M.F. Perez, A.C. Nikrunka, O. Cheryl, E.M. Mortensen, Farmington, CT, p.A7110

532 Evaluation of Sleep in Hospitalized Patients with Chronic Obstructive Pulmonary Disease: An Observational Study/N.H. Stewart, R. Walters, V.G. Press, B. Mokhles, D. Lauderdale, V.M. Arora, Omaha, NE, p.A7111

533 Predictors and Barriers to Uptake of Influenza Vaccination Among African American Patients with Chronic Obstructive Pulmonary Disease in a Large Academic Hospital/T. Olanipekun, V.S. Effoe, C. Fotzeu, N. Bakinde, G.E. Westney, Atlanta, GA, p.A7112


218 Matching Patients with Chronic Obstructive Pulmonary Disease (COPD) to Personalized Care: A Novel Machine Learning Tool to Predict Cause of 90-Day Readmission/ S. Kaskovich, M.J. Hemmrich, L.R. Venable, K. Carey, M.M. Cherup, V.G. Press, Chicago, IL, p.A7119


220 Loneliness and Emergency Department Visits in Chronic Obstructive Pulmonary Disease/P. Marty, R. Benzo, Rochester, MN, p.A7121


224 Gender and Racial Social Inequalities in Chronic Obstructive Pulmonary Disease/T. Parekh, S. Patel, Y.-I. Kim, A. Cherrington, S. Bhatia, M.T. Dransfield, Birmingham, AL, p.A7125


CLINICAL

POSTER DISCUSSION SESSION

D103 IDIOPATHIC INTERSTITIAL PNEUMONIAS: NATURAL HISTORY AND PROGNOSIS
1:30 p.m. - 3:30 p.m.  KBHCCD
Room C140/C142 (Level 1)

Poster Viewing 1:30-2:15
Discussion 2:15-3:30

Chairing: N. Goh, MBBS, PhD, Melbourne, Australia
R.J. Shah, MD, MSCE, San Francisco, CA
J.S. Lee, MD, Aurora, CO

101 Effect of MUC5b Genetic Polymorphism on Response to Lyosphatidic Acid Receptor 1 (LPA1) Ant agonist BMS-986020 in a Phase 2 Clinical Trial in Idiopathic Pulmonary Fibrosis/A. Minnich, M. Yang, S. Du, B. Soule, Y. Luo, Princeton, NJ, p.A7127


103 Hospital-Associated Outcomes for IPF Patients with Lung Cancer/B. Bade, A. Shojaee, M. Gulati, New Haven, CT, p.A7129


In Treated Patients with Idiopathic Pulmonary Fibrosis Hiatus Hernia but Not Acid Reflux Predicts Disease Progression and Survival/J. Mackintosh, S. Desai, H.I. Adamali, K. Patel, F. Chua, E.A. Renzoni, M. Kokosi, V. Kouranos, G. Margaritopoulos, A. Wells, P.L. Molyneaux, S. Kumar, T.M. Maher, P.M. George, London, United Kingdom, p.A7138

Physiological Response to Exercise and Vital Prognosis in Patients with Combined Pulmonary Fibrosis and Emphysema (CPFE)/C. Boily-Daoust, J. Chalaoui, J. Morisset, C. Poirier, B.P. Dubé, Montreal, Canada, p.A7139


The Effects of Tobacco Smoking Intensity and Cessation on Idiopathic Pulmonary Fibrosis Incidence and Progression/R. McKnight, L.H. Lancaster, J. Kropski, W. Mason, Nashville, TN, p.A7147


D104 CRITICAL CARE: A FINE BALANCE - SEPSIS DEFINITIONS, OUTCOMES AND EPIDEMIOLOGY

1:30 p.m. - 3:30 p.m. OMNI DALLAS DOWNTOWN

Trinity Ballroom 5-7 (Level 3)

Abstract Summaries
1:30-2:00

Viewing/Discussion 2:00-3:30

Chairing: V. Liu, MD, MS, Oakland, CA
M.M. Churpek, MD, MPH, PhD, ATSF, Chicago, IL
N. Meyer, MD, MS, Philadelphia, PA


1002 Epidemiology and Outcomes of Cancer-Related and Non-Cancer-Related U.S. Sepsis Hospitalizations/M. Hensley, H.C. Prescott, Ann Arbor, MI, p.A7152


1005  The Impact of High Versus Low Mean Arterial Pressure Goals in Cirrhotic Patients with Septic Shock/A. Rose, R.L. Owens, A. Malhotra, P. Asfar, La Jolla, CA, p.A7155


1013  Leukopenia: Sirs or Sepsis-Defining Organ Dysfunction?/S.H. Belok, N.A. Bosch, A.J. Walkey, Boston, MA, p.A7163


1020  Increased Mortality in Severe Sepsis Patients Who Presented to the Emergency Department During the Night Shift/T. Maeda, J. Paralkar, P.S. Patrawalla, New York, NY, p.A7170


1022  Front Line of Sepsis Care: Training Emergency Medical Services Providers to Identify Sepsis Using a Validated Sepsis Screening Tool/I. Sayad, S. Rajasekar, N. Nabavi, A. Yancey II, J.E. Sevransky, C. Polito, Atlanta, GA, p.A7172

1023  Analysis of a Potential Automated Sepsis Alert Based on Quick Sequential Organ Failure Assessment (qSOFA) Among Hospitalized Floor Patients/K. Swenson, A. Rogers, G. Krishnan, L. Shieh, Stamford, CA, p.A7173


CLINICAL • TRANSLATIONAL
RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

D105  IMPROVING PEDIATRIC ASTHMA CONTROL AND OUTCOMES
1:30 p.m. - 3:30 p.m.  OMNI DALLAS DOWNTOWN

Abstract Summaries 1:30-2:00

Viewing/Discussion 2:00-3:30

Chairing: K. Lu, MD, Irvine, CA
M.C. McCormack, MHS, MD, Baltimore, MD
J. Gaffin, MD, Boston, MA

802 A Prospective, Randomized, Controlled Study of Inhaler Electronic Monitoring Devices to Improve Adherence in Children with Asthma/T. Simoneau, Y. Sun, N. Gherlone, S. Almeida, M. Manice, J.P. Hollembach, Hartford, CT, p.A7177


808 Predictors of Return Acute Asthma Visits Among Patients Receiving Guideline Recommended Discharge Management in the Emergency Department/D. Radhakrishnan, C. Dhaliwal, T. Haji, G. Leung, S. Giangioppo, R. Surapaneni, Ottawa, Canada, p.A7183

809 Applying a Seasonal Asthma Exacerbation Predictive Index (saEPI) to an At-Risk Pediatric Population/C. Shipp, G. Huang, M.M. Hossain, K.M. McDowell, Cincinnati, OH, p.A7184


813 Low Levels of Bronchoalveolar Lavage Soluble Receptor for Advanced Glycation End Products is Associated with Increased Serum Eosinophils and IgE Levels in Children with Asthma/J.T. Patregnani, B.A. Brooks, E. Chovinsky, D.K. Pillai, Washington, DC, p.A7188


819 Genetic Variation at the 17q21 Locus is Associated with Altered Sphingolipids in Children/J.G. Ono, T. Worgall, B.I. Kim, S. Worgall, New York, NY, p.A7479
607 Epigenetic Regulation of the Kloko/miz1 Axis Promotes Cigarette-Smoke-Induced Damage in Mice/8-J. Kim, P. Cheres, L.S. Huang, S. Watanabe, N. Joshi, K. Williams, R. Piseaux-Allion, M. Chi, A. Yeldandi, A. Lam, A. Misharin, G.S. Budinger, V. Natarajan, D.W. Kamp, Chicago, IL, p.A7220


609 MCU Modulates Transcriptional Network for PGC-1a-Mediated Fatty Acid Oxidation During Pulmonary Fibrosis/L. Gu, J.L. Casey, D. Davis, A.B. Carter, Birmingham, AL, p.A7223

610 The Role of TRPA1/TRPV1 in PM2.5 -Induced Airway Epithelial Cell Injury Model/F. Li, M. Wang, Shanghai, China, p.A7224

611 Susceptibility of Microtuble-Associated Protein 1 Light Chain 3 Beta Knockout Mice to Lung Injury and Fibrosis/V.S. Kesireddy, S. Ahuja, S. Chillappagari, L. Knudsen, I. Henneke, J. Graumann, P.S. Kesireddy, M. Meiners, M. Ochs, M. Korfei, W. Seeger, A. Guenther, P. Mahavadi, Giessen, Germany, p.A7225


615 The Role of Mitochondrial P66shc and Cyclophilin D In Biological Aging of the Lung/C.F. Garcia Castro, N. Sommer, M. Korfei, M. Bednorz, B. Kojonazarov, S. Kraut, N. Alebrahimdehkhordi, S. Arnohd, R. Schulz, N. Weissmann, O. Pak, Giessen, Germany, p.A7229

616 Role of PINK1 Mediated Mitophagy During Streptococcus Pneumoniae Pneumonia/Y. Zhang, L.K. Sharma, A.J. Losier, E. Iferdigo, M. Sailer, I.S. Bazan, C. Dela Cruz, P. Lee, New Haven, CT, p.A7230


619 Transcriptomic Analysis Identifies Pathways Mediating Alveolar Epithelial Type II (AT2) Cell Dysfunction and Fibrosis in Response to ER Stress Following Grp78 Knockout (KO)/B. Zhou, M. Horie, P. Flodby, H. Wang, Y. Liu, A. Lee, Z. Borok, Los Angeles, CA, p.A7233


621 Muc5b-Overexpression Promotes Increased ER Stress in Mouse Models of Pulmonary Fibrosis/J.E. Michalski, A.M. Estrella, C.E. Hennessy, I.T. Stancil, E. Dobrinskikh, I.V. Yang, D.A. Schwartz, Aurora, CO, p.A7235

622 AP-3-Dependent Mechanisms Regulate the Trafficking of ATP8a1 to Lamellar Bodies in Alveolar Type 2 Cells/S. Kook, P. Wang, S. Meng, L. Goetzl, M.S. Marks, S.H. Guttentag, Nashville, TN, p.A7236


D108 MECHANISM OF LUNG INJURY

Poster Viewing 1:30-2:15
Discussion 2:15-3:30

Chairing: B.J. Smith, PhD, Aurora, CO
T. Winkler, PhD, Boston, MA

701 Cell Injury Cluster Progression During Ventilator-Induced Injury/C. Mattson, K. Okamura, M. Kiselevach, B.J. Smith, Aurora, CO, p.A7238


Alignment of Intercellular Stress Affects Endothelial Barrier Function/C.C. Hardin, T. Nguyen, Boston, MA, p.A7241

TSG-6 Secreted from Human Umbilical Cord-Derived Mesenchymal Stem Cells Attenuate Severe Burn-Induced Acute Lung Injury Via Inhibiting Inflammatory Reactions/X. Hu, L. Liu, Y. Wang, Y. Yu, Y. Liu, J. Chai, Beijing, China, p.A7242

Stretch and Mechanical Ventilator-Induced Senescence in Experimental Lung Injury/R.L. Heise, M.S. Valentine, S. Chindal, A. Cordero, F.J. Kamga Gninzeko, Richmond, VA, p.A7243

Attenuation of Hyperoxic Lung Injury by Tracheal Delivery of Naturally Occurring Antisense Erythropoietin Receptor cDNAY.-A. Zhang, K. Cao, C.C. Hsia, Dallas, TX, p.A7244


Effects of Dexamethasone and Docetaxel on Respiratory Mechanics and on Lung Morphology of Healthy Rats/C. Melo-Silva, G. Scattolin, E. Gaio, M. Roza, V. Amado, Brasilia, Brazil, p.A7252


Effects of Acute Lung Inflammation on Zinc Pharmacokinetics/D. Silva, H. Aslulimani, R.M. Baron, A. Arciniegas Rubio, R.M. Molina, J.D. Brain, Boston, MA, p.A7256

An Uncommon Cause of Drug Induced Lung Injury/M. Bitar, F. Fuentes, D. Wilte, Cincinnati, OH, p.A7257


915 Association of Nocturnal R-R Intervals Changes and Cardiovascular Outcome in a Large Prospective Community-Based Cohort/A. Sankari, S.A. Maresh, L. Finn, N. Aljundi, B. Bander Alsabri, S. Serene Fawaz, M. Hamdon, E.W. Hagen, M.S. Badr, P. Peppard, Detroit, MI, p.A7273


919 Sleep Extension Reduces Energy Intake in Free-Living Overweight Adults: A Randomized Controlled Study/E. Tasali, E. Kahn, K. Hoddy, J. Killkewski, D.A. Schoeller, Chicago, IL, p.A7482

D110 LUNG CANCER: OPTIMIZING SCREENING, DIAGNOSIS, AND TREATMENT

1:30 p.m. - 3:30 p.m.  
KBHCCD Arena (Level 2)

Abstract Summaries 1:30-2:00
Viewing/Discussion 2:00-3:30

Chairs: H.C. Cain, MD, MS, New Haven, CT
V.S. Nair, MSCR, MD, Tampa, FL
M.B. Schabath, PhD, Tampa, FL

401 Fish Intake, Dietary Polynsaturated Fatty Acids, and Lung Cancer: Systematic Review and Dose-Response Meta-Analysis of 1.7 Million Men and Women/C. Cao, N. Xu, Ningbo, China, p.A7277

402 The Effect of Coordinated Investigations for Rural Lung Cancer Patients on Traveling and Time to Staging Completion/S. Naqvi, S. Bharadwaj, R. Kennedy, R. Bigsby, P. Babyn, C.C. Tyan, Saskatoon, Canada, p.A7278

403 Differences in Utilization of Resources for Grief Management in Lung Cancer Patients with and Without Previous Psychiatric Illness Seeking Care at a National Cancer Institute Designated Cancer Center in New Mexico/E. Sheehan, A.E. Wright, L.N. Stalter, F. Qeadan, C. Wiggins, Albuquerque, NM, p.A7279


406 Handgrip Weakness and Low Fat-Free Mass Are Prognostic Factors for Overall Survival in Patients with Non-Small Cell Lung Cancer Treated with Curative-Intent Radiotherapy/C. Burtin, Diepenbeek, Belgium, p.A7282


408 Incidence and Outcomes of Patients with Metastatic Lung Cancer Requiring Mechanical Ventilation/H.-I. Liao, S.B. Smith, Chicago, IL, p.A7284


113 Quality Elements for Lung Cancer Screening Programs: The Struggle for Implementation in the Community/C. Henson, L.D. Nield, L.P. Stoller, Aurora, CO, p.A7289


119 CT-Guided Lung Biopsies: 18 Gauge vs 20 Gauge Needle Size on Rates of Pneumothorax and Sample Adequacy/N. Kolderman, D. Cheti, C. Hasbrook, A. Forsyth, M. Coffey, G. Nair, S. Al-Katib, Royal Oak, MI, p.A7295
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