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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Julius L. Wilson, MD, 1944-45
Ezra R. Bridge, MD, 1945-46

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Ezra R. Bridge, MD, 1945-46

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Howard W. Bosworth, MD, 1947-48
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David A. Cooper, MD, 1952-53
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John D. Steele, MD, 1954-55
Stuart Willis, MD, 1955-56
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Theodore L. Badger, MD, 1957-58
Daniel E. Jenkins, MD, 1958-59
Roger S. Mitchell, MD, 1959-60

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William B. Tucker, MD, 1960-61
Robert H. Ebert, MD, 1961-62
H. William Harris, MD, 1962-63
William R. Barclay, MD, 1963-64
William S. Schwartz, MD, 1964-65
Winthrop N. Davey, MD, 1965-66
John S. Chapman, MD, 1966-67
Robert L. Yeager, MD, 1967-68
Joseph B. Stocklen, MD, 1968-69
James F. Hammarsten, MD, 1969-70
Eugene D. Robin, MD, 1970-71
James Kieran, MD, 1971-72
Alan K. Pierce, MD, 1972-73
Jay A. Nadel, MD, 1973-74
Gareth M. Green, MD, 1974-75
Attilio D. Renzetti, Jr., MD, 1975-76
Hans Weil, MD, 1976-77
Richard L. Riley, MD, 1977-78
Donald F. Tierney, MD, 1978-79
Marvin A. Sackner, MD, 1979-80

Anne L. Davis, MD, 1980-81
John F. Murray, MD, 1981-82
Robert B. Mellins, MD, 1982-83
Roland H. Ingram, Jr., MD, 1983-84
Clarence A. Guenter, MD, 1984-85
Kenneth M. Moser, MD, 1985-86
Gordon L. Snider, MD, 1986-87
Joseph H. Bates, MD, 1988-89
Kenneth L. Brigham, MD, 1989-90
A. Sonia Buist, MD, 1990-91
Herbert Y. Reynolds, MD, 1991-92
James D. Crapo, MD, 1992-93
J.T. Sylvester, MD, 1993-94
Gary W. Heunginkle, MD, 1994-95
Leonard L. Hudson, MD, 1995-96
Philip C. Hopewell, MD, 1996-97
Talmage F. King, Jr., MD, 1997-98
Edward R. Block, MD, 1998-99
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William J. Martin, II, MD, 2000-01
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Thomas R. Martin, MD, 2002-03
Homer A. Boushey, Jr., MD, 2003-04
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Peter D. Wagner, MD, 2005-06
John E. Heffner, MD, 2006-07
David H. Ingbar, MD, 2007-08
Jo Rae Wright, PhD, 2008-09
J. Randall Curtis, MD, MPH, 2009-10
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# ATS 2019 INTERNATIONAL CONFERENCE
## MAY 17-22, DALLAS

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

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

The information contained in this program is up to date as of April 12, 2019. For the most current session information, please visit the [online program itinerary](#).

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Cook Incorporated (Food & Beverage Only; CME Speaker);
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ResMed (Other transfers of value)

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Gilead, MedImmune, Sanofi (Research Support)

Benjamin D. Medoff, MD:
Regeneron (Advisory Committee)

Anne Marie Russell, MScN:
Roche (Advisory Committee, Consultant, Research Support, Speaker)

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Boehringer Ingelheim (Consultant, Other Transfers of Value, Speaker);
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Anil Vachani, MD:
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Veracyte (Consultant); Aaronson Rapaport (Consultant, Research Support, Speaker)

Lisa R. Young, MD:
Boehringer-Ingelheim (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
### 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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## CLINICAL

### POSTGRADUATE COURSE

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<th>CME Credits Available: 6.5</th>
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### PG2 ECMO FOR EXPERIENCED PROVIDERS

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

- **Member:** $475  
- **In-Training Member:** $300  
- **Non-Member:** $550  
- **In-Training 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 (Level 1)**

### Target Audience
All clinicians, bedside personnel and ancillary services that deal with severely ill cardioresp 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.

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

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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### Chairing

- **H.J. Dalton, MD, Falls Church, VA**  
- **C. Agerstrand, MD, New York, NY**

### Schedule

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<td>Welcome and Intro</td>
<td>H.J. Dalton, MD, Falls Church, VA</td>
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<td>8:10</td>
<td>PT Populations Receiving ECMO</td>
<td>C. Agerstrand, MD, New York, NY</td>
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<td>8:35</td>
<td>After EOLIA: How to Use it in Decision Making</td>
<td>A. Combes, MD, Clamart, France</td>
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<td>9:00</td>
<td>ECPR: Practical Aspects</td>
<td>Speaker To Be Announced</td>
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<td>9:25</td>
<td>Economics/How to Handle the Lung?</td>
<td>H.J. Dalton, MD, Falls Church, VA</td>
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<tr>
<td>10:10</td>
<td>Extubation and Ambulation: Pitfalls to Avoid</td>
<td>D. Brodie, MD, New York, NY</td>
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<td>10:35</td>
<td>Anticoagulation: Beyond Heparin</td>
<td>G. Schears, MD, Rochester, MN</td>
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<td>11:00</td>
<td>Rapid Fire: Difficult Cases, What Would You Do?</td>
<td>H.J. Dalton, MD, Falls Church, VA</td>
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<td>11:30</td>
<td>LUNCH</td>
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<td>12:15</td>
<td>Circuit Pressures: How to React and Fix</td>
<td>M. Desai, MD, Falls Church, VA</td>
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<tr>
<td>12:35</td>
<td>Simulation 1: Circuit Pressures</td>
<td>Speaker To Be Announced</td>
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<td>12:55</td>
<td>Simulation 2: Hypoxia on ECMO, VV and Femoral VA</td>
<td>C. Agerstrand, MD, New York, NY</td>
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<td>1:35</td>
<td>Simulation 3: Transport on ECMO</td>
<td>M. Robinson, RN, Columbus, OH</td>
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<td>Break</td>
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<td>2:30</td>
<td>Simulation 4: Advanced Ultrasound and ECMO</td>
<td>H.E. Callisen, PA, Scottsdale, AZ</td>
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<td>3:10</td>
<td>Simulation 5: ECPR How to Do It</td>
<td>V. Pellegrino, MD, Prahran, Australia</td>
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<td>3:50</td>
<td>Simulation 6: Ask the Experts</td>
<td>J. Badulak, MD, Seattle, WA</td>
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<td>3:51</td>
<td>Panel Discussion and Wrap Up</td>
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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 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 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 Room D170/D172 (Level 1)

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

8:20 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

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 Member: $250
Non-Member: $475 In-Training Non-Member: $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 Room C148 (Level 1)
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
• 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. Mammarrappalli, 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.  
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

Assemblies on Pediatrics; Clinical Problems; Pulmonary Circulation; Sleep and Respiration Neurobiology
8:00 a.m. - 4:00 p.m.  
KBHCCD
Room C156 (Level 1)

Target Audience  
Pediatric and adult pulmonary fellows, clinicians and researchers interested in an up-to-date review of the pulmonary complications of sickle cell disease across the lifespan, highlighting evaluation and management of these conditions

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

- evaluate and manage cardiopulmonary abnormalities in patients with SCD across the lifespan to improve patient health and quality of life;
- understand the clinical burden of pulmonary complications of SCD and approaches to management of those complications in low-resource settings;
- employ strategies to implement comprehensive pulmonary care programs for adult and pediatric patients with SCD.

Pulmonary disease is among the most common causes of accelerated mortality in individuals with sickle cell disease (SCD). This course provides an overview of the pathophysiology and clinical spectrum of cardiopulmonary complications of SCD across the lifespan. Course faculty, international experts in sickle cell lung disease, will present a state of the art review of acute and chronic pulmonary complications of SCD that addresses underlying pathophysiology and considerations for management in low-resource areas. The format includes lectures with audience participation via the Audience Response System, question and answer periods, case discussions, and a panel discussion on establishing a multidisciplinary sickle cell pulmonary program.

Chairing:  
R.T. Cohen, MD, MPH, Boston, MA
A.P. Ruhl, MD, MHS, Bethesda, MD
S.C. Sadreameli, MD, MHS, Baltimore, MD
E.S. Klings, MD, Boston, MA

8:00 Introduction  
R.T. Cohen, MD, MPH, Boston, MA

8:10 Sickle Cell Disease 101 for the Pulmonologist  
A. Campbell, MD, Washington, DC

8:35 Acute Chest Syndrome Management and New Directions  
A.P. Ruhl, MD, MHS, Bethesda, MD

9:00 Transgenic Mouse Models to Study Sickle Cell Lung Disease  
S. Ofori-Acquah, PhD, Pittsburgh, PA

9:25 Cases from the Clinic: Understanding Pulmonary Function in SCD  
R.T. Cohen, MD, MPH, Boston, MA

9:50 Question and Answer Period #1

10:00 Break

10:10 All That Wheezes Is Not Asthma in SCD  
B. Kopp, MD, Columbus, OH

10:35 Impact of the Indoor and Outdoor Environment on Pulmonary Outcomes in SCD  
S.C. Sadreameli, MD, MHS, Baltimore, MD
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

3:15 How I Set Up a Multidisciplinary SCD Pulmonary Clinic  
E.S. Klings, MD, Boston, MA

3:45 Panel Discussion on Multidisciplinary Sickle Cell Pulmonary Clinics  
E.S. Klings, MD, Boston, MA

4:15 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

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

Pre-registration:
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

Clinical Postgraduate Course

PG8 PROCEEDINGS FROM THE WORLD SYMPOSIUM 2018: WHAT DO WE NEED TO KNOW MOVING FORWARD?

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
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.

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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**CLINICAL**

**POSTGRADUATE COURSE**

CME Credits Available: 7

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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. 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: $200  Non-Member: $425  Non-In-Training: $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

11:10  Why Is This Patient Hypoxemic
J. Petersson, MD, PhD, Stockholm, Sweden

11:25  Small Group Learning

12:05  LUNCH

1:00  How We Move Blood Through the Lungs
B.A. Cockrill, MD, Boston, MA

1:15  Small Group Learning

1:55  How We Control Breathing
P.G. Carvalho, MD, Boise, ID

2:10  Small Group Learning

2:50  Break

3:05  How We Exercise
R.W. Glenny, MD, Seattle, WA

3:20  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: $200  Non-Member: $425  Non-In-Training: $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
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>8:05</td>
<td>Biology of Nicotine Addiction: Implication for Tobacco Treatment Strategies</td>
<td>E.R. Neptune, MD, Baltimore, MD</td>
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<tr>
<td>8:30</td>
<td>Lung Cancer Screening: Challenges in Patient Selection and Implementation</td>
<td>J. Iaccarino, MD, MSc, Boston, MA</td>
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<tr>
<td>8:55</td>
<td>Biomarkers in Lung Cancer: Are They Ready for Prime Time</td>
<td>P.P. Massion, MD, Nashville, TN</td>
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<td>9:20</td>
<td>Lung Cancer Staging 8th Edition: Special Considerations</td>
<td>L.T. Tanoue, MD, New Haven, CT</td>
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<tr>
<td>9:45</td>
<td>Break</td>
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<tr>
<td>9:55</td>
<td>Minimally Invasive Surgery for NSCLC: VATS or RATS</td>
<td>T.A. D’Amico, MD, Durham, NC</td>
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<td>10:20</td>
<td>Alternative Treatment for Lung Cancer: Thermal Ablation</td>
<td>R.D. Suh, MD, Los Angeles, CA</td>
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<td>10:45</td>
<td>Alternative Treatment for Lung Cancer: SBRT</td>
<td>A. Weiner, MD, Chapel Hill, NC</td>
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<tr>
<td>11:10</td>
<td>Tumor Board</td>
<td>M.P. Rivera, MD, ATSF, Chapel Hill, NC</td>
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<td>11:50</td>
<td>LUNCH</td>
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<tr>
<td>12:40</td>
<td>Diagnostic Bronchoscopic Tools Available to the Pulmonologist</td>
<td>A.V. Gonzalez, MD, MSc, Montreal, Canada</td>
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<td>1:05</td>
<td>Therapeutic Bronchoscopic Techniques Available to the Pulmonologist</td>
<td>F. Maldonado, MD, Nashville, TN</td>
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<tr>
<td>1:30</td>
<td>The Expanding Role of Immunotherapy in the Treatment of Lung Cancer</td>
<td>M.P. Rivera, MD, ATSF, Chapel Hill, NC</td>
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<tr>
<td>1:55</td>
<td>Treatment of Oligometastatic Disease: Pushing the Envelope to Improve Outcomes</td>
<td>G.R. Simon, MD, Houston, TX</td>
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<td>2:20</td>
<td>Break</td>
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<tr>
<td>2:30</td>
<td>Pulmonary and Cardiac Complications of Immunotherapy</td>
<td>J.D. Possick, MD, New Haven, CT</td>
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<tr>
<td>3:20</td>
<td>Tumor Board</td>
<td>M.P. Rivera, MD, ATSF, Chapel Hill, NC</td>
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This session and the International Conference are supported by an educational grant from AstraZeneca LP.

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.
### CLINICAL POSTGRADUATE COURSE

**PG1B CRITICAL CARE ULTRASOUND AND ECHOCARDIOGRAPHY II**

This is part 2 of a two-part course which includes PG1A on Friday, May 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)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chairers/Instructors</th>
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</thead>
<tbody>
<tr>
<td>8:25</td>
<td>Vascular Access</td>
<td>M.J. Lanspa, MD, MSCR, ATSF, Salt Lake City, UT</td>
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<tr>
<td>8:45</td>
<td>Tamponade</td>
<td>G.B. Allen, MD, Burlington, VT</td>
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<tr>
<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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<tr>
<td>9:45</td>
<td>Ultrasound for Diuresis and Dialysis</td>
<td>E.L. Hirshberg, MD, ATSF, Murray, UT</td>
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<tr>
<td>10:15</td>
<td>Break</td>
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<tr>
<td>10:30</td>
<td>Practical Skills Session: Hands-On Stations III</td>
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<tr>
<td>12:00</td>
<td>LUNCH</td>
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<tr>
<td>12:30</td>
<td>Lunch and Clinical Cases II</td>
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<tr>
<td>12:45</td>
<td>Abdominal Ultrasonography</td>
<td>V.A. Dinh, MD, Loma Linda, CA</td>
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<tr>
<td>1:15</td>
<td>Goal Directed Management of Shock Using Echocardiography</td>
<td>J. Kasal, MD, Saint Louis, MO</td>
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<td>1:45</td>
<td>Incorporating Echocardiography into CPR</td>
<td>S. Cha, MD, Baltimore, MD</td>
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<td>2:15</td>
<td>Break</td>
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<tr>
<td>2:30</td>
<td>Practical Skills Session: Hands-On Session IV</td>
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<tr>
<td>8:00</td>
<td>Vascular Ultrasound: DVT Evaluation</td>
<td>L. Rapoport, MD, Santa Clara, CA</td>
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</tbody>
</table>

**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

**Target Audience**

Providers of critical care or emergency medicine

ATS 2019 • Dallas, TX
Ask the Expert
A. Leibowitz, MD, Boston, MA
J. Kasal, MD, Saint Louis, MO
X. Monnet, MD, PhD, Le Kremlin-Bic, France
S. Nikravan, MD, Seattle, WA
E. Teo, MD, Atlanta, GA

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

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CLINICAL
POSTGRADUATE COURSE

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.
Member: $475  In-Training Member: $300
Non-Member: $550  In-Training Non-Member: $400
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.
2:44 Practical Skills Station: Endobronchial Ultrasound Anatomy
C. Argento, MD, Chicago, IL
E. Volker, MD, MSPH, Denver, CO

3:08 Practical Skills Session: Electromagnetic Navigational Bronchoscopy
C.R. Lamb, MD, Burlington, MA
K. Czamecka-Kujawa, MD, BS(Hons), Toronto, Canada

3:32 Practical Skills Session: Endobronchial Valve Placement
S. Shojaee, MD, MPH, Richmond, VA
V.K. Holden, MD, Baltimore, MD

3:56 Practical Skills Session: Endobronchial Brushings and Biopsies in the Pediatric Patient
C. Spencer, MD, New York, NY

3:57 Practical Skills Session: Transbronchial Biopsies in the Pediatric Patient
S.B. Goldfarb, MD, Philadelphia, PA

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

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.

BASIC • CLINICAL • TRANSLATIONAL
POSTGRADUATE COURSE
CME Credits Available: 6.5

PG14 ASTHMA STATE OF THE ART 2019
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 Allergy, Immunology and Inflammation; Clinical Problems; Pediatrics
8:00 a.m. - 4:00 p.m.  KBHCCD
Room C156 (Level 1)

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.
**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.

**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

**Program**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session/Activity</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>8:00</td>
<td>Introduction</td>
<td>J.D. Edelman, MD, Seattle, WA</td>
</tr>
<tr>
<td>8:15</td>
<td>Guidelines for Lung Transplant Referral and Selection</td>
<td>A.R. Glanville, MD, MBBS, Sydney, Australia</td>
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<tr>
<td>8:50</td>
<td>Lung Donation and Allocation (US)</td>
<td>E.D. Lease, MD, Seattle, WA</td>
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<tr>
<td>9:10</td>
<td>Lung Donation and Allocation (Europe)</td>
<td>J. Gottlieb, MD, Hannover, Germany</td>
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<tr>
<td>9:30</td>
<td>Organ Donation and Allocation Panel Discussion</td>
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<tr>
<td>9:40</td>
<td>Organ Procurement and Preservation</td>
<td>P. Sanchez, MD, PhD, Pittsburgh, PA</td>
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<tr>
<td>10:10</td>
<td>Break</td>
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<tr>
<td>10:25</td>
<td>Pushing the Candidate Envelope</td>
<td>R.M. Kotloff, MD, Cleveland, OH</td>
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<tr>
<td>11:25</td>
<td>Disease Specific Implications Before and After Transplant</td>
<td>S. Kapnadak, MD, Seattle, WA</td>
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<tr>
<td>11:55</td>
<td>Lunch</td>
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<tr>
<td>12:45</td>
<td>Pediatric Lung Transplantation</td>
<td>S.C. Sweet, MD, PhD, St. Louis, MO</td>
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<tr>
<td>1:10</td>
<td>Immunosuppression: State of the Art</td>
<td>S.M. Bhorade, MD, Chicago, IL</td>
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<tr>
<td>1:35</td>
<td>Infections in Lung Transplant Recipient</td>
<td>S. Husain, MD, MS, Toronto, Canada</td>
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<tr>
<td>2:00</td>
<td>Cellular Rejection, Humoral Rejection, Allo- and Auto-Antibodies</td>
<td>D.J. Levine, MD, San Antonio, TX</td>
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<tr>
<td>2:30</td>
<td>Break</td>
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<tr>
<td>2:45</td>
<td>Complications: Chronic Lung Allograft Dysfunction</td>
<td>J.D. Edelman, MD, Seattle, WA</td>
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<tr>
<td>3:10</td>
<td>Quality of Life and Functional Status Before and After Lung Transplantation</td>
<td>B.M. Hoffman, PhD, Durham, NC</td>
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<tr>
<td>3:35</td>
<td>Medical Challenges Faced by Lung Transplant Recipients</td>
<td>J.D. Edelman, MD, Seattle, WA</td>
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</table>

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

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

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**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.

**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.

**Program**

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<tr>
<td>10:55</td>
<td>Ethical Paradigms and Challenges in Lung Transplantation</td>
<td>E.R. Garrity, MD, MBA, Chicago, IL</td>
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<td>11:25</td>
<td>Disease Specific Implications Before and After Transplant</td>
<td>S. Kapnadak, MD, Seattle, WA</td>
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**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.  
KBHCCD Room C155 (Level 1)
• 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.

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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.

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 Environmental, Occupational and Population Health; Critical Care
8:00 a.m. - 4:00 p.m. KBHCCD Room C148 (Level 1)

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.

Chairing:
P.S. Lai, MD, MPH, Boston, MA
E.D. Riviello, MD, MPH, Boston, MA
C. North, MD, Boston, MA
W. Siika, MD, Nairobi, Kenya

8:00  Opening Remarks
P.S. Lai, MPH, MD, Boston, MA

8:05  Let's Start from the Very Beginning: The Nuts and Bolts of Developing an Academic Career in Global Health
C. North, MD, Boston, MA
W. Siika, MD, Nairobi, Kenya

8:45  Critical Care 1: Finding and Crunching the Numbers: Global Epidemiology Research that Includes the Whole Globe
N. Adhikari, MDCM, MSc, Toronto, Canada

9:20  Critical Care 2: Doing and Studying Critical Care in Resource Constrained Settings: Research as a Means to Multiple Ends
E.D. Riviello, MD, MPH, Boston, MA

9:55  Break

10:10  Critical Care 3: Can You Flip a Coin? Randomized Controlled Trials in Intensive Care
B. Andrews, MD, Nashville, TN

10:45  HIV-Related Chronic Lung Disease: The Changing Face of the HIV Epidemic
L. Huang, MD, ATSF, San Francisco, CA

11:20  Ask Me Anything (AMA). A Working Lunch

12:10  Doing the Science Together: Building Regional Collaborations to Study Non-Communicable Lung Diseases
K.J. Mortimer, PhD, Liverpool, United Kingdom

12:45  Environmental Health 1: When Things Break: Exposure Assessment on a Small Budget in Resource-Limited Settings
P.S. Lai, MPH, MD, Boston, MA

1:20  Environmental Health 2: Intervening on a Large Scale: Community-Based Trials in Air Pollution
W. Checkley, MD, PhD, Baltimore, MD

1:55  Break

2:10  Environmental Health 3: From Trainee to Faculty: Successful Independent Careers in LMICs
B. Kirenga, MBChB, MMEd, Kampala, Uganda

2:45  Training 1: Developing Human Resources: How to Create a Pulmonary Fellowship in a Resource Poor Setting
N.W. Schluger, MD, New York, NY

3:20  Training 2: Developing Human Resources: Short Courses for Long Term Impact
R. Haniffa, PhD, Colombo, Sri Lanka

3:55  Closing Remarks
E.D. Riviello, MD, MPH, Boston, MA
**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  
W.D. Morgan, MD, Tucson, AZ

11:05  
J.L. Allen, MD, Philadelphia, PA

11:40  
**LUNCH**

12:05  
C.L. Ren, MD, MBA, ATSF, Indianapolis, IN

12:55  
J.L. Carroll, MD, Little Rock, AR

2:15  
S. Lakshminrusimha, MD, Sacramento, CA

2:50  
R.K. Hopper, MD, Palo Alto, CA

3:25  
C.M. Cielo, DO, Philadelphia, PA

3:50  
D.M. Orenstein, MD, Pittsburgh, PA
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

Assemblies on Pulmonary Infections and Tuberculosis; Allergy, Immunology and Inflammation; Respiratory Cell and Molecular Biology
8:00 a.m. - 4:00 p.m.  
Room D170/D172 (Level 1)

Target Audience
Investigators and providers of lung health, postdoctoral fellows, fellows-in-training, and students with interest in understanding the scientific basis for disease susceptibility to lung infections.

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

• Apply new findings and information regarding normal host responses to microbial infections in the lung.
• Learn new findings about novel strategies and approaches to the management of lung infections.
• Improve the life and health status of patients with lung infections.

The course will provide state of the art presentations by experts in the field, updating current knowledge and cutting-edge research in the area of lung innate immunity and host defense. Presentations will draw from variety of disciplines, and content will provide insights into current understanding of critical components and interactions of lung protective mechanisms, elucidating mechanisms of host susceptibility to serious lung infections, and will promote discussions to develop novel strategies to treat lung infections.

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

8:00 Sensing and Signaling Infection Through Innate Immunity Receptors
J. Imler, PhD, Strasbourg, France

8:30 Cytosolic Immune Receptors and the Inflammasome
T. Kanneganti, PhD, Memphis, TN

9:00 New Insights into Macrophage Trafficking and Innate Function
D. Dockrell, MD, PhD, Edinburgh, United Kingdom

9:30 Bacterial Adaptation to Innate Immune Defenses in the Airways
A.S. Prince, MD, New York, NY

10:00 Break

10:15 Lung Dendritic Cells in Viral Infections
M. Gill, PhD, Dallas, TX
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

BASIC • CLINICAL • TRANSLATIONAL

POSTGRADUATE COURSE

CME Credits Available: 7

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.  
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
### BASIC • TRANSLATIONAL

**POSTGRADUATE COURSE**

CME Credits Available: 6.5

**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.
- 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 Cell and Molecular Biology; Allergy, Immunology and Inflammation**

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

**11:45 LUNCH**

**12:40 Analysis of High-Dimensional Cytometry Data**

A. Belkina, MD, PhD, Boston, MA

**1:15 Spatial Transcriptomics to Understand Lung Development and Disease**

T. Desai, MD, MPH, Stanford, CA

**1:50 Integrative Analysis of the Spatial and High-Throughput Single-Cell Transcriptomics**

V. Svensson, PhD, Pasadena, CA

**2:25 Break**

**2:40 Light Sheet Microscopy for Studying Human Lung**

D. Shepherd, PhD, Aurora, CO

**3:20 High-Content Automated Single Cell Imaging Analysis Using CellProfiler**

T. Becker, PhD, Cambridge, MA

**3:55 Concluding Remarks**

M.C. Nawijn, PhD, Groningen, Netherlands

### CLINICAL

**POSTGRADUATE COURSE**

CME Credits Available: 7

**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.
- 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; Clinical Problems**

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

**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**

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A. Misharin, MD, PhD, Chicago, IL

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M.C. Nawijn, PhD, Groningen, Netherlands

**11:10 Single Cell Proteomics in the Lung**

C. Ansong, PhD, Richland, WA

**11:45 LUNCH**

**12:40 Analysis of High-Dimensional Cytometry Data**

A. Belkina, MD, PhD, Boston, MA

**1:15 Spatial Transcriptomics to Understand Lung Development and Disease**

T. Desai, MD, MPH, Stanford, CA

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**2:25 Break**

**2:40 Light Sheet Microscopy for Studying Human Lung**

D. Shepherd, PhD, Aurora, CO

**3:20 High-Content Automated Single Cell Imaging Analysis Using CellProfiler**

T. Becker, PhD, Cambridge, MA

**3:55 Concluding Remarks**

M.C. Nawijn, PhD, Groningen, Netherlands

ATS 2019 • Dallas, TX
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

PG25 VENTILATORY COMPLICATIONS OF HEART FAILURE

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 Sleep and Respiratory Neurobiology; Critical Care; Respiratory Structure and Function

8:00 a.m. - 4:00 p.m.
Room D163/D165 (Level 1)

Target Audience
Clinicians, scientists and nurses involved in the management of acute pulmonary edema and chronic heart failure. Will include those with interest in non invasive ventilation support, lung function testing and sleep laboratories.

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

• increase understanding of the changes in lung function (at rest, on exercise and during sleep);
• increase the understanding of modern heart failure treatments and to explore the controversial areas of oxygen and positive airway pressure;
• share the knowledge between critical care, physiology and sleep in terms of physiological understanding, pitfalls in treatment and effects of positive airway pressure.

This course will focus on the ventilatory abnormalities related to heart failure in the acute setting (pulmonary edema), chronic setting (lung function, exercise physiology, polysomnography) and the impact of standard heart failure treatments (medications, devices and transplantation) and positive airway pressure.

Chairing:
M.T. Naughton, MD, ATSF, Prahran, Australia
G. Lorenzi-Filho, MD, Sao Paulo, Brazil

8:00
Heart Failure Etiology and Pathophysiology
J. Floras, MD, DPhil, Toronto, Canada

8:35
Role of Positive Airway in Acute Pulmonary Edema
L.J. Brochard, MD, Toronto, Canada

9:05
Lung Function in Heart Failure
K. Kee, MBBS, Parkville, Australia

9:25
Role of Rostral Fluid Shift in Sleep and Heart Failure
S. Redolfi, MD, PhD, Paris, France

9:45
Break

10:00
Cardiopulmonary Exercise Testing in Heart Failure
G. Lorenzi-Filho, MD, Sao Paulo, Brazil

10:25
Periodicity with Breathing in Heart Failure: Why?
S.A. Sands, BSc, PhD, Cambridge, MA
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  Break  

2:35  Periodic Breathing in Heart Failure: To Pace or Oxygenate?  
S. Javaheri, MD, Cincinnati, OH  

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, chair of the Department of Medicine at Duke University. 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.
CLINICAL
PEDIATRIC CLINICAL CORE CURRICULUM

CME Credits Available: 1
MOC Points Available: 1

PCC1  PEDIATRIC CLINICAL CORE CURRICULUM
6:45 a.m. - 7:45 a.m. OMNI DALLAS DOWNTOWN
Dallas Ballroom A-C (Level 3)

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

6:45  Control of Breathing Disorders in Children
E.S. Katz, MD, Boston, MA

7:15  Management of Obstructive Sleep Apnea in Children
J.E. Maclean, BSc(Hons), MD, PhD, Edmonton, Canada
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.

### BEHAVIORAL • CLINICAL
### CRITICAL CARE TRACK

**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. Girardis, 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

### BASIC • CLINICAL • TRANSLATIONAL
### BASIC SCIENCE CORE

**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.

Chairing: 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  

A6  

PAP FOR ALL OR PAP FOR FEW: CONTROVERSIES IN MANAGEMENT OF SLEEP-DISORDERED BREATHING  

Assembly on Sleep and Respiratory Neurobiology  
9:15 a.m. - 11:15 a.m.  
Room C155-C156 (Level 1)  

Target Audience  
Pulmonary and critical care physicians, sleep physicians, fellows in training, physician extenders, respiratory therapists  

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

• become aware of controversy as it relates to managing asymptomatic patients with OSA and CVD and be able to apply new knowledge competence and implement practice changes as appropriate for treatment of these patients;  
• gain improved ability to determine the best mode of PAP therapy (CPAP or NIV) in OHS given patient characteristics and selected outcomes;  
• recognize the various reasons why clinical trials in cardiovascular disease have led to negative outcomes and what changes in trial design the sleep field should aim for in the future.  

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.

Chairing: S. Pamidi, MD, Montreal, Canada  
N.A. Shah, MD, MPH, MSci, New York, NY  
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  

SUNDAY MORNING
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 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

9:15 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.

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.

**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.

**Chairing:** C. Rosas-Salazar, MD, MPH, Nashville, TN
E. Forno, MD, MPH, ATSF, Pittsburgh, PA

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

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

10:29 Epigenetics and Transcriptomics in the Prediction and Phenotyping of Childhood Asthma
E. Forno, MD, MPH, ATSF, Pittsburgh, PA

10:52 Emerging Biomarkers of Pediatric Rare Lung Diseases
L.R. Young, MD, ATSF, Nashville, TN

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

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**A10 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. KBHCCD
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, life-style 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, Chicago, IL

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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A11  CRITICAL CARE 2.0: INTEGRATING BIG DATA, CLINICAL TRIALS, AND IMPLEMENTATION SCIENCE TO CREATE A LEARNING ICU SYSTEM

Assemblies on Behavioral Science and Health Services Research; Critical Care

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

Target Audience
Clinicians, researchers, hospital leaders, quality improvement leaders

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

• understand the rationale and framework of the Learning Health System;
• describe how the Learning Health System impacts both the design and conduct of quality improvement, healthcare operations, and research;
• identify strategies to address potential barriers of the Learning Health System related to ethics, funding, and implementation.

Optimal critical care involves delivering the right treatment to the right patient at the right time for the right price. The Learning Health System (LHS) framework describes a solution that leverages high quality evidence, internal data and informatics, and systematic implementation to improve outcomes and value. In this session, leading experts will review the principles of the LHS and describe how it can foster the delivery of high quality acute and critical care. In particular, this session will focus on critical care: an area marked by high morbidity and mortality as well as documented gaps and delays in the implementation of evidence based care.

Chairing: V. Liu, MD, MS, Oakland, CA
M.W. Semler, MD, MSc, Nashville, TN
A.J. Walkey, MD, MSc, Boston, MA

9:15  What is a Learning Hospital System?
K.R. Courtright, BA, MS, MD, Philadelphia, PA

9:35  A Lab in the Wild I: Embedded RCTs
P. Young, MBChB, BSc (Hons), PhD, Wellington, New Zealand

9:55  A Lab in the Wild II: Quasi-Experimental Designs
A.J. Walkey, MD, MSc, Boston, MA

10:15  Helping the World Breathe: Implementing Evidence-Based Critical Care Globally
N. Adhikari, MD, MS, Toronto, Canada

10:35  The Ethics of Continuous Learning: How Does It Impact Research?
R. Faden, PhD, MPH, Baltimore, MD

10:55  Improving Value: Cost Savings with the Learning Health System
G.R. Bernard, MD, Nashville, TN

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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.  KWHCCD
Room C147/C148/C154 (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

**CLINICAL**

**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 2
MOC Points Available: 2

**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 pharamacotherapy 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, 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
J. 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

**CLINICAL**

**MINI SYMPOSIUM**

**A14 REDUCING DISPARITIES AND IMPROVING OUTCOMES OF LUNG CANCER SCREENING**

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

Ballroom A One (Level 2)

Chairing:
C.G. Slatore, MD, Portland, OR
J. Iaccarino, MD, MSc, Boston, MA
A.C. Melzer, MD, MS, Minneapolis, MN

Oral Presentations
9:15 Racial Differences in Attitudes Toward Lung Cancer Screening


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


MINI SYMPOSIUM

A15 CRITICAL CARE: BRAVE NEW WORLD - NEW INSIGHTS FROM CLINICAL TRIALS AND OBSERVATIONAL COHORTS

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN Trinity Ballroom 4/8 (Level 3)

Chairing: S.E. Mehta, MD, Toronto, Canada M.N. Gong, MS, MD, Bronx, NY

Oral Presentations


10:00 Percutaneous Temporary Placement of a Phrenic Nerve Stimulator for Diaphragm Pacing (RESCUE 1) US Feasibility Clinical Trial/A. Ataya, E.P. Silverman, G.J. Criner, D. McDonagh, Gainesville, FL, p.A1012


11:00 Deeper Insights from the Provision of Psychological Support to People in Intensive Care (POPPi Trial - the POPPi Trial Psychologist's View/D. Wade, London, United Kingdom, p.A7296

BASIC • CLINICAL • TRANSLATIONAL

MINI SYMPOSIUM

A16 CHEMICAL THREATS AND INJURY: MECHANISMS AND TREATMENT

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN Dallas Ballroom G (Level 3)

Chairing: S.E. Jordt, PhD, Durham, NC S. Ahmad, PhD, Birmingham, AL C.W. White, MD, Denver, CO

Oral Presentations

9:15 Swine Model of High Dose Sulfur Mustard Inhalation, and Improved Outcome After Rescue with Fibrinolytic Treatment/L.A. Veress, Aurora, CO, p.A1016


9:45 Neutralization of Extracellular Nucleic Acids Rescues Rats from Chemical-Induced ARDS/N. Mariappan, M. Husain, I. Zafar, K. Smithson, S. Ahmad, A. Ahmad, Birmingham, AL, p.A1018

10:00 Characterization of Extracellular miRNA from Rats Exposed to Inhaled Analog of Sulfur Mustard/T. Rana, I. Zafar, M. Husain, N. Mariappan, T. Hamid, D.S. Chandrashekar, S. Ahmad, A. Ahmad, Birmingham, AL, p.A1019
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

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 Bronchoscopic Detection of Aspiration in Patients with Mycobacterium Avium Complex Pulmonary Infection/S. Whealon, L. Lande, Wynnewood, PA, p.A1032
11:00 A19 LESS IDIOPATHIC: STRUCTURAL AND FUNCTIONAL ABNORMALITIES IN IPF

9:15 a.m. - 11:15 a.m. KBHCCD
Room D220/D227 (Level 2)

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

Oral Presentations


SUNDAY • MAY 19

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A21 ADVANCES IN ASTHMA PATHOGENESIS

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

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

Chairs: 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. Marne, M. Conway, F.D. Martinez, S. Guerra, J.G. Fedrcofd, 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. J.K. Yombo, M.M. Mentik-Kane, M.S. Wilson, T.A. Wynn, S.K. Madala, Cincinnati, OH, p.A1053

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

The Impact of Palliative Care on Quality of Life, Depression, and Anxiety in Patients with Idiopathic Pulmonary Fibrosis/K. Janssen, D. Rosielle, Q. Wang, H.J. Kim, Minneapolis, MN, p.A1074

Palliative Care Needs and Attitudes of Patients with Pulmonary Arterial Hypertension/C.E. Brown, Y. Lynch, M. Modes, J. Steiner, P. Leary, R.A. Engelberg, J.R. Curtis, Seattle, WA, p.A1075


Caregiver Stress in Advance Care Planning (ACP) Conversations: A Qualitative Analysis of Data from a Randomized Controlled Trial/D. Lipnick, B. Levi, R. Johnson, I.S. La, E. Thiede, W. Debra, G. Michael, L.J. Van Scoy, Hershey, PA, p.A1077


Perspectives on Advance Care Planning for Patients with Hematologic Malignancy/J. Spring, J. McKinlay, M. Detsky, S. Mehta, S. Thayag, K. Mcguigan, L. Munshi, Toronto, Canada, p.A1083


Asking Patients About Their Future Cardiovascular Event Risk: Evaluation of a Conversation Game to Train Health Professionals/Chairing: D.H. Sterman, MD, ATSF, New York, NY

• J.K. Pannu, MD, Nashville, TN
• H.J. Lee, MD, Baltimore, MD


102 Bleeding in Patients Undergoing Indwelling Pleural Catheters While on Antiplaletet 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 Intrathoracic Nodal and Lesion Biopsy/T. He, I. Susanto, S.S. Oh, Los Angeles, CA, p.A1092


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


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


109 Outcomes of Inferior Vena Cava Placement in Pulmonary Embolism Complicated with Shock/M.H. Gul, Z.M. Htun, 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

In-Hospital Mortality and Early Arterial Embolization in Patients with Hemothorax Requiring Mechanical Ventilation/T. Ando, T. Jo, M. Kawashima, H. Kage, G. Tanaka, Y. Yamauchi, M. Suzukawa, K. Masuda, H. Yasunaga, T. Nagase, Tokyo, Japan, p.A1107


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


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


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

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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


Clinico-Publishing, Tokyo, Japan, p.A1107


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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


Clinico-Publishing, Tokyo, Japan, p.A1107


221 Suboptimal PIFR Associated with Greater Dyspnea in Chronic Obstructive Pulmonary Disease (COPD)/D.A. Mahler, J.A. Ohar, J. Yun, E.J. Moran, C.N. Barnes, G.D. Crater, Hanover, NH, p.A1132

222 Analysis of Vaccination Effect Against Pneumococcal Infection with a Combined Course of Chronic Obstructive Pulmonary Disease and Chronic Heart Failure/G. Ignatova, V. Antonov, Chelyabinsk, Russian Federation, p.A1133


BASIC • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A25 CRITICAL CARE: THE WIND IN THE WILLOWS - ARDS: OF SWINE AND MEN

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: R.M. Baron, MD, Boston, MA
J.A. Bastarache, MD, Nashville, TN
R.S. Stephens, MD, Baltimore, MD

801 Nonpharmacological Interventions to Reduce Ventilator Dyssynchrony in Patients with the Acute Respiratory Distress Syndrome/W.C. McGuire, M. Moss, D. Albers, P.D. Sottile, Aurora, CO, p.A1135


803 Phenotyping Entrainment Patterns During Mechanical Ventilation in ARDS Using the Campbell Diagram/E. Baedorf De Ferrari, M. Herzog, A. Corona, S. Tauer, T. Koch, M. Gama de Abreu, Dresden, Germany, p.A1137


ATS 2019 • Dallas, TX
1003 Perinatal Nicotine Exposure-Induced Offspring Asthma Is Transmitted Via Both Male and Female Germ Lines/V. Rehan, J. Liu, C. Yu, R. Sakurai, Y. Wang, Torrance, CA, p.A1162


1006 Social and Environmental Variables Obtained from Secondary Data Sources Explain Spatial Trends in Asthma Exacerbations Found in Electronic Health Record (EHR)-Derived Data/S. Xie, B.E. Himes, Philadelphia, PA, p.A1165


1012 Presence of Pleural Plaques and/or Asbestosis and the Risk of Lung Cancer/F. Brims, K. Kong, E. Harris, A. Reid, C. Murray, P. Franklin, N. Hodhi-Berry, A.B. Musk, N. de Klerk, Perth, Australia, p.A1171


1014 The Immunomodulatory Effect of Marijuana on Cellular Function of Human Alveolar Macrophages/R. Johnson-Paben, E.L. Burnham, J. Gaydos, A. McNally, Aurora, CO, p.A1173


1016 Titanium Dioxide Nanoparticles Enhance RSV-Induced Airway Barrier Dysfunction/C.C. Smallcombe, T.J. Harford, V. Bokun, A.I. Ivanov, G. Piedimonte, F. Rezaee, Cleveland, OH, p.A1175

1017 Progressive Massive Fibrosis Contributes to Pulmonary Hypertension in Silicosis/Q. Ye, S. Yu, Y. Wang, Beijing, China, p.A1176


A27 PEDIATRIC LUNG INFECTION AND CRITICAL CARE AROUND THE WORLD

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN

Abstract Summaries 9:15-9:45

Viewing/Discussion 9:45-11:15

Chairing: P.J. Robinson, MD, PhD, Melbourne, Australia
G. Emeriaud, MD, PhD, Montreal, Canada
W. Checkley, MD, PhD, Baltimore, MD


307 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


A29 EMERGING CONCEPTS IN LUNG FIBROSIS
9:15 a.m. - 11:15 a.m.  BALLHALLC

Poster Viewing 9:15-10:00
Discussion 10:00-11:15
Chairing: J.S. Hagood, MD, Chapel Hill, NC
E.F. Redente, PhD, Denver, CO
A. Lam, MD, Chicago, IL

702 Local Delivery of NOX4 Antisense Oligonucleotides Ameliorates 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


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 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


720 Reduced Protein Cysteine Oxidation by Coordinate Action of Oxidoreductases Reverses Existing Increases in Lung Fibrosis/Y. M.W. Janssen-Heiningier, E. Elko, A. Kumar, A. Van Der Veld, V. Anathy, Burlington, VT, p.A1244


725 Microvesicle Expression of Growth Hormone Receptor from Mesenchymal Cells Supports the Lung Epithelial Stem Cell Niche and Abrogates Pulmonary Fibrosis in Mice/T. Xie, V. Kulur, N. luo, C. Liang, B. Jiang, P. Chen, P. Noble, Los Angeles, CA, p.A1236

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


402 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

403 Microbiome Profile Associations in Malignant Pleural Effusion/S. Shojaee, A. Sharma, N. Gottel, T. Sanchez, J. Gilbert, N. Rahman, Richmond, VA, p.A1249


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


415 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


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


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. Pirogov, A.G. Prikhodko, D.A. Gassan, Blagoveshchensk, Russian Federation, p.A1276


P699 STIFLE: An Exploratory Longitudinal Study to Characterize Daily Changes and Relationships in Airway Inflammation, Symptoms, Lung Function, and Reliever Use in Adult Asthma Patients
T. Harrison, G. Whelan, M. Fagerãs, A. Rutgersson, L. Belton, S. Siddiqi, P. Gustafson, Nottingham, United Kingdom, p.A1308

P700 Switching and Combining Biologics in Severe Asthma: Experience from a Large Academic Teaching Center/L. Eggert, R.S. Chinthrajah, Stanford, CA, p.A1309


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. Albayaty, 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 MDI); 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. Perelman, A.B. Pirogov, A.G. Prikhodko, D.A. Gassan, V.P. Kolosov, Blagoveschensk, 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. Alsmail, K. Sutzko, A. Yanez, R. Ramirez, L. Tan, Loma Linda, CA, p.A1330


Facilitator: N. Lugogo, MD, Ann Arbor, MI

P728 Characteristics of Patients with Severe Asthma in the Russian Federation-the Russian Severe Asthma Registry/N. Nenasheva, A. Belevsky, Moscow, Russia, Russian Federation, p.A1337


P730 Comparative Feasibility of Sputum and Exhaled Breath VOCs Sampling in Patients with Severe Exacerbations of Airways Disease/W. Ibrahim, M.J. Wilde, R. Cordell, L. Bryant, R.C. Free, B. Zhao, M. Richardson, A. Singapuri, N.J. Greening, P.S. Monks, C.E. Brightling, S.H. Siddiqui, Leicester, United Kingdom, p.A1339

P731 Nationwide Questionnaire-Based Survey on the Safety of Bronchial Thermoplasty for Severe Asthma Patients in Japan/A. Sano, H. Sano, T. Iwanaga, H. Takahiko, Y. Tohda, Osakasayama, Japan, p.A1330

P732 Severe Inner City Asthma: Low Vs High FEF 25-75% Is a Marker of Airway Obstruction, Bronchodilator Response and Allergen Sensitization but Not Airway Symptoms/M. Ahmad, E.S. Schulman, Philadelphia, PA, p.A1341

P733 Clinical and Biological Phenotyping of Upper and Lower Airways as a Mean of Therapy Optimization in Severe Asthmatic Patients Eligible for Biologics Treatment/P. Paggiaro, M. Latore, M. Bradick, E. Bacci, S. Cianchetti, C. Cardini, M. Miccoli, L. Cristofani Menacci, A. Cell, Pisa, Italy, p.A1342

P734 History of Childhood Asthma: A Potential Risk Factor for Poor Asthma Control in Adult Asthma/M. To, R. Tsuzuki, O. Katsube, S. Yamawaki, S. Soeda, Y. Kono, N. Honda, I. Kano, K. Haruki, Y. To, Saitama, Japan, p.A1343

P735 Relationship Between House Dust Mite-Specific IgE in Sputum and Airway Hyperresponsiveness in Adult Patients with Atopic Asthma/H. Sano, K. Tomita, A. Sano, O. Nishiyama, T. Iwanaga, Y. Tohda, Osakasayama, Japan, p.A1344


P737 Hormone-Based Contraception Might Be Associated with Better Lung Function and Better Asthma Control/P. Zhang, H.J. Kim, G. Bebek, J.G. Zein, Cleveland, OH, p.A1346

THEMATIC POSTER SESSION

A33 ADVANCES IN MEDICAL EDUCATION IN PULMONARY AND CRITICAL CARE MEDICINE

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: J.I. McSparron, MD, Ann Arbor, MI


Flipping the Pulmonary Physiology Script- Resident Education/J.P. Needleman, M.G. Marcus, M. Mendiratta, I. Walker-Descartes, Brooklyn, NY, p.A1353

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

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

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


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


The Presence of Pulmonary and Critical Care Programs on Social Media/V. Kaul, N.H. Stewart, D. Khateeb, P.S. Garcha, W.G. Carlos, C.L. Carroll, S. Gandotra, Elmhurst, NY, p.A1364

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

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. Arrroliga, Temple, TX, p.A1365

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


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

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

Screening, Diagnosis, and Treatment in Sleep Disorders

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

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, ATS, Cleveland, OH

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


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


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

P442  First in Human Experience of Placement of a New Size Endobronchial Valve in Patients with Advanced Emphysema/K. Morgan, E.D. Tenda, B. Farzanegan, Tehran, Iran, Islamic Republic of, p.A1405


P447  Use of a Novel Non-Invasive Ventilation Unit in Patients with Radial Endobronchial Ultrasound Guided Sensitivity Off Radial Endobronchial Ultrasound Guided Argon Plasma Electrosurgery: Mechanism of Injury Causing Trends in Endobronchial Valve Implantation and Associated 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/Z. Zhang, Wuxi, China, p.A1413


P455  Change of Pulmonary Function Test in Patients with Tuberous 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


P458  Serum VEGF-D Level in the Periods of Not Taking mTOR Inhibitors in the Patients with Lymphangioleiomyomatosis/ M. Hirose, T. Ariai, C. Sugimoto, T. Takimoto, Y. Inoue, Osaka, Japan, p.A1419

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. Babaee 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

Facilitator: S.Y. El-Chemaly, MD, MPH, Boston, MA


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


CLINICAL THEMATIC POSTER SESSION

A37 CONNECTIVE TISSUE DISEASE-INTERSTITIAL LUNG DISEASE

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: T. Luckhardt, MD, Birmingham, AL

P176 Frailty Measurements in Systemic Sclerosis Differ from Other Fibrotic Interstitial Lung Diseases/S. Bhorade, R. Jablonski, J. Lee, M. Mashi, A. Ansari, R. Tomic, J.E. Dematte, Chicago, IL, p.A1429


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

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


P207 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

P208 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


P210 Clinical Significance of Serum Adiponectin for Patients with Postinflammatory Pulmonary Fibrosis/Y. Fujiki, Tochigi Prefecture, Japan, p.A1462


A39 DRUG RELATED CASE REPORTS

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:  K. Suresh, MD, Baltimore, MD

P468 Complete Reversal of Ipilimumab Pneumonia by Corticosteroid and Drug Withdraw
E.P. Oliveira, R.F. Palazzo, C.S.V. Barbas, Sao Paulo, Brazil, p.A1484

P472 Acute Drug-Induced Pneumonitis from Brentuximab Therapy/S. Katta, T. Connolly, Houston, TX, p.A1473


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P491 Tumor Necrosis Factor Inhibitors for Anti-PD-1/PD-L1 Pneumonitis: Does It Improve or Impair?/C. Nieweld, G. George, F. Romero, R.S. Sumner, Philadelphia, PA, p.A1492

P492 Amiodarone in Nodular Interstitial Lung Disease/T. Phanthok, C. Duran, V.S. Taskar, Augusta, GA, p.A1493

P493 Enasidenib Causing Differentiation Syndrome and Pulmonary Facilitator


P495 A Unique Case of Narcan-Induced Pulmonary Hemorrhage/S.M. Nanavati, G. Melki, V. Kumar, A. Sharif, P. Michael, A. Sharaan, Paterson, NJ, p.A1496

P496 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

P497 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

P498 Dyspnea and Dry Eyes After Pembrolizumab/A.M. Shieleno, X. Wu, New York, NY, p.A1499

P499 Yet Another Pulmonary Complication of TNF Inhibitor/D. Sharma, D. El Sayegh, Staten Island, NY, p.A1500


P501 DRESS Syndrome Without Eosinophilia and Tuberculosis Treatment/C. Bernal, Lima, Peru, p.A1502


P504 Ipiplimunib Pneumonitis Treated with Infliximab/K. Lai, V.R. Shannon, L. Bashoura, S.A. Faiz, Houston, TX, p.A1505

P505 Two Cases of Daptomycin-Induced Acute Eosinophilic Pneumonia/M. Ghani, H. Hashemi, M. Behre, Bronx, NY, p.A1506

P506 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


P508 Delayed Onset Trastuzumab Induced Pneumonitis/A. Mirrakhimov, A.I. Saeed, Albuquerque, NM, p.A1509


P510 Dasatinib Induced Chylothorax/A. Ghauri, M.H. Ifthikhar, A. Alratroot, H. Laird-Fick, East Lansing, MI, p.A1511

P511 Paclitaxel Induced Diffuse Interstitial Pneumonitis: A Case Report/N.A. Siddiqui, R. Arora, R.C. Holladay, Shreveport, LA, p.A1512


P513 Gastrointestinal Angiodysplasia and Ambrisentan/A. Munir, J.D. Parekh, A. Wells, M.J. Sanley, Omaha, NE, p.A1514


P516 Nitrofurantoin Toxicity: A Near Case of Mistaken Identity/ J. Miskoff, M. Chaudhri, Neptune, NJ, p.A1517

P517 Infliximab Associated Shrinking Lung Syndrome/J. Krishnan, B. Hayward, New York, NY, p.A1518


P519 Rituximab for Stabilization of Fibrotic Hypersensitivity Facilitators:

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, Pearland, TX, 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
P522  Management of Chronic Eosinophilic Pneumonia with Mepolizumab/R. Lawrence, E.S. Klings, Boston, MA, p.A1522


P524  A Case of Pneumomediastinum Leading to a Diagnosis of Amyopathic Dermatomyositis/G. Glazman-Kuczaj, K. Cleven, Bronx, NY, p.A1524


P526  Rheumatic Obliteration of the LungI/M. Mody, K. Edubiri, P.S. Patel, T. Anandarangam, C. Migliore, Newark, NJ, p.A1526

P527  Challenges in Diagnosing Antisynthetase Syndrome in Patients with Initial Presentation of Interstitial Lung Disease/ L.E. Stawowy, H. Mujahid, R.G. Sangani, Morgantown, WV, p.A1527


Facilitator:  S.R. Russell, MD, Chicago, IL


P530  Rapid Progression of Mediastinal Lymphadenopathy in Stage I Sarcoidosis Leading to Esophageal Rupture/S. Awadallah, H. Sarwar, P. King, M. Sahebazamani, Greenville, SC, p.A1530


P537  When Löfgren Breaks the Heart: An Unusual Presentation of Löfgren’s Syndrome with Cardiac Involvement/M. Johnston, J. Boggs, Norfolk, VA, p.A1537

P538  A Rare Case of Sarcoidosis with Complete Bronchial Obstruction/A. Khan, M. Faisaluddin, A. Jain, M.F. Betancourt-Ramirez, Orlando, FL, p.A1538

Facilitator:  C. Newton, MD, Dallas, TX


P540  Recurrent Testicular Mass in a Patient with Sarcoidosis/E. Verghese, A. Jabri, Y. Dhamija, M. Priyadarshini Kumar, N. Haller, A. Diwakar, Akron, OH, p.A1540


P543  Late-Onset Sarcoidosis in a Patient with Myasthenia Gravis/M.D. Schweitzer, P.A. Barletta, M. Mirsaeidi, Fort Lauderdale, FL, p.A1543

P544  Rare Presentation of Cryptogenic Organizing Pneumonia in Patient with Quiescent Systemic Lupus Erythematosus/A.S. Museedi, J. Fraser, San Antonio, TX, p.A1544

P545  Granulomatous and Lymphocytic ILD (GLILD): Revelation in ILD World/M.R. Qureshi, K.N. Cao, Tampa, FL, p.A1545

P546  Prompt Diagnosis of Atypical Case of Diffuse Alveolar Hemorrhage/J. Flanagan, V. Lassalle, R. Brink, M. Plum, R. Kanaan, S. Al-Andary, Largo, FL, p.A1546


P548  Pulmonary Sarcoidosis and Pliomatricoma/M.A. Quiñonez, M.E. Vijil, San Pedro Sula, Honduras, p.A1548

Facilitator:  N.Y. Hamzeh, MD, Iowa City, IA

P549  A Rare Case of Bone Marrow Sarcoidosis with Review of Literature/K.E. Fitton, F. Khorfian, G. Bayasi, Grand Blanc, MI, p.A1549

P550  Untreated Sarcoidosis as a Cause for Recurrent Myocardial Infarction/A. Karim, P. Saric, A. Kalra, Cleveland, OH, p.A1550


P552  Sarcoidosis Again?!/M. Mody, A. Arjuna, P.S. Patel, T. Anandarangam, Newark, NJ, p.A1552


P554  Severe Treatment-Refactory Extrapulmonary Sarcoidosis with Disease Arrest by Continuous Macrolide Therapy, Progression After Discontinuation and Relief After Reinstitution. A 10 Year Prospective Study/S. Rustcheff, Varnamo, Sweden, p.A1554

**P556** Carotid Vasculitis: A Rare Manifestation of Sarcoidosis/P.T. Neilan, A.A. Mancuso, D.C. Patel, Gainesville, FL, p.A1556

**P557** Sarcoidosis: A Rare Case of Co-Existing Systemic Sarcoidosis and Amyloidosis/K. Mealey, A. Ly, N. Shah, A. Khan, N. Ravikumar, Springfield, MA, p.A1557

**P558** Secondary Organizing Pneumonia Associated with Miliary Tuberculosis/K.C. Kim, Daegu City, Korea, Republic of, p.A1558

**Facilitator:** S.A. Suliman, MD, Louisville, KY

**P559** Sarcoidosis and IPF: The Egg and the Chicken Phenomenon/A. Arjuna, P.W. Stevenson, H. Alhumait, A. Shahmohammadi, S. Chandrashekar, Gainesville, FL, p.A1559


**P561** Sarcoidosis Disguised as Malignancy/R. Patel, M. Kadri, A. Al-khateeb, S. Bellary, H. Sharma, R.A. Miller, A. Klukowicz, Newark, NJ, p.A1561

**P562** Palliative Care Lost in the Complexity of Pulmonary Hypertension/A.V. Sharma, R. Chopra, O. Schwartz, Washington, DC, p.A1562

**P563** A Case of Systemic Sarcoidosis Presenting as Hypercalcemia Induced Pancreatitis/J. Kaur, A.S. Bath, J.R. Ladwig, Kalamazoo, MI, p.A1563

**P564** Lofgren Syndrome Masquerading as Cellulitis/A. Ul Haq, T. Hussain, S.H. Ijaz, S. Daouk, Oklahoma City, OK, p.A1564

**P565** Acute Idiopathic Eosinophilic Pneumonia. Not All Cases Are Alike, A Diagnostic Challenge/C. Vu, J. Pham, W. Lee, Palm Springs, CA, p.A1565


**P567** Sarcoidosis Masqueraded as a Malignancy/L. Delasos, Farmington, CT, p.A1567

**P568** A Pancreatic Mass Presenting as a Rare Case of Pancreatic Sarcoidosis/D. Rutenberg, K.N. Cao, Tampa, FL, p.A1568

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**CLINICAL**

**THEMATIC POSTER SESSION**

**A41** COPD: EPIDEMIOLOGY

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.


**P134** Comparison of Predictive Properties Among Subject Reported Outcomes in Subjects with Chronic Obstructive Pulmonary Disease: Breathlessness, Respiratory Symptoms and Health Status/K. Nishimura, M. Kusunose, R. Sanda, A. Narita, T. Oga, Obu, Japan, p.A1570


**P136** Breathing-Swallowing Discoordination Is Associated with Poor Prognosis in Patients with COPD/S. Sato, S. Nagami, Y. Oku, A. Sato, N. Tanabe, N. Yagi, T. Hirai, S. Muro, Kyoto, Japan, p.A1572


**P143** Factors Associated with 30-Day Readmission in Patients with Chronic Obstructive Pulmonary Disease/L. Candelario, M.A. Campos, Miami, FL, p.A1579


P148 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

P149 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


P151 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


P156 Emergency Room Visits and Hospital Readmissions for Acute Exacerbations of COPD Are Similar Among Homeless and Non-Homeless Veterans with Access to Dental Care in Chicago/I. Imayama, M. Tole, G. Callison, I. Rubinstein, Chicago, IL, p.A1592


P159 The Profile of COPD Patients with Prolonged Hospitalizations: A Retrospective Analysis of 200 Admissions/G. Epstein Shocchet, E. Abd El Qader, L. Israeli-Shani, Z. Dovrish, O. Wand, D.A. King, D. Shitrit, Kfar Saba, Israel, p.A1595

P160 Prevalence of Chronic Obstructive Pulmonary Disease with Preserved Ratio Impaired Spirometry (COPD-PRISM) and Clinical Outcomes in Tertiary Care Setting Thailand/T. Kawai, N. Rungsrisathithorn, W. Wudhikulprapan, W. Sukkasem, Bangkok, Thailand, p.A1596


P163 Forced Vital Capacity (FVC) May Be an Independent Marker for Assessing Clinical Outcomes in Chronic Obstructive Pulmonary Disease (COPD)/W. Seo, T.J. An, Seoul, Korea, Republic of, p.A1599

P164 Comorbidity and Quality of Life in the Patient with Chronic Obstructive Pulmonary Disease/E.J. Soto Hurtado, J. Bujalance Zafra, L. García López, I. Millán Pinilla, R. Arroyo Morales, M. Bujalance Zafra, Malaga, Spain, p.A1600


P166 Exacerbation Rate in COPD Patients - Two Years Follow-Up Cohort/O.A. Nascimento, C.S. Silva, A.A. Albuquerque Neto, M. Gazzotti, J.R. Jardim, Sao Paulo, Brazil, p.A1602


P43 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 Oxgenation Program at a Tertiary Referral Academic Medical Center: A Qualitative Review/V. Schims, J. Wells, D.L. Hotchin, Portland, OR, p.A1627


P47 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


P49 Lung Ultrasound for Aeration Assessment in Patients with Acute Respiratory Distress Syndrome (ARDS) Requiring Venovenous ECMO/Parekh, B. Short, S. Chandra, New York, NY, p.A1631

P50 Caspofungin Population Pharmacokinetics (PK) in Perioperative Patients with Lung Transplantation Receiving 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


Facilitators: G.B. Allen, MD, Burlington, VT
S. Sahetya, MD, Baltimore, MD

P52 Acute Respiratory Failure Requiring Admission to Medical Intensive Care Unit: A Prospective Study/A. Mohan, G. Sindhu, J. Harikrishna, M.H. Rao, K.V.S. Sarma, Tirupati, India, p.A1633


P54 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


P57 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

P58 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


P61 Attending-Patient Familiarity and the Decision to Extubate Mechanically Ventilated Patients/A.N. Khan, J.A. Greenberg, Chicago, IL, p.A1642

Facilitators: G.B. Allen, MD, Burlington, VT
S. Sahetya, MD, Baltimore, MD


P64 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, N. Montecinos, I. Ramírez, J. Olivares, R. Cornejo, Santiago de Chile, Chile, p.A1645

**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.**

**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

**P105 Patterns and Significance of Abnormal Liver Function Test in Decompensated Diabetes Mellitus/R. Ogunti, A. Awan, H. Yaqqob, P. Wessly, K. Binu, M. Munawwar, B. Ahmad, Y. Gebrekidan, V. Kodadhal, 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

P117 Therapeutic Targeting of Bruton’s Tyrosine Kinase for the Treatment of Acute Lung Injury/A. Kurdowska, A. Jeffers, W. Qin, J. M. Florence, T. A. Tucker, Tyler, TX, p.A1695


P119 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, M. Margoles, Y. Fitz, P. Eichacker, Bethesda, MD, p.A1697


P121 Sepsis-Induced Multiorgan Dysfunction Rapidly Progresses in Male Sheep than in Female Sheep/K. Liu, Y. Niimi, S. Fukuda, T. Baljinnyam, D. S. Prough, P. Enkhbaatar, Galveston, TX, p.A1699


Facilitator: A. Fox-Robichaud, BSc, MSc, MD, FRCP, Hamilton, Canada

P123 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


P127 Characterization of Microparticle Gasdermin-D in Patients in the Medical Intensive Care Unit/E. Homesy, P. Consiglio, S. Das, H. Nagaraja, M. D. Weurers, M. C. Exline, A. Sarkar, Columbus, OH, p.A1705


P129 Airway Epithelial Heparin Coordinates Pulmonary Macrophage and Local Iron Against Bacterial Pneumonia/Q. Chen, Y. Yang, C. Zeng, S. Yang, S. Song, S. Liu, X. Fang, Q. Shi, Hangzhou, China, p.A7311

CLINICAL

THEMATIC POSTER SESSION

A46 CRITICAL CARE CASE REPORTS: ACID BASE, ELECTROLYTES, ENDOCRINE, METABOLIC AND RENAL

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.

Facilitators:
- C. M. Hendrickson, MD, MPH, San Francisco, CA
- P. Bhatraju, MD, Seattle, WA

P937 Nivolumab-Induced Hypophysitis/M. Reaven, W. Bender, C. M. Hendrickson, MD, Atlanta, GA, p.A1707


P939 Not Your Textbook Thyroid Storm: Paradoxical Beta Blocker Decompensation Masking Unusual Cardiac Manifestations/A. Ramanuii, 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 Sequence Intubation with Etomidate and Hydrocortisone/A. Alexis, Miami, FL, p.A1715

P946 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

P947 Transcontinental Dialysis at 30,000 Feet/S. Difflay, T. C. Ross, D. J. Pearson, Dayton, OH, p.A1717

P948 The Critically Ill Patient with a Renal Transplant/I. Bronshteyn, P. Shah, MD, Gainesville, FL, p.A1717

Facilitators:
- S. Beesley, MD, MSc, Salt Lake City, UT
- P. Bhatraju, MD, Seattle, WA

Inguino-Scrotal Bladder Herniation Leading to Post Obstructive Acute Kidney Failure

Methadone Induced Adrenal Insufficiency

An Atypical Treatment for a Typical Hemolytic Uremic Syndrome in an Adult

Hypernatremia After Cardiopulmonary Arrest: An Ominous Finding

Hypernatremia with Seizures and Pulmonary Infiltrates in a Rugby Player

A Case of Osmotic Demyelination Syndrome Following Gradual Correction of Hypernatremia

A Case of Euglycemic Diabetic Ketoacidosis in a Pregnant Patient

ICU Management of a Profound Hypoglycemia Secondary to Resistant Pro-Insulinoamide

Euglycemic Diabetic Ketoacidosis Secondary to Sodium-Glucose Cotransporter 2 Inhibitors

Rhinocerebral Mucormycosis: A Rare Presentation in Severe Diabetic Ketoacidosis

A Case of Euglycemic Diabetic Ketoacidosis in a Pregnant Patient

DKA Without the Sugarcoating

The Model Patient: When Diet and Medication Adherence Result in Life-Threatening Acidosis

Severe Euglycemic Diabetic Ketoacidosis Associated with Use of Canagliflozin

Combined Metformin Associated Lactic Acidosis and Starvation Ketoacidosis with Very High Osmolal Gap

The Case of the Unexplained Lactate: The Role of Mitochondria

Asymptomatic but Lethal Systemic Amyloidosis

Severe Delirium Tremens: An Unusual Cause of Rhabdomyolysis with Extreme Serum Creatine Kinase Elevation

Third Degree Heart Block: Its Not Always the Heart

Metformin Induced Lactic Acidosis - A Rare but Treatable Entity

Thyrotoxicosis Induced Low Cardiac Output State in the Setting of Marfan Syndrome

CRITICAL CARE CASE REPORTS: MECHANICAL VENTILATION FROM NIV TO ECMO

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

Facilitators: J.M. Kruser, MD, Chicago, IL
K.A. Wong, MD, Mineola, NY

A Case of Severe Acute Respiratory Distress Syndrome with Underlying Pulmonary Alveolar Proteinosis That Could Not Be Saved with Extracorporeal Membrane Oxygenation

Successful Application of Extracorporeal Membrane Oxygenation Without Anticoagulation for Diffuse Alveolar Hemorrhage Secondary to Microscopic Polyangiitis

Extracorporeal Membrane Oxygenation as Salvage Treatment for Acute Respiratory Failure Secondary to Granulomatosis with Polyangiitis

Extracorporeal Membrane Oxygenation as Rescue Therapy for AIDS-Related Pneumocystis Jirovecii Pneumonia

Experience with Liposomal Amphotericin B in a Patient with Disseminated Blastomycosis Receiving Extracorporeal Membrane Oxygenation and Continuous Renal Replacement Therapy


P990  A Rare Case of Tension Pneumocephalus Induced by High Prior Head Trauma/V. Kumar, R. Singh, A. Rahman, T.-H. Le, G. Khubaib, 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 Hypoxemic 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


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.A1769

P1003  Abrupt Respiratory Failure as Initial Presentation of Myasthenia Gravis Crisis/ J. Correa, J.R. Vintch, M. Adler, Torrance, CA, p.A1771

P1004  Hyperacute Lung Rejection in Setting of Acceptable HLA-Crossmatching/M. Damarla, MD, Baltimore, MD


P1008  Diagnosis and Management of Ethical Concerns in the Intensive Care Unit/E. Sonntag, Chapel Hill, NC, p.A1776

Facilitators:  N. Qadir, MD, Los Angeles, CA
S. Dhungana, MD, Philadelphia, PA

P1009  Infraclavicular Fasciotomies to Improve Ventilation in a Severe Asthmatic Presenting with Secondary Pneumomediastinum and Progressive Subcutaneous Emphysema/Z. Lonjers, J. Glover, Berwyn, IL, p.A1777


P1011  Tracheal Erosion in a Tracheostomy Dependent Patient Presenting as Facial Subcutaneous Emphysema and Bilateral Pneumothoraces/A. Sumarsono, J.C. Weissler, Dallas, TX, p.A1779


P1014  Acute Respiratory Failure and Carotid Baroreceptor-Mediated Bradycardia Due to Spontaneous Neck Hematoma in Acquired Hemophilia A/K. Berger, R. Parker, Pittsburgh, PA, p.A1782


Facilitators:  R.S. Stephens, MD, Baltimore, MD
M. Sklar, MD, Toronto, Canada

P1018  Bubble Trouble: Iatrogenic Arterial Gas Embolism Caused by Transcutaneous Lung Biopsy Under Positive Pressure Ventilation/A. Arjomand, J. Holm, B. Mann, Seattle, WA, p.A1786

P1019  A Rare Case of Tracheal Stenosis Post Short Term Intubation with Associated Bacterial Laryngotracheitis/J. Makram, H. Mallah, X. Solis, K.M. Nugent, A. Wichmann, E. Islam, Lubbock, TX, p.A1787


P1021  A Curious Case of Displaced Air - Same Level Fall Causing Tracheal Tear/V. Buntak, A. Rajkumar, N. Shaheen, M. Freels, N.A. Botros, Canton, OH, p.A1789


P1027  ARDS Secondary to Adenovirus/C. Blay, C. Butler, A. Ataya, Gainesville, FL, p.A1795

P1028  A Case of Antibody Negative Statin Induced Myopathy Resulting in Acute Respiratory Failure/M. Gillespie, A. Rossetti, Columbus, OH, p.A1796


CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

A49  CASE REPORTS IN LUNG DISEASE ASSOCIATED WITH INHALATIONAL EXPOSURES

9:15 a.m. - 4:15 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:  S.E. Hines, MD, MSPH, Baltimore, MD


P1031  Household Bleach Inhalation and ARDS/V. Kang, R. Lauf, K. Jordan, Columbus, OH, p.A1799


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THEMATIC POSTER SESSION

A50 MOLECULAR MECHANISMS OF ENVIRONMENTAL AND OCCUPATIONAL LUNG DISEASES

9:15 a.m. - 4:15 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.R. Harkema, DVM, PhD, ATSF, East Lansing, MI


Quantitation of Silica in Lungs of Transplanted Patients Due to Artificial Stone-Induced Silicosis; Correlation to Occupational, Clinical and Functional Parameters/E.M. Fireman, A. Alrhaman, D. Rosengarten, M.R. Kramer, Tel Aviv, Israel, p.A1849


Facilitator: H.M. Kipen, MD, MPH, Piscataway, NJ


Longitudinal Evaluation of Spirometric Function in Air Force Firefighters/A.J. Berglund, J.J. Kim, B.S. Barber, M.J. Morris, Fort Sam Houston, TX, p.A1858

Comparison of Impulse Oscillometry with Spirometry for Deployment Respiratory Screening/M. Gonzales, R. Chatterjee, J. Hayes, M.J. Morris, San Antonio, TX, p.A1859


### A52 SARCOIDOSIS AND EXPOSURE RELATED INTERSTITIAL LUNG DISEASE

**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. Gulati, MD, New Haven, CT


**P223** Longitudinal Trends in Air Quality and Home-Recorded Spirometry in Pulmonary Fibrosis Patients in the Dallas-Fort Worth Area/M. Holmes, C. Edwards, B. Vick, E. Costello, Dublin, Ireland, p.A1865

**Facilitator:** L. Li, MD, PhD, Denver, CO

**P224** Use of a Mobile Application (patientMPower) to Capture Longitudinal Data on Air Quality and Home Spirometry in United States Based Pulmonary Fibrosis Patients/M. Holmes, C. Edwards, E. Costello, Dublin, Ireland, p.A1866

**P225** A Nationwide Study of Patients Characteristics for Idiopathic Pulmonary Fibrosis in 2014/J. Tran, V. Murugesan, B.M. Cuneo, Washington, DC, p.A1867


**P227** Sarcoidosis in Military Deployers to Iraq, Afghanistan and Southwest Asia/D.C. Patel, J. Jaber, S.D. Krefft, R.F. Miller, Gainesville, FL, p.A1869


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

P591  Cardiac Output in Preterm Infants Using Electrical Cardiometry/R. Ow, J. Van De Water, A. Bozeman, B. Smith-Weaver, M. Rodriguez, B. Ho, D.W. Ashley, Macon, GA, p.A1892


P600  Profile of Pulmonary Function Parameters in Healthy School Going Children - A South Indian Study/K.C. Bolla, N. Meenakshi, A. Shanmuganathan, N. Ganga, Kelambakkam, India, p.A1901


P613  Ibuprofen Displays Synergistic Antibacterial Activity with Standard-of-Care Antibiotics Against Pseudomonas Aeruginosa/Q. Chen, M.E. Ilanga, P.N. Shah, B. Chirra, S.B. Simbassa, J.A. Smolen, J.A. Tagaev, O.O. Ogun, C.L. Cannon, College Station, TX, p.A1914


A54 CASE REPORTS IN PULMONARY VASCULAR MEDICINE I

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

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. Kudelko, MD, Palo Alto, CA


P816 Cyanotic Congenital Heart Disease in Adulthood/T. Sharma, A. Auja, N. Shah, N. Patel, J. Kluger, Hartford, CT, p.A1928

Facilitator: C. Khodaki, 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. Hrustanovic-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


P833  Pulmonary Tumor Embolism Accompanied by Stroke: An Infrequent Complication of a Rare Disease/M. Hamza, K. Mohamed Ahmed, M. Ellithi, M. Mustafa, A.J. Hericks, Sioux Falls, SD, p.A1945


P835  A Case of High Output Cardiac State Exacerbated by Portopulmonary Hypertension Medications/A. Korwin, I. Singh, New Haven, CT, p.A1947


Facilitator:  K.J. Cruz Morel, MD, Menlo Park, CA


P840  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.A1952

P841  Pulmonary Hypertension in Right-Side Unilateral Pulmonary Artery Agenesia and Hypoplastic Lung/?M. Hooper, M. Eggert, Norfolk, VA, p.A1960


P843  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


P848  Preserving Fragile Balance: A Perpetual Quest/M. Johnston, M. Hooper, M. Eggert, Norfolk, VA, p.A1960


P850  Association of Pulmonary Hypertension and Myeloproliferative Disorders/S. Chauhan, Y. Galan, S. Tripathi, V. Gidwani, H. Amin, Cleveland, OH, p.A1963

P851  A Rare Case of Scimitar Syndrome Presenting as Hemoypiosis in a Young Adult/D. Folt, C. Teba, R. Schilz, K. Ansari Gilani, Cleveland, OH, p.A1965


P853  Against All Odds: A Case of Severe Pulmonary Hypertension Secondary to Concomitant PSZ 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


BASIC • TRANSLATIONAL

THEMATIC POSTER SESSION

A55  PEDAL TO THE METAL: NEW INSIGHTS INTO ENDOTHELIAL RESPONSES TO LUNG INJURY

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:  S.M. Dudek, MD, Chicago, IL


P860 Protective Impact of Mild Pulmonary Thrombosis on Sepsis-Induced Lung Injury/C. Evans, X. Zhang, Z. Dai, Y.-Y. Zhao, Chicago, IL, p.A1971


Facilitator:  N. Al-Naamani, MD, MS, Philadelphia, PA

P864 Gamma Secretase Activating Protein is Necessary for Endothelial Dysfunction and Production of Cytopathic Beta Amyloid During Bacterial Infection/M. Gwin, S.B. Voth, C.M. Francis, R. Balczon, T. Stevens, Mobile, AL, p.A1975

P865 Inhibition of Group V Phospholipase A2 (gVPLA2) Protects Lung Endothelium from Methicillin-Resistant Staphylococcus Aureus (MRSA) Induced Permeability/Y.M. Htwe, L. Meliton, S.M. Dudek, Chicago, IL, p.A1976


Facilitator:  A.M. Andruska, MD, Stanford, CA


Facilitator:  J.A. Hinnensteel, MD, MS, Aurora, CO


P885 Sleep-Disordered Breathing and Hypoxemia in Pulmonary Tumor Thrombotic Microangiopathy: A Review of Pulmonary Thromboendarterectomy Trends: Perspective from Rationale and Design of the Selexipag in Inoperable or Rapid Titration of Riociguat in Patients with Pulmonary Arterial Hypertension.


P891 Change in Pulmonary Hemodynamics 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


Facilitator: F. Torres, MD, Dallas, TX

P897 Adherence to Diagnostic Guidelines for Suspected Pulmonary Embolism/L. Salman, Y. Edwards, M. Majeed, Liverpool, United Kingdom, p.A2006


P902 Plasma TIMP-1 Is Increased in Chronic Thromboembolic Pulmonary Hypertension and Correlates with Pulmonary Vascular Resistance/P. Honma, 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

Facilitator: M.M. Chakinala, MD, Saint Louis, MO

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


Facilitator: M.M. Chakinala, MD, Saint Louis, MO

A57 NTM: CASE REPORTS

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: 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, G. Gibson, Bronx, NY, p.A2025

P627 A Rare Nontuberculous Mycobacterial Infection in an Immunocompetent Patient/H. Ahmad, D.T. Tsukayama, Rochester, 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


P632 Mycobacterium Kansasii Infection in an Elderly with Zenker’s Diverticulum - Case Report/M. V.C. Oliveira, M.I.B. de André Valery, Sao Paulo, Brazil, p.A2031


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


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. McMullen, J.D. Road, C. Miller, Chicago, IL, p.A2040
**CLINICAL
THEMATIC POSTER SESSION**

**A58 NTM: EPIDEMIOLOGY AND CLINICAL STUDIES**

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<th>Time</th>
<th>Title</th>
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<td>9:15 a.m. - 4:15 p.m.</td>
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<td>S.H. Kasperbauer, MD, Denver, CO</td>
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**DISCUSSION:**
- 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


**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

**BASIC • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION**

**A59 PULMONARY REHABILITATION: MUSCLE FUNCTION AND STRENGTH**

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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>M. Moy, MD, MSc, Boston, MA</td>
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**DISCUSSION:**
- 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. Henkle, PhD, MPH, Portland, OR


**P240** Intercostal and Quadriceps Muscle Oxygenation During Normocapnic Hyperpnoea and Cycling Exercises in COPD/F. Oueslati, D. Saey, É. Nadreau, M. Martin, F. Maltais, Québec, Canada, p.A2056

**P241** Skeletal Muscle Weakness Is Associated with Specific Alterations in Amino Acid Metabolism in Patients with Chronic Obstructive Pulmonary Disease/C. Cruthirds, J.J. Thaden, G.A.M. Ten Have, N.E.P. Deutz, M.P.K.J. Engelen, College Station, TX, p.A2057

The Mitochondrial Motility in Diaphragm and Quadriceps of COPD Rat Before and After Rehabilitation/S. Qumu, Beijing, China, p.A2059

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


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. Moya, N.G. McElvaney, Dublin, Ireland, p.A2063


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


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

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


Role of Antigen Processing and Presentation Pathway in Sepsis/L. Gao, E.Y.L. Liu, Baltimore, MD, p.A2071


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


Anti-Aging Protein Klotho Modulates the Neutrophil Response to Mediators of Sepsis/C. Molina, P.G. Arndt, Minneapolis, MN, p.A2075


Pulmonary Challenge Induces Age-Dependent Changes in Pancreatic Activity/E.E. Miller, K. Ochani, K. Lin, P. Wang, S.F. Liu, H.L.R. Rilo, Manhasset, NY, p.A2078
P276 Prolonged LPS Exposure Caused Increased IL-1B Release in
Classically Activated Lung Macrophages Exacerbate Lower
Respiratory Tract Infections/L.J. Casey, L. Gu, V.B. Antony, D.
Davis, A.B. Carter, Birmingham, AL, p.A2080

P275 Toll-Like Receptor 8 Is Activated by Circulating MicroRNA’s in
Cell-Free Hemoglobin Levels in the Distal Airspace of Patients
Facilitator- V. Kryvenko, W. Seeger, I.

P274 Nanobodies - A Novel Approach Designed to Target Plasminogen
Activator Inhibitor 1/ A. Schwingshackl, E.A. Fitzpatrick, S. Cormier, C.M. Waters, Los Angeles, KY, p.A2091

P273 Ethyl Pyruvate Attenuates Ventilation-Induced Diaphragm Dysfunction Through High-Mobility Group Box-1 in a Murine Endotoxemia Model/ L.-F. Li, L.-C. Chiu, Taoyuan, Taiwan, p.A2088

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

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

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. Cancio, B. Antebi, Ft. Sam Houston, TX, p.A2085

P269 Dimethyl Fumarate Potently Inhibits Thioredoxin Reductase 1 and Enhances Nr2-Dependent Responses in Murine Club Cells/T. Nicola, S. Wall, A. Lee, R. Li, W. Zhang, M. MacEwen, N. Ambalavanan, T. E. Tipple, Birmingham, AL, p.A2084


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. Gaggar, Birmingham, AL, p.A2082


P265 Prolonged LPS Exposure Caused Increased IL-1B Release in
Classically Activated Lung Macrophages Exacerbate Lower
Respiratory Tract Infections/L.J. Casey, L. Gu, V.B. Antony, D.
Davis, A.B. Carter, Birmingham, AL, p.A2080


Facilitator: A. Schwingshackl, MD, PhD, Los Angeles, CA


P293 Role of UCHL1 in Radiation-Induced Lung Injury Mediated by Sphingolipids/Y. Epshtein, H. Wang, J.R. Jacobson, Chicago, IL, p.A2108

P294 Deficient of Deubiquitinating Enzyme USP13 Aggravates LPS-Induced Pulmonary Inflammation in Mice/L. Li, J. Wei, S. Li, A. Jacko, N.M. Weathington, R.K. Mallampalli, J. Zhao, Y. Zhao, Columbus, OH, p.A2109


P298 Curcumin Suppresses the Alveolar Inflammation and Modulates the p53-Fibrinolytic System and Epithelial to Mesenchymal Transition During Lung Injury and Fibrosis In Vitro and In Vivo/S. Shaikh, A. Prabhu, M. Manjunath Gouda, P. Subba, M.A. Najar, P.K. Modi, Y. Prabhakar Bhandary, Mangalore, India, p.A2113


P300 Club Cell Specific Heme Oxygenase-1 Deletion Does Not Alter Hyperoxic Sensitivity In Adult Mice/K. Dunigan, Q. Li, T. Nicola, C. Aegerter, R. Li, S. Wall, A. Agarwal, P. Vitiello, T.E. Tipple, Birmingham, AL, p.A2115

P301 Cyclophilin A as a Novel Mediator in Acute Lung Injury/M.W. Koh, M. Takata, M.R. Wilson, London, United Kingdom, p.A7318


A61 EPITHELIAL BIOLOGY

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: K.M. Ridge, PhD, Chicago, IL

P306 Structural Composition and Signaling Pathways of Alveolar Epithelial TREK-1 Potassium Channels/A. Schwingshackl, B. Lopez, C.M. Waters, A. Wei, R. Olcese, Los Angeles, CA, p.A2116

P307 Negligible Telomere-Independent Effect of Telomerase on Alveolar Epithelial Cells/S. Han, N.S. Chandel, Chicago, IL, p.A2117


P309 Delayed Increases in Hyaluronan Following Ozone Exposure Associates with Alveolar Type 2 Cell Proliferation/R.M. Tighe, A. Birukova, A. Schlobohm, C.E. Barkauskas, Durham, NC, p.A2119


P312 Calorie Restriction Can Reverse Several of the Aging and HFD-Induced Changes in Lung Epithelial Stem Cells/M. Ozaki, A.E. Hegab, T. Betsuyaku, Tokyo, Japan, p.A2122


P314 Evidence for Nanoparticle-Induced Lysosomal Dysfunction in Alveolar Epithelial Cells/A. Sipos, K.J. Kim, Z. Borok, C. Sioutas, E.D. Crandall, Los Angeles, CA, p.A2124
Facilitator: E. Plosa, MD, Nashville, TN

P315 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

P316 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

P317 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


P319 The Role of Placental Growth Factor as a Mediator of Pulmonary Disease Via Human Alveolar Type 2 Pneumocyte Apoptosis/E. Simpson, A.D. Rice, T. Wang, M.B. Fallon, Phoenix, AZ, p.A2129


Facilitator: T. Parimon, MD, Los Angeles, CA

P324 Selective Activation of Angiotensin Type 2 (AT2) Receptor Protects Alveolar Epithelial Cells Against Bleomycin-Induced Injury/R. Alcaraz, A. Shenoy, U. Steckelings, M. Katovich, C. Summers, V. Shenoy, Clovis, CA, p.A2134

P325 HECT E3 Ubiquitin Ligase Smurf2 Regulates μ-Opioid Receptor Degradation in Lung Epithelial Cells/Y. Zhao, S. Dong, J. Liu, J. Zhao, Columbus, OH, p.A2135


P327 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

Facilitator: S.H. Randell, PhD, Chapel Hill, NC

P328 ATP-Citrate Lyase Controls Oxygen Consumption Rate and DNA Repair Responses in Alveolar Epithelial Cells/H. Shaqghahi, R. Para, D.J. Sales, F. Romero, R.S. Summer, Philadelphia, PA, p.A2138

P329 Dexamethasone Induces Senescence in A549 Cells: Relevance to Pulmonary Fibrosis/P. Longhorne, H.N. Wilkinson, M.J. Hardman, S. Hart, Cottingham, United Kingdom, p.A2139

P330 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


Facilitator: S.H. DeCamp, N.C. Ogassavara, J.J. Fredberg, Boston, MA, p.A7322


P334 Transforming Growth Factor Beta Regulates Epithelial Cell Death During Influenza Infection/A.N. Gerber, R. Newton, Calgary, Canada, p.A7324

P335 Insights into Glucocorticoid Resistance: Synergy Between Glucocorticoids and Inflammatory Cytokines on TLR2 Expression/A. Bansal, M.M. Mostafa, S. Shah, C. Kooi, R. Leigh, A.N. Gerber, R. Newton, Calgary, Canada, p.A7324

P336 Interleukin-6 Is Required for Neuregulin-1 Induced HER2 Signaling in Pulmonary Epithelial Cells/R. Alcaraz, A. Shenoy, U. Steckelings, M. Katovich, C. Summers, V. Shenoy, Clovis, CA, p.A7325

P337 Hypoxic Exposure Increases Senescence in Type II-Like Mouse Lung Epithelial Cells: Role of P53 Signaling/A. Scaffa, A.D. Rice, T. Wang, M.B. Fallon, Phoenix, AZ, p.A7326


P339 Hyperoxic Exposure Increases Senescence in Type II-Like Mouse Lung Epithelial Cells: Role of P53 Signaling/A. Scaffa, A.D. Rice, T. Wang, M.B. Fallon, Phoenix, AZ, p.A7326


**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:** 9:15-10:00: authors will be present for individual discussion
10:00-12:00: 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

**P343** Allethrin and Prallethrin Stimulates MUC5AC Expression Through Oxidative Stress in Human Airway Epithelial Cells/H.G. Na, Y.S. Choi, C.H. Bae, S.-Y. Song, S. Kwak, Y.-D. Kim, Daegu, Korea, Republic of, p.A2144

**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


**P346** Endoplasmic Reticulum Stress Induces MUC5AC and MUC5B Expression in Human Nasal Airway Epithelial Cells/Y.-D. Kim, Y.S. Choi, H.G. Na, C.H. Bae, S.-Y. Song, S. Kwak, Daegu, Korea, Republic of, p.A2147


**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:** V. Kim, MD, ATSF, Philadelphia, PA

**P354** Amphiregulin Potentiates Airway Inflammation and Mucus hypersecretion Induced by Urban Particulate Matter via the EGFR-PI3Ka-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

**P356** VAMP3 Is a v-SNARE in Baseline Mucin Secretion/O. Hoang, Z. Azzegagh, C. Garcia, J.R. Flores Gonzalez, A.M. Jaramillo, M.J. Tuvin, B.F. Dickey, Houston, TX, p.A2157

**P357** Syntaxin 3 Mediates Baseline Mucin Secretion/A.M. Jaramillo, M.J. Tuvim, B.F. Dickey, Houston, TX, 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.A7330

**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.A7331

**P361** Circulating Mitochondrial DNA Is Associated with Acute Exacerbations of Cystic Fibrosis/V. Ortiz, C. Ryu, E. Herzog, C.J. Britto-Leon, J. Koff, New Haven, CT, p.A7332

A63 PATHOPHYSIOLOGY OF ASTHMA IN CELLS, TISSUES, AND ANIMAL MODELS

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: G. Ijpma, PhD, Montreal, Canada


P742 Tracheal Smooth Muscle Relaxation Produced by Phosphodiesterase Inhibitors (Sildenafil and Ordonofil) Compared to That of Theophylline/S.Y. Khatib, M.M. Al Janabi, Irbid, Jordan, p.A2163


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/G. Cao, B.T. Deeney, R.A. Panettieri, New Brunswick, NJ, p.A2166


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/N.F. Li, A.T. Reid, K.S. Nichol, C. Grainge, P.A.B. Wark, D.A. Knight, N.W. Bartlett, Newcastle, Australia, p.A2171

Facilitator: C.A. Singer, PhD, Reno, NV


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


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


P759 Hyperoxia-Induced Soluble Guanylyl Cyclase (sGC) Dysfunction in Developing Airway Involves the Calcium Sensing Receptor (CaSR)/J. Ravix, R.D. Britt, A.M. Roesler, S.A. Wicher, L. Manlove, M. Thompson, C.M. Pabelick, Y.S. Prakash, Rochester, MN, p.A2180

P760 Intrauterine Growth Restriction Mediates an Inflammatory Phenotype in Offspring but Does Not Affect Airway Epithelial Tight Junction Expression/K.C.W. Wang, J. Looi, A. Kicic, P.B. Noble, Crawley, Australia, p.A2181

P761 Inhaled Budesonide Promotes Barrier Integrity In vivo in a Mouse Model of Epithelial Barrier Disruption/C. Rimmer, S.N. Georas, J. Veazey, Rochester, NY, p.A2182

**Basic • Clinical • Translational**

**Thematic Poster Session**

**A64 Clinical Asthma: Assessment and Treatment**

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

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

**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/S. A. Wicher, A. M. Roesler, B. Roos, M. Thompson, C. M. Pabellick, Y. S. Prakash, Rochester, MN, p.A2188


**P774** Mesenchymal Stem Cells Accelerate Epithelium 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/E. 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
P788 Wixela® Inhala® Dry Powder Inhaler - In Vitro Performance Compared with Advair® 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


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

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. Sathish, Fargo, ND, p.A2230


P374 A Phase II Clinical Trial of the Safety of Simvastatin in Patients with Pulmonary Lymphangioleiomyomatosis and with Tuberous Sclerosis Complex/V.P. Krymskaya, H.-S. Lee, V. Fleck, D.J. Dorgan, R.M. Kodloff, M. Kreider, F.X. McCormack, Philadelphia, PA, p.A7337

BASIC • CLINICAL
THEMATIC POSTER SESSION

A67 ALTITUDE AND EXTREME ENVIRONMENT
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: S.R. Hopkins, MD, PhD, La Jolla, CA


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


BASIC • CLINICAL • TRANSLATIONAL
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, K. Lortie, P. Graham, Y. Bosse, Montreal, Canada, p.A2238


A69 SRN: WHAT CAN WE LEARN FROM CLINICAL AND EPIDEMIOLOGICAL STUDIES IN SLEEP?

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. Simakajornboon, MD, Cincinnati, OH


P1217 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

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. Lai, 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 Hypopnoea 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 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


P1110 Atypical Carcinoid of Thymus Presenting with Bone Marrow and Soft Tissue Metastases/W.-H. Lin, T.-H. Tsai, J.-Y. Shih, Taipei City, Taiwan, p.A2289

P1111 Spontaneous Tumor Lysis Syndrome: A Rare Presentation of Small Cell Lung Cancer/K. Clark, Farmington, CT, p.A2290

P1112 Bilateral Chylothorax: A Rare Presentation of Lymphoma/K. Clark, R. Perez, O. Ibrahim, Farmington, CT, p.A2291

P1113 Linear Infiltrates: A Rare Presentation of MALT Lymphoma/B.A. Hirsh, M.J. Walker, V. Ciocca, S.A. Gregory, Wynnewood, PA, p.A2292


P1115 Primary Lung Adenocarcinoma with Milliary Pattern/M.O. Sillo, A. Thota, K. Manzoor, Boston, MA, p.A2294

P1116 Primary Adenocarcinoma of the Lung with Signet Ring Cells, Rare Subtype/F. Berhanie, Y. Kodadhala, A. Thomas, T.J. Naab, A. Ali, Washington, DC, p.A2295


P1118 Sarcomatoid Carcinoma of the Lung: A Rare and Unfortunate Disease/W. Grist, Y. Elamir, Jersey City, NJ, p.A2297


P1120 Unusual Presentation of AKI with Lung Nodule/A. Andrabi, M. Seth, P. Sundar, K. Quiusky, Pittsfield, MA, p.A2299


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


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 Lung 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


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

**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:** C. 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. Hashm, 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

**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
- P1158 Critical Airway Obstruction as Initial Presentation of Hodgkin's Lymphoma/E. Henderson, V. Pathak, Raleigh, NC, p.A2336
- 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
- P1160 Incidentalomas: A Tale of Two Endobronchial Lesions/D. Thakkar, S. Somalaraju, S. Shadchehr, Burlington, MA, p.A2338

**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: L.B. Yarmus, DO, ATSF, Baltimore, MD

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. Pourabollah Tooktaboni, H. Mehravaran, F. Razavi, A. KashefiZadeh, 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-CP) 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


Facilitator: D.H. Yu, MD, Stanford, CA


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
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

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.
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. 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. 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

L5 RESULTS FROM NHLBI-FUNDED GENOMIC RESEARCH IN ALPHA-1 ANTITRYPSIN DEFICIENCY AND SARCOIDOSIS (GRADS) PROGRAM

12:15 p.m. - 1:15 p.m.  
KBHCCD Room D167/D174 (Level 1)

Target Audience
Physician scientists and health providers interested in Sarcoidosis including researchers, clinicians, nurses and educators. Students, Postdoc fellows, junior faculty who would like to hear advances in rare lung disease research like sarcoidosis

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

• apply new technologies (transcriptomics and metagenomic analyses) to investigate the pathogenic mechanisms of AATD and sarcoidosis;

• understand the pathogenesis of sarcoidosis and the role of Microbiome;

• understand clinical phenotyping of Sarcoidosis to understand and improve outcomes.

This session will present a brief overview of the GRADS Study, a description of the phenotypes in sarcoidosis, the proposed definitions of disease burden, and the apparent influence of the microbiome. It will also include updates on the data analyses of the RNA transcriptome of sarcoidosis patients, proposed environmental risk factors, and the association of clinical variables with specific microbiota. The session will conclude with discussions on suggested directions for the future of sarcoidosis research.

Chairing: L.J. Vuga, MD, MPH, PhD, Bethesda, MD
E.D. Crouser, MD, Columbus, OH
12:15 Bal Transcriptome in Sarcoidosis
N. Kaminski, MD, ATSF, New Haven, CT

12:29 Genetics and Environment in Sarcoidosis: Lessons From Grads
L.A. Maier, MSPH, MD, Denver, CO

12:43 Microbiome Discovery in Grads
A.M. Morris, MD, MS, Pittsburgh, PA

12:57 Insights From the Grads Study
K.C. Patterson, MD, Falmer, United Kingdom

1:11 Discussion

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
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

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.

Registration Fee: $70.00 (includes box lunch.)
Attendance is limited. Pre-registration is required.
ME1 HARNESSING THE POWER OF SOCIAL MEDIA AND FREE OPEN ACCESS MEDICAL EDUCATION (#FOAMED): AN INTERACTIVE WORKSHOP FOR MEDICAL EDUCATORS

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, ATSF, New Haven, CT
C.L. Carroll, MD, ATSF, Hartford, CT
M.A. Stiegler, MD, Research Triangle Park, NC

ATS 2019 • Dallas, TX

A81 PEDIATRIC YEAR IN REVIEW

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, ATSF, 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

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
2:15 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

2:15 p.m. - 4:15 p.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 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

#### 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

### A87 KNOWLEDGE GAPS AND PATHWAYS FORWARD IN RV FAILURE RESEARCH: RECOMMENDATIONS FROM AN OFFICIAL ATS RESEARCH STATEMENT ON RV FAILURE

**Assembly 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.  
**Room D162/D164 (Level 1)**

**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:

- 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.

**Chairing:**  
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.  
**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-Extubation 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

Target Audience
Adult and pediatric critical care clinicians and researchers

Objectives
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
**A93** ADULT ASTHMA BREAKTHROUGHS: THE ROLE OF THE IMMUNE SYSTEM IN HUMAN ASTHMA

**Chairing:** P. Akuthota, MD, La Jolla, CA
G.G. Brusselle, MD, PhD, Ghent, Belgium

**Oral Presentations**

- **2:45** 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
- **3:00** 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

**Featured Speaker**

**4:00** Opportunities for Improving Care in Obstructive Lung Diseases/L. C. Feemster, Seattle, WA

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**A94** INNOVATIONS TO IMPROVE CARE IN OBSTRUCTIVE LUNG DISEASE

**Chairing:** J.K. Gerald, MD, PhD, Tucson, AZ
J.P. Wisnivesky, DrPH, MD, New York, NY

**Oral Presentations**

- **3:15** Extended, 6 Weeks, Varenicline Preloading: Does It Facilitate Smoking Reduction and Cessation? A Randomized Double-Blind, Placebo-Controlled Study/G. Izbicki, Y. Freier Dror, A. Bohadana, Jerusalem, Israel, p.A2378
- **3:30** 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
- **3:45** 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

**Featured Speaker**

**4:00** Opportunities for Improving Care in Obstructive Lung Diseases/L. C. Feemster, Seattle, WA
**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**

2:15  

2:30  

2:45  

3:00  

3:15  

3:30  

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

4:00  

**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**

2:15  

2:30  

2:45  

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

3:15  
Investigating Susceptibility to Ozone-Induced Lung Inflammation and Injury Using the Collaborative Cross Mouse Genetic Reference Population/A.E. Tovar, G.J. Smith, J. Thomas, K. McFadden, S.N. Kelada, Chapel Hill, NC, p.A2393

3:30  

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

**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


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

Oral Presentations


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
Laboratory-Based Intermountain Validated Exacerbation (LIVE) Score and Palliative Care Referrals in Patients with Chronic Obstructive Pulmonary Disease/D.P. Blaigev, D.S. Collingridge, S. Rea, R.A. Mulanski, S. Zeng, M. Arjomandari, V.G. Press, Murray, UT, p.A2435


Characteristics of Subjects with Exercise-Induced Hypoxemia That Improve Their Exercise Capacity with Oxygen Supplementation/ Y. Perez, I. Vital, R. Calderon, M.A. Campos, Miami, FL, p.A2439


The Frequency of Exacerbations Treated with Antibiotics, Steroids or Both During GOLD Stage in Patients with COPD in the DYNAGITO Trial/K.F. Rabe, A. Anzueto, C. Jenkins, A. de la Hoz, F. Voss, J.A. Wedzicha, P.M.A. Calverley, Grosshansdorf, Germany, p.A2449


A103 CRITICAL CARE: AS YOU LIKE IT - ICU MANAGEMENT AND PROCESSES OF CARE

Chairing:
H.B. Gershengorn, MD, ATSF, Miami, FL
T.S. Valley, MD, MSc, Ann Arbor, MI
S.J. Hsieh, MD, MS, New York, NY


803 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

804 Effects of a Night Intensivist on Patient Mortality/A. Nikamal, S. Kothari, S. Patel, D. Barounis, A. Shah, Oak Lawn, IL, p.A2458


807 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


811 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


**BASIC • CLINICAL • TRANSLATIONAL**

**POSTER DISCUSSION SESSION**

**A104 WILDFIRE, BIOMASS, AND WORLD TRADE CENTER EXPOSURES**

2:15 p.m. • 4:15 p.m.  
OMNI DALLAS DOWNTOWN  
Trinity Ballroom 5-7 (Level 3)

**Poster Viewing**  
2:15-3:00

**Discussion**  
3:00-4:15

**Chairing:**  
K.E. Pinkerton, PhD, Davis, CA  
A. Nolan, MS, MD, ATSFl, New York, NY  
M.E. Rebulll, PhD, Chapel Hill, NC

**1001 Wildfire Smoke Exposure During Infancy Results in Increased Proinflammatory Cytokine Responses, Impaired Lung Function, and Transgenerational Immune Effects**  

**1002 Respiratory Health of Emergency Workers Following a Large Warehouse Fire**  

**1003 Is Early Life Exposure to Coal Mine Fire Smoke Associated with Childhood Respiratory, Atopic and Infective Illnesses?**  

**1004 Respiratory Health Evaluation of Firefighters with Persistent Symptoms Four Months Following a Chemical Fire Response, 2018**  

**1005 Biomass Fuel Exposure and Lung Cancer Risk Among Nonsmoking Women**  
M. Gholamnejad, Urmia, Iran, Islamic Republic of, p.A2484

**1006 Neighborhood Communities of a Cement Factory, Biomass Energy and Prevalence of COPD in the Democratic Republic of Congo**  
E. Mbelambela, S.M.J. Muchanga, N. Suganuma, Nankoku, Japan, p.A2485

**1007 Airway Disease in Biomass Smoke-Associated ILD: Not Just COPD**  

**1008 Homeostatic Chemokines May Play an Important Role in Biomass Smoke Induced Chronic Obstructive Pulmonary Disease Among Women**  

**1009 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. Tesfaigzii, Aurora, CO, p.A2488

**1010 Risk Factors for Treatment of Airways Injury in World Trade Center-Exposed Firefighters**  

**1011 Metabolomics of WTC-Lung Injury (WTC-LI): A Validation Study**  

**1012 World Trade Center Particulate Matter Associated Cardiopulmonary Dysfunction and Injury: Incorporating Echocardiography in a Murine Model**  

**1013 Clinical Biomarkers of World Trade Center Airway Hyperreactivity: A 16-Year Longitudinal Study**  

**1014 Novel Use of µ-PET/CT Imaging to Detect Cardiopulmonary Changes in a Murine Model Following World Trade Center Particular Matter Exposure**  

**1015 Validation of Biomarkers of World Trade Center (WTC) Lung Injury: Design of a Case Cohort Control**  

**1016 Sarcoid-Like Granulomatous Disease: Pathologic Case Series in World Trade Center (WTC) Dust Exposed Rescue and Recovery Workers**  


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. Osahan, S. Friedman, J. Cone, New York, NY, p.A2500

Comparison of Pulmonary Function in Females Using Clean Air Pollution/Irritants Trigger and Factors Associated with Uncontrolled Lower Respiratory Symptoms/A. Talusan, S. Kwon, New York, NY, p.A2497


Insights from the Pulmonary Vascular Phenomics Project (PVDOMICS): The Effect of Multiple Pulmonary Vascular Groups on Hemodynamics in Pulmonary Hypertension/F.P. Rischard, 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


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
112 Minimal Clinically Important Distance Measured by Six-Minute Walking Distance in Patients with IPAH


113 Subtypes and Outcomes of Sarcoïdosis-Associated Pulmonary Hypertension


114 Assessing Predictive Quality of Diastolic Pulmonary Gradient in Precapillary and Postcapillary Pulmonary Hypertension


115 Increasing Age Is Associated with Worsening Physical Function Despite More Favorable Cardiopulmonary Hemodynamics: A Pulmonary Hypertension Association Registry (PHAR) Report


116 PVDOMICS: Early Clinical Findings Across the Spectrum of Pulmonary Hypertension

A. Hemmes, Nashville, TN, p.A2517

117 Prognostic Impact of Exercise Pulmonary Hypertension in Patients with Unexplained Dyspnea


118 Neuromodulation as a New Strategy in Management of Pulmonary Hypertension


119 Effect of Inhaled Albuterol on Pulmonary Vascular Resistance in Patients with Group 1 Pulmonary Arterial Hypertension on Oral Vasodilator Therapy: A Proof of Concept Study

D. De La Zerda, I.Y. Gutierrez Puentes, B.E. Hurwitz, E.S. Miller, K. Arana, A. Wanner, Miami, FL, p.A2520

120 Hepatoma-Derived Growth Factor (HDGF) Is a Predictor of Disease Severity and Survival in Pulmonary Arterial Hypertension and Highly Associated with Portal Pulmonary Hypertension


121 Early Versus Late Initiation of Treatment with Prostacyclin-Class Therapy in Patients with Pulmonary Arterial Hypertension (PAH)


122 Right Ventricular Dysfunction by Speckle-Tracking Echocardiography as a Predictor of Outcomes in Acute Respiratory Failure Requiring Mechanical Ventilation


123 Upfront Combination Versus Monotherapy in Pulmonary Arterial Hypertension (PAH): Can Advanced Risk Stratification Tell Us the Real Benefit?


A106 NTM: BENCH TO BEDSIDE

Ballroom A Four (Level 2)

2:15 p.m. - 4:15 p.m.

Abstract Summaries

2:15-2:45

Viewing/Discussion

2:45-4:15

Chairing:

T.K. Marras, MD, Toronto, Canada

M. Holt, MBBS, BSc, Denver, CO

J. Philley, MD, Tyler, TX


306 Long-Term Natural Course of Pulmonary Mycobacterium Avium Complex Disease Evaluated with Serial Computed Tomography/A. Shiorshita, Y. Tanaka, K. Nakashima, Kamogawa City, Japan, p.A2529


308 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


A107 ENGINEERED AND REMODELLED MATRIX COMPARTMENTS

Abstract Summaries

Chairing: D.J. Weiss, MD, PhD, ATSF, Burlington, VT
C.M. Magin, PhD, Aurora, CO
D.E. Wagner, PhD, Lund, Sweden


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


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

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


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

NTM Module and QOL-Bronchiectasis: Responsivity of Patient-Reported Outcomes to Treatment in Patients with Pulmonary Nontuberculous Mycobacterial Disease/E. Henkle, K.L. Winthrop, A.L. Quittnner, Portland, OR, p.A2541


608 Context-Specific Maturation of Lung Progenitors Is Directed by Lung Matrices and Vascular Cell-Derived Extracellular Vesicles/M. Ho, M. Ho, K.R. Chaudhary, D.J. Stewart, Ottawa, Canada, p.A2551


610 Lung Derived ECM/Polymere Composite Substrates to Investigate Composition and Stiffness-Dependent Cell-ECM Interactions/R.A. Poul, O. 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. Chaudhary, D.J. Stewart, Ottawa, Canada, p.A2554


618 a-TAT1 Promotes Myofibroblast Activation and Lung Fibrosis Via Microtubule-Dependent Mechanotransduction 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


Higher Plasma Concentrations of Angiopoietin-1 and Angiopoietin-1/Angiopoietin-2 in Adults with Cystic Fibrosis Compared to Healthy Age Matched Controls/P. Bhatraju, K. Hisert, M.L. Atiken, C. Goss, W.C. Liles, W.A. Allemere, Seattle, WA, p.A2575

Fibroblasts from Lung Apices and Bases of Patients with Idiopathic Pulmonary Fibrosis Respond Differently to Pirfenidone and TGF-Beta 1/1. Jaffar, I. Glaspole, K. Symons, G. Westall, Melbourne, Australia, p.A2576


Protective Effect of 3-Carbamoyl Proxyl Against Bleomycin-Induced Lung Fibrosis/N. Berkman, M. Assayag, S. Goldstein, A. Samuni, Jerusalem, Israel, p.A2581


BASIC • BEHAVIORAL • CLINICAL • TRANSLATIONAL

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

A109 SRN: OSA PATHOPHYSIOLOGY AND TREATMENT - MOVING TOWARDS PERSONALIZED MEDICINE

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

Chairs: R.I. Kimoff, MD, Montreal, Canada

A.R. Schwartz, MD, Baltimore, MD

901 REM Rebound Predicts CPAP Compliance in Patients with Obstructive Sleep Apnea/R.S. Leung, A. Udayashankar, Toronto, Canada, p.A2586

902 Loop Gain in REM Versus Non-REM Sleep Using CPAP Manipulation/L. Messineo, L. Taranto Montemurro, A. Azarbarzin, M. Marques, N. Cilianesi, 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.  

Abstract Summaries 2:15-2:45  
Viewing/Discussion 2:45-4:15

Chairing: F. Maldonado, MD, Nashville, TN  
N.T. Tanner, MD, MSCR, Charleston, SC  
S. Shojaei, 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


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4:30 p.m. - 5:45 p.m.

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

5:30 p.m. - 7:30 p.m.

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

7:30 p.m.-10:30 p.m.

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 Approach to Respiratory Viral Illness in Children
T.C. Lewis, MD, MPH, Ann Arbor, MI

7:15 Management of Complicated Pneumonia and Empyema in Children
C.R. Esther, MD, PhD, Chapel Hill, NC
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, ATSF, Denver, CO
B1 CLINICAL YEAR IN REVIEW

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

9:14 Sarcoïdosis
J.C. Grutters, MD, Nieuwegein, Netherlands

9:44 Mycobacterial Infections
D.J. Horne, MD, MPH, Seattle, WA

10:13 Asthma
N. Lugogo, MD, Ann Arbor, MI

10:42 ARDS
C.T.L. Hough, Seattle, WA

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.

B2 ENDOBRONCHIAL VALVE TREATMENT IN PATIENTS WITH ADVANCED EMPHYSEMA: IT’S TIME HAS COME

Assemblies on Clinical Problems; Nursing; Pulmonary Rehabilitation; Respiratory Structure and Function

9:15 a.m. - 11:15 a.m. Ballroom C One-Two (Level 2)

Target Audience
Clinicians and researchers who are involved with the care and research of patients with COPD who have emphysema

Objectives
At the conclusion of this session, the participant will be able to:
• understand the pathophysiology and its consequences of severe hyperinflation on morbidity and mortality in patients with severe emphysema;
• gain understanding of the principles of endobronchial valve placement, proper selection of patient candidates, and performance of procedure;
• understand the adverse events that can result from endobronchial valve treatment and how to proactively mitigate against those complications.

Multiple studies have been recently reported on the utility of endobronchial valve treatment in patients with heterogeneous and homogeneous disease to improve outcomes in patients with advanced emphysema and severe hyperinflation. This session will focus on these recent studies and provide the audience with information regarding patient selection, placement of endobronchial valve therapy, expected short and long-term outcomes as well as management of adverse events. Leading international investigators and practitioners with extensive experience in endobronchial valve placement will present at the session.

Chairing: G.J. Criner, MD, ATSF, Philadelphia, PA
D. Gompelmann, MD, Heidelberg, Germany
F.J. Herth, DrMed, Heidelberg, Germany

9:15 Introduction
G.J. Criner, MD, ATSF, Philadelphia, PA

9:16 Consequences of Severe Hyperinflation in Patients with Advanced Emphysema
B.R. Celli, MD, Boston, MA

9:31 Lessons Learned from Lung Reduction Surgery
W. Weder, MD, Zurich, Switzerland

9:46 Selection of Patients for Endobronchial Valve Therapy
F.J. Herth, DrMed, Heidelberg, Germany

10:01 Outcomes of Endobronchial Valve Therapy in Patients with Heterogenous Emphysema
G.J. Criner, MD, ATSF, Philadelphia, PA

10:15 Outcomes of Endobronchial Valve Therapy in Patients with Advanced Homogeneous Emphysema
A. Valipour, MD, Vienna, Austria
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

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

B4 KEEPING MY CRITICALLY ILL PATIENT COMFORTABLE, AWAKE, ENGAGED, AND MOVING

Assemblies on Critical Care; Nursing; Pediatrics

9:15 a.m. - 11:15 a.m.  
OMNI DALLAS DOWNTOWN  
Dallas Ballroom D/H (Level 3)

Target Audience
Nurses, physicians, pharmacists, therapists, and social workers who provide care in the intensive care unit (ICU), inpatient providers caring for patients transferred from the ICU

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

• understand current best practices and novel modalities for managing pain and agitation in patients with critical illness;

• understand current evidence surrounding delirium treatment and present gaps in knowledge surrounding clinical trials of early mobility;

• understand applications of the ABCDEF bundle in adult and pediatric patients with critical illness and strategies for effective implementation of the bundle for adults with critical illness.

For many years, deep sedation, amnesia, and bed rest were thought to be necessary and compassionate components of critical care. More than 15 years of research has challenged these practices, and informed the 2013 Pain, Agitation, and Delirium (PAD) guideline recommendations. 2019 brings and update of these guidelines. The update of these guidelines will include a new section on immobility. Because these issues affect nearly all critically ill patients (both adult and pediatric-and by extension, their families) at some point during their ICU stay, the appropriate management of pain, agitation, anxiety, delirium and immobility and providing support to patients’ families are important topics for ICU clinicians. The emphasis on, and implementation of pain management, light or minimal sedation, delirium treatment, early mobility, and family engagement, has raised many questions and challenges for both clinicians and researchers. This session will use an interdisciplinary panel of speakers to address key knowledge gaps on the topics of pain management, sedation, delirium treatment, immobility, and family engagement/support.

Chairing: N.E. Brummel, MD, MSci, Nashville, TN
S. Mehta, MD, Toronto, Canada
R. Bakhru, MD, Winston-Salem, NC
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

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
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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**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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**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 2
MOC Points 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

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

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

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. Zeller, JD, Silver Spring, MD
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. Nawijn, 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

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
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

10:25 Free Open Access Medical (FOAM) Education: Does It Help or Hurt?  
N. Seam, MD, ATSF, Bethesda, MD

10:45 Are You Competent to Assess Competency in 2019?  
B. Coruh, MD, Seattle, WA

11:05 Putting It All Together  
R. Adamson, MBBS, ATSF, Seattle, WA

B13  50 YEARS OF PROGRESS IN PULMONARY SCIENCE

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

Video Presentation:  
Lung Stem Cells Featuring Tien Peng, MD

9:58 Respiratory Distress Syndrome  
J.A. Whitsett, MD, Cincinnati, OH

Video Presentations:  
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
Room D167/D174 (Level 1)

Chairing:
P. Akuthota, MD, La Jolla, CA
T.R. Aksamit, MD, Rochester, MN
M.C. McCormack, MHS, MD, Baltimore, MD

Oral Presentations
9:15 Eosinophil-Guided Corticosteroid-Sparing Therapy in Hospitalized Patients with Exacerbated COPD(CORTICOsteroid Reduction in COPD (CORTICO-COP)): A Randomized Prospective Multicenter Investigator-Initiated Trial/


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/S. Nathan, K. Flaherty, M. Glassberg, C. Csete, G. Raghu, J. Swigris, R. Alvarez, N. A. Ettinger, J. E. Loyd, P. Fernandez, H. Gillies, P. Shah, L. H. Lancaster, Falls Church, VA


10:30 A Randomized Controlled Trial of a Novel Smoking Cessation Smartphone Application Integrated with a Mobile Carbon Monoxide Checker for Smoking Cessation Treatment/H. Tateno, K. Masaki, A. Nomura, E. Hida, K. Fukunaga, Tokyo, Japan


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MINI SYMPOSIUM

B15 IMMUNOTHERAPY FOR LUNG DISEASE
9:15 a.m. - 11:15 a.m. KBHCCD
Room C146 (Level 1)

Chairing:
G.M. Gauvreau, PhD, ATSF, Hamilton, Canada
J.L. Cho, MD, Iowa City, IA

Oral Presentations
9:15 Tezepelumab Treatment Effect on Annualized Rate of Exacerbations by Baseline Biomarkers in Uncontrolled Severe Asthma Patients: Phase 2b PATHWAY Study/J. Corren, E. Garcia Gil, J.R. Parnes, T.-H. Pham, J.M. Griffiths, Los Angeles, CA

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

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


**MINI SYMPOSIUM**

**B17 ADVANCES IN ILD THERAPY**

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

**Oral Presentations**


9:30 Nintedanib Plus Sildenafil Versus Nintedanib Alone in Patients with IPF and Severely Impaired Gas Exchange: Subgroup Analysis by Right Heart Dysfunction/ J. Behr, M. Kolb, J.W. Song, F. Luppi, B. Schinzel, S. Stowasser, M. Quaresma, F.J. Martinez, Munich, Germany, p.A2637


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


BEHAVIORAL MINI SYMPOSIUM

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. Hanra, 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


10:45 A Qualitative Study of Enablers and Barriers to Participation and Retention in Cancer Research/G.L. Narsavage, T. Petite, A. Nichols, Morgantown, WV, p.A2649

BASIC • CLINICAL • TRANSLATIONAL MINI SYMPOSIUM

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


**B20 LUNG TRANSPLANTATION: MODELS AND MECHANISMS**

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

**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. KBHCCD

**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.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. Viglianti, 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


B23 CRITICAL CARE: STEP ACROSS THIS LINE - MICROBIOME, GENETICS, AND OTHER BIOMARKERS IN ACUTE CRITICAL ILLNESS

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

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

601 MiR-490-3p and MiR-744-5p Are Increased in ICU Acquired Weakness (ICUAW) and Regulate Myoblast Differentiation and Proliferation/J. Batt, C. Escudero King, C.J. Walsh, P. Plant, S. Ahmed, J. Correa, S. Mathur, M.S. Herridge, P. Hu, C.C. Dos Santos, Toronto, Canada, p.A2707

603 Survivors of Murine Pneumosepsis Exhibit Long-Term Behavior Change and Primed Brain IL-1ß Expression/J.S. 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


624 Thyroid Hormone Regulates Immune Response of Macrophages in Sepsis/D. Zhang, H. Lee, Y. Jin, Boston, MA, p.A2730

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)

9:15-9:45  Abstract Summaries

9:45-11:15  Viewing/Discussion

Chairs: 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/J. 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


817  Diaphragm Pacing: A Promising Adjunct to Facilitate Liberation from Mechanical Ventilation/R.B. Hejal, M. Elmo, R. Onders, Cleveland, OH, p.A2748


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


B26 CLINICAL STUDIES IN PEDIATRIC SLEEP, HOME VENTILATION AND NEUROMUSCULAR DISEASE

9:15 a.m. - 11:15 a.m. OMNI DALLAS DOWNTOWN
Trinity Ballroom 1-3 (Level 3)

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. Sarber, D.F. 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. Sawman, R.S. Amin, D.T. Benscoter, Cincinnati, OH, p.A2793


919 Self-Reported Infant Safe Sleep Practices of Brooklyn Mothers/F.G. Christian, Y. Ravichandran, M. Pollak, E. Pollak, Oklahoma City, OK, p.A7365
Chairing: M.T. Gladwin, MD, Pittsburgh, PA


204 Leptin Modulates Insulin Signaling Protein Intermediates Involved in Fatty Acid Metabolism in Cultured Cardiomyocytes with BMPR2 Mutation/M. Talati, N. Fortune, E. Hornsby, J.D. West, A. Hemmes, Nashville, TN, p.A2798


210 Looking Outside of the Lung to Treat Pulmonary Hypertension Due to Left Heart Disease; Lessons from a Novel Humanized Model of HFpEF-PH/M. Fini, M. Li, V. Karoor, T. Sullivan, K.R. Stenmark, Aurora, CO, p.A2804

211 Examination of the Interventricular Septum to Discriminate Group 2 from Non Group 2 Pulmonary Hypertension/N.V. Turlapati, A. Jakkoju, A. Vaidya, B.P. deBoisblanc, M.R. Lammi, New Orleans, LA, p.A2805


213 Right Atrial to Pulmonary Artery Wedge Pressure (RA/PAWP) Ratio Across the Hemodynamic Spectrum in Pulmonary Hypertension/A. Van, N. Turlapati, A. Jakkoju, B.P. deBoisblanc, M.R. Lammi, New Orleans, LA, p.A2807


216 Early Maladaptive Right Ventricular Remodeling in an Animal Model of Western Diet Induced Pulmonary Hypertension and Heart Failure/V. Agrawal, N. Fortune, L. Leavess, E. Hornsby, E. Brittain, J.D. West, A. Hemmes, Nashville, TN, p.A2810


221 Right Ventricular Fibrosis in Pulmonary Hypertension Is Mediated by ACh/nACHr Signaling/A. Vang, J.H. Siamwala, R.T. Clements, N.R. Kue, T.J. Mancini, D.J. McCullough, A. Allawzi, G. Choudhary, Providence, RI, p.A2815

222 Pulmonary Arterial Stiffening in Pulmonary Hypertension Due to Left Heart Disease/M.M. Kucherenko, P. Sang, D. Wolsten, G. Duda, W.M. Kuebler, C. Kosnalla, Berlin, Germany, p.A2816

223 Group-Based Trajectory Modeling of Diastolic Function in Healthy Subjects and Patients with Pulmonary Arterial Hypertension/Y. Han, J. Han, S. Altmaier, K. Addetta, A. Patel, Philadelphia, PA, p.A2817


B28 HOW AIRWAYS MALFUNCTION: NEW CONCEPTS

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, E. Donnelly, London, United Kingdom, p.A2821


307 Arginine Methylation Epigenetically Regulates Airway Epithelial Cell Injury In COPD Pathogenesis/T. Melcon, 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. Habibovic, A. Van Der Vliet, Burlington, VT, p.A2829


313 Autophagy Augmentation Alleviates Cigarette Smoke Induced CFTR Dysfunction, Ceramide Accumulation and COPD-Empysema Pathogenesis/N. Vj, M. Bodas, G. Pehote, D. Silverberg, E. Gulbins, 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.  
Ballroom D Four (Level 3)

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

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

**Chairs:**  
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  
D. Hackett, A.J. Halayko, Winnipeg, Canada, p.A2852

**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  
F. Sanai, A. Cairncross, P.B. Noble, J.G. Martin, Montreal, Canada, p.A2857

**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

327 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


332 Increased Risk of Sleep Apnea in Patients of Allergic Rhinitis - A Nationwide Population-Based Study/C.-H. Chuang, Y.-C. Tsai, C.-Y. Kuo, C.-Y. Hsu, J.-Y. Hung, Kaohsiung, Taiwan, p.A2875

333 Fetal Sex and Sleep Disordered Breathing During Pregnancy/M. Salameh, M. Hanson Bublitz, M. Okun, M. Miller, G.R. Bourjeily, Providence, RI, p.A2876


335 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, I.F.B. Azam, L.A. Bortolotto, G. Lorenzi-Filho, L.F. Drager, Sao Paulo, Brazil, p.A2878

Discussion:

Viewing:

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

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


P145 Does Calcineurin Inhibitors (CNIs) 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

BASIC • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION

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


P657  Ambient PM2.5 Enhances the Pulmonary Allergic Immune Response via DUOX1 to Activate Allergen-Induced IL-33 Secretion and Type 2 Immune Effects/J. Zhang, C.B. Fulgar, X. Sun, W. Li, L. Cui, A. Castaneda, K. Bein, Q. Zhang, S. Xu, K.E. Pinkerton, Hubei, China, p.A2895

P658  Suppressive Effect of a TLR7 Agonist in IL-33-induced Eosinophilic Airway Inflammation/S. Okuzumi, J. Miyata, T. Mochimaru, S. Kagawa, M. Matsusaka, T. Tanosaki, R. Watanabe, M. Kuwae, M. Nishiura, S. Ueda, K. Fukunaga, Tokyo, Japan, p.A2896


P662  Bone Marrow Derived Dendritic Cell (BMDC) Adoptive Transfer Alleviate Ova-Induced Allergic Airway Inflammation in Asthma Mice/Z. Chen, K. Xu, N. Wu, Z. Min, Z. Jiang, Shanghai, China, p.A2900

P663  Inhalation Delivery of Type III Interferons Enhances Pulmonary Allergic Immune Response via DUOX1 to Activate Allergen-Induced IL-33 Secretion and Type 2 Immune Effects/J. Zhang, C.B. Fulgar, X. Sun, W. Li, L. Cui, A. Castaneda, K. Bein, Q. Zhang, S. Xu, K.E. Pinkerton, Hubei, China, p.A2895

P664  A Humanized Mouse Model to Study Asthmatic Airway Inflammation Via Human IL-33/IL-13 Axis/S. Maruoka, S. Yamada, R. Ito, S. Nunomura, S. Toyoshima, Y. Okayama, K. Izuhara, S. Hashimoto, Y. Con, Tokyo, Japan, p.A2902


P666  Bronchial Epithelial Cells of Different Ages Regulate Th2 and Th17 Cell Differentiation Through MBD2 Mediating the Level of sICOSL/Y. Yuan, Q. Zen, X. Xiang, Changsha, China, p.A2904

P667  The Role of Innate Lymphoid Cells (ILCs) in Mice Model of Irritant Induced Asthma/U. Fuji, Y. Ishii, E. Nakada, N. Khazaei, S. Farahnak, T. McGovern, J.G. Martin, Montreal, Canada, p.A2905


P674  Soluble 15-Lipoxygenase Type 1 from Rhinovirus-Infected Epithelial Cells Causes Airway Epithelial Injury/L. Shi, A. Guadarrama, N. Lane, L.C. Denlinger, Madison, WI, p.A2912

Facilitator:  J. Griffith, MD, PhD, Boston, MA


P679  A Novel In-Vitro Model to Study Endothelial Dysfunction in Asthma/P. Rajasekar, A. Knox, R.L. Clifford, Nottingham, United Kingdom, p.A2917

P680  Mechanisms Underlying Corticosteroid Insensitivity Induction by Interleukin-17A in Bronchial Epithelial Cells/W. Akik, N. Dauletbaev, L.C. Lands, Montreal, Canada, p.A2918

In the image, the content is not clearly presented as a readable document. It appears to be a list of scientific papers or abstracts related to respiratory health and allergies, with titles and authors listed. However, the text is not transcribed into a coherent and readable format due to its disorganized and fragmented nature. The content seems to be related to various studies and research papers presented at a conference, possibly the American Thoracic Society (ATS) conference in 2019. Without a clear and legible representation of the text, it's challenging to provide a coherent summary or analysis.


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. Decuytere, M. Pourriel, N. Roche, Bordeaux, France, p.A2988


P443 Lack of Association Between the Serotonin Transporter Gene Polymorphism and Depressive Symptoms in Patients with Chronic Obstructive Pulmonary Disease/A.M. Yohannes, V. Fan, H.Q. Nguyen, K. Pike, R. Kohlen, Azusa, CA, p.A2990

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. 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: H. Kathuria, MD, ATS, Boston, MA


P18 Psychiatric Diagnosis and Treatment Success in a Community-Based Smoking Cessation Clinic/L. Offit, M.M. Barnett, A.S. Flora, San Francisco, CA, 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


P23 Age-Related Changes in Lung Age with Smoking Status at Two-Days Medical Checkup/M. Fukakusa, Y. Ichikawa, Y. Ishida, K. Masuda, Tokyo, Japan, p.A3005
B37 NOVEL APPROACHES TO ASTHMA MANAGEMENT AND OUTCOMES

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

Area E (Hall F, Level 2)

Facilitator: A.C. Wu, MD, MPH, Boston, MA

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.


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


P29 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


P35 Health Care Use by Older Australian Women with Asthma/P. Eftekhari, P.M. Forder, M.L. Harris, J.E. Byles, Newcastle, Australia, p.A3022

P36 Management of Severe Eosinophilic Asthma: A Simulation-Based Assessment of Physicians’ Practice Choices/T. Lambert, Willslow, United Kingdom, p.A3023


P38 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

MONDAY • MAY 20

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 Sunvou-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


CLINICAL

THEMATIC POSTER SESSION

B38  LUNG CANCER: SCREENING PRACTICES AND TREATMENT OUTCOMES

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: 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/Calhoun, League City, TX, p.A3046


Can Historical Electronic Health Record Smoking Data Be Leveraged to Improve the Selection of Patients for Lung Cancer Screening?/O.J. Kats, A. Tilmiat, Y. Adie, Y. Tarabichi, Cleveland, OH, p.A3049

Development and Validation of an Algorithm to Identify Chronic Obstructive Pulmonary Disease in Individuals Eligible for Lung Cancer Screening/D. Ha, C. Zeng, A. Burnett-Hartman, B. Hixon, C.A. Joyce, D.P. Ritzwoller, Aurora, CO, p.A3050

Determinants of Cancer-Specific Quality of Life in Veteran Lung Cancer Survivors Eligible for Long-Term Cure/D. Ha, J.J. Swigris, Aurora, CO, p.A3051

Facilitator: M. Triplette, MD, MPH, Seattle, WA


A Novel Model-Based Questionnaire for COPD Diagnosis Based on Data of Low-Dose CT Screening in Shimane, Japan/A. Tanino, T. Kawamura, M. Hamaguchi, R. Tanino, M. Kobayashi, J. Umemoto, Y. Shirsutsuki, T. Okuno, M. Nakao, Y. Amano, T. Hotta, T. Okimoto, Y. Tsubata, M. Hamaguchi, N. Kurimoto, T. Isobe, Izumo, Japan, p.A3054

A Year in Review: Identifying Delays in Lung Cancer Diagnosis/P. Patel, R.M. Davis, P.E. Whitten, Peoria, IL, p.A3055


Facilitator: A.S. Morigenthou, MD, New York, NY


Antigen Avoidance Test Is Beneficial for Predicting The Prognosis of Patients with Chronic Hypersensitivity Pneumonitis Treated with Corticosteroid Therapy/S. Hanzawa, T. Tateau, T. Kawahara, M. Ishizuka, Y. Miyazaki, Bunkyo-ku, Tokyo, Japan, p.A3062

Clinical and Radiological Features That Are Used to Distinguish Chronic Hypersensitivity Pneumonitis from Idiopathic Pulmonary Fibrosis/A. Wong, C.J. Hague, J.L. Wright, A.M. Churg, C.J. Ryerson, Vancouver, Canada, p.A3063


Comparison of Thoracic Sarcoidosis Stage Determined from the Presentations of Chest X-Ray Versus High-Resolution Computed Tomography and Application in Both Chinese and American Patients with Sarcoidosis/D. Weng, H. Li, Shanghai, China, p.A3069

Facilitator: D.C. Patel, DO, MBA, Gainesville, FL

The Correlation of a Sarcoidosis Clinical Outcome Score to Clinical and Radiological Features That Are Used to Distinguish Chronic Hypersensitivity Pneumonitis from Idiopathic Pulmonary Fibrosis/A. Wong, C.J. Hague, J.L. Wright, A.M. Churg, C.J. Ryerson, Vancouver, Canada, p.A3063


Comparison of Thoracic Sarcoidosis Stage Determined from the Presentations of Chest X-Ray Versus High-Resolution Computed Tomography and Application in Both Chinese and American Patients with Sarcoidosis/D. Weng, H. Li, Shanghai, China, p.A3069

Facilitator: D.C. Patel, DO, MBA, Gainesville, FL


P162 Histoplasma Exposure Risk Assessment in Sarcoidosis Patients and Its Correlation with Calcified Lymphadenopathy: A Case Control Study/P. Sen, M. Azam, T. Kwiatkowski, J. H. Jennings, Detroit, MI, p.A3074

P163 Clinical, Radiological and Pulmonary Function of Patients with Hypersensibility Pneumonia (HP) Followed in a Brazilian Hospital/D. Estrella, T. Prata, G. Pimenta, L. P. Arneguy, G. Cordeiro, Belo Horizonte, Brazil, p.A3076


P165 Incorporating an Online Decision-Making Algorithm to Assist Sarcoidosis Management/K. H. F. E. M. Santos, M. Mirsaeidi, Miami, FL, p.A3077

P166 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


P241 A Case of Autoimmune Pulmonary Alveolar Proteinosis with Sjögren’s Syndrome/I. Imayama, K. Haas, C. Ascoli, Chicago, IL, p.A3084

P242 The Surfactant of the Matter: A Case of Severe Pulmonary Alveolar Proteinosis/A. Mohammed, E. Amenta, Houston, TX, p.A3085


P246 Diffuse Alveolar Hemorrhage - A Rare Case of Pulmonary Renal Syndrome in the Background of Seropositive Rheumatoid Arthritis/A. Fatima, S. Priyanka, R. Ali, S. Kashyap, A. Abellard, S. Chinni, N. Anand, M. Mataria, Oak Lawn, IL, p.A3089

P247 Interstitial Pneumonia with Autoimmune Feature Presented with NSIP HRCT Pattern and High Anti-CPP Titer Responded Dramatically to Prednisone, Mycophenolate Mofetil and Rituximab/A. Alqaid, C. E. Sotelo, Shreveport, LA, p.A3090


Facilitator: D. C. Gomez Manjarres, MD, Gainesville, FL

P249 Diagnostic Challenges and Management Considerations of Immune-Related Hypersensitivity Pulmonitis Associated with Immune Checkpoint Inhibitors/B. Bagley, N. L. Sigua, M. Bikak, Indianapolis, IN, p.A3092

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


B40 AUTOIMMUNE LUNG DISEASE 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.

Facilitator: M. Gulati, MD, New Haven, CT


P239 A Case of Diffuse Alveolar Hemorrhage in Rheumatoid Arthritis/N. Mills, E. J. Yoo, Philadelphia, PA, p.A3082

P255 Pump the Brakes: A Case of Etanercept-Induced Accelerated Pulmonary Nodulosis/B. 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


P259 Granulomatosis with Polyangiitis as an Acute Cause of Central Diabetes Insipidus/S.-J. Sass, E. Wiens, J. Ziegler, A. Sharma, Winnipeg, Canada, p.A3102


Facilitator: J. Chiarchiaro, MD, Pittsburgh, PA

P261 A Rare Case of Anti-RNA Polymerease III Autoantibody-Associated Interstitial Lung Disease in Systemic Sclerosis Sine Scleroderma/W.S. Tam, A.M. Nambari, San Antonio, TX, p.A3104

P262 Isolated Pseudotumor as a Presentation of Granulomatosis with Polyangiitis/F. Nayeemuddin, S. Ullah, P. Kyaw, R. Sreedhar, Springfield, IL, p.A3105

P263 Cystic Lung Disease in a Patient with Systemic Lupus Erythematosus: To Biopsy or Not Biopsy/A. Khawaja, A. Gallo De Moraes, Rochester, MN, p.A3106


P265 Bronchial Webs in Cryoglobinemia/S. Hashim, St. Louis, MO, p.A3108


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. Mandeel, 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. Andradi, 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

Double Aortic Arch - A Rare Cause of Stridor in Adults/M. Beg, M. Al Qaysi, P. Ong, San Antonio, TX, p.A3141

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 Stricture/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


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 Osteochondropathica 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. Culluman, K. Deasy, G. Neville, J. McCarthy, L. Burke, D.M. Murphy, M.P. Kennedy, Cork, Ireland, p.A3160

P319 Broncholithiasis: 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


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


P329 Management of a Case of Tracheobronchopathia Osteochondroplastica Causing Airway Obstruction/I.R. Kugasia, S.A. Doumeh, K. Farhat, K.N. Harris, Waxahachie, TX, p.A3171

P330 The Segment Left Behind/S.F. Cocciardi, A. Borah, W. Abouzgheib, Camden, NJ, p.A3172

P331 Recurrent Hemoptysis Due to Diffuse Endobronchial Telangiectasia/M. Rudrappa, Joplin, MO, p.A3173

**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


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. Culluman, 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
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P344 A Rare Cause of Dyspnea- GreyTurners Sign Turned Upside Down/C. Breathnach, D. Ryan, S. Flemming, K. Sunkari, Dublin, Ireland, p.A3185


P346 It’s the PITS: Delayed Diagnosis of Post-Intubation Tracheal Stenosis Resulting in Emergent Cricothyrotomy/B.D. Park, B.A. Graney, T.J. Huie, Aurora, CO, p.A3187


P348 Case Report: Tracheal Adenoid Cystic Carcinoma Misdiagnosed as Asthma/A Case Report: Tracheal Adenoid Cystic Carcinoma Misdiagnosed as Asthma/K.D. Duong, V.T. Le, N.V. Tran, Ho Chi Minh City, Viet Nam, p.A3189

P349 Ketamine as an Alternative Agent for Conscious Sedation in the Hypoxic Patient/M. Botros, E. Homsy, Columbus, OH, p.A3190

P350 Anterior Myelomeningocele Without Neurospine Involvement: A Rare Posterior Mediastinal Pathology/Y. Khan, S. Iqbal, S. Fatimi, Karachi, Pakistan, p.A3191

P351 Dyspnea in a Patient with Sarcoidosis/G. Clerger, A. Burza, Brooklyn, NY, p.A3192


P355 An Extremely Rare Case of Diffuse Alveolar Hemorrhage in a Patient with Scleroderma and Previously Undiagnosed Granulomatosis with Polyangiitis/A. Amin, G. Sharma, S. Kwatra, L. Goldstein, M.A. Bautista, A. Boulos, Youngstown, OH, p.A3196


P357 Persistent Atelectasis in the Young Adult Merits Aggressive Work Up/A. Zeglen, V. Pamudurthy, R.Z. Abraham, Kankakee, IL, p.A3198

P358 Acute Hypoxemic and Acute on Chronic Hypercapnic Respiratory Failure in a Patient with Obesity Hypoventilation Syndrome After Perineural Catheter Interscalene Block Following Rotator Cuff Surgery/M. Harris, K. Zuidema, M.J. Junqueira, Pueblo, CO, p.A3199


P360 Tracheobronchial Aspiration in Adults: A Rare but Life Threatening Condition/S. Kwatra, A. Amin, G. Sharma, U. Khalid, M.A. Bautista, Youngstown, OH, p.A3201


P365 When Lungs Become Bone: A Rare Case of Idiopathic Dendriform Pulmonary Ossification/E. Zouein, K. Sangianni, P. Shah, A.J. Gamino, Chicago, IL, p.A3206

P366 Rethinking the Thrombophilic Workup a Case of Severe Vitamin B12 Deficiency/S.X. Lee, J. Lee, T. Lim, Lawrenceville, GA, p.A3207

P367 Unusual Case of Idiopathic Bilateral Diaphragmatic Weakness/J.L. Peng, S. Shah, S.B. Patel, Maywood, IL, p.A3208


P369 Sterile Surprise: Aseptic Abscesses as Initial Presentation of Inflammatory Bowel Disease/R. Bhatia, E. Amenta, J. Zataki, Houston, TX, p.A3210

P370 Surgical Management of Tracheal Stenosis in an Adult Patient with Jarcho Levine Syndrome/ J. Lee, T. Lim, Lawrenceville, GA, p.A3210


P372 Novel Case of Undifferentiated Hypoxia Leading to Adulthood Diagnosis of Fontainebleau Hemoglobinopathy/K. Surapur, Tucson, AZ, p.A3213

**P376** The Protective Role of Pleural Fistulae in the Containment of
Discussion:

**P375** Synovial Sarcoma: Masquerading as Massive Pleural Effusion

**P377** Bilothorax: A Rare Complication After Percutaneous Transhepatic Biliary Drainage Placement

**P378** Complicated Loculated Pleural Effusion with Acute Fibrinuous Pleurisy

**P379** Recurrent Chylous Pleural Effusion in a Patient with Thoracic Venous Catheter Placement

**P380** A Rare Complication of Bronchoscopy - Pleural Effusion

**P381** Fighting with Every Fiber of His Being: A Case of Fibrous Mediastinitis Causing Superior Vena Cava Syndrome with Pleural Effusion

**P382** Maleficient Multiple Myeloma: A Case of Myelomatous Pleural Metastases with Effusion

**P383** Primary Pleural Amyloidosis with Isolated Endobronchial Lesion

**P384** Unusual Cause of Recurrent Hydropneumothorax in a Young Women

**P385** Primary Pleural Lymphoma: Case Report

**P386** A Case of Unilateral Pleural Effusion with Large Thyroid Mass

**P387** Actinomycetes Necrotizing Pneumonia and Empyema

**P388** Peripheral Eosinophilia and Eosinophilic Pleural Effusion Resulting from Spontaneous Pneumothorax

**P389** Unusual Presentation of TB in Immunocompetent Patient

**P390** An Uncommon Complication of a Common Procedure: A Case Describing a Fatal Mediastinal Hematoma Following Central Venous Catheter Placement

**P391** Trapped Lung from a Listeria Monocytogenes Empyema

**P392** Aortopathy Complicated by Spontaneous Chylothorax in a Patient with Turner Syndrome

**P393** Post Thyroidectomy Exudative Effusion: A Case Report

**P394** The Wrong Way on a One Way Track: A Heimlich Valve Complication

**P395** A Rare Cause of Eosinophilic Pleural Effusion

**P396** Salmonella Swimming Up-(Blood)-Stream: A Case of Salmonella Empyema in an Immunocompetent Patient

**P397** Unusual Cause of Recurrent Pneumothorax in a 52 Year Old Immigrant

**P398** A Rare Case of Eosinophilic Pleural Effusion

**P399** Pleural Effusion Secondary to Superior Vena Cava Stenosis in the Setting of End Stage Renal Disease

**P400** Curious Case of Symptomatic Pleural Effusion

**P401** Is It Cancer? Recurrent Pleural Effusions in an Otherwise Healthy 39 Year Old Male

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**P463** Actinomycetes Necrotizing Pneumonia and Empyema

**P464** Peripheral Eosinophilia and Eosinophilic Pleural Effusion Resulting from Spontaneous Pneumothorax
A Rare Case of Extrathoracic Pleural Effusion/N. Dudiki, S. Summers, M. Maxfield, Worcester, MA, p.A3247

Candida Thoracis Empyema Presenting as Thoracic Endometriosis/S.K. Matta, A. Omranian, Houston, TX, p.A3248

Bilious Airways: A Case of Bilothorax Following Liver Transplantation/K. Pew, S. Thomas, Dallas, TX, p.A3249


A Mystery Case of Chylothorax/R. Alsaggaf, A. Scott, J. McCann, J. Garvey, Dublin, Ireland, p.A3251

When Not to Place a Chest Tube: A Case of Spontaneous Bacterial Empyema/G. Thompson, M. Myers, R. Kern, Rochester, MN, p.A3252

Epithelioid Mesothelioma Presenting as Incidental Hydropneumothorax, A Case Series/Y. Ahmad, A. Flora, S. Benzquaen, Cincinnati, OH, p.A3253

Re-Expansion Pulmonary Edema After Drainage of Less than 1 Liter: A Case Report and Literature Review/A. Taguilasos, C. Yacapin, R. Cinco, C. Ercitcio, Muntinlupa, Philippines, p.A3254


Gastronomic Pleurisy: A Case of Pancreatic Pleural Fistula/J. Unger, P. Bagley, N. Huprikar, D. Mabe, Silver Spring, MD, p.A3257

Lung Herniation: A Rare Consequence After Thoracotomy/T.T. Aung, A. Chu, P. Kaul, Syracuse, NY, p.A3258


A Rare Presentation of a Unilateral Pleural Effusion in Newly Diagnosed AL Amyloidosis/L. Sanders, M. Reichmuth, M.J. Junqueira, S. Sicher, Pueblo, CO, p.A3260

Tension Hydrothorax Causing Cardiac Arrest: A Rare Complication of Malignant Effusions/C. Kanisarapahan, H. La, J. Kewcharoen, N. Sritaranaviriyakul, Honolulu, HI, p.A3261

An Unusual Case of Pleural Fluid Eosinophilia/L. Jones, R. Winsett, A.M. Nambiar, San Antonio, TX, p.A3262

Renal Biopsy: A Rare Cause of Pneumomeдиastinum/R. Rajagopal, S. Hussain, New Brunswick, NJ, p.A3263


CLINICAL
THEMATIC POSTER SESSION

B44 COPD: TREATMENT AND OTHER TOPICS

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.


P454 Assessment of a Harmonization Technique to Reduce the Confounding Factors in Clinical CT Scans/G. Vega-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, M. Ramirez, C. Rodriguez Flores, Caracas, Venezuela, p.A3273

B45 COPD: TREATMENT

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.


P490 Chronic Obstructive Pulmonary Disease Pharmacological Treatment Effectiveness/A.C.G. Ferreira, L.S. Dias, J.L.R. Silva Junior, M.F. Rabahi, Goiania, Brazil, p.A3302

P491 Investigation of the Proper Use of Steroids During Admissions for Acute Exacerbation of Chronic Obstructive Pulmonary Disease at a Community Teaching Hospital/W. Grist, Y. Elamir, Y. Patel, J. Matta, L. Alerté, D. Hipolito, A. Dubey, B. Elamir, Jersey City, NJ, p.A3303


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.D. Singh, R. Wise, D.A. Lipson, Philadelphia, PA, 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. Chahtine, G. Bachuva, 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. Cavney, 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. Rustscheff, 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


P530 To Compare the Efficacy and Safety of Nebulized Short Acting Beta Agonists/Short Acting Muscarinic Agents (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

P531 Benefits of Glycopyrrolate/Formoterol Fumarate 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


P533 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


P538 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

P539 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


P541 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


CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B46 IDIOPATHIC INTERSTITIAL PNEUMONIA: NATURAL HISTORY

9:15 a.m. - 4:15 p.m. KBBHCDD 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: L.P. Hariri, BS, MD, PhD, Boston, MA


P170 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

P171 The Role of Infection in Acute Exacerbation of Idiopathic Pulmonary Fibrosis/D. Weng, H. Li, Shanghai, China, p.A3357

P172 Analysis of the Clinical Characteristics of 176 Patients with Pathologically Confirmed Cryptogenic Organizing Pneumonia/D. Weng, Y. Zhang, H. Li, Shanghai, China, p.A3358


P185 Comparison of MRC Breathlessness Scale to a Novel Interstitial Lung Disease Among US Veterans: Pilot Study of a Multidimensional Dyspnea Scale (MDDS) for Clinical Use/

N.A. Hasaneen, Stony Brook, NY, p.A3370


P187 Clinical Examination Classified with Serum SP-D Level in Patients with Organizing Pneumonia/H. Matsuse, C. Nakano, N. Kondo, Tokyo, Japan, p.A3373


P203 Prognostic Analysis of Idiopathic Interstitial Pneumonias with Rheumatologic Features: A Prospective Multicenter Cohort Study (PAIR Cohort Study)/K. Kanazawa, Y. Shibata, Fukushima, Japan, p.A3390


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


B47 CRITICAL CARE: THE HEART GOES LAST - CARDIAC ARREST, CARDIAC SURGERY AND COMPLICATIONS OF THE HEART

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: 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


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

Facilitators: M.P. Kerlin, MD, MS, Philadelphia, PA


Improving Outside Hospital Transfers in the Medical Intensive Care Unit: A Quality Improvement Initiative/A.L. Ramsey, A. Muller, X. Xu, Y. Kao, T.H. Neville, Los Angeles, CA, p.A3411


Review of 780 Intubations in a Community Hospital Using a Team Based Approach in a Critical Care Unit/R.P. Tofts, S. Saleknezhad, V. Allen, M. Hamed, S. Tully, Columbus, MS, p.A3414

Outcome Measures of Patients Exubtated 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


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


Following the Guidelines: A Look at Compliance with Surviving Sepsis in a General Medical Unit/O. Ashraf, L. Babar, M. Faruqi, T.J. Cheema, Pittsburgh, PA, p.A3428

B49 CRITICAL CARE: EAST OF EDEN - PREDICTING AND MEASURING OUTCOMES
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: H. Wunsch, MSc, MD, Toronto, Canada
M. Afshar, MSCR, MD, Maywood, IL

P1147 Admission Glucose and Lactate Levels as Predictors of In-Hospital Mortality/D. Sotello Aviles, S. Yang, K.M. Nugent, Lubbock, TX, p.A3434


P1150 Outcomes of End Stage Liver Disease Ward Patients Requiring ICU Transfer in a Safety Net Hospital/C. Cerro Chiang, A. Sumarsono, T. Tielman, L.S. Brown, C. Chen, M.J. Leveno, Dallas, TX, p.A3437


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


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


P810 An Uncommon Cause of Infective Endocarditis - Group G


P808 An Unusual Case of Infectious Mycotic Aneurysm Rupture with Complete Destruction (Absence) of Tricuspid Valve Due to


P804 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


P815 The Diagnostic Difficulty of Cardiac Sarcoidosis Without Known Systemic Disease/C. Conner, P. Troy, Farmington, CT, p.A3468


Facilitators: M.W. Semler, MD, MSc, Nashville, TN A. Law, MD, Boston, MA


P819 Anti-Synthetase Syndrome Presenting with Atrial Ventricular Blockage/G. Sun, M. Bachan, Z. Khan, Bronx, NC, p.A3472

P820 Left Ventricular Noncompaction Presenting as a Cardiac Arrest/A.S. Bath, V. Deepak, M. Farishta, V. Gupta, Kalamazoo, MI, p.A3473


P822 SynCardia Total Artificial Heart Implant for End-Stage Biventricular Heart Failure Secondary to Eosinophilic Myocarditis/S. Savajiyani, R. Garcia Orr, G. Chu, Phoenix, AZ, p.A3475


P824 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

P825 End of the Line/G. Orellana, O. Garner, A. Iardino, Odessa, TX, p.A3478

P826 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 N. Ramesh, MD, Wilkes Barre, PA

P827 Valvular Degeneration Following Endocarditis: A Case Report on Indications for Surgical Referral/M. Hubbard, A. AbuQare, Blackfoot, ID, p.A3480
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)

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. Ral1, MD, Philadelphia, PA
M. Brewer, DO, Jackson, MS


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 High-Output Heart Failure/ J. Payne, K. Olson, E. Rayyan, R. Saggard, Phoenix, AZ, p.A3510


P926 Atypical Presentation of Ulcerative Colitis/F. Aleskerov, Cleveland, OH, p.A3577

B53 SLEEP DISORDERED BREATHING AND LONG-TERM VENTILATION IN PEDIATRICS

B54 CASE REPORTS IN PULMONARY VASCULAR MEDICINE II
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

P942  Severe Pulmonary Hypertension in a Patient with Pyruvate Kinase Deficiency Treated with Riociguat/M.J. McMahon, S.D. Nathan, S. Aryal, Bethesda, MD, p.A3598


P945  Pulmonary Hypertension Exacerbated by Iodinated Contrast/A. Fadda, S. Tseng, M. Abidali, T. Ardiles, Phoenix, AZ, p.A3601

P946  Pulmonary Vasculature Complications Associated with Fibrosing Mediastinitis/J. Lin, L. Frye, Chicago, IL, p.A3602

Facilitator: V. Balasubramanian, MD, Fresno, CA


P950  A Case of Pulmonary Veno-Occulsive Disease with Variant in EIF2AK4 c.892delA/J. Wang, X. Tao, Q. Gao, J. Wan, W. Xie, F. Liu, Z. Zhai, C. Wang, Beijing, China, p.A3606

P951  Anomalous Descending Aorta to Pulmonary Vein Fistula: A Rare Clinical Entity/L. Zhang, P.H. Hanneman, W.G. Carlos, Indianapolis, IN, p.A3607


P953  Inferior ST Elevations After Accidental Epoprostenol Discontinuation/R. Simmons-Beck, B. Scarpato, Boston, MA, p.A3609


P955  Chagas Disease and Pulmonary Hypertension/W. Singh, L.S.H. Cruz, B. Yaghmour, Los Angeles, CA, p.A3611


Facilitator: H.W. Farber, MD, Boston, MA

P957  Thrombosed Pulmonary Artery Aneurysm in a Patient with Underlying Eosinophilic Granulomatosis with Polyangiitis/E. Urbina, C. Cristiancho, S.-L. Kwa, Framingham, MA, p.A3613


P961  Primary Pulmonary Artery Chondrosarcoma/C. Villaquiran-Torres, J. Torres-González, L. Jaramillo-Garcia, Bogotá, Colombia, p.A3617

P962  Pulmonary Artery Sarcoma, An Exotic Pulmonary Neoplasm/C. Villaquiran-Torres, P.R. Gil Torres, J. Guzman-Buenaventura, J. Gutierrez, Bogotá, Colombia, p.A3618

P963  Mistaken Identity: A Case of High-Output Pulmonary Hypertension Due to Partial Anomalous Pulmonary Venous Drainage Disguised by an Arterio-Venous Fistula/N. Schoenberg, N. Ruopp, H.W. Farber, Boston, MA, p.A3619


P965  A Novel Heterozygous Notch1 Mutation Causes Chronic Thromboembolic Pulmonary Hypertension: A Case Report/R. Jiang, J.-M. Liu, Shanghai, China, p.A3621

P966  An Unusual Case of Pulmonary Artery Aneurysms with Mural Thrombus Formation/S. Amin, K.E. Roberts, Boston, MA, p.A3622

Facilitator: A.U. Aranda, MD, Guaynabo, Puerto Rico

P967  A Fatal Case of Foreign-Body Granulomatous Pulmonary Emboli/A. Torres, M.E. Winter, C.I. Rivera, Miami Beach, FL, p.A3623


P972 Thyroid Gland in a Patient with Pulmonary Arterial Hypertension Treated with Epoprostenol/S.J. Abughazaleh, Z. Safdar, Houston, TX, p.A3628


P975 Successful Patent Foramen Ovale Closure in a Patient with Pulmonary Arterial Hypertension of Sickle Cell Disease/C. Cramer-Bour, E.S. Klings, Boston, MA, p.A3631

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

P977 A Case of Persistent Left Superior Vena Cava/F. Ogundipe, A. Thomas, Washington, DC, p.A3633

P978 A Young Woman with Chronic Dyspnea After Deep Venous Thrombus Without Pulmonary Embolus/J.T. Powner, V.G. Valentine, Birmingham, AL, p.A3634


P980 A Case Report of Pulmonary Tumor Emboli Due to an Undifferentiated Primary Tumor/J. Kornfield, M. Miller, A.K. Brady, Portland, OR, p.A3636

P981 Is There a Paved Path Between the Lungs and Back Bone?/R. Mandru, H. Grewal, I.G. Amzuta, C. Martinez-Balzano, Syracuse, NY, p.A3637

P982 Living in the Clouds: A Rare Cause of Pulmonary Hypertension/A. DeMaio, K. Hena, New York, NY, p.A3638


Facilitator: R.L. Benza, MD, Pittsburgh, PA


Facilitator: J.A. Mazurek, MD, Philadelphia, PA


P993 Screening for Pulmonary Arteriovenous Malformation (PAVM) in Hereditary Hemorrhagic Telangiectasia: Clinical Significance of Pulmonary Micronodules and/or Positive TTCE Without PAVM/V. Margelidon-Cozzolino, C. Khouatra, D. Gamondes, K. Ahmad, J. Traclet, S. Dupuis-Girod, V. Cottin, Lyon (France), p.A3648


CLINICAL

THEMATIC POSTER SESSION

B55 USE YOUR ILLUSION I: CLINICAL RESEARCH IN 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.
**BIOMECHANICS OF PAH**

**THEMATIC POSTER SESSION**

**B56 LET'S GET PHYSICAL: EXERCISE AND BIOMECHANICS OF PAH**

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

**Facilitators:** N.C. Chesler, PhD, Madison, WI  
R.R. Vanderpool, BS, MS, PhD, Tucson, AZ

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**P1007**  
Sex-Specific Residual Pulmonary Vasodilative Reserve as Predictors in Patients with Idiopathic 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

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**P1000**  
Changes in Pulmonary Hemodynamics During Right Heart Catheterization in Pulmonary Hypertension  

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**P1004**  
Prognostic Value of the Six-Minute Walk Test in Young Patients with Pulmonary Arterial Hypertension  
S.J. Halliday, A. Hemnes, Nashville, TN, p.A3659

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**P1005**  
Transcultural Adaptation in a Colombian Population of the Cambridge Pulmonary Hypertension Outcome Review (CAMPHOR) in Patients with Pulmonary Hypertension  
M. Simon, MD, Pittsburgh, PA, p.A3660

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**P1006**  
Pulmonary Veno-occlusive Disease in Elderly Patients with Hypoxemia Out of Proportion to Underlying Pulmonary or Cardiovascular Disease: An Under-Recognized Entity?  

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**P1007**  
Sex-Specific Residual Pulmonary Vasodilative Reserve as Predictors in Patients with Idiopathic 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

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**P1000**  
Changes in Pulmonary Hemodynamics During Right Heart Catheterization in Pulmonary Hypertension  

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**P1004**  
Prognostic Value of the Six-Minute Walk Test in Young Patients with Pulmonary Arterial Hypertension  
S.J. Halliday, A. Hemnes, Nashville, TN, p.A3659

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**P1005**  
Transcultural Adaptation in a Colombian Population of the Cambridge Pulmonary Hypertension Outcome Review (CAMPHOR) in Patients with Pulmonary Hypertension  
M. Simon, MD, Pittsburgh, PA, p.A3660

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**P1006**  
Pulmonary Veno-occlusive Disease in Elderly Patients with Hypoxemia Out of Proportion to Underlying Pulmonary or Cardiovascular Disease: An Under-Recognized Entity?  
P1037 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


Facilitator: L.K. Sharma, PhD, New Haven, CT


P1056 Retrospective Review of Video Fluoroscopic Swallowing Studies and Pulmonary Outcomes at Thomas Jefferson University Hospital (TJUH)/P. Mahesh, B. Sundaram, G.C. Kane, Philadelphia, PA, p.A3697


P1058 Frequency and Antimicrobial Susceptibility of Bacteria Isolated from Patients Hospitalized with Pneumonia in United States Medical Centers (2017-2018)/H. Sader, M. Castanheira, R.E. Mendes, C.G. Carvalhaes, R.K. Flamm, North Liberty, IA, p.A3699


P1061 Association of Procalcitonin Levels and Risk of Mortality in Adults with Hospital Acquired Pneumonia and High Risk Community Acquired Pneumonia/D.J.O. Rillera, I. Manuel, Las Piñas City, Philippines, p.A3702

P1062 Clinical Features and Outcomes of Idiopathic Pulmonary Fibrosis Patients Hospitalized for Pneumonia/T. Wada, Kobe, Japan, p.A3703


P1067 7-Day and 30-Day Readmission Rate for Patients Discharged with Pneumonia: Analysis of 757,014 Admissions/A.S. Bath, A. Jaswa, J. Kaur, Kalamazoo, MI, p.A3707

P1068 Trends and 30-Day Readmission Rate for Patients Discharged with Pneumonia: Analysis of 2,439,605 Admissions/A.S. Bath, J. Kaur, M. Farishta, V. Deepak, Kalamazoo, MI, p.A3708


B58 CLINICAL STUDIES IN LUNG INFECTIONS AND PNEUMONIA: TREATMENT AND OUTCOMES

9:15 a.m. - 4:15 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: N.C. Dean, MD, Murray, UT


P1057 Retrospective Review of Video Fluoroscopic Swallowing Studies and Pulmonary Outcomes at Thomas Jefferson University Hospital (TJUH)/P. Mahesh, B. Sundaram, G.C. Kane, Philadelphia, PA, p.A3697


P1059 Frequency and Antimicrobial Susceptibility of Bacteria Isolated from Patients Hospitalized with Pneumonia in United States Medical Centers (2017-2018)/H. Sader, M. Castanheira, R.E. Mendes, C.G. Carvalhaes, R.K. Flamm, North Liberty, IA, p.A3699


B59 BACTERIAL INFECTION CASE REPORTS

9:15 a.m. - 4:15 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.
P1089 Acute Right Mainstem Airway Occlusion Post Pulmonary

P1088 A Rare Cause of Empyema: Streptococcus Gordonii/Stenotrophomonas Maltophilia Pneumonia: A Life Threatening

Facilitator: C. Feldman, MD, PhD, DSc, ATSF, Johannesburg, South Africa

P1073 Empyema Necessitans from Streptococcus Constellatus/L. Parra-Rodriguez, R. Nasim, A. Mohammed, D. Singh, S.B. Smith, Chicago, IL, p.A3712

P1074 Raoultella Planticola: A Rare but Growing Cause of Nosocomial Infection/C. Morris, L. Sorrell, A. Mora, Dallas, TX, p.A3713


P1076 Pulmonary Infiltrates Clues to the Forgotten Disease/A. Mohammed, Z. Tims-Cook, Atlanta, GA, p.A3715


P1079 Unilateral Propptosis in Lemierre’s Syndrome Variant/M.F. Shen, H.J. Chen, Taichung, Taiwan, p.A3718


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. Biberston, J.S. Parrish, San Diego, CA, p.A3724

P1086 The First Case of Multiple Lung Abscesses and Pharyngeal Abscess Due to Granulicatella Adiacens/H. Nogami, G. Nakagawa, H. Fujikawa, F. Ueda, M. Takahashi, Japan, p.A3725

P1087 Stenotrophomonas Maltophilia Pneumonia: A Life Threatening Entity in the Setting of Hematologic Malignancy/U. P. Reichenbach, J. Thomsen, D. Frosch, A. Heit, K. Schmid, H. Schmitt, Germany, p.A3726

P1088 A Rare Cause of Empyema: Streptococcus Gordonii/A.S. Bath, J. Kaur, Kalamazoo, MI, p.A3727


CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

B60 PULMONARY REHABILITATION: GENERAL

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

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. Evans, MBChB, MRCP(UK), PhD, Leicestershire, United Kingdom S. Teramoto, MD, PhD, Tatamachi Hachioji-shi, Japan

P208 The Comparison of Martial Art-Based Standard Pulmonary Rehabilitation Program on COPD/D. Feng, G. Li, J. Guo, Y. Bian, Z. Jin, X. Kang, J. Song, Beijing, China, p.A3729


P210 Impact of Patient-Perceived Barriers to Exercise Therapy on Referral to Exercise Rehabilitation in Pulmonary Hypertension Patients/T. Cascino, C. Ashur, C. Richardson, E. Jackson, V.V. McLaughlin, Ann Arbor, MI, p.A3731


P212 Video Testimonials May Facilitate Understanding of and Referral to Pulmonary Rehabilitation in People with Chronic Respiratory Disease/N.S. Cox, C.F. McDonald, V. Jackson, C. Kein, J. Bondarenko, B.R. Miller, N.L. Lannin, A.E. Holland, Melbourne, Australia, p.A3733

P213 Exercise Effects on Salivary IgA During Pulmonary Rehabilitation in Patients with COPD/N.S. Cox, C.F. McDonald, M. Gleeson, L.G. Wood, S. Hall, J. Bondarenko, C.J. Hill, A.E. Holland, Melbourne, Australia, p.A3734


P215 Life in the Big City/S. Roark, Denver, CO, p.A3736

P577 RNA-sequencing analysis of human plasma-derived TNF-


P579 The impact of corticosteroids on chronic obstructive pulmonary disease lung macrophage phenotype and function. A.J. Higham, A. Baba Dikwa, T. Scott, J. Li, S. Lea, D. Singh, Manchester, United Kingdom, p.A3788


B62 ASTHMA MECHANISMS
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: G.L. Chupp, MD, New Haven, CT


P765 Exposure to ambient particles amplifies the eotaxin-1 release from alternatively activated macrophages in allergen-sensitized mice. M. Huang, J. Zhang, Z. Chen, Nanjing, China, p.A3797


P769 Glucocorticoids repress genes induced by TNF-alpha and IL-13 by reducing chromatin accessibility at enhancers. A. Gupta, V. Kadiyala, T. Song, F.S. Gally, S. Sasse, A.N. Gerber, Aurora, CO, p.A3801

P770 Systemic immunometabolism in asthmatics and biomass or tobacco smoke exposed chronic obstructive pulmonary disease (COPD) patients. A. Agarwal, S. Kadam, A. Brahme, M. Agrawal, K. Apte, G. Narke, S. Madas, S.S. Salvi, Pune, India, p.A3802


P773 Genetic regulation of airway remodeling following chronic allergen exposure in mice. L. Donoghue, M. Patterson, K. McFadden, J. Thomas, A. Tovar, S.N. Kelada, Chapel Hill, NC, p.A3805


**P776** IL-5R Expression on Airway Neutrophils in Treatment-Refractory Asthma/C. Welch, M.G. Lawrence, M.S. Spano, J.W. Steinke, T. Bracicale, W.G. Teague, L. Borish, Charlottesville, VA, p.A3808

**Facilitator:** K. Cahill, MD, Nashville, TN


**P780** Differential Tumor Necrosis Factor Ligand and Receptor Expression on Monocyte Subsets in Blood and Sputum/N.M. Niessen, J.L. Simpson, K.J. Baines, P.G. Gibson, M. Fricker, Newcastle, Australia, p.A3812

**P781** YKL-40 Facilitates Airway Remodeling in Asthma Via Activating FAK and MAPK Signaling Pathway/H. Tang, Y. Sun, B. Liu, Shanghai, China, p.A3813

**P782** Over Expression of Cathepsin B and Its Induction by Ethanol in Asthmatic Vs Non-Asthmatic Bronchial Epithelial Cells and Related AMPKα and ER Stress Signaling/L. Kaphalia, M.P. Srinivasan, B.S. Kaphalia, W.J. Calhoun, Galveston, TX, p.A3814


**P785** Sphingolipid Deficiency Alters Rhinovirus Infection of Airway Epithelial Cells and Macrophages/E. Wasserman, S. Worgall, New York, NY, p.A3817

**Facilitator:** C.J. Britto-Leon, MD, ATSF, New Haven, CT


**P790** Primary Airway Smooth Muscle Cells from Subjects with and Without Asthma Reveal Distinct Differences in Contractile, Epigenetic, and Transcriptional Responses to the Asthma-Promoting Cytokines IL-13 + IL-17E/Thompson, Q. Dang, B. Mitchell-Handley, K. Rajendran, S. Ram-Mohan, J. Solway, R. Krishnan, C. Ober, Chicago, IL, p.A3822

**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

**P795** Treatment with Liponucleotides Attenuates DRA-Induced Asthma in Mice/C. Davis, A.M. Nelson, L.M. Joseph, L.E. Rosas, Columbus, OH, p.A3827


**P797** Up-Regulation of Paraoxonase 2 in Human Bronchial Epithelial Cells/D.E. Winnica, S. Sharma, L.G. Que, S. Ye, V.L. Smith, M.H. Cruse, N. Perez, F. Holguin, Aurora, CO, p.A3829

B63 ANIMAL MODELS OF COPD
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:  D.A. Deshpande, PhD, Philadelphia, PA


P586 The Role of Myeloid Cell Type-Specific Inducible Nitric Oxide Synthase in Chronic Obstructive Pulmonary Disease/M. Greidic, S. Kraut, C.Y. Wu, S. Hadzic, O. Pak, M. Brosen, W. Seeger, M. Seinetz, N. Weissmann, Giessen, Germany, p.A3837

P587 Roles of Bronchoconstriction in Progression of Emphysema in Murine Models/Y. Harakawa, A. Sato, A. Watanabe, T. Mizutani, K. Uemasu, N. Tanabe, S. Sato, T. Hirai, Kyoto, Japan, p.A3838


P591 Inhalational Delivery of Induced Pluripotent Stem Cell (iPSC) Secretome on Canine Post-Pneumonectomy Compensation/D.M. Dane, K. Cao, K.H. Kernstine, A. Gazdhar, T.K. Geiser, C.C. Hsia, Dallas, TX, p.A3842

P592 In Search of Alpha-Klotho Protein Expression in the Lung/K. Cao, Z. Zheng, P. Johanne, O. Moe, C.C. Hsia, Dallas, TX, p.A3843


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. Inui, M. Karayama, K. Mori, H. Hozumi, Y. Suzuki, K. Furuhashi, 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/S. Satia, R.P. Cusack, M. Matsuoka, X. Yanquing, 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. Mesiha, K. Nangrani, A. Patel, M. Alipour, V. Vasudevan, Brooklyn, NY, p.A3861


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/I.S. Sharma, T. Goodin, A. Ozol-Godfrey, S. Sanjar, Marlborough, MA, p.A3871

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

P623  The Effect of Baseline Rescue Medication Use on Lung Function and Patient-Reported Outcomes in Patients with COPD Treated with Nebulized Glycopyrrolate in the GOLDEN 3 and 4 Studies/J.F. Donohue, A. Ozol-Godfrey, T. Goodin, S. Sanjar, Chapel Hill, NC, p.A3873

P624  Improvement in Lung Function and Patient-Reported Outcomes in Patients with Chronic Obstructive Pulmonary Disease with Comorbid Anxiety and Depression Receiving Nebulized Glycopyrrolate in the GOLDEN 3 and 4 Studies/N.A. Hanania, A. Ozol-Godfrey, M. Tocco, T. Goodin, S. Sanjar, Houston, TX, p.A3874

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. Whitcher, 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


**CLINICAL THEMATIC POSTER SESSION**

**B67 CASE REPORTS: DIAGNOSTIC AND MANAGEMENT DILEMMAS**

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:** C.M. Kinsey, MD, MPH, South Burlington, VT

- **P1244** Impact of Adaptive Servo-Ventilation on Cardiac Stress Biomarkers and Renal Function in Patients with Acutely Decompensated Heart Failure/M. Light, N.J. Gardetto, R.L. Owens, A. Malhotra, L.B. Daniels, M. Hepokoski, La Jolla, CA, p.A3909
- **P1247** Comparison of Continuous Positive Airway Pressure Compliance Using a Nasal vs. Oroonasal Mask in Veterans with Obstructive Sleep Apnea/P.T. Taweesedt, N. Nguewoun Herve, J.W. Kim, G.J. Schilero, Bronx, NY, p.A3912
- **P1248** Bioburden Proliferation Characteristics and Impedance of a Heat and Moisture Exchanger/A. Hansford, C. Finch, G. Richards, Sydney, Australia, p.A3913
- **P1249** Individualized Respiratory Physiology-Oriented High-Intensity Non-Invasive Positive Pressure Ventilation in Stable Hypercapnic COPD Patients/L. Guan, L. Zhou, R. Chen, Guangzhou, China, p.A3914
- **P47** Occupational Asbestos Exposure and Malignant Pleural Mesothelioma, Biphasic Type: A Challenging Histopathological and Immunohistochemical Diagnosis/C. Salazar, N. Kanter, A. Abboud, Z.M. Huyn, Chicago, IL, p.A3915
- **P48** Closed Pleural Biopsy: Still a Valuable Tool/K. Gada, P. Desai, A. Chu, G. Trikh, Syracuse, NY, p.A3916
- **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. Valentin, 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
- **P55** Solitary Neuroendocrine Breast Mass: Primary Mammary Carcinoma or Metastatic Disease?V. Pamudurthy, R.Z. Abraham, B. Alam, T. Betlej, M. Sipahi, Kankakee, IL, p.A3923

**Facilitator:** K.J. Diab, MD, ATSF, Indianapolis, IN

- **P58** Atypical Pulmonary Carcinoid and Hyponatremia Should Prompt an Extensive Metastatic Workup/A. Gopalakrishnan, T. Olanipekun, 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
- **P61** Multi-Modal Treatment Leading to Prolonged Survival in a Patient with Pulmonary Artery Intimal Sarcoma/A.J. Loutoo, D. Gomez, K. Gunasekar, A. Arora, S. Shetty, D. Rudolph, Bridgeport, CT, p.A3929
P64 Incidental Non-Cardiac Abnormalities Found on Cardiac CT for Coronary Calcium Scoring/J.F. Turner, J. Peeke, S. Baveja, J. Crook, T.M. Dudney, Knoxville, TN, p.A3932


P71 Elder Patients with Stage IV Lung Adenocarcinoma Harboring 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, J.-Y. Hung, M.-H. Lee, Y.-M. Tsai, M.-S. Huang, Y.W. Chung, Kaohsiung City, Taiwan, p.A3938


P74 Altered Exosomal Transcriptome Profile of Lung Cancer with Brain Metastasis/J. Zhang, Z. Wu, H. Pan, Y. Zhou, L. Chen, S. Tan, S. Li, Guangzhou, China, p.A3941

P75 Lymph Nodes in Lung Cancer Patients with Granulomatous Disease: To Be or Not To Be Metastasis/S. Baveja, E. Heidel, J.F. Turner, L. Nodit, Knoxville, TN, p.A3942


Facilitator: S.J. Moghaddam, MD, Houston, TX


P82 Enhanced Tumor Regression and Immune Cell Infiltration by Inhaled Submicron Particle Paclitaxel in an Orthotopic Athymic Nude Rat Model of Non-Small Cell Lung Cancer (NSCLC)/W. Johnston, J. Verco, M. Frost, P. Kuehl, M. Baltezor, G. diZerega, San Luis Obispo, CA, p.A3949

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/L. Lisha, X. Li, X. Hu, Q. Gu, P. Deng, W. Tang, S. Deng, C. Hu, J. Feng, Changsha, China, p.A3951


P89 Nanotechnology Based Repositioning of an Anti-Viral Drug for Non-Small Cell Lung Cancer (NSCLC)/V. Parvathaneni, 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 ONCLOGY: 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: 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.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


BEHAVIORAL

THEMATIC POSTER SESSION


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. Stalter, 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

**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

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WS4  PROMOTING WELLNESS IN HEALTH CARE TEAMS: A PRACTICAL APPROACH

**Target Audience**
Healthcare professionals in all disciplines

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

- identify strategies to promote wellness in healthcare teams;
- implement evidence-based interventions to improve team function and patient outcomes;
- foster a culture of resilience and well-being among healthcare providers.

Wellness in healthcare teams is essential for improving patient outcomes, reducing burnout, and enhancing job satisfaction. This workshop aims to provide practical tools and strategies for promoting wellness in healthcare teams.

**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
**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

L13 UPDATE ON CLASSIFICATION OF CHEST RADIOGRAPHS AND THE B READER PROGRAM

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

L14 ASTHMA PREDICTION: NEW FINDINGS FROM COHORTS

12:15 p.m. - 1:15 p.m. Ballroom D Two (Level 3)

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

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:
• 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

DIVISION OF LUNG DISEASES, NHLBI/NIH

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:
• 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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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:

• 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

ME2 DESIGNING AN EFFECTIVE SIMULATION CURRICULUM

CME Credits Available: 1

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
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. 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
CC3  PULMONARY CLINICAL CORE CURRICULUM II.

2:15 p.m. - 4:15 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:
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

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

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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.  
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

B82  PRO/CON: THE CONUNDRUM OF MANAGING ACUTE PULMONARY EMBOLISM

Assemblies on Clinical Problems; Critical Care; Pulmonary Circulation  
2:15 p.m. - 4:15 p.m.  
Ballroom C One-Two (Level 2)

Target Audience
Pulmonary critical care physicians, cardiologists, interventional radiologists, early career professionals, hospital administrators, nurses, physician extenders

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

• compare, contrast and analyze various evidence based treatment approaches for PE management and have insight into multi disciplinary approach and personalized PE care;
• identify gaps in current literature, quality improvement and research initiatives to improve, guide and streamline individual practices;
• learn new findings about topic areas not adequately addressed in current ACCP, AHA and ESC guidelines and can begin integrating this evidence into the management of their PE patients.

This scientific symposium will focus on controversial topics in management of acute pulmonary embolism. It will compare and contrast where ACCP, AHA and ESC guidelines differ in their management of acute PE. It will provide audience how patient with acute PE is approached differently by clinicians with from different medical specialty. The session will conclude with a panel discussion focused on the future direction of the comprehensive multidisciplinary PE management. We will also use ARS throughout session.

Chairing: P. Rali, MD, Philadelphia, PA  
V.F. Tapson, MD, West Hollywood, CA  
R.N. Channick, MD, Boston, MA

2:15  PRO: Catheter Directed Thrombolysis Should Be Standard of Care for Submassive PE  
G. Piazza, MD, Boston, MA

2:23  CON: Catheter Directed Thrombolysis Should Not Be standard of Care for Submassive PE  
V.F. Tapson, MD, West Hollywood, CA

2:31  Rebuttal: Catheter Directed Thrombolysis Should Be Standard of Care for Submassive PE  
G. Piazza, MD, Boston, MA

2:35  Rebuttal: Catheter Directed Thrombolysis Should Not Be Standard of Care for Submassive PE  
V.F. Tapson, MD, West Hollywood, CA

2:39  Question and Answer Session: Catheter Directed Thrombolysis for Submassive PE  
Improves Outcome  
D. Jimenez, MD, PhD, Madrid, Spain

2:45  PRO: Systemic Thrombolysis for Submassive PE

ATS 2019 • Dallas, TX
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.

Chairing:
K.A. Provost, DO, PhD, Buffalo, NY
N. Simakajornboon, MD, Cincinnati, OH
M. Cao, DO, Redwood City, CA
H. Sawnani, MD, Cincinnati, OH

2:15 Neuromuscular Respiratory Failure Syndromes: Recognition is Half the Battle
H. Sawnani, 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

**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. Vladr, 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
Cilia Dysfunction in Patients with Congenital Heart Disease
C. Lo, PhD, Pittsburgh, PA

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

B87 CROSSTALK BETWEEN AIRWAY EPITHELIUM AND TYPE 2 IMMUNITY IN ASTHMA

Assembly on Allergy, Immunology and Inflammation
2:15 p.m. - 4:15 p.m. KBHCCD
Ballroom D One (Level 3)

Target Audience
Pulmonary physicians and scientists

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

• define the pathways whereby the airway epithelium senses and responds to aeroallergens in asthma;
• define the mechanisms driving pathologic type 2 immunity in asthma;
• identify areas of uncertainty in type 2 high asthma biology.

This Scientific Symposium will cover the biologic mechanisms regulating type 2 inflammation in asthma. Experts in the field will present our current state of knowledge on type 2 high asthma, focusing on pathologic crosstalk between the airway epithelium and the immune system. The objective of this symposium is to define the outstanding questions in type 2 high asthma and propose potential new therapeutic approaches.

Chairing:
R.A. Rahimi, MD, PhD, Boston, MA
D.C. Newcomb, PhD, Nashville, TN
J.V. Fahy, MD, San Francisco, CA

2:15 Regulation of Allergic Immunity in Early Life
C. Lloyd, PhD, London, United Kingdom

2:35 Sex Steroids in the Regulation of Allergic Asthma
D.C. Newcomb, PhD, Nashville, TN

2:55 Spontaneous Protein Crystallization in Asthma as a New Drug Target
B. Lambrecht, MD, PhD, Ghent, Belgium

3:15 Focal Type 2 Airway Niches in Asthma
J.V. Fahy, MD, San Francisco, CA

3:35 Trafficking and Function of Lung-Resident and Circulating Memory Th2 Cells in Allergic Asthma
R.A. Rahimi, MD, PhD, Boston, MA

3:55 Lung Dendritic Cells and the Resident Memory Response in Allergic Asthma
A.I. Sperling, PhD, ATSF, Chicago, IL

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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

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
**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

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**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
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

Oral Presentations


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/B. D. Horne, M. J. Hegewald, S. Rea, T. L. Bair, D. P. Blagev, Salt Lake City, UT, p.A3998


B95 CELLULAR AND MOLECULAR LANDSCAPE OF THE LUNG


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


### BASIC • TRANSLATIONAL

**MINI SYMPOSIUM**

**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**  
2:15  
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. Delulis, 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  
3:00  
3:15  
3:30  
**Pluripotent Stem Cells to Unravel the Role of Alveolar Type 2 Epithelial Cells in the Pathogenesis of Pulmonary Fibrosis**/K.-D. Alysandratos, J.-C. Jean, S.J. Russo, S. Mulugeta, K. Wynne, S. Phanse, A. Emili, M.F. Beers, D.N. Kotton, Boston, MA, p.A4022  
3:45  
4:00  

### BASIC • BEHAVIORAL

**MINI SYMPOSIUM**

**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**  
2:15  
**Phenotypic Predictors of Long-Term Upper Airway Neurostimulation Responsiveness in the ADHERE International Cohort**/R. Mehra, K. Doghramji, R.J. Schwab, P.J. Strollo, K.P. Strollo, Cleveland, OH, p.A4025  
2:30  
**Effects of Natural Rostral Fluid Redistributions Induced by Gravity on the Severity of Obstructive Sleep Apnea**/S. Wang, H. Zhang, X. Huang, C. Wang, H. Lin, H. Xu, C. Ji, Beijing, China, p.A4026  
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, Wilrijk (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  
3:15  
3:30  
3:45  

### BEHAVIORAL

**MINI SYMPOSIUM**

**B98** TARGETING THE IMMUNE SYSTEM IN LUNG CANCER PROGRESSION  
2:15 p.m. - 4:15 p.m.  
Ballroom A One (Level 2)  

**Chairing:**  
A.M. Houghton, MD, Seattle, WA  
V. Keshamouni, PhD, Ann Arbor, MI  

**Oral Presentations**  
2:15  
**Phenotypic Predictors of Long-Term Upper Airway Neurostimulation Responsiveness in the ADHERE International Cohort**/R. Mehra, K. Doghramji, R.J. Schwab, P.J. Strollo, K.P. Strollo, Cleveland, OH, p.A4025  
2:30  
**Effects of Natural Rostral Fluid Redistributions Induced by Gravity on the Severity of Obstructive Sleep Apnea**/S. Wang, H. Zhang, X. Huang, C. Wang, H. Lin, H. Xu, C. Ji, Beijing, China, p.A4026  
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, Wilrijk (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  
3:15  
3:30  
3:45  
B101 ADVANCES IN COPD PATHOGENESIS

**Featured Speaker**

**2:15** Featured Speaker/S.M. Dubinett, Los Angeles, CA

**Oral Presentations**


**3:00** Intratumoral CCL21-Gene Modified Dendritic Cells (CCL21-DC) Combined with Checkpoint Blockade in Murine Models of Non-Small Cell Lung Cancer (NSCLC) with Varying Mutational Load/R. Salehi-Rad, R. Li, B. Liu, R. Lim, L. Tran, S. Ong, Z.L. Huang, M. Paul, K. Krysan, D. Shackelford, S.M. Dubinett, Los Angeles, CA, p.A4034


**3:30** Use of SPD-CD40L to Recruit Immune Cells to the Tumor Microenvironment/G.E. Holt, G.W. Stone, Miami, FL, p.A4036


**Featured Speaker**

**2:15** Featured Speaker/S.M. Dubinett, Los Angeles, CA

**Oral Presentations**


**3:00** Intratumoral CCL21-Gene Modified Dendritic Cells (CCL21-DC) Combined with Checkpoint Blockade in Murine Models of Non-Small Cell Lung Cancer (NSCLC) with Varying Mutational Load/R. Salehi-Rad, R. Li, B. Liu, R. Lim, L. Tran, S. Ong, Z.L. Huang, M. Paul, K. Krysan, D. Shackelford, S.M. Dubinett, Los Angeles, CA, p.A4034


**3:30** Use of SPD-CD40L to Recruit Immune Cells to the Tumor Microenvironment/G.E. Holt, G.W. Stone, Miami, FL, p.A4036


**BASIC • TRANSLATIONAL**

**RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION**

**B101 ADVANCES IN COPD PATHOGENESIS**

**2:15 p.m. - 4:15 p.m.**

**KBHCCD**

**Room C141/C143/C149 (Level 1)**

**Abstract Summaries**

**2:15-2:45**

**Viewing/Discussion**

**2:45-4:15**

**Chairing:** S. Christenson, MD, MS, San Francisco, CA

I.D. Pavord, MD, Oxford, United Kingdom

M.H. Cho, MPH, MD, Boston, MA

**Featured Speaker**

**2:15** Featured Speaker/S.M. Dubinett, Los Angeles, CA

**Oral Presentations**


**3:00** Intratumoral CCL21-Gene Modified Dendritic Cells (CCL21-DC) Combined with Checkpoint Blockade in Murine Models of Non-Small Cell Lung Cancer (NSCLC) with Varying Mutational Load/R. Salehi-Rad, R. Li, B. Liu, R. Lim, L. Tran, S. Ong, Z.L. Huang, M. Paul, K. Krysan, D. Shackelford, S.M. Dubinett, Los Angeles, CA, p.A4034


**3:30** Use of SPD-CD40L to Recruit Immune Cells to the Tumor Microenvironment/G.E. Holt, G.W. Stone, Miami, FL, p.A4036


214 Interferon-Inducible Blood Gene Expression Signature in COPD Patients with CT Airway Disease Phenotypes/J.H. Yun, S. Lee, R. Chase, M.M. Parker, A. Saferali, M. Seo, P. Castaldi, C.P. Hersh, Boston, MA, p.A4052


221 RNA-seq Analysis Demonstrates the Role of 5’ and 3’ UTR Splicing in Response to Cigarette Smoke Exposure/P. Castaldi, S. Lee, M.M. Parker, R. Chase, C.P. Hersh, Z. Xu, Boston, MA, p.A4059

Chairing: M. Valero, PhD, MPH, San Antonio, TX
N. Thakur, MD, MPH, San Antonio, 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. Atewugu, C. Oncken, E.M. Mortensen, Farmington, CT, p.A4073
B103 ILD: THERAPY

2:15 p.m. - 4:15 p.m.

Room C140/C142 (Level 1)

Abstract Summaries
2:15-2:45

Viewing/Discussion
2:45-4:15

Chairing:
J. Oldham, MD, 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


108 Direct 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. Keindler, Y. Chung, J. Tkacz, Providence, RI, p.A4078


114 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


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


907 The Use of Melatonin to Prevent Delirium in the Critically Ill Elderly/M. Forte, J. Gordon, A. Patel, M. Harris, Pueblo, CO, p.A4105


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


911 The Efficacy and Safety of Leg Cycle Ergometry in Critically Ill Adults: A Systematic Review and Meta-Analysis/A. Takaoka, R. Utgjikar, 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. Bakhru, Winston-Salem, NC, p.A4110

913 Understanding Variability in Mobility Practices of Critically Ill Patients/A. Takaoka, R. Utgjikar, B. Rochwerg, D.J. Cook, M. Kho, Hamilton, Canada, p.A4110


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

MONDAY • MAY 20


919 Effect of Neuromuscular Electrostimulation in the Development of Acquired Weakness in the Intensive Care Unit (ICU-AW) in Adult Patients with Severe Sepsis and Septic Shock in a University Hospital: Results of a Randomized Pilot Study/D. Arellano, S. Aguirre, D. Orellana, C. Contreras, Santiago of Chile, Chile, p.A4117

920 Conditions Associated with Intensive Care Unit Acquired Weakness/Z.M. Htun, M.H. Gul, P. Jain, Chicago, IL, p.A4118

921 Physical Activity Level Ideal for Independent Functional Status at Discharge in Intensive Care Patients/C. Fu, Sao Paulo, Brazil, p.A4119

922 Comparison of the Confusion Assessment Method for the ICU (CAM-ICU) and the Intensive Care Delirium Screening Checklist (ICDSC) for Delirium Detection in Mechanically Ventilated ICU Patients/K. Linstrum, E. Nuzzo, B. Curtis, S. Checklist (ICDSC) for Delirium Detection in Mechanically Ventilated ICU Patients at Discharge in Intensive Care Patients/D. Arellano, S. Aguirre, D. Orellana, C. Contreras, Santiago of Chile, Chile, p.A4117

923 Does Dementia Impact the Outcome of Mechanical Ventilation?/J. Krinsley, M.A. Bernstein, Stamford, CT, p.A7377

RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

B105 CRITICAL CARE: COUNTERPARTS - NON-PULMONARY CRITICAL CARE AND MULTI-ORGAN FAILURE

2:15 p.m. - 4:15 p.m. OMNI DALLAS DOWNTOWN

Abstract Summaries 2:15-2:45
Viewing/Discussion 2:45-4:15

Dallas Ballroom E-F (Level 3)

Chairing: M.A. Tidswell, MD, Springfield, MA
L. Munshi, MD, MSc, Toronto, Canada


803 Dexmedetomidine-Induced Fevers: Defining Features of Temperature Curves and Clinical Consequences of Delayed Recognition/P. Valda Toro, P. Kahn, R. Luthra, Y. Kunitomo, J. Huston, S. Kalra, S. Gautam, C. DeIa Cruz, New Haven, CT, p.A4123


808 Outcomes Associated with Implementing the Respiratory Knowledge Portal (RKP) into Daily ICU Rounds: A Retrospective Observational Trial/M. Pedro, S. Cataldo, B.C. Harvey, Mettawa, IL, p.A4128


810 Zinc Deficiency Worsens the Long-Term Outcome and Exacerbates Inflammation in a Murine Model of Influenza-MRSA Superinfection/A.M. Kaynar, A. Andreas, A. Maloy, W. Austin, B.R. Pitt, R. Gopal, J.F. Alcorn, Pittsburgh, PA, p.A4130


812 Mixed Venous to Arterial Carbon Dioxide Gap Is Not a Useful Test to Identify Low Cardiac Output: A Retrospective Analysis of 1412 Patients with Pulmonary Artery Catheters in a Cardiothoracic Intensive Care Unit/A. Rosenberg, A. Ragavan, T.C. Aw, E. Gallatiou, London, United Kingdom, p.A4132


815 Use of Opioids in the Medical Intensive Care Unit Is Not Associated with Outpatient Opiate Use/A. Chen, B. Pang, A. Chowdhury, A. Duggal, Cleveland, OH, p.A4135


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. Rosentsveg, S.Y. Chung, N. Schwartz, S.J. Koenig, G.Z. Zaidi, Manhasset, NY, p.A4140


831 The Timing of Family Meetings in the Medical Intensive Care Unit/G. Picciotto, L. Parham III, M. Huber, M. Siegler, W. Parker, Chicago, IL, p.A4154

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


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. Malle, K.A. Bradley, C.L. Hough, S. Lokhandwala, E.J. Hawkins, Seattle, WA, p.A4162


Describing Pre-Family Meeting Huddles in the Intensive Care Unit, an Exploratory Qualitative Research Project/R. Nunez Lopez, E. Drammeh, M. Leaf, A. O’donnell, A. Buffo, T. Campbell, W.J. Ehlenbach, Madison, WI, p.A4164


Feasibility, Acceptability, and Preliminary Efficacy of VidaTalk™ Communication Application in Family Caregivers of Mechanically Ventilated ICU Patients/J.W. Shin, M.B. Happ, A. Tan, J. Tate, Columbus, OH, p.A7379

B107 EFFECTS OF E-CIGARETTES AND THEIR COMPONENTS ON RESPIRATORY DYSFUNCTION, INFLAMMATION, AND REPAIR

2:15 p.m. - 4:15 p.m. KBHCCD

Ballroom D Four (Level 3)

Abstract Summaries
2:15-2:45

Viewing/Discussion
2:45-4:15

Chairs: I. Jaspers, PhD, Chapel Hill, NC

E.R. Neptune, MD, Baltimore, MD

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


E-cig Vapors Cause CFTR Dysfunction and Mucosal Inflammation in Never-Smokers In Vitro and In Vivo/S. Chung, N. Baumlín, J.S. Dennis, P.L. Whitney, C. Aguiar, S. Paredes Aller, E.S. Mendes, A. Schmid, M.D. Kim, M.A. Salathe, Kansas City, KS, p.A4174


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

711 E-Cigarette Use Protects Against Sterile Inflammation in a Mouse Model of Ventilator-Induced Lung Injury/A. Mosheisky, J. Shin, J. Olay, A. Jahan, C.M. Bojanowski, L.E. Crotty Alexander, L. Jolla, CA, p.A4179


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


716 E-Cigarette Exposed Female Mice Exhibit a Greater Decrement in Exercise Tolerance than Male Mice/S. Vitorino, A. Lucas, T. Taka, L.E. Crotty Alexander, E.C. Breen, La Jolla, CA, p.A4184


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

B108 UNDER PRESSURE: THE ROLE OF CELLULAR STRESS IN PULMONARY VASCULAR REMODELING

2:15 p.m. - 4:15 p.m.  Ballroom D Three (Level 3)

Poster Viewing  2:15-3:00

Discussion  3:00-4:15

Chairs: R. Paulin, PhD, Quebec, Canada
M.R. Mac Lean, PhD, Glasgow, United Kingdom
R. Rafikov, PhD, Tucson, AZ


602 Rapid Redistribution of Oxidative Base Damage in DNA Regulatory Sequences Accompanies Transcriptional Modulation by Hypoxia in the Human Endothelial Cell Genome/G. Daly, C.M. Francis, V.M. Pastukh, D. Absher, R.J. Langley, M.N. Gillespie, Mobile, AL, p.A4191

603 Inducing Oxidative DNA Damage Overload by Inhibiting the 8oxoguanine Hydrolase MTH1 to Kill Pulmonary Artery Smooth Muscle Cells: A New Therapeutic Strategy in Pulmonary Arterial Hypertension/G. Vitry, R. Paradis, V. Nadeau, E. Tremblay, S. Provencher, O. Boucherat, S. Bonnet, R. Paulin, Quebec, Canada, p.A4192

604 Transcriptional and Posttranscriptional Mechanisms Contribute to Hypoxia-Induced PINK1 Loss and Mitophagy Derangements in Proliferating Pulmonary Artery Smooth Muscle Cells/D.E. Green, T. Murphy, C.M. Hart, Atlanta, GA, p.A4193


Purine Nucleoside Phosphorylase Inhibition Attenuates the Metabolic Syndrome and Associated Pulmonary Hypertension and Right Ventricular Dysfunction/S.P. Tofovic, J. Hu, E. Jackson, Pittsburgh, PA, p.A4197

Metabolomic Signatures 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


Inhibition of Monoamine Oxidase-A Reduces Pulmonary Vascular Remodeling in Experimentally Induced Pulmonary Arterial Hypertension/X. Sun, E. Peters, I. Schalij, S. Andersen, D. da Silva Goncalves Bos, A. Vonk Noordegraaf, D. De Man, W. van der Laarse, H.J. Bogaard, Amsterdam, Netherlands, p.A4205


410 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


413 C-Reactive Protein of 15 mg/dl on Admission Is Associated with Prolonged Length of Stay in Patients Hospitalized with Community-Acquired Pneumonia/Y. Genchano, J. Ognibene, W. Southern, S. Arora, Bronx, NY, p.A4221


415 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


421 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

422 The 2017 Epidemic Pulmonary Plague in Madagascar/J. Ratomaharo, R. Andriamihaja, L. Razafindrakoto, R. Rakotoarivelo, M. Randria, Athis-Mons, France, p.A4231


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-1β Response and Host Susceptibility/C.-C. Shu, M.-F. Wu, C.-J. Yu, Taipei, Taiwan, p.A4244

ASSEMBLY MEMBERSHIP MEETINGS

The fourteen Assemblies are the primary groups of the American Thoracic Society. Each Assembly holds an annual Membership Meeting at the International Conference. 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.

ALLERGY, IMMUNOLOGY AND INFLAMMATION
HYATT REGENCY DALLAS
Reunion Ballroom E-F (Lobby Level)
Chairing: Bethany B. Moore, PhD, ATSF, Ann Arbor, MI

CLINICAL PROBLEMS
HYATT REGENCY DALLAS
Landmark Ballroom A (Lobby Level)
Chairing: Meilan K. Han, MD, MS, Ann Arbor, MI

CRITICAL CARE
HYATT REGENCY DALLAS
Marsalis Hall B (Exhibition Level)
Chairing: John Kress, MD, Chicago, IL

ENVIRONMENTAL OCCUPATIONAL AND POPULATION HEALTH
HYATT REGENCY DALLAS
Reunion Ballroom G-H (Lobby Level)
Chairing: Howard M. Kipen, MD, MPH, Piscataway, NJ

NURSING
HYATT REGENCY DALLAS
Reunion Ballroom C (Lobby Level)
Chairing: Linda Chlan, PhD, RN, ATSF, Lakeville, MN

PULMONARY CIRCULATION
HYATT REGENCY DALLAS
Landmark Ballroom D (Lobby Level)
Chairing: Karen A. Fagan, MD, Spanish Fort, AL

PULMONARY INFECTIONS AND TUBERCULOSIS
HYATT REGENCY DALLAS
Reunion Ballroom A-B (Lobby Level)
Chairing: Kristina A. Crothers, MD, Seattle, WA

PULMONARY REHABILITATION
HYATT REGENCY DALLAS
Cumberland E-H (Exhibition Level)
Chairing: Richard Casaburi, MD, Rancho Palos Verdes, CA

RESPIRATORY CELL AND MOLECULAR BIOLOGY
HYATT REGENCY DALLAS
Marsalis Hall A (Exhibition Level)
Chairing: Melanie Koenigshoff, MD, PhD, ATSF, Aurora, CO

RESPIRATORY STRUCTURE AND FUNCTION
HYATT REGENCY DALLAS
Landmark Ballroom C (Lobby Level)
Chairing: Gwen S. Skloot, MD, ATSF, New York, NY

SLEEP AND RESPIRATORY NEUROBIOLOGY
HYATT REGENCY DALLAS
Landmark Ballroom B (Lobby Level)
Chairing: Sanjay R. Patel, MD, Pittsburgh, PA

SLEEP AND RESPIRATORY NEUROBIOLOGY RECEPTION
7:00 p.m.-10:00 p.m.
HYATT REGENCY DALLAS
Cumberland J-L (Exhibition Level)
Pre-registration and an additional fee is required.
Seating is limited.
Member Fellow: $24.00
Member: $44.00
Non-Member Fellow: $44
Non-Member: $54.00

THORACIC ONCOLOGY
HYATT REGENCY DALLAS
Pegasus Ballroom A-B (Lobby Level)
Chairing: M. Patricia Rivera, MD, ATSF, Chapel Hill, NC
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)

FACULTY DEVELOPMENT SEMINAR

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

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

BASIC • CLINICAL • TRANSLATIONAL

KEYNOTE SERIES

CME Credits Available: .75

The Keynote Series focuses on topics thought to be timely and of high relevance to the pulmonary, critical care, and sleep medicine community.

Sessions are presented each morning during the Conference.

Below are the topics for Tuesday, May 21

K5 DEVELOPING THE EVIDENCE FOR VALUE BASED CARE IN PULMONARY MEDICINE
8:00 a.m.-8:45 a.m. KBHCCD
Ballroom C One-Two (Level 2)

Speaker: Robert M. Califf, MD, Durham, NC

K6 ENHANCING DIVERSITY AND INCLUSION IN ACADEMIC MEDICINE
8:00 a.m.-8:45 a.m. KBHCCD
Ballroom C Three-Four (Level 2)

Speaker: David S. Wilkes, MD, Charlottesville, VA
C1 CLINICAL YEAR IN REVIEW

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
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 activating role of cell 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, ATSF, 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, ATSF, 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
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. 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 diagnosis 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 II (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 5 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

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

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.
9:15 A Patient's Perspective
R. Haskin, Houston, TX

9:20 Inflammation in Bronchiectasis
J.D. Chalmers, MD, PhD, Dundee, United Kingdom

9:40 Microbiome and Mycobiome
K.L. Winthrop, MD, MPH, Portland, OR

10:00 Genetics in Bronchiectasis and NTM
K.N. Olivier, MD, MPH, Bethesda, MD

10:20 Phenotyping Bronchiectasis
G. Tino, MD, ATSF, Philadelphia, PA

10:40 Update in the National Bronchiectasis and Research Registry and Strategies for Future Clinical Trials
A.E. O'Donnell, MD, Washington, DC

11:00 Panel Discussion
This session and the International Conference are supported by an educational grant from Insmed Incorporated.

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.

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, MBBS, 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

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.

BEHAVIORAL • CLINICAL

SCIENTIFIC SYMPOSIUM
CME Credits Available: 2
C10 LIFESPAN WEIGHT MANAGEMENT OF SLEEP DISORDERS: REAL, FEASIBLE OR JUST THEORY?

Assembly on Sleep and Respiratory Neurobiology
9:15 a.m. - 11:15 a.m.
KBHCCD Room D221/D225/D226 (Level 2)

Target Audience
Pulmonologists, respiratory therapists, clinical and basic researchers, primary care practitioners, and other health professionals who are interested in treating patients with sleep apnea and obesity

Objectives
At the conclusion of this session, the participant will be able to:
• understand the challenges in pursuing a successful long-term weight management in the pandemic obesity;
• recognize the role of weight management in OSA, from kids to humans;
• understand the potential role of sleep extension on reversing weight gain and metabolic dysfunction in sleep-deprived patients.

This proposal is intending to be a comprehensive major symposium discussing the evidence of lifestyle interventions, anti-obesity drugs and bariatric surgery on obstructive sleep apnea (OSA) and obesity hypoventilation syndrome. Distinct talks will address the evidence in kids, adolescents and adults. Moreover, this session will have the opportunity to discuss recent evidence on the potential role of sleep extension on weight and metabolic outcomes in sleep-deprived patients.

Chairing:
B.A. Edwards, PhD, Melbourne, Australia
L. Kheirandish-Gozal, MD, MSc, ATSF, Columbia, MO
B. Mokhlesi, MD, MSc, Chicago, IL
L.F. Drager, MD, Sao Paulo, Brazil

9:15 Challenges in the Long-Term Weight Management in the Pandemic Obesity: Is There Light at the End of the Tunnel?
J.P. Despres, PhD, Quebec, Canada
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

10:03 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

10:27 Efficacy and Safety of Bariatric Interventions in Adults with OSA and Obesity Hypoventilation Syndrome
S.R. Patel, MD, Pittsburgh, PA

10:51 Sleep Extension: Can We Improve Weight and Metabolic Profile in Sleep-Deprived Patients?
E. Tasali, MD, Chicago, IL

C11 FUTURE DIRECTIONS IN PAH RESEARCH: A PRO/CON DEBATE

Assembly on Pulmonary Circulation
9:15 a.m. - 11:15 a.m.  KBHCCD

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. Spiekerkoetter, 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

A. Hemnes, MD, ATSF, Nashville, TN

H. Olschewski, MD, Graz, Austria

10:45 PRO: Precision Medicine is Needed to Tailor the Correct PAH Therapy for the Correct Patient
J. Leopold, MD, Boston, MA

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.

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.
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. KBHCCD
Room D163/D165/D170/D172 (Level 1)

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


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


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

BEHAVIORAL
MINI SYMPOSIUM

C17 PULMONARY REHABILITATION 2019
9:15 a.m. - 11:15 a.m. KBHCCD

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


BASIC • CLINICAL • TRANSLATIONAL
MINI SYMPOSIUM

C18 RARE LUNG DISEASES
9:15 a.m. - 11:15 a.m. KBHCCD

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
NEW PATHWAYS REGULATING AIRWAY SMOOTH MUSCLE CONTRACTION: POTENTIAL TARGETS FOR ASTHMA THERAPY

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

Chairing: S.V. Naga Prasad, PhD, Cleveland, OH
R.D. Britt, 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. Britt, 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


1014 Metrics of Ethics: How to Measure the Work and Build Medical Ethics Consultative Expertise to Support the ICU and Hospital/ M.H. Leong, 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


CLINICAL
POSTER DISCUSSION SESSION

C22 ILD: DIAGNOSIS

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

Room C140/C142 (Level 1)

Poster Viewing
9:15-10:00

Discussion
10:00-11:15

Chairing: I. Glaspole, MBBS, PhD, Melbourne, Australia
A.O. Adegunsoye, MD, Chicago, IL
J. Morisset, MD, Montreal, Canada

Identification of Clinical Endotypes in Lymphangioleiomyomatosis to Improve Personalised Care/S. Johnson, J.I. Johnson, N. Gupta, F.X. McCormack, J. Garibaldi, S. Cherumburoong, Nottingham, United Kingdom, p.A4307


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

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


ATS 2019 • Dallas, TX
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
Room C141/C143/C149 (Level 1)
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

Does Veno-Venous Extracorporeal Membrane Oxygenation Reduce Pulmonary Arterial Pressure at Alveolar Hypoxia? A Porcine Experimental Study/B. Holzgrewe, H. Kalzén, A.S. Larsson, Uppsala, Sweden, p.A4390

Impairment of Endothelial Caveolin-1-TRPV4 Channel Signaling in Pulmonary Hypertension/C. Marziano, K. Hong, E.L. Cope, M. Ottolini, S.K. Sonkusare, Charlottesville, VA, p.A4391

Targeting ADORA1/PDE10A Signaling as a Novel Therapeutic Approach for Treating Pulmonary Hypertension/C. Valasarajan, J.C.P. Laria, N.C.P. Laria, A. Wietelmann, F. Griminger, W. Seeger, S.S. Pullamsetti, Bad Nauheim, Germany, p.A4392

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

Car, A Homing Peptide, Prolongs Pulmonary Preferential Vasodilation by Increasing Pulmonary Retention and Reducing Systemic Absorption of Liposomal Gasdull/A. Keshavarz, M. Rabinovitch, MD, Stanford, CA

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


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


Inhaled PLGA Particles of Spermine Nonoate, Nitric Oxide Donor, as a Promising Targeted Therapy to Reduce Pulmonary Arterial Pressure in PAH/A. Alobaidia, F. Ahsan, Amarillo, TX, p.A4406

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


Targeting Pathologic Hyaluronan Synthesis in Pulmonary Hypertension/V. Tseng, J. Kienhenz, T. Murphy, E.N. Grayack, C.M. Hart, Atlanta, GA, p.A4413


Treatment Outcomes of Tuberculous Meningitis in Adults: A Systematic Review and Meta-Analysis/M. Wang, J.-Q. He, Chengdu, China, p.A4418

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


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


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

Isoniazid as an Immunomodulatory Agent for Latent Tuberculosis Infection Treatment in View of Invariant Natural Killer T (INKT Cells)/W.-J. Su, S.-F. Huang, J.-Y. Feng, Y.-Y. Yang, Taipei, Taiwan, p.A4427

TB TREATMENT

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

Abstract Summaries

Viewing/Discussion

Chairing: S.H. Kasperbauer, MD, Denver, CO
M.C.I. Lipman, MD, London, United Kingdom

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
Linezolid Interruption in Patients with Extensively Drug Resistant Tuberculosis Receiving a Bedaquiline-Based Treatment Regimen/O. Olayanju, A. Esmaili, P. Gina, K. Dheda, Cape Town, South Africa, p.A4428


Cost Analysis of Rifampin Desensitization Versus a Non-Rifampin Containing Regimen for the Treatment of Active Tuberculosis (TB) in Patients with Rifampin Allergy/J. Batt, D. Denis, G. Regan, J. Telchi, W. Isaranuwatchai, N. Vozoris, Toronto, Canada, p.A4430


Krüppel-Like Factor 4 (Klf4) Is a Stat3-Smad2 Regulator in ATII Cells Determining ATII Cell Fate During Lung Development and Bronchiectasis in Patients/D. Wang, B. Liu, C. Liu, Chengdu, China, p.A4440

Endoplasmic Reticulum Protein Thioredoxin Domain Containing 5 (TXNDC5) as a Novel Therapeutic Target for Pulmonary Fibrosis/T. Lee, Y.T. Lee, F.L. Lu, P.N. Tsao, Y. Fang, K.C. Yang, Taipei, Taiwan, p.A4431


Conserved TGFß1-Signaling in Pulmonary Arterial Hypertension Induces Sustained Canonical Smad3 Pathways in Vascular SMC/L. Calvier, P. Chouvareine, E. Legchenko, G. Kokeny, M.M. Mozes, G. Hansmann, Dallas, TX, p.A4435


MULTI-ORGAN ABNORMALITIES DUE TO BETA-CATENIN STABILIZATION IN CD11c+ MYELOID CELLS/E. Malins, S.-J. Kim, A. Flozak, A. Yeldandi, C.J. Gottardi, A. Lam, Chicago, IL, p.A4441

Rapid Abstract Discussion Session - Ballroom D Three (Level 3) - Abstract 1: 9:15-9:45 - Viewing/Discussion 9:45-11:15 - Chairing: M.R.J. Kolb, MD, Hamilton, Canada - M. Minoo, PhD, Los Angeles, CA

Rapid Abstract Discussion Session - Ballroom D Three (Level 3) - Abstract 1: 9:15-9:45 - Viewing/Discussion 9:45-11:15 - Chairing: M.R.J. Kolb, PhD, MD, Hamilton, Canada - M. Minoo, PhD, Los Angeles, CA

Endoplasmic Reticulum Protein Thioredoxin Domain Containing 5 (TXNDC5) as a Novel Therapeutic Target for Pulmonary Fibrosis/T.H. Lee, Y.T. Lee, F.L. Lu, P.N. Tsao, Y. Fang, K.C. Yang, Taipei, Taiwan, p.A4431


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. Okonoumou, C. Vohlen, D.V.B. Hirani, D. Al Alam, B. Schermer, J. Dötsch, M.A. Alejandre Alcazar, Cologne, Germany, p.A4443

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. Okonoumou, C. Vohlen, D.V.B. Hirani, D. Al Alam, B. Schermer, J. Dötsch, M.A. Alejandre Alcazar, Cologne, Germany, p.A4443


Multorgan Abnormalities Due to Beta-Catenin Stabilization in CD11c+ Myeloid Cells/E. Malins, S.-J. Kim, A. Flozak, A. Yeldandi, C.J. Gottardi, A. Lam, Chicago, IL, p.A4441

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. Okonoumou, C. Vohlen, D.V.B. Hirani, D. Al Alam, B. Schermer, J. Dötsch, M.A. Alejandre Alcazar, Cologne, Germany, p.A4443

Knappel-Like Factor 4 (Klf4) Is a Novel Regulator of Forkhead Box Protein 01 (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, D. Al Alam, B. Schermer, J. Dötsch, M.A. Alejandre Alcazar, Cologne, Germany, p.A4443


C29  SRN: FUNDAMENTALS IN SLEEP AND RESPIRATORY NEUROBIOLOGY

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

Abstract Summaries  9:15-9:45

Viewing/Discussion  9:45-11:15

Chairing:  Y. Peker, MD, PhD, Istanbul, Turkey
M.S. Badr, MD, Detroit, MI
M. Macrea, MD, Salem, VA


Impact of CPAP Treatment on Leptin and Adiponectin in Coronary Artery Disease and Nonsleep Obstructive Sleep Apnea - A Secondary Analysis of the RICCSSDA Trial/Y. Peker, B. Balcan, T. Yucel-Lindberg, K. Lindberg, E. Thunström, Istanbul, Turkey, p.A4452

Nitric Oxide Inhibits Endothelial Cell Senescence in Human Microvascular Endothelial Cell Culture/M. Macrea, T.J. Martin, A. Malhotra, Z. Jia, Salem, VA, p.A4453


Chronic Intermittent Hypoxia Causes Hepatic Mitochondrial Dysfunction in a Mouse Model of Nonalcoholic Fatty Liver Disease/O. Meswani, P. Wegbrans Gird, A. Lucas, E. Moya Cespedes, F. Powell, E. Breen, A. Malhotra, La Jolla, CA, p.A4456

Long-Term Facilitation Following Acute Intermittent Hypoxia Is Present in People with Cervical Spinal Cord Injury During Non-REM Sleep/S. Vaughan, A. Sankari, S. Carroll, E. Kruppe, A. Salloum, M.S. Badr, Detroit, MI, p.A4457


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. Sahota, 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


720 Fluid-Structure Interaction Simulations and Experiments of Airflow Limitation in Models of Obstructive Sleep Apnea/G. Garcia, M.G. Moghaddam, T.B. Le, Milwaukee, WI, p.A4468

721 Foxp3+ Regulatory T Cells Were Overexpressed in Peripheral Blood of Patients with Non-Small Cell Lung Cancer and Obstructive Sleep Apnea/Y. Liu, X. Gao, Guangzhou, China, p.A7392

CLINICAL
RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION

C30 LUNG CANCER SCREENING: LESSONS FROM THE FRONT-LINE
9:15 a.m. - 11:15 a.m. KBHCCD

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


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, p.A4470


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, p.A4473


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, p.A4475

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, p.A4476


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, p.A4481


The Influence of Patient Comorbidities on Clinician Approaches to Lung Cancer Screening: A Qualitative Analysis/J. Iaccarino, E. Koppelman, R.S. Wiener, Boston, MA, p.A4485

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, p.A4486
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**BASIC • TRANSLATIONAL**

**THEMATIC POSTER SESSION**

**C31 TRANSLATIONAL STUDIES IN SARCOIDOSIS**

**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:** A.K. Gerke, MD, Iowa City, IA

**P237 Proteomic Profiling of Serum Exosomes to Find Novel Biomarkers in Sarcoidosis/Y. Futami, Y. Takeda, T. Koba, H. Kida, A. Kumanogoh, K. Ueda, Suita City, Japan | p.A4489**


**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. Mirsaedi, Miami, FL | p.A4495**

**P244 Characteristic of PET/CT Scan in Sarcoidosis/S. Jabeen Isma, N.S. Khakoo, G. Urdaneta, M. Mirsaedi, 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**


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

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  Nemiralisib 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. Tabberer, S. West, E. Hessle, 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 Glycopyrroloate) 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
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<td>9:15 a.m. - 4:15 p.m.</td>
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<td><strong>Area D (Hall F, Level 2)</strong></td>
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<td><strong>Facilitator:</strong> S.B. Montesi, MD, Boston, MA</td>
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<td><strong>P430</strong></td>
<td>Successful Treatment of Anti-Synthetase Syndrome Presenting as Acute Eosinophilic Pneumonia/A.A. Mirza, R. Raj, Palo Alto, CA, p.A4558</td>
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<td>Diffuse Alveolar Hemorrhage in a Case of Catastrophic Antiphospholipid Syndrome/D. Guadarrama, R. Kapil, L. Scherer, R. El-Bizri, Providence, RI, p.A4560</td>
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<td><strong>P433</strong></td>
<td>Diagnostic Delay: A Case of ANCA-Negative Eosinophilic Granulomatosis with Polyanititis/M.E. Schimmel, J.C. Fazio, M.K. Greer, Atlanta, GA, p.A4561</td>
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<td>Doctor I Cannot Breathe: A Case of Microscopic Polyangititis with Diffuse Alveolar Hemorrhage/C. Trujillo, A. Asharaf, V. Prado, J.M.D. Racoma, Chicago, IL, p.A4574</td>
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C34  ILD AND IPF: CLINICAL AND MECHANISTIC STUDIES

9:15 a.m. - 4:15 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: B.B. Moore, PhD, ATSF, Ann Arbor, MI

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Facilitator: R.S. Knipe, MD, Boston, MA

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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. Fruas, 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. Flaherty, Ann Arbor, MI, p.A4615

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.K. Castillo, I. Buendia-Roldan, M. Preciado, H. Mateos-Toledo, M. Mejia, M. Gaxiola, L. Chavez-Galan, Ciudad de Mexico, Mexico, p.A4616


CLINICAL

THEMATIC POSTER SESSION

C36 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


P467 Chest CT Scan with or Without Contrast - A Decision That Can Save a Life/T. Singh, K. Gaurav, S. Pandey, A. Shafii, A. Maskey, Lexington, KY, p.A4644

P468 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

P469 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


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


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. Lättilä, H. Koskela, J. Pekkanen, Kuopio, Finland, p.A4699


P527  Clinical Characteristics and Outcomes in Adult Cystic Fibrosis Patients with Severe Lung Disease in Southern Brazil/P.R. De Tarso Dalcin, G. Figueiredo da Silva, N. Simmonds, Porto Alegre, Brazil, p.A4703


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
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#### Theme: AUTOIMMUNE, DRUG RELATED, AND TRANSPLANT

**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. Mathur, MD, New York, NY

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**Effect of Whole Lung Lavage (WLL) on Exhaled Nitric Oxide Fraction (FeNO) in Patients with autoimmune Pulmonary Alveolar Proteinosis (aPAP)**/ S. Teramoto, M. Ishida, N. Shimizudani, K. Utsumi, T. Ichiwata, Tokyo, Japan, p.A4730

P560 **Clinical Outcomes and Survival Following Lung Transplantation in Patients with Pulmonary Langerhans Cell Histiocytosis/N.A. Wajda, Z. Zhu, R. Jandarov, N. Gupta, Cincinnati, OH, p.A4732**

P561 **Clinical Observation: 5 Cases of Wen San Ding Transdermal External Treatment for Idiopathic Pulmonary Alveolar Proteinosis/B. Yang, Beijing, China, p.A4733**


P563 **Sirolimus Related Lung Toxicity on Radiologic Evaluation/F.M. Khateeb, R.M. Assaly, H.A. Badi, Toledo, OH, p.A4735**

P564 **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**

P565 **Clinical, Radiographic and Histopathologic Findings with Outcomes of Checkpoint Inhibitor Immunotherapy Induced Pneumonitis at Memorial Sloan Kettering Cancer Center (MSKCC)/S. Imran, M.B. Feinstein, E. Khusainova, J. Sauter, D.E. Stover, New York, NY, p.A4737**


P567 **Single Center Experience of ROSE+BALF+TBLB+NGS in Diagnose of Pneumocystis Pneumonia in Lung Transplant Recipients/J. Zhang, Wuxi, China, p.A4739**


P569 **A Study to Evaluate the Association of Post-Transplant Lung Functions with Isolation of Non-Tuberculous Mycobacteria in Bronchosopic Cultures During the First Year After Lung Transplantation/C. Manthuruthil, F. Woll, R. La Hoz, M. Mohanka, J. Mullins, S. Bollineni, V. Kaza, F. Torres, A. Banga, Dallas, TX, p.A4741**


P571 **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**


P575 **Acute Colonic Pseudo-Obstruction in Lung Transplant Recipients/D. Djondo, K. Young, B. Bemiss, Maywood, IL, p.A4747**

Facilitator: C. Johnson, MD, Philadelphia, PA

P576 **Clinical Characteristics Dermatomyositis/Polymyositis Associated Interstitial Lung Disease According to the Autoantibody/T. Kishaba, Y. Nei, S. Ibuki, M. Momose, H. Nagano, S. Yamashiro, Uruma, Japan, p.A4748**


P578 **Trimethoprim/Sulfamethoxazole in Induced Alveolar Hemorrhage/H. Zubair, S. Waheed, Z. Meer Rabeel, Buffalo, NY, p.A4750**


P583 **Heart Rate Recovery in Patients with Scleroderma/J. Fried, A. Hsu, C.A. Reichner, Washington, DC, p.A4755**
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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.

Facilitators: R. Hallowell, MD, Boston, MA
K. Tsushima, MD, PhD, Nagano, Japan

C39  IDIOPATHIC INTERSTITIAL PNEUMONIA: THERAPY


P1084 Dyspnea Management in Interstitial Lung Disease: An Early Integrated Palliative Care Approach in a Multidisciplinary Setting/L. van den Bosch, M. Kalluri, Edmonton, Canada, p.A4757


P1090 Correlation Between Circulating Fibrocytes and Therapeutic Effects of Nintedanib/H. Kobayashi, Suzuka, Japan, p.A4763

P1091 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


P1098 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

P1099 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

C40 CRITICAL CARE: THE ART OF WAR - INNOVATIONS IN EDUCATION

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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.

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. Faruqi, Z. Zaidi, Gainesville, FL, p.A4785


P142 Medical Intensive Care Unit Intern Curriculum/A.M. Shioleno, 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 Curriculum for Medical Students/N. Kapur, V. Birk, A.P. Trivedi, Chicago, IL, p.A4789

Facilitators: A.J. Smith, MD, Maspeth, 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 Ultrasound Training 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


CLINICAL

THEMATIC POSTER SESSION

C41  CRITICAL CARE CASE REPORTS: TOXICOLOGY AND POISONINGS

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: J. Devlin, PharmD, Boston, MA

T.M. Ferrer Marrero, MD, Milwaukee, WI


P154  Opportunities for Procedural Skills Among Medical Residents in Critical Care Setting: West Texas/Y. Vorakunthada, W. Lithwatt, M. Phy, Lubbock, TX, p.A4799


P156  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


P160  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

P161  Metformin Associated Lactic Acidosis/S. Raoof, Tucson, AZ, p.A4805


P164  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

P165  Fast and the NitroFurious: Nitrofurantoin Induced Acute Liver Injury with Concomitant Hemorrhagic Pulmonary Edema/V. Deepak, A. Tanase, M. Farishta, M. Parmar, Kalamazoo, MI, p.A4810


P167  Fatal Case of Lactic Acidosis in a Post-Partum HIV Patient on Nucleoside Reverse Transcriptase Inhibitor with New Diagnosis of Pulmonary Arterial Hypertension/A. Sagaslli, N. Kirsch, K. Modi, Las Vegas, NV, p.A4812

P168  Fatal Case of Bupropion-Induced Necrotizing Fasciitis/ M.M. Mathew, New York, NY, p.A4818


P173  A Fatal Case of Bupropion-Induced Cardiotoxicity Refractory to Impella Placement/M. Reaume, M. Parmar, A. Tanase, R. Rosenblatt, Kalamazoo, MI, p.A4817


Fatal Epsom Salt Overdose/J. Leap, S. Baltaji, A. Singh, Pittsburgh, PA, p.A4826

Fatal Chemotherapy-Induced Mucositis/B. Chaucer, A. Stone, R.M. Davis, B.S. Aulakh, Peoria, IL, p.A4827

A Rare and Fatal Case of Rivaroxaban Induced Acute Liver Failure/K. Helmkamp, L. Gonzalez, R.M. Davis, D. Taneja, Peoria, IL, p.A4838


Synthetic Cannabinoid Overdose Presenting with Life-Threatening Hyperthermia/M. Spring, R. Parikh, Boston, MA, p.A4844


Acute Respiratory Distress Syndrome as an Acute Complication of Amiodarone/N. Hotchandani, W. Khan, New Brunswick, NJ, p.A4846


A Case of Severe Lactic Acidosis Due to Metformin Toxicity/P. Soni, V. Ponnusamy, S. Sharma, A. Sinha, C. Seneviratne, Y. Kuper, Brooklyn, NY, p.A4849

Life-threatening Sinus Bradycardia Caused by Combination of Haloperidol and Donepezil/G. Sun, M. Chang, Z. Khan, Bronx, NY, p.A4850


A Denuding Drug: A Case of Methotrexate-Induced Toxic Epidermal Necrolysis/A. Egan, C.E. Daniels, Rochester, MN, p.A4853
P211 Early to Pressors, Early to Leave Against Medical Advice - Cotton Fever in IV Drug User/P. Chandrika, J. Hussain, S. Ghadermarzi, M.R. Bowling, Greenville, NC, p.A4854

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

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. DeMeo, MD, Boston, MA


P864 Vitamin B12 Mediated Hyperhomocysteinemia and Adverse Pulmonary Functions: A Population Based Study from Rural North India/S. Yadav, K. Chandlok, S. Joshi, N. Kiranmala Devi, K.N. Saraswathy, New Delhi, India, p.A4871


P867 BI 1026706, a Bradykinin 1 Antagonist, Did Not Reduce Pulmonary Inflammation Upon Segmental Endotoxin Challenge in Healthy Current Smoker Subjects Compared with Placebo/J. M. Hohlfeld, P. Badorek, C. Faulenbach, K. Kohl, T. Litzenburger, M. Müller, M. Samo, W. Seibold, A. Gupta, Hannover, Germany, p.A4874

P868 Relationship Between Mortality and Readmission Rate in Hospitalized Patients with Acute Exacerbation of COPD (AECOPD)/A. Samarghandi, R. Qayyum, Richmond, VA, p.A4875

Facilitator: N. Pushca, MD, Baltimore, MD


P873 The Characteristics of Smoking History and Outcomes in Post-Mortem Chronic Bronchitis Patients: A Retrospective Study/L. Zhu, X. Wang, Shanghai, China, p.A4880

P874 Environmental Risk Factors in Malagasy Patients Suffering from Chronic Obstructive Pulmonary Disease/J. Ratamahoro, M. Randriantahary, D. Rakotonanahary, R. Rakotoariveloh, M. Randria, L. Razafindrakoto, Athia-Mons, France, p.A4881

P875 Association Between RAGE Gene Polymorphism (rs1800624, rs2070600) with Chronic Obstruction Pulmonary Disease/H. Niu, T. Yang, T. Yu, R. Duan, Beijing, China, p.A4882


P877 Updated Spirometric Values for Southern Chinese Adults Aged 20-89 Years/I. Hou, Y. Song, Shanghai, China, p.A4884


Facilitator: S. Touray, MB BCh, MSc, Carlsbad, NM

P879 Trends and 30-Day Readmission Rate for Patients Discharged with COPD: Analysis of 1,680,843 Admissions/A.S. Bath, V. Deepak, M. Farishta, Kalamazoo, MI, p.A4886

P880 COPD Due to Home Biomass Smoke Exposure in Rural Non-Smokers Brazilian Women/ M.S. Paschoalini, M.M. Cruz, Barreiras, Brazil, p.A4887


P882 Mild Chronic Obstructive Pulmonary Disease (COPD) and the Presence of Dyspnea: Inferences from the Canadian Cohort of Obstructive Lung Disease (CanCOLD) Study/M. Cherian, D. Jensen, S. Murisleen, E.C. Goodall, G. Nadeau, J. Bourbeau, Montreal, Canada, p.A4889


P884 Metformin and Mortality from Chronic Lower Respiratory Disease/E. Forno, A. Mendy, R. Gopal, J.F. Alcorn, Pittsburgh, PA, p.A4891


CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION

C44 ASTHMA EPIDEMIOLOGY

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.

ATS 2019 • Dallas, TX
Facilitator: C.D. Ramsey, MD, Winnipeg, Canada

P586 Seasonal Trends in Asthma Exacerbations: Are They the Same in Asthma Subgroups?/C. Castro, Y. Tarabichi, M. Ayache, Cleveland, OH, p.A4895

P587 Impact of Asthma Control on Different Age Groups in Five Latin American Countries/M.B. Alith, M. Gazzotti, O.A. Nascimento, J.R. Jardim, Sao Paulo, Brazil, p.A4896


P591 International Severe Asthma Registry (ISAR): The Story so Far/D.B. Price, G.W. Canonica, Cambridge, United Kingdom, p.A4900


Facilitator: P.S. Lai, MPH, MD, Boston, MA


P596 Relationship Between Asthma and Dietary Patterns in Different Age-Groups: A Systematic Review and Meta-Analysis/M. Dhaliwal, J. Li, M.K. Parvizian, I. Satia, O.P. Kurmi, Canada, p.A4905


**THEMATIC POSTER SESSION**

**C45 EFFECTS OF THE ENVIRONMENT ON PULMONARY HEALTH**

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: L.M. Paulin, MD, Lebanon, NH

A.A. Yorgancioglu, MD, ATSFS, Manisa, Turkey

P601 Air Quality Index and Air Quality Awareness Among Adults in the United States/M.C. Mirabelli, S.E. Sarnat, S.A. Damon, Atlanta, GA, p.A4909


P605 Harmful Associations Between Air Pollutants and the Number of Visitors to the Emergency Department by Pneumonia Under Warm Temperature/J. Hwang, H. Yi, H.-J. Bae, D.-W. Seo, N. Kim, Seoul, Korea, Republic of, p.A4912

P606 Long-Term Exposure to Ambient Air Pollution and CT Measurements in a Korean COPD Cohort/W.J. Kim, S.O. Kwon, Y.-J. Han, S.H. Hong, S.H. Bak, M.K. Lee, S.-Y. Kim, Chuncheon, Korea, Republic of, p.A4913

P607 Respiratory and Cardiovascular Symptoms Occurrence Due to the Exposure to Low-Stack Emission Sources/A.J. Badyda, A. Chcialowski, P.O. Czechowski, A. Stanyczyk, P. Dabroweicki, Warsaw, Poland, p.A4914


Pulmonary Manifestations of Inflammatory Bowel Disease: A Case Report/J.M. Platt, M.R. Derynyck, A. Adeleye, Calgary, Canada, p.A4939

Cryptogenic Organizing Pneumonia, a Rare Cause of Pulmonary Nodules in Children: A Case Report/J.M. Platt, M.A. Anselmo, Calgary, Canada, p.A4940

Progression of Alveolar Simplification to End-Stage Fibrotic Lung Disease in Childhood/P. Lenhart-Fendergrass, C. Galambos, D. Liptzin, R.R. Deterding, Aurora, CO, p.A4941

Facilitator: T.J. Vece, MD, Chapel Hill, NC


Pediatric Interstitial Lung Disease and Pneumomediastinum in Clinically Amyopathic Juvenile Dermatomyositis: Treatment with Pirfenidone as an Adjuvant/D.S. Moreno McNeill, E. Sayad, T.P. Vogel, P. Patel, A.A. Ramirez, M.D. Silva Carmona, Houston, TX, p.A4943

Large Bulous Lung Disease in a Child with Proteus Syndrome/S.G. Bickel, S. Ibrahim, J. Hersh, R.L. Morton, N.S. Eid, Louisville, KY, p.A4944


Combined Use of Whole Lung Lavage and Inhaled Sargramostim for Lysinuric Protein Intolerance - Associated Pulmonary Alveolar Proteinosis in 13 Year-Old Male/F. Araji, D.R. Rao, L. Umana, E. Basora, Dallas, TX, p.A4946

Catamenial Hemoptysis in a 16 Year Old African American Female/F. Araji, Z. Ghazala, A. Dettori, Y.M. Rivera-Sanchez, Dallas, TX, p.A4947


Facilitator: L. Yonker, MD, Boston, MA

Induction of Remission Following Treatment with Benralizumab in a 16-Year-Old Male with Eosinophilic Granulomatosis with Polyangiitis/M. Byrd, M.V. Bautista, Washington, DC, p.A4949

Aspirin-Exacerbated Respiratory Disease: Reversal of Pulmonary Parenchymal Abnormalities with Mepolizumab/K. Krone, T. Laidlaw, Boston, MA, p.A4950


Foreign Body Aspiration Presenting as Status Asthmaticus/J. Paskaradevan, L.M. Barber, D.R. Spielberg, Houston, TX, p.A4952


A Case of Pediatric Autoimmune Pulmonary Alveolar Proteinosis That Has Been Refractory to ‘Standard’ Treatment/J. Fiero, E.M. Behrens, B.C. Trapnell, J.C. Piccione, Philadelphia, PA, p.A4954

Pulmonary Manifestations of Behcet’s Disease/A. Parra, J. Garcia, L. Munera, L.M. Cadavid, J. Uribe, Medellin, Colombia, p.A4955

Facilitator: Y.M. Rivera-Sanchez, MD, Dallas, TX

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


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

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

Fungal Pulmonary Cyst Secondary to Hyperimmunoglobulin E Syndrome, Which Organ to Transplant?IS. Louey, P. Robinson, Melbourne, Australia, p.A4961

Facilitator: D.B. Sanders, MD, MSc, Indianapolis, IN

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Silent, but Hopefully Not Deadly - Aspiration and Poor Weight Gain in an Infant with Co-Morbid Down Syndrome and Cystic Fibrosis/E.K. Khan, S.L. Martiniano, S.D. Sagel, Aurora, CO, p.A4963

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P705  
A Large Multiseptated Cystic Mass Posterior to the Bladder in a Male Patient with Cystic Fibrosis/M. Al-Humiari, L. Faverio, C. Sabogal, Gainesville, FL, p.A4965

P706  
A 3 Year-Old with Advanced Cystic Fibrosis Lung Disease and Staphylococcus Aureus Bacteremia/R. Perkins, G.S. Sawicki, Boston, MA, p.A4966

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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

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Invasive Cavitary Aspergillus Infection Complicated by ABPA/Y. Yu, C.R. Esther, Chapel Hill, NC, p.A4970

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Mediastinal Invasion/S. Meledathu, U. Hasan, Newark, NJ, p.A4971

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P703  
Tuberculosis: A Rare Case of Anterior Mediastinal Mass in a Twelve Month Old Child/M.A. De La Torre Enteria, Elisabeth, M. Afanetti, H. Trang, Nice, France, p.A4973

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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

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Facilitator: J.C. Piccione, MS, DO, Philadelphia, PA

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Altered Mental Status in Mechanically Ventilated Children/P.A. Nourani, V.H. Nayak, H.H. Gutierrez, A.S. Alishlash, Birmingham, AL, p.A4979

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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. Vielkind, K. Tommerdahl, S. Hawkins, R.T. Mohon, Aurora, CO, p.A4981

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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

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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

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

P717  
Sabre-Sheath Airway with Multiple Areas of Tracheal Stenosis Caused by Mucolipidosis Type II/T.S. Poore, P. Houin, A. Larson, Aurora, CO, p.A4987
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<td>Chronic Thromboembolic Pulmonary Hypertension (CTEPH): A Rare Cause of Pediatric Pulmonary Hypertension</td>
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<td>E.M. DeBoer, MD, Aurora, CO</td>
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<td>Rare Genetic Cause of Pulmonary Hypertension</td>
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<td>Acute Respiratory Failure and Pulmonary Hypertension as First Presentation of Multiminicore Disease in Set of Siblings</td>
<td>N. Villafranco, N.P. Varghese, Houston, TX, p.A5005</td>
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<td>Management of Congenital Heart Disease in Adult Intensive Care Unit</td>
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<td>E. Hamberger, S. Bhargava, Palo Alto, CA, p.A5007</td>
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<td>Successful Plasma Exchange and Surgical Procedures on a Pediatric Patient Anticoagulated with Bivalirudin on Extracorporeal Membrane Oxygenation</td>
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<td>Spontaneous Pneumomediastinum in a Neonate with Spinnaker-Sail Sign</td>
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<td>A Case of Bilateral Pulmonary Varices Associated with Hybrid Left Pulmonary CPAM and Sequestration in a 2 Year-Old Girl</td>
<td>M.E. Dumas, H. Vlachos-Mayer, F. Council, Sherbrooke, Canada, p.A5011</td>
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<td>M. Martinez, S. Welsh, C.W. Lillehei, C.J. Smithers, H.P.W. Kozakewich, L.P. Hayden, Boston, MA, p.A5012</td>
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<td>Dehydrated Hereditary Stomatocytosis Causing Severe Ascites Leading to Pulmonary Hypoplasia and Respiratory Insufficiency in a Neonate</td>
<td>M.D. McDowell, C.M. Oermann, Kansas City, MO, p.A5013</td>
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<td>Bronchopulmonary Dysplasia, 21 Years Later: Pulmonary Hypertension and Emphysema in a Young Adult Bronchopulmonary Dysplasia Patient</td>
<td>S.J. Cassady, G. Ramani, J. Deepak, Baltimore, MD, p.A5015</td>
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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 Alqahthan, Abba, 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. Esquilies, 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  ABCA-3 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

C49  TICKET TO RIDE: EXPERIMENTAL MODELS 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.

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. Nilsson, 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. Noël, 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. Tuder, 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


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 (PAH)/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

C50 THE PERFECT DRUG: EXPERIMENTAL TREATMENTS OF PAH

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


Facilitators: K. Suresh, MD, Baltimore, MD  J.X.J. 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 Matrix Kinase 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

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**C51**  CLOSER TO THE HEART: UPDATE ON APPROVED THERAPIES FOR 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:** E.D. Austin, MD, MSc, Nashville, TN
- D. Fraidenberg, MD, Chicago, IL


**P1140**  Assessment of the REPLACE Study Composite Endpoint in the PATENT Study and Association with Long-Term Outcomes in Riociguat-Treated Patients/G. Simonneau, M.M. Hoepner, H.A. Ghofrani, P. Corris, S. Rosenkranz, E. Grünig, R.J. White, V.V. McLaughlin, D. Langleben, R.L. Benza, Le Kremlin-Bicêtre, France, p.A5064

**P1141**  An Evaluation of the Effect of Macitentan on the Pharmacokinetics of Riociguat in Healthy Male Subjects/D. Csonka, S. Bruderer, A. Schultz, R. Stepanova, J.J. Perez Ruixo, Allschwill, Switzerland, p.A5065


**P1143**  A Single Center Experience of Transitioning 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. Jalaiwala, 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

**P1150**  Study Design of the Phase 3 ADVANCE Program Evaluating Time-to-Clinical Events and Exercise Capacity in Patients with Pulmonary Arterial Hypertension Treated with Tadalafil/V.V. McLaughlin, R. Channick, B. Walsh, M. Keating, K. Gilder, C. Cabell, P. Klassen, V.F. Tapson, M. Humbert, Ann Arbor, MI, p.A5074

**P1151**  The Long Term Experience on Treatment for Adult Patients with Eisenmenger Syndrome/Z. Dai, J. Chen, J. Hsu, Y. Wu, Y. Liu, Kaohsiung


**P1154**  Changes in Risk Category Among Patients with Systemic Sclerosis-Associated PAH Treated with Initial Combination Therapy in the ATPAHSS Trial/M. Humbert, Ann Arbor, MI, p.A5078

**BASIC • TRANSLATIONAL**

**THEMATIC POSTER SESSION**

**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. Salman, S. Beshay, Z. Safdar, Houston, TX, p.A5080


**P1160** Evaluation of Quality of Life in a Cohort of Patients Diagnosed with Pulmonary Arterial Hypertension in Bogotá, Using the Colombian Version of the CAMPHOR Questionnaire/C. Villaquin-Torres, M. Ocampo, S. Villazon, S. Moreno-Luna, R. Duenas-Villamil, J. Lutz-Pena, P. Acuna, Bogotá, Colombia, p.A5082

**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

**Facilitator:** A. Sweat, MD, Stanford, CA

**P1162** Pulmonary Hypertension in Chronic Kidney Disease After Renal Transplant: Risk Factor or Consequence/D. 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. Foudessi, M. Fafa Cissé, S. Koné, N.M.J. Ouethy, 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

**P1174** Sleep Disordered Breathing Phenotype Across Pulmonary Hypertension Group: Insights from the Pulmonary Vascular Disease Phenomics Study/R. Mehra, L. Wang, R. Nawabit, S. Kaur, K.B. Highland, N.S. Hill, Cleveland, OH, p.A5096

Facilitator: A.E. 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-Alley, 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. Mulyadi, 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. Soedarsmono, 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. 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: D.L. Cohn, MD, Denver, CO

P60 A Bacteriophage-Based Method Identifies Low Level Mycobacterium Tuberculosis Bacteraemia 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. Kamledi, 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


**P73** Sensitivity and Specificity of an Electronic Nose in Diagnosing Pulmonary Tuberculosis Among Patients with Suspected Tuberculosis in Indonesia/A. Saktiawati, Y. Stienstra, Y.W. Subronto, S. Sumardi, J.-W. Gerritsen, H. Oord, O.W. Akkerman, T.S. van der Werf, Yogyakarta, Indonesia, p.A5176

**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

**P77** Effect of Prior Intake of Amoxicillin-Clavulanic Acid in the Detection of Acid-Fast Bacilli on Direct Examination of Bronchial Secretions/E. Justin, K. Thiam, N. Toure, Y. Dia, F. Bintou, M. Cisse, S. Musangu, C. Kubulungu, A. Jeillany, Dakar, Senegal, p.A5180


BASIC + TRANSLATIONAL

THEMATIC POSTER SESSION

C58 MECHANISMS OF PULMONARY FIBROSIS

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: S.K. Huang, MD, Ann Arbor, MI


P266 The Effects of Combined Antifibrotic Therapy in Bleomycin Induced Pulmonary Fibrosis/E.D. Abston, P. Caravan, M. Lanuti, Boston, MA, p.A5225

P267 The Effect of Nintedanib on Pulmonary Vascular Tone in an Experimental Model of Lung Fibrosis and Pulmonary Hypertension/N. Chandran, N. Sharma, S.L. Wollin, A. Olschewski, G. Kwapiszewksa, H. Olschewski, Graz, Austria, p.A5226


P272 The Importance of Multiple-Site Sampling in Understanding the Pathogenesis of Idiopathic Pulmonary Fibrosis/J. Fukumoto, S. Patil, M. Alleyen, S. Krishnamurthy, L. Galam, P. Olschewski, Graz, Austria, p.A5231

Facilitator: A. McCubbrey, PhD, Denver, CO


P303  Cellular Consequences of Uncharacterized Surfactant Protein-A2 (SFTP-A2)-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:  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. Natarajan, 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. Benazzo, 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

BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C59  GENETIC AND EPIGENETIC MECHANISMS IN PULMONARY FIBROSIS

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:  B.R. Gochuico, MD, Bethesda, MD


C60  VASCULAR BIOLOGY 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: K. Suresh, MD, Baltimore, MD


P332  Inhibition of Janus Kinase 2 Signal Transducer and Activator of Transcription 3 (JAK2-STAT3) Pathway as a Therapeutic Option for Pulmonary Hypertension/N.D.R. Yerabolu, A. Weiss, N. Weissmann, H.-A. Ghofrani, F. Grimminger, W. Seeger, R.T. Schermuly, Giessen, Germany, p.A5283


P335  Balance Between Lung Endothelial Cell Injury and Repair Defines the Pulmonary Hypertension Phenotype in a Targeted Transgenic Model of Diptheria Toxin-Induced Apoptosis/R. Soares Godoy, M. Taha, Y. Deng, K. Rowe, D.J. Stewart, Ottawa, Canada, p.A5286


Facilitator: R.F. Hough, MD, PhD, New York, NY

P337  Overexpression of Hypoxia Inducible Factors in Pulmonary Artery Smooth Muscle Cells Mitigates Hypoxia-Induced Pulmonary Hypertension/E.A. Barnes, X. Che, R. Ito, S. Reddy, D.N. Cornfield, Stanford, CA, p.A5288


P339  The EH-Induced Mouse Model of Pulmonary Arterial Hypertension Recapitulates Gender Differences of Human Disease/S.A. Predescu, B. Carman, S. Qin, D.N. Predescu, Chicago, IL, p.A5290

P340  Single Cell Sequencing and Lineage Tracing of Pulmonary Vasculature and Right Ventricle of Neonatal Mice/R. Menon, A. Shrestha, C. Reynolds, Houston, TX, p.A5291


Facilitator: A. Sarkar, PhD, Columbus, OH


P348  Independent and Interactive Effects of Early Lipopolysaccharide and Hypoxia Exposure on Pulmonary Vasculature and Right Ventricle of Neonatal Mice/S. Shivanna, R. Menon, A. Shrestha, C. Reynolds, Houston, TX, p.A5299

P349  Multi-Transcriptome-Based Network Analysis to Identify Novel Genes and Candidate Small Molecules for Pulmonary Arterial Hypertension/S. Ghandikota, M. Lape, A. Jegga, Cincinnati, OH, p.A5300
P350  
3T3 T-Cell Calcium Channel Determines the Angiogenic Potential of Pulmonary Microvascular Endothelial Cells/Zheng, H. Chen, P. Xie, C.A. Dickerson, J. King, M.F. Alexeyev, S. Wu, Birmingham, AL, p.A5301

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P353  
Dissecting the Targeted Shp2 Phosphatase in Endothelium During Radiation-Induced Pulmonary Fibrosis/P. Liu, M. Li, Z. Zhou, H. Cheng, X. Zhang, Y. Ke, Hangzhou, China, p.A7412

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P355  
Single Cell RNA Sequencing to Characterize Murine Alveolar Macrophages in Control, Schistosomiasis, and Hypoxia Exposures/N. Campbell, C. Mickael, R. Kumar, M. Frid, K. Stenmark, B. Graham, Aurora, CO, p.A7414

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P357  
Sodium Tanshinone IIA Sulfonate Inhibits the Protein Degradation, Promotes the Cell Surface Localization of BMPRII and Restores BMP9 Signaling Transduction in Pulmonary Arterial Endothelial Cells/K. Yang, W. Liu, W. Lu, J. Wang, Guangzhou, China, p.A7416

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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. Alejandre Alcazar, Cologne, Germany, p.A5308

P772  
Hydromethylxylation 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

P773  
The Role of Hypoxia-Induced Tracheobronchial Ciliary Dysfunction in the Pathogenesis of Bronchopulmonary Dysplasia/D. Teade, D. Bhaskar, P.A. Denney, Providence, RI, p.A5310

P774  
Hyperoxia Leads to Early Senescence in Neonatal Lungs and Lung Epithelial Cells: Consequences for Alveolar Simplification/P. A. Denney, A. Peterson, S. Bullock, A. Scaffa, Providence, RI, p.A5311

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P776  
Oral Maternal Administration of the Cytochrome P450 (CYP)1A/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

P779  
Facilitator:  F.J. Hawkins, MBCh, Boston, MA


P359 Inhibition of Myofibroblast Differentiation Targeting Multiple Pathways with Pirfenidone and Ogerin/T. Bell, D. Nagel, R. Clough, P.J. Sime, R.M. Kottmann, Rochester, NY, p.A5319


P365 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

P366 Wnt1-Inducible Signaling Protein 1 (WISP1) Augments Nuclear Factor (NF)-kB Signaling in Primary Human Lung Fibroblasts/M. Lehmann, S. Klee, D.E. Wagner, M. Koenigshoff, Munich, Germany, p.A5326


Facilitator:  Y. Sanders, MD, Birmingham, AL

P368 Role of Galectin-3 in Idiopathic Pulmonary Fibrosis Development/N.R. Parmar, A.C. Mackinnon, F. Zetterberg, P. Ford, R.G. Jenkins, Notingham, United Kingdom, p.A5328

P369 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


P371 Overexpression of Twist1 in COL1A2-Cells Leads to Increased Bleomycin-Induced Pulmonary Fibrosis/J. Tan, J. Dutta, H. Bahudhanapati, D. Kass, Pittsburgh, PA, p.A5331


P375 Lung Resident Mesenchymal Stem Cells Give Rise to Lung Epithelial Progenitor-Like Cells In Vitro/P. Khan, M. Boesch, L. Fang, M. Tamm, M. Brutsche, F. Baty, K.E. Hostettler, Basel, Switzerland, p.A5335

Facilitator: D. Lagares, PhD, MSc, Charlestown, MA


P392 Inhibition of Profibrotic Signaling in Primary Fibroblasts from Patients with Idiopathic Pulmonary Fibrosis (IPF) by Sirtuin-1/-2-Inhibitor Sirtinol/M. Korfei, J.V. Zlotkowski, D. Stelmaszek, C. Ruppert, W. Seeger, A. Guenther, Giessen, Germany, p.A5352


### BASIC • TRANSLATIONAL

#### THEMATIC POSTER SESSION

C63 MECHANISTIC STUDIES IN COPD

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

**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.


Role of Lysocardiolipin Acyltransferase in Lung Epithelial Cell Apoptosis Induced by Cigarette Smoke Extract/M. Bandela, R.K. Bikkavilli, P. Fu, V. Suryadevara, S. Dhavamani, S. Papasani, S. Singla, S.P. Reddy, S.M. Dudek, V. Natarajan, Chicago, IL, p.A5358


Role of Lysocardiolipin Acyltransferase in Lung Epithelial Cell Apoptosis Induced by Cigarette Smoke Extract/M. Bandela, R.K. Bikkavilli, P. Fu, V. Suryadevara, S. Dhavamani, S. Papasani, S. Singla, S.P. Reddy, S.M. Dudek, V. Natarajan, Chicago, IL, p.A5358


Rationalization of NADPH Oxidase Activity by the Protease Inhibitor Alpha-1 Antitrypsin, a Novel Mechanism/P. Hawkins, D.A. Bergin, T. McEnery, N.G. McElvaney, E.P. Reeves, Dublin, Ireland, p.A5366


CSP7 Mitigates TSE Induced Airway Inflammation and Susceptibility to Develop Emphysema/D.N. Dás, L. Fan, V. Radhakrishnan, A.S. Marudamuthu, S. Park, R. Shetty, G. Criner, N. Marchetti, S. Bolla, S. Shetty, Tyler, TX, p.A5368


Nontypeable Haemophilus Influenzae (NTHi) Exploits Disease-Related Defects in Xenophagy to Persist and Traffic Within the Epithelial Compartment During COPD/E. Roscioni, M. Poh, A. Kicic, S.E. Lester, P. Nguyen, H.P.A. Jersmann, P.N. Reynolds, S. Hodge, Adelaide, Australia, p.A5376


Human SP-D Genetic Variants in the Pathogenesis of Chronic Lung Injury/L. Ni, Syracuse, NY, p.A5372


Nontypeable Haemophilus Influenzae (NTHi) Exploits Disease-Related Defects in Xenophagy to Persist and Traffic Within the Epithelial Compartment During COPD/E. Roscioni, M. Poh, A. Kicic, S.E. Lester, P. Nguyen, H.P.A. Jersmann, P.N. Reynolds, S. Hodge, Adelaide, Australia, p.A5376


P914 Inhibition of Nasal and Systemic IgA Responses by Cigarette Smoke Exposure in Mice/J. McGrath, D. Thayaparan, S. Cass, B. Ly, R. Heo, S. Alkhani, J. Koenig, M. Fantauzzi, L.P. Schenck, M. Stampfl, Hamilton, Canada, p.A5379

P915 PU.1 Mediates Cigarette Smoke Extract Induced Endothelial Progenitor Cell Dysfunction via Stem Cell Antigen-1/X. He, L. Luo, Y. Chen, Changsha, China, p.A5380


P918 NEIL2 Activity a Sign of Oxidative Stress in COPD?/J. Seashore, N. Tapryal, S. Sur, T. Hazra, V.J. Cardenas, Galveston, TX, p.A5383

P919 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


P922 The Effects of PDE4 Inhibitors Roflumilast and CHF6001 on Cytokine Production from COPD BAL Lymphocytes/S. Lea, L. Hodgson, T. Southworth, F. Facchini, G. Villetti, M. Civelli, D. Singh, Manchester, United Kingdom, p.A5387


P925 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


P930 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


P933 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.A7434


P936 Extracellular Matrix (ECM) Proteins in Airway and in COPD Mice: Regional Expression Difference and Potential Mechanism Mediated by Transforming Growth Factor-ß1 (TGF-ß1)

Y. Zeng, W. Hu, Y. Zuo, J. Zhang, Shanghai, China, p.A7437

P401 Caveolin-1-Scaffolding Peptide Attenuates Pulmonary Fibrosis

W. Toriumi, A. Maeda, S. Ohkouchi, M. Chioccioli, Munich, Germany, p.A5395

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

P402 Interleukin-9 Blockade Suppresses Silica-Induced Lung Inflammation and Fibrosis in Mice/N. Okada, H. Kurosawa, Sendai, Japan, p.A5396


P404 Inhalation Toxicity of 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

P405 Comprehensive Metabolome Analysis Reveals New Mechanism of Anti-Fibrotic Factor Stanniocalcin-1 (STC1) Which Modulate of Anti-Fibrotic Factor Stanniocalcin-1 (STC1) Which Modulate

M. Koenigshoff, T. Adams, F. Ahangari, T. Mertens, S. Collum, W. Bi, A. Guha, R. Thandavarayan, K. Rajagopal, S.S. Jyothula, H. Karmouty-Quintana, Houston, TX, p.A5400

P406 Extracellular Matrix (ECM) Proteins in Airway and in COPD Mice: Regional Expression Difference and Potential Mechanism Mediated by Transforming Growth Factor-ß1 (TGF-ß1)

Y. Zeng, W. Hu, Y. Zuo, J. Zhang, Shanghai, China, p.A7437


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-Quintana, Houston, TX, p.A5400


P413 The Neuraminidase 1 (NEU1) - Epidermal Growth Factor Receptor (EGFR) Axis in Pulmonary Fibrosis/S. Atamas, S.W. Hyun, N.W. Todd, S.E. Goldblum, I.G. Luzina, Baltimore, MD, p.A5404


P416 Deletion of Pou2af1 in Type II Alveolar Epithelial Cells Augments Bleomycin-Induced Pulmonary Fibrosis/Q. Li, N. Omote, Z. Chen, G. Delulisi, N. Hashimoto, Y. Hasegawa, N. Kaminski, New Haven, CT, p.A5407


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
C65  DIFFUSE PARENCHYMAL LUNG DISEASES: BASIC AND CLINICAL STUDIES

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:  K. Bernau, DPhil, Madison, WI


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. Pitzetti, P. Caruso, S. Pontis, M.G. Pittelli, M. Bonatti, C. Frati, D. Madeddu, F. Quaini, C. Lagrasta, G. Villette, M. Civelli, M. Trevisani, Parma, Italy, p.A5411


P424  Pirfenidone Partially Alleviated Paraquat-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, ATSF, Ann Arbor, MI

P937  Use of Quantitative CT to Determine Disease Extent and Identify UIP Pattern in Rheumatoid Arthritis ILD/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. Collum, J. Hecht, H. Karmouty-Quintana, J.L. Alcorn, Houston, TX, p.A5421


Facilitator:  F. Xu, PhD, Vancouver, Canada


P946  Lipid Accumulation Leads to Inhibition of M1 Response in Alveolar Macrophages/W. Slovinsky, H. Shaghagi, A. Bhusan, 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. DeMarzo, M.K. Glassberg Csete, R.A. Alvarez, Miami, FL, p.A5437


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

C66 MECHANICAL VENTILATION

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

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


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. Golchin, M.A. Tidswell, Springfield, MA, p.A5446

P221 Accuracy and Utility of Negative Inspiratory Force with Uncuffed Endotracheal Tubes in Children/J. Hotz, A. Suresh, D. Bornstein, R.G. Khemani, Los Angeles, CA, p.A5447

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 Repeatability of Cardiopulmonary Exercise Test (CPET) Biometrics: 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. Pusser, S. 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. Hokan, J. Detterich, A. Sabati, 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. Hokan, P. Shah, J. Detterich, A. Sabati, R.M. Kato, Los Angeles, CA, p.A5462


BASIC • CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

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. Bourjeily, 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, Duration and Arousal Index/P. Walia, M. Bublitz, Length of Gestation/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. Szemraj, P. Kuna, P. Bialasiewicz, Lodz, Poland, p.A5471

BASIC • CLINICAL
THEMATIC POSTER SESSION

C69 LUNG CANCER
9:15 a.m. - 4:15 p.m. KGHCDD

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: C.H. Wendt, MD, Minneapolis, MN


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


Facilitator: C.S. Sassoon, MD, Long Beach, CA


P1010 Pulmonary Involvement of Langerhans Cell Histiocytosis as Initial Manifestation of the Disease in a Pediatric Patient: A Case Report/S.M. Restrepo, M. Villamil, J.H. Arcila Posada, C. Burbano Lopez, A. Contreras, N. Aponte Barrios, L. Jaramillo, Bogota, Colombia, p.A5479


BASIC • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION

C70 NEONATAL AND PEDIATRIC LUNG DISEASE
9:15 a.m. - 4:15 p.m. KGHCDD

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: S. Dakshinamurti, MD, MS, Winnipeg, Canada


P792  Susceptibility to Oxidative Stress Characterizes Phenotypes in Murine Model of BPD/T. Mizutani, A. Sato, A. Watanabe, Y. Hamakawa, K. Uemasu, N. Tanabe, S. Sato, T. Hirai, Kyoto, Japan, p.A5488


P794  The Effect of Mother’s Own Milk on Respiratory Severity Score in Very Low Birth Weight Infants/K. Sapp, C. Bauza, P. Parimi, M. Newkirk, M. Go, St. Petersburq, FL, p.A5490

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


BASIC • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION

C71  PULMONARY HYPERTENSION
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:  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. McDowell, 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. Hara, K. Oda, K. Yamasaki, K. Yatera, Kitakyushu City, Japan, p.A5501

Facilitator:  S. Dua, MD, New York, NY

P1192  Correlation of FVC/DLCO to Mean Pulmonary Artery Pressure/M. Newkirk, M. Go, St. Peterbusrg, FL, p.A5490

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

P990 Stay Calm and Just Breathe: A Case of Swayer-James-Macleod Syndrome/M.A. Saeed, A. Patil, Omaha, NE, p.A5518


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: J. Leung, MD, Vancouver, Canada

P994 Unilateral Diaphragm Paralysis After Pulmonary Vein Isolation Masquerading as a Pulmonary Embolism/G. Kousourou, S. Kenth, J. Baker, Kalamazoo, MI, p.A5522
P996 The Overinflated Lung: Ball-Valve Intraluminal Mass Leading to Progressive Dyspnea and Unilateral Hyperlucent Hemithorax/D. Dustin, B.L. Jones, Lebanon, NH, p.A5524
P997 A 5 Minute Tutorial on Sporadic Late-Onset Nemaline Myopathy (SLONM) with Respiratory Failure/V. Halani, D. Tazbaz, V. Kumar, P. Vaidyan, G. Morey, St. Louis, MO, p.A5525
P998 Respiratory Failure: An Uncommon Presentation of Multifocal Motor Neuropathy/V. Prado, C. Trujillo, M. Farooq, Chicago, IL, p.A5526
P999 Organizing Pneumonia as a Sentinel Manifestation of Colon Cancer/A. Devarajan, A. Valvani, A. Kumar, O. Epelbaum, Valhalla, NY, p.A5527
P1000 Follicular Bronchiolitis: A Diffuse Cystic Lung Disease Masquerading as Severe Obstructive Lung Disease/C. Pal, D. Garg, Newark, NJ, p.A5528

C73 SRN: CURIOUS CASES IN SLEEP AND RESPIRATORY MEDICINE

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: J. Budde, MD, MPH, Long Island City, NY

Late-Onset Congenital Central Hypoventilation Syndrome

P1217 Obstructive Sleep Apnoea at Its Most Severe - Severe Sleep Disordered Breathing During Pregnancy and Effect of CPAP on Arrhythmias in Two OSA Patients

P1216 Pompe Disease: An Unusual Cause of Hypercapnia in An Facilitator

Obstructive Sleep Apnea in the Setting of Large Mandibular

P1210 What's on my Mind? A Case of Central Sleep Apnea Related to 9:15 a.m. - 4:15 p.m. KBHCCD

Facilitator: I. Tapia, MD, Philadelphia, PA

C74 LUNG CANCER: BIOMARKERS FOR PROGNOSIS AND OUTCOMES

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.
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.

Chairing:
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

The following awards will be presented:

Outstanding Educator:
Richard M. Schwartzstein, MD, Boston, MA

Research Innovation and Translation Achievement:
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Han Wen, PhD, Bethesda, MD

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Marcus Y. Chen, MD, Bethesda, MD
Han Wen, PhD, Bethesda, MD

Outstanding Clinician:
Octavius D. Polk, Jr., MD, Washington, DC

Chairing:
D. Pradhan, MD, New York, NY
G.W. Garrison, MD, Burlington, VT

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
**BEHAVIORAL WORKSHOP**

**CME Credits Available: 1.5**

**WS6**  
**CANCELED: HEALTH POLICY ADVOCACY 101: EFFECTIVELY INFORM YOUR ELECTED OFFICIALS**

This session has been canceled

Assemby 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

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**MEET THE PROFESSOR SEMINARS**

**CME Credits Available: 1**

 Registration Fee: $70.00 (includes box lunch.)  
Attendance is limited. Pre-registration is required.

**MP601**  
INHALATION OF RECOMBINANT HUMAN GRANULOCYTE-COLONY STIMULATING FACTOR AND AUTOIMMUNE PULMONARY ALVEOLAR PROTEINOSIS  
R. Tazawa, MD, PhD, Niigata, Japan  
Greenville Avenue (Level 2)

**MP602**  
CYSTIC LUNG DISEASE: UNCOMMON DISORDERS COMMONLY MISDIAGNOSED  
R.M. Kotloff, MD, Cleveland, OH  
Deep Ellum B (Level 2)

**MP603**  
MASTERING THE MAZE OF PAP AND NIV COVERAGE CRITERIA  
P.C. Gay, MD, Rochester, MN  
Deep Ellum A (Level 2)

**MP604**  
COUGH, WHEEZE, AND DYSPNEA: WHAT IS IT IF NOT ASTHMA?  
M.M. Weinberger, MD, Encinitas, CA  
Arts District 1 (Level 2)

**MP605**  
ACUTE EXACERBATION OF IDIOPATHIC PULMONARY FIBROSIS  
T. Kishaba, MD, ATSF, Okinawa, Japan  
Arts District 2 (Level 2)

**MP606**  
NEUROLOGIC DISASTERS IN THE ICU  
T.P. Bleck, MD, ATSF, Chicago, IL  
Arts District 3 (Level 2)

**MP607**  
AIR POLLUTION AND MUCO-CILIARY DEFENSE: ROLE OF CILIARY ACTIVITY  
H. Bayram, MD, PhD, ATSF, Istanbul, Turkey  
Arts District 4 (Level 2)

**MP608**  
NAVIGATING THE CHALLENGES OF HOME OXYGEN THERAPY FOR COMPLEX SLEEP RELATED RESPIRATORY DISORDERS AND RESPIRATORY FAILURE SYNDROMES  
M. Cao, DO, Redwood City, CA  
Arts District 5 (Level 2)

**MP609**  
PULMONARY COMPLICATIONS AND MANAGEMENT OF CHILDHOOD CANCER  
S.B. Goldfarb, MD, Philadelphia, PA  
Arts District 6 (Level 2)

**MP610**  
ICPET: FROM STARTING A PROGRAM TO INTERPRETING STUDIES  
M.G. Risbano, MD, MA, Pittsburgh, PA  
Arts District 7 (Level 2)

**MP611**  
THE MANAGEMENT OF PATIENTS WITH SEVERE COMMUNITY-ACQUIRED PNEUMONIA  
C. Feldman, MD, DSc, PhD, ATSF, Johannesburg, South Africa Cedars (Level 2)
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
Speakers: J.K. Heath, MD, MSCE, Philadelphia, PA
D.C. Chu, MD, Hershey, PA
C. Clancy, MD, Philadelphia, PA

CC4  SLEEP MEDICINE CLINICAL CORE CURRICULUM II
2:15 p.m. - 4:15 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.
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 Sarcoidosis Pathogenesis
E.S. Chen, MD, Baltimore, MD

2:35 A Patient's Perspective
S. Detter, Frisco, TX

2:40 Disease Recurrence and Exacerbations
K.C. Patterson, MD, Falmer, 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 Sarcoidosis
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 D/H (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
**BASIC • TRANSLATIONAL**

**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 2

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**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

2:15 Human Lung Development and Congenital Lung Abnormalities  
G. Deutsch, MD, Seattle, WA

2:40 Epigenetic Regulation of Cell Lineages in Human Lung Development  
J.S. Hagood, MD, Chapel Hill, NC

3:05 Transcriptomic Lineage Mapping of the Developing Human Lung  
M. Guo, PhD, Cincinnati, OH

3:25 Multi-Omic Characterization of the Lung During Development  
C. Ansong, PhD, Richland, WA

3:50 Immune Cell Development in Children, Measured in Lung, Spleen and Blood  
G.S. Pryhuber, MD, Rochester, NY

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**BEHAVIORAL • CLINICAL • TRANSLATIONAL**

**SCIENTIFIC SYMPOSIUM**

CME Credits Available: 2

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**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

2:15 Linking Mechanical Ventilation to the Development of Lung Injury  
J.H.T. Bates, PhD, DSc, ATSF, Burlington, VT

2:35 Maintaining Low Surface Tension to Minimize Ventilation Injury  
C.E. Perlman, PhD, Hoboken, NJ

2:55 What You See and What You Get: PET/CT Insights on Mechanical Ventilation  
M.F. Vidal Melo, MD, PhD, Boston, MA

3:15 Identifying Targets to Guide Mechanical Ventilation: The Injury Cost Function  
B.J. Smith, PhD, Aurora, CO

3:35 Evolution of Lung Injury Using Quantitative CT Imaging  
M. Cereda, MD, Philadelphia, PA

3:55 Optimizing Ventilation in the Heterogeneous Lung: An Engineering Perspective  
D.W. Kaczka, MD, PhD, Iowa City, IA
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

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?

Chairs:
- H.S. Kulkarni, MD, MSc, ATSF, Saint Louis, MO
- R. Vittal, PhD, Ann Arbor, MI
- J. Kohl, MD, Lubeck, Germany

2:15 Introduction: A New Role for Complement in the Lung - More than Just Pro-Inflammatory Proteins?
H.S. Kulkarni, MD, MSc, ATSF, Saint Louis, MO

2:25 Using Complement Regulatory Proteins as Novel Therapeutic Molecules to Combat Pulmonary Fibrosis
R. Vittal, PhD, Ann Arbor, MI

2:45 Inhibiting Complement Receptors to Improve Donor Utilization and Outcomes Post-Lung Transplantation
C. Atkinson, PhD, Charleston, SC

3:05 Novel Reporter Models as Tools to Delineate the Role of Complement in Pulmonary Tolerance and Allergic Asthma
J. Koehl, MD, Lubeck, Germany

3:25 Exploiting Targeted Complement Modulation for Multi-Modal Anticancer Immunotherapies
R. Plot, PhD, Pamplona, Spain

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

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.

Chairs:
- 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
2:15 Fatty Acid Intake in the United States
C. Hanson, PhD, Omaha, NE

2:35 Silica-Triggered Lupus Flares, Pulmonary Powerhouses of Autoimmunity, and Dietary Lipid Interventions for Prevention and Treatment
J.R. Harkema, DVM, PhD, ATSF, East Lansing, MI

2:55 Dietary N-3 PUFAs Modulates Ozone Induced Pulmonary Immunity
K.M. Gowdy, BS, MS, PhD, Greenville, NC

3:15 Supplementation with n-3 PUFAs Ameliorate Adverse Cardiovascular Health Effects of Air Pollution Exposure in Human Volunteers
J.M. Samet, MPH, PhD, Chapel Hill, NC

3:35 Dust and Diet: Environmental Factors Impacting Lung Health
T.M. Nordgren, PhD, Riverside, CA

3:55 Dietary Influences on the Response to Particulate Matter Exposure: Asthma and COPD
N.N. Hansel, MD, MPH, Baltimore, MD

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. KBHCCD
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
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, 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

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CLINICAL • TRANSLATIONAL

SCIENTIFIC SYMPOSIUM

CME Credits Available: 2

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 p.m. - 4:15 p.m. KBHCCD
Room C147/C148/C154 (Level 1)

Target Audience
Physicians, nurses, respiratory therapists, and others who care for adults with interstitial lung disease, malignant pleural effusions, Obesity, OSA, fungal infections and pediatric patients who need supplemental oxygen

Objectives
At the conclusion of this session, the participant will be able to:
• understand how evidence is used to inform diagnostic and treatment recommendations;
• apply clinical recommendations from recently published guidelines in clinical practice, improving patient outcomes;
• obtain new strategies to managing IPF, Malignant Pleural Effusions, Obesity in OSA, Fungal Infections and pediatric Supplemental Oxygen.

This session is proposed as the fifth annual scientific symposium highlighting ATS clinical practice guidelines, as originally requested by the ATS Executive Committee several years ago to highlight recently approved or published ATS evidence-based clinical practice guidelines. This year’s symposium will highlight guidelines and statements on Idiopathic Pulmonary Fibrosis, Malignant Pleural Effusions, Obesity in OSA, Fungal Infections and pediatric Supplemental Oxygen. Speakers will describe the clinical recommendations formulated by the guideline panels, discuss the rationale for each, and critically review the evidence supporting each recommendation. Speakers will also describe how the guidelines provide the foundation for improving care. Speakers include the chairs of the panels that developed the guidelines.

Chairing:
R.A. Dweik, MD, ATSF, Cleveland, OH
C.C. Thomson, MPH, MD, ATSF, Cambridge, MA
B. Patel, MD, Houston, TX

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

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BASIC • TRANSLATIONAL

MINI SYMPOSIUM

C93 MECHANISMS OF AIRWAY INFLAMMATION IN ASTHMA AND COPD

2:15 p.m. - 4:15 p.m. KBHCCD
Room D221/D225/D226 (Level 2)

Chairing:
A. Haczku, MD, PhD, Davis, CA
P.A. Verhoef, PhD, MD, Chicago, IL

Oral Presentations

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


2:45 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.A5557
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

3:45 Inhibition of Mac-1 Associated with PMN Exosomes Attenuates Emphysema in a COPD Mouse Model

4:00 Downregulation of Lung DUOX1 During Aging Attenuates Innate Epithelial Injury Responses and May Predispose Development of COPD

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BEHAVIORAL MINI SYMPOSIUM

C94 THE IMPACT OF SOCIAL DETERMINANTS IN PULMONARY AND CRITICAL CARE

2:15 p.m. - 4:15 p.m. 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
2:30 Adverse Childhood Experiences Are Associated with Pediatric Asthma

2:45 Material Hardship and Modifiable Causes of Asthma Morbidity in Children
N.A. Jabre, C.A. Keet, E. Matsui, Baltimore, MD, p.A5564

3:00 The Association of Asthma, Sexual Identity, and Substance Use Among a Nationally Representative Sample of US Adolescents

3:15 Mediational Effect of Medication Beliefs on the Relationship Between Health Literacy and Medication Adherence Among Patients with Chronic Obstructive Pulmonary Disease: A Structural Equation Modeling Approach

3:30 Contribution of Anxiety and Depression on Chronic Obstructive Pulmonary Disease (COPD) Outcomes

3:45 Cystic Fibrosis: Mental Health Disorders and Inpatient Healthcare Utilization
S. Godara, A. Godara, M. Khan, Z. Khan, D.G. Kissner, A.O. Soubani, Detroit, MI, p.A5568

4:00 The Association Between Neighborhood Socioeconomic Disadvantage and Readmissions for Patients Hospitalized with Sepsis
S. Godara, A. Godara, M. Khan, Z. Khan, A.O. Soubani, Detroit, MI, p.A5569

CLINICAL MINI SYMPOSIUM

C95 ENHANCING PATIENT-CENTERED CARE IN CRITICAL CARE

2:15 p.m. - 4:15 p.m. 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
2:15 Satisfaction and Involvement in Patient Care Influence the Interaction Between Flexible ICU Visiting Hours and Symptoms of Anxiety and Depression Among Family Members of Critically Ill Patients: A Sub-Analysis of a Cluster-Randomized Crossover Trial

2:30 How Often Are Prioritized Healthcare Goals of Seriously Ill Outpatients Accurately Identified by Their Clinician?

2:45 A Randomized Trial of a Communication-Priming Intervention for Patients with Serious Illness: Identifying Heterogeneity of Treatment Effect
A.C. Long, L. Downey, J.R. Curtis, Seattle, WA, p.A5572

3:00 Communicating with Awake Mechanically Ventilated Patients


3:30 The Influence of Geographic Dispersion on Outcomes of Hospitalized Pulmonary Service Patients
C96 COPD AND PLEURAL DISEASE
2:15 p.m. - 4:15 p.m. KBHCCD
Ballroom C Three-Four (Level 2)

Chairing:
D.J. Feller-Kopman, MD, Baltimore, MD
S. Bose, MD, MPH, Baltimore, MD

Oral Presentations

2:30 Alpha-1 Antitrypsin Deficiency Pi’Z and Pi’S Allele Frequency in a Direct-to-Consumer Genetic Database/H. Nhan, J. Zhan, J. Perry, J.K. Stoller, E. Kim, Mountain View, CA, p.A5579


3:15 CD206+CD14+ Macrophages, a Potential Biomarker for Diagnosis of Malignant Pleural Effusion/X.-B. Pei, Beijing, China, p.A5582


C97 DON’T STOP BELIEVING: CLINICAL TRIALS IN PULMONARY VASCULAR MEDICINE
2:15 p.m. - 4:15 p.m. KBHCCD
Room D162/D164 (Level 1)

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


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
**BASIC • TRANSLATIONAL**

**MINI SYMPOSIUM**

**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**

2:15  

2:30  
**NLRP10 Regulates IL-17A/G-CSF Axis to Dampen Pulmonary Host Defense in MRSA Pneumonia**/S. Paudel, L. Ghimire, L. Jin, S. Cai, S. Jeyaseelan, Baton Rouge, LA, p.A5594

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

3:00  

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

3:30  

3:45  

4:00  

**BASIC • CLINICAL • TRANSLATIONAL**

**MINI SYMPOSIUM**

**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**

2:15  

2:30  

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

3:00  

3:15  

3:30  

3:45  
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) 

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. Simmerring, 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. Meganathan, 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

105 Targeted High-Resolution CT Re-Scan in Patients with Lymphangioleiomyomatosis: A Homogeneous Outcomes in the Pulmonary Fibrosis Foundation Registry/A.-M. Hoffmann-Vold, J. Kenwright, P. Neely, S. Robot-Fournier, M. Kalluri, Edmonton, Canada, p.A5612


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


Deep Learning Classification of Emphysema Pattern on CT Is Associated with Progression of COPD at Five Year Followup/S.M. Humphries, A.M. Notary, J.P. Centeo, B. EI Kaddouri, D.A. Lynch, Denver, CO, p.A5635


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. Choaite, 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

Abstract Summaries 2:15-2:45

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
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. Saliccioli, 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. Almaatiah, G. Khifran, B. Hu, M. Rothenberg, 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


A Comparison of Oscillometry Devices in Pediatric Asthma, Bronchopulmonary Dysplasia and Healthy Children/M.P. Dumas, R.J. Dandurand, Z. Hantos, L.C. Lands, Montreal, Canada, p.A5689


Establishment of Cut Off Values for Various Impulse Oscillometry (IOS) Parameters for Detection of Exercise Induced Bronchoconstriction (EIB) in Children with Asthma Aged 6 to 15 Years/S. Gupta, K.R. Jat, J. Sankar, A. Mukherjee, R. Lodha, S. Kabra, New Delhi, India, p.A5692


Hypobaric Hypoxia (Altitude of Residence) and Age Determines Hemoglobin Levels in Peruvian Children Between 6 and 35 Months Old/J.A. Leon-Abarca, R.A. Accinelli, Lima, Peru, p.A5695


Validation of GLI-2012 Spirometry Reference Values in 3-11 Year Old Children from Northern and Central Italy/E. Lombardi, C. De Pieri, E. Valentini, M. Arigliani, Florence, Italy, p.A7448

Chairing: M.L. Mettersky, MD, Farmington, CT
R. Thomson, MBBS, PhD, Greenslopes, Australia
M. Mirda, MD, Miami, FL

The Validity of Claims-Based Codes to Identify Pseudomonas Infection in Patients with Bronchiectasis in Medicare Data/J.H. Ku, B. Chan, T.R. Aksamit, E. Henkle, K.L. Winthrop, Portland, OR, p.A5697


Clinical Phenotypes Among Patients with Bronchiectasis/A. Basavaraj, L.N. Segal, A.S. Scott, S. Kitner, D. Harris, D.J. Addriizzo-Harris, D. Kamelhaur, New York, NY, p.A5699


The Impact of Bronchiectasis as a Comorbid Condition on Outcomes of Hospitalization/S. Hohmann, Chicago, IL, p.A5701


Prospective Monitoring of Patients with Bronchiectasis/G. Ignatova, V. Antonov, Chelyabinsk, Russian Federation, p.A5703


Nocardiia Infections in Immunocompetent Patients with and Without Bronchiectasis/A. Garrett, Scottsdale, AZ, p.A5705


313 Benefits of Simeox Airway Clearance Technology in Patients with Stable and Acute Exacerbation of Bronchiectasis


315 Risk Factors for Haemoptysis in 1804 Adults with Non-Cystic Fibrosis Bronchiectasis in Southwestern China: A Retrospective Cohort Study/Y. Wang, B. Liu, J. Luo, D. Wang, C. Liu, Chengdu, China, p.A5711


317 Inhaled Ciprofloxacin (ARD-3150) in Patients with Non-Cystic Fibrosis Bronchiectasis and Frequent Pulmonary Exacerbations: A Pooled Analysis from ORBIT-3 and ORBIT-4/D.J. Chalmers, A.M. Davis, G. Tino, I. Gonda, J. Freethlich, Cambridge, United Kingdom, p.A5713


322 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

323 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

324 Benefits of Simeox Airway Clearance Technology in Non-Cystic Fibrosis Patients with Bronchiectasis/P. Sliwinski, D. Klatka, A. Gladzka, L. Morin, K. Iwan, Warsaw, Poland, p.A5720

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**C106 PULMONARY REHABILITATION**

**2:15 p.m. - 4:15 p.m.**

**OMNI DALLAS DOWNTOWN**

**Trinity Ballroom 5-7 (Level 3)**

**Abstract Summaries 2:15-2:45**

**Viewing/Discussion 2:45-4:15**

**Chairing:** B.W. Carlin, MD, Sewickley, PA

**M. Steiner, MBBS, MD, Leicester, United Kingdom**

**C101 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**

**C102 A Web-Based Physical Activity Intervention Benefits Persons with COPD and Low Self-Efficacy: A Randomized Controlled Trial/S. Robinson, E.S. Wan, A. Kantorowski, M.L. Moy, Bedford, MA, p.A5722**

**C103 A Video Intervention to Increase Pulmonary Rehabilitation Uptake for Patients Hospitalized with Acute Exacerbations of COPD (virtue): A Randomized Controlled Trial/E. Barker, S.E. Jones, W. Banya, S.S.C. Kon, S. Fleming, C.M. Nolan, S. Patel, S.F. Clarke, J.A. Walsh, S.C. Wynne, M. Maddocks, M. Farquhar, J.A. Wedzicha, W. Man, Harefield, United Kingdom, p.A5723**


**C105 How Much to Change Physical Activity and Sedentary Time to Meaningfully Impact Quality-of-Life in Patients with Moderate-to-Severe Chronic Obstructive Pulmonary Disease/C.N. Driver, P. Novotny, R. Benzo, Rochester, MN, p.A5726**


**C107 L-Carnitine Supplementation in COPD Patients Significantly Improved Walking Distance in a Randomized Double-Blinded Pilot Study/S. Mirza, R. Benzo, Rochester, MN, p.A5728**


Protein Digestion, but Not Amino Acid Absorption, Is Compromised During Feeding in Chronic Obstructive Pulmonary Disease/A. McNew, N.E.P. Deutz, S.Y. Simbo, J.J. Thaden, G.A.M. ten have, M.P.K.J. Engelen, College Station, TX, p.A5730


The Effect of Music on Walk Enjoyment and Symptoms in Adults with Chronic Lung Diseases/A. Novotny, R. Benzo, Rochester, MN, p.A5735


Is the 1-Minute Sit to Stand Test a Functional Capacity Test in Patients with Severe Chronic Obstructive Pulmonary Disease?/S. Géphine, S. Bergeron, D. Saey, P. Mucci, F. Maltais, Quebec City, Canada, p.A5736


Life-Time Pulmonary Rehabilitative Management of COPD Integrated into the Doctor’s Office Setting Update on the 17th year of a Continuous Care Model/B. Liep, M. Barnett, R.R. Carter, R. Murray, Monrovia, CA, p.A5740


Alveolar Macrophage-Derived Extracellular Vesicles Protect Alveolar Epithelial Cells from Influenza Infection/D. Schneider, D. Lyons, C. Wilke, L.R.K. Penke, A. Lauring, B.B. Moore, M. Peters-Golden, Ann Arbor, MI, p.A5747

Hypercapnia Increases Influenza A Virus Replication in Airway Epithelium Through a Sterol-Regulatory Element Binding Protein 2 (SREBP2)-Dependent Mechanism/M. Casalino-Matsuda, F. Chen, A. Matsuda, P.H.S. Sporn, Chicago, IL, p.A5748


Intersitial Heparan Sulfate Deposition in a Mouse Influenza Model of Lung Fibrosis/S. Liao, Y. Yang, H.L. Twigg, R. Linhardt, E.P. Schmidt, Aurora, CO, p.A5750

Acutely Lethal Influenza Infection Truncates the Citric Acid Cycle in Murine Alveolar Type II Epithelial Cells/L. Doolittle, L.E. Rosas, L.M. Joseph, P.S. Woods, I.C. Davis, Columbus, OH, p.A5751


513 Mesenchymal Stem Cell Plasticity and Therapeutic Programming in Acute Lung Injury/M.M. Barroso, A.I. Vazquez, L. Jankauskaite, T. Braun, S. Herold, Giessen, Germany, p.A5754


515 Growth Differentiation Factor 15 (GDF15)-Mediated Lung Aging Promotes Human Rhinovirus Infection and Virus-Induced Inflammation/Q. Wu, W. Ren, S. Ye, M. Koenigshoff, O. Eickelberg, Aurora, CO, p.A5756


517 Disruption of the Airway Epithelial Barrier in a Murine Model of RSV infection/C.C. Smallcombe, D. Linfield, T.J. Harford, V. Bokun, A.I. Ivanov, G. Piedimonte, F. Rezaee, Cleveland, OH, p.A5758


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BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

C108 COPD: PHENOTYPE, MECHANISM, AND TREATMENT

2:15 p.m. - 4:15 p.m.  KBHCCD

Ballroom D Three (Level 3)

Poster Viewing  2:15-3:00

Discussion  3:00-4:15

Chairing:  J.K. Burgess, PhD, Groningen, Netherlands

A.L. James, MD, MBBS, PhD, Nedlands, Australia

J. Leung, MD, Vancouver, Canada

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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
617 Decrypted Orthopnea in Chronic Obstructive Pulmonary Disease (COPD): Using the Forced Oscillation Technique/E. Marchand, M. Zambrano-Braun, Yvoir, Belgium, p.A5778

618 Where the Sparks Begin: Small Airway Dysfunction in Patients with Preserved Pulmonary Function/Y.H. Hsiao, H.-Y. Chiu, D.-W. Perng, Taipei, Taiwan, p.A5779


624 Role and Mechanism Research of NOX4 and ESRP1 in Airway Epithelial-Mesenchymal Transition/C. Jieda, B. Hao, X. Guo, Q. Cai, Y. Li, J. Chen, Yinchuan, China, p.A5785

C109 RESPIRATORY MUSCLE DYSFUNCTION: MECHANISM AND ASSESSMENT

2:15 p.m. - 4:15 p.m.  

BASIC • CLINICAL • TRANSLATIONAL

POSTER DISCUSSION SESSION

2:15 p.m. - 4:15 p.m.  

Ballroom D Four (Level 3)

Poster Viewing  
2:15-3:00

Discussion  
3:00-4:15

Chairing:  
B.J. Petrof, MD, Montreal, Canada
B. Jung, MD, PhD, Montreal, Canada
G.C. Sieck, PhD, Rochester, MN

701 Mechanical Contraction, Nutritional Supplementation and Muscle Reoxygenation to Counteract Skeletal Muscle Cell Atrophy Induced by Hypoxia/S. Bensaid, C. Fabre, P. Mucci, C. Cieniewski-Bernard, Loos, France, p.A5786


705 Diaphragm Thickening Fraction and Its Relation with Disease Severity and Symptoms in Patients with Chronic Obstructive Pulmonary Disease: Comparison of Measurements Performed During Tidal Breathing and Maximal Inspiration/A.-C. Maynard-Paquette, C. Poirier, B.-P. Dubé, Montréal, Canada, p.A5790

706 Restrictive Disease Pattern on Pulmonary Function Testing in Obesity: Can It Be Explained by Diaphragmatic or Neuromuscular Weakness?/A. Mangardich, O. Al Qarni, E.A. Becker, S.H. Mirza, Chicago, IL, p.A5791

707 Relationship Between Diaphragmatic Excursion and Maximum Inspiratory Pressure (MIP) in Adults Patients with Guillain Barré Syndrome/F. J. Ríos, B.V. Rivero, Santiago, Chile, p.A5792


710 Risk of Readmission and Mortality Following Admission for Hypercapnic Respiratory Failure\textsuperscript{a} A. Meservey, M.C. Burton, A.E. Dixon, Burlington, VT, p.A5795

711 Change in Diaphragm Thickness in Mechanically Ventilated Children\textsuperscript{b} T. Pedigo, J. Hotz, S. Shah, M. Elkhunovich, R.G. Khemani, Los Angeles, CA, p.A5796

712 Transvenous Phrenic Nerve Pacing May Mitigate Ventilation-Induced Diaphragm Atrophy in All Myofiber Types\textsuperscript{c} K. Fernandez, E. Rohrs, T. Bassi, M. Ornowska, S.C. Reynolds, Burnaby, Canada, p.A5797


715 Bone Marrow-Derived Macrophages of Duchenne Muscular Dystrophy (mdx) Mice Are Differentially “Educated” Based on Muscle Disease Stage\textsuperscript{f} S. Bhattarai, F. Liang, Q. Li, E. Kaufmann, M. Divangahi, B.J. Petrof, Montreal, Canada, p.A5800

716 MRI Assessment of Diaphragm Impairment in Duchenne Muscular Dystrophy (DMD): Comparison to Optoelectronic Plethysmography and Pulmonary Function Tests (PFTS)/A. Aliverti, F. Penatti, F. Arrigoni, A. Lo Mauro, M.G. D’Angelo, Milano, Italy, p.A5801

717 Transvenous Phrenic-Nerve-Stimulated Diaphragm Contraction During Mechanical Ventilation Decreases Loss of End-Expiratory Lung Volume in Non-Injured Lungs\textsuperscript{g} E. Rohrs, M. Ornowska, T.G. Bassi, K. Fernandez, S. Reynolds, Burnaby, Canada, p.A5802

718 Transvenous Phrenic-Nerve Diaphragm Stimulation Reduces Lung Inflammation in Non-Injured Porcine Lungs During 50 Hours of Mechanical Ventilation\textsuperscript{h} E. Rohrs, T.G. Bassi, K. Fernandez, M. Ornowska, S.C. Reynolds, Burnaby, Canada, p.A5803

719 In Vivo Susceptibility of Cystic Fibrosis Mice to Inflammation-Induced Diaphragm and Limb Muscle Dysfunction\textsuperscript{i} B.J. Petrof, E. Gusev, F. Liang, D. Radzioch, Montreal, Canada, p.A5804

720 A Role for Interleukin-6 in the Pathogenesis of Ventilator-Induced Diaphragmatic Dysfunction\textsuperscript{j} B.J. Petrof, C. Giordano, S. Hussain, F. Liang, Montreal, Canada, p.A5805

721 MitoQ (Mitoquinone Mesylate) Prevents Sepsis Induced Reductions in Diaphragm Strength and Endurance\textsuperscript{k} G.S. Supinski, E. Schroder, L. Wang, L.A.P. Callahan, Lexington, KY, p.A5806

722 Effect of Hydroxymethylbutyrate and Eicosapentaenoic Acid on Diaphragm and Quadriceps Strength in MICU Patients\textsuperscript{l} G.S. Supinski, P. Netzel, L.A.P. Callahan, Lexington, KY, p.A5807

723 Role of TLR4 Receptor in Lipopolysaccharide-Induced Decrease of Thiamine Transporter Expression in C2C12 Cells\textsuperscript{m} C.S. Sassoon, E. Zhu, L. Fang, H.M. Said, Long Beach, CA, p.A5808


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C110 THE FUTURE OF LUNG CANCER BIOMARKERS: WHERE SHOULD WE LOOK?

2:15 p.m. - 4:15 p.m.  

KBHCCD  

Abstract Summaries

2:15-2:45

Viewing/Discussion

2:45-4:15

Chairing: J.G. Aerts, MD, PhD, Rotterdam, Netherlands

M.M. Fuster, MD, San Diego, CA

A.V. Gonzalez, MD, MSc, Montreal, Canada

401 The Advanced Lung Cancer Inflammation Index is a Prognostic Marker in Patients Undergoing Curative-Intent Therapy for Lung Cancer\textsuperscript{o} A. Cypro, M.M. Fuster, P.R. Montgrain, San Diego, CA, p.A5809

402 The Utility of Liquid Based Biopsy Using Next Generation Sequencing Technology at the Time of Tissue Collection by Bronchoscopy for Suspected Lung Cancer\textsuperscript{p} S. Chandrika, S. Cowles, J.E. Denis, M.R. Bowling, Greenville, NC, p.A5810

403 Prevalence and Significance of APOBEC-Mediated RNA Editing in Lung Cancer Tumors\textsuperscript{q} S. Zhang, S. Vendamuri, S. Patnaik, Hanover, NH, p.A5811

404 Detection of T790M Mutation in Blood Versus Tumor Tissue Biopsy\textsuperscript{r} L. Sakr, G. Kasymjanova, H. Wang, G. Chong, A. Spatz, D.I. Small, C. Pepe, V. Cohen, J. Agulnik, Montreal, Canada, p.A5812

405 Transcriptomic Signatures in Airway Brushings and Lung Cancer Prognosis\textsuperscript{s} J.G. Aerts, MD, PhD, Rotterdam, Netherlands


406 Reliability of PD-L1 Assays Using Small Tissue Samples Compared with Surgical Specimens\textsuperscript{t} 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 Immunotherapy/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


4:30 p.m.-6:30 p.m.

SECTION MEMBERSHIP MEETINGS

The Section meetings are open to all ATS members and other interested individuals. Items to be discussed include the Sections’ current projects and future directions.

MEDICAL EDUCATION

Hyatt Regency, Dallas
Cumberland A-C (Exhibition Level)

Chairing: Henry Fessler, MD, Baltimore, MD
W. Graham Carlos, MD, MSCR, ATSF, Indianapolis, IN

TERRORISM AND INHALATION DISASTERS

Hyatt Regency Dallas
Windsor (Atrium Level)

Chairing: Sven Jordt, PhD, Chapel Hill, NC
Erik Svendsen, PhD, 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: 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 |

SUNRISE SEMINARS

Registration Fee: $50.00 (includes continental breakfast.)
Attendance is limited. Pre-registration is required.

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<th>6:45 a.m. - 7:45 a.m.</th>
<th>OMNI DALLAS DOWNTOWN</th>
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<tbody>
<tr>
<td>SS301 MINDFULNESS FOR OPTIMIZING HEALTH CARE PROFESSIONAL WELL-BEING: REDUCING BURNOUT</td>
<td>N.C. Liang, MD, San Diego, CA Greenville Avenue (Level 2)</td>
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<tr>
<td>SS302 DIAGNOSIS AND MANAGEMENT OF THE ADULT PATIENT WITH BRONCHIECTASIS</td>
<td>E.C. Dasenbrook, MD, MHS, Cleveland, OH Deep Ellum B (Level 2)</td>
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<tr>
<td>SS303 HOW REAL WORLD DATA IS TRANSFORMING CLINICAL RESEARCH</td>
<td>E.D. Farrand, MD, San Francisco, CA Deep Ellum A (Level 2)</td>
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<tr>
<td>SS304 PROJECT ECHO: EXTENDING BEST MEDICAL PRACTICES FOR IDIOPATHIC PULMONARY FIBROSIS TO UNDERSERVED COMMUNITIES</td>
<td>M. Otaola, MD, Buenos Aires, Argentina Arts District 1 (Level 2)</td>
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<td>SS305 THE ROLE OF SEX AND GENDER IN LUNG DISEASE</td>
<td>J.J. Beros, MD, Philadelphia, PA Arts District 2 (Level 2)</td>
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<td>SS306 HYPERSENSITIVITY PNEUMONITIS FOR THE CLINICIAN</td>
<td>A. Pande, MD, Cleveland, OH Arts District 3 (Level 2)</td>
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<td>SS307 MANAGEMENT OF RESPIRATORY FAILURE IN ALS AND OTHER NEUROMUSCULAR DISEASE</td>
<td>P. Choi, MD, Ann Arbor, MI Arts District 4 (Level 2)</td>
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<tr>
<td>SS308 CHALLENGING CASES IN CRITICAL CARE ULTRASOUND</td>
<td>D. Pradhan, MD, New York, NY Arts District 5 (Level 2)</td>
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<td>SS309 NASAL HIGH FLOW IN THE ICU</td>
<td>M. Allison, MD, Baltimore, MD Arts District 6 (Level 2)</td>
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<td>SS310 CARBON MONOXIDE POISONING: UNDERLYING MECHANISMS, CURRENT MANAGEMENT AND FUTURE DIRECTIONS</td>
<td>J.J. Rose, MD, MBA, Pittsburgh, PA Arts District 7 (Level 2) CME credit is not available for this seminar</td>
</tr>
<tr>
<td>SS311 ANTI-INFLAMMATORYES IN LUNG DISEASE: WHAT WORKS WHERE</td>
<td>L. Yonker, MD, Boston, MA Cedars (Level 2)</td>
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<tr>
<td>SS312 CARING FOR ADOLESCENTS AND ADULTS BORN PREMATURE: LATE CARDIOPULMONARY MANIFESTATIONS</td>
<td>K. Goss, MD, Madison, WI South Side 1 (Level 3)</td>
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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.

<table>
<thead>
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<tr>
<td>6:45 a.m. - 7:45 a.m.</td>
<td>OMNI DALLAS DOWNTOWN</td>
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#### 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

### K7 WHAT SHOULD PULMONOLOGISTS KNOW ABOUT ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING?

<table>
<thead>
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<th>Time</th>
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<tr>
<td>8:00 a.m.-8:45 a.m.</td>
<td>Ballroom C One-Two (Level 2)</td>
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#### Speakers
Michael D. Howell, MD, MPH, Mountainview, CA

### D1 CLINICAL YEAR IN REVIEW 4

**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>
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<tr>
<td>9:15 a.m. - 11:15 a.m.</td>
<td>Hall A (Level 2)</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;
- 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.

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**CLINICAL TOPICS IN PULMONARY MEDICINE**

**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.  
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; AMPLE-1 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

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**CLINICAL TOPICS IN PULMONARY MEDICINE**

**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.  
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

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 facilitate design and conduct clinical trials are sufficient. In many cases, they may fail to answer important research questions or provide meaningful insights.

Chairing: M.M. Churpek, MD, MPH, PhD, ATSF, Chicago, IL
P. Sinha, BSc(Hons), MBChB, 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 Are “Bigger Trials” the Answer? The ANZICS Experience
P. Young, MBChB, BSc (Hons), PhD, Wellington, New Zealand

10:15 “Smarter” 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), MBChB, PhD, San Francisco, CA

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 seem 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. KBHCCD 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 Introduction to Extracellular Vesicles in Vascular Injury and Pulmonary Medicine L.A. Ortiz, MD, Pittsburgh, PA

9:45 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
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.

Chairing:
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

9:25 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
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
9:15 a.m. - 11:15 a.m.  KBHCCD

Room C155-C156 (Level 1)

Chairing: P.L. Molyneaux, MRCP(UK), MBBS, BS(Hons), London, United Kingdom
A. Podolansczuk, MD, New York, NY

Oral Presentations


11:00  Use of Artificial Intelligence to Identify Undiagnosed Idiopathic Pulmonary Fibrosis Patients/A. Knight, S. Meghri, Y. Nigmatullina, J. Glasser, A. Smyth, J. Keefer, J. Rigg, Durham, NC, p.A7453

D13  TRANSPLANTATION
9:15 a.m. - 11:15 a.m.  KBHCCD

Room C146 (Level 1)

Chairing: R.D. Yusen, MD, MPH, St. Louis, MO
C.M. Shaver, MD, PhD, Nashville, TN

Oral Presentations


**D14 CRITICAL CARE: GREAT EXPECTATIONS - RECOVERY AND OUTCOMES AFTER CRITICAL ILLNESS**

*BEHAVIORAL • CLINICAL MINI SYMPOSIUM*

**D15 THE BEST OF PEDIATRIC ASTHMA EPIDEMIOLOGY**

*BEHAVIORAL • CLINICAL • TRANSLATIONAL MINI SYMPOSIUM*

**WEDNESDAY MORNING**

**D14 CRITICAL CARE: GREAT EXPECTATIONS - RECOVERY AND OUTCOMES AFTER CRITICAL ILLNESS**

**Oral Presentations**

**9:00** Long-Term Outcomes and Quality of Life of 1,364 General ICU Survivors: A Multicenter Prospective Cohort Study

**9:15** Dysfunction Junction: 8-Year Trends in Deteriorating Intensive Care Functional Status

**9:30** One-Year Outcomes Following Tracheostomy for Acute Respiratory Failure

**9:45** Enablers and Barriers to Implementing ICU Follow-Up Clinics and Peer Support Groups Following Critical Illness - The Thrive Collaboratives

**10:00** Long-Term Outcomes and Quality of Life of 1,364 General ICU Survivors: A Multicenter Prospective Cohort Study

**10:15** Epidemiology and Outcomes of Maternal Sepsis in the US/M. Hensley, H.C. Prescott, Ann Arbor, MI, p.A5854

**10:30** Early Functional Recovery Trajectories of Chronic Critically Ill Patients: An Observational Cohort Study

**10:45** Recent Trends in Critical Care Admission Diagnosis and Related Mortality

**11:00** The Role for Off-Site/Home Visits in the Post ICU Care Continuum

**Chairing:**

M.S. Herridge, MD, Toronto, Canada
C.T.L. Hough, MD, MSc, Seattle, WA
A.J. Walkey, MD, MSc, Boston, MA

**Dallas Ballroom G (Level 3)**

**D15 THE BEST OF PEDIATRIC ASTHMA EPIDEMIOLOGY**

**Oral Presentations**

**9:15** Violence Exposure, Health Risk Behaviors, and Current Asthma Among U.S. Adolescents

**9:30** Attributable Risk of Overweight and Obesity in US Infants, School-Age Children and Adolescents

**9:45** Serum Zinc, Selenium and Total Antioxidant Contents of Nigerian Children with Asthma: Association with Disease Severity and Symptoms Control

**10:00** Early-Life Antibiotics Use Increases the Risk of Asthma and Eczema: A Discordant Twin Study

**10:15** Fecal Acetate Relative Abundance in Pregnancy Is Inversely Associated with Asthma/Recurrent Wheeze with Atopy in Offspring

**10:30** Asthma Incidence Rates in the Echo Children’s Respiratory and Environmental Workgroup (CREW) Consortium by Family History, Sex, Race/Ethnicity and Year of Birth

**10:45** Fine Mapping the 17q12-21 Childhood Onset Asthma Locus in Ethnically Diverse Children in the Multi-Center Environment and Child Health Outcomes (ECHO)-Children’s Respiratory and Environmental Workgroup (CREW) Consortium

**Chairing:**

P. Subbarao, MD, Toronto, Canada
J. Rice, DO, Baltimore, MD
J.E. Gern, MD, Madison, WI

**Dallas Ballroom A-C (Level 3)**
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

9:15  Lung Single-Cell Transcriptomics of Two Animal Models of Pulmonary Arterial Hypertension Reveals Vulnerable Cell Types and Pathways

9:30  Pulmonary Artery Endothelial Cell Phenotype Switch Impairs Angiogenesis in the Lungs in Persistent Pulmonary Hypertension of the Newborn

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

10:15  Pathogenetic Role of Fatty Acid Oxidation in Human Lungs Affected by Pulmonary Arterial Hypertension

10:30  Metabolomics in Pulmonary Hypertension

10:45  Paclitaxel, a FoxO1 Activator Reverses IL-6 Mediated Perinatal Metabolic Programming of Lung Micro-Vessels and the Risk of Pulmonary Arterial Hypertension

11:00  Antioxidant Conjugated Peptide Attenuated Metabolic Reprogramming in Pulmonary Hypertension

D17  TOWARDS THE NEXT IPF THERAPIES

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

Chairing:
M.R. Horton, MD, Baltimore, MD
M. Peters-Golden, MD, Ann Arbor, MI
C. Feghali-Bostwick, PhD, Charleston, SC

Oral Presentations

9:15  Dual αVβ6/αVβ1 Inhibitor PLN-74809 Reduces Fibrogenesis in Ex Vivo and In Vivo Models of IPF

9:30  Engineered Lymphocytes Expressing Mutant Form of TGFβ Block TGFβ Pathway on Lung Fibroblasts

9:45  Cell Specific Targeting of the Rho-Kinase-MRTF Pathway Using Nanotechnology in a Mouse Model of Lung Fibrosis

10:00  A High-Throughput Small Molecule Screen for YAP Inhibitors Identifies Statins as Inhibitors of Fibroblast Activation and Pulmonary Fibrosis

10:15  Inhibition of BRD4 Down-Regulates Nox4 Expression by Blocking P300 Association with the Nox4 Promoter and Improves Resolution of Lung Fibrosis in a Bleomycin Model

10:30  ER Stress-Induced Stem Cell Failure and Lung Fibrosis Are Reversed by TUDCA

10:45  Kruppel-Like Factor 4 (KLF4): A Brake on Fibroblast Activation and A Target for Pharmacologic Induction in Pulmonary Fibrosis

11:00  BMS-986278, an LPA1 Receptor Antagonist for Idiopathic Pulmonary Fibrosis: Preclinical Assessments of Potential Hepatobiliary Toxicity
## BASIC • CLINICAL • TRANSLATIONAL
### MINI SYMPOSIUM

### D18 BEST OF NOVEL TECHNOLOGIES AND METHODOLOGIES

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

**Chairing:**  
S. Choi, PhD, MSc, Daegu, Republic of Korea  
B.S. Brook, PhD, DrPH, Nottingham, United Kingdom  
J.C. Woods, PhD, Cincinnati, OH

**Oral Presentations**

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## BEHAVIORAL • CLINICAL

### MINI SYMPOSIUM

### D19 LUNG CANCER SCREENING: NOVEL INSIGHTS ON PATIENT SELECTION AND OUTCOMES

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

**Chairing:**  
C.G. Slatore, MD, Portland, OR  
D. Upadhyay, MD, Fresno, CA

**Featured Speaker**

**9:15 Featured Speaker**  
G.A. Silvestri MD, Charleston, SC

**Oral Presentations**

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<td>9:30</td>
<td>Interstitial Lung Disease Is an Independent Cause of Lung Cancer Among Smokers</td>
<td>A.A. Balekian, T. Henry, G. Raghu, Los Angeles, CA</td>
<td>p.A5891</td>
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<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</td>
<td>R.P. Young, R.J. Hopkins, F. Duan, C. Chiles, D. Aberle, G.A. Silvestri, P. Billings, G. Gamble, Auckland, New Zealand</td>
<td>p.A5893</td>
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<td>10:30</td>
<td>Comparing the Performance of Lung-RADS with the Brock Model to Identify Cancer Risk in the NLST</td>
<td>V.S. Nair, M.K. Gould, Tampa, FL</td>
<td>p.A5895</td>
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D21 HOST RESPONSE TO LUNG INFECTIONS

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

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

Ballroom A Four (Level 2)

Chairing: Y.J. Huang, MD, Ann Arbor, MI
C. Dela Cruz, MD, PhD, ATSF, New Haven, CT
R.S. Hagan, MD, PhD, Chapel Hill, NC
S.R. Reeves, A.M. Piliponsky, K.A. Barrow, W.A. Altemeier, S.F. Ziegler,


302 Intranasal Administration of Catalase Ameliorates Respiratory Syncytial Virus-Induced Airway Disease Via Modulation of Innate Immune Responses/M. Ansar, T. Ivanciu, 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 I IFN-Dependent Cytokine Production/R. van der Geest, H. Li, J.S. Lee, Pittsburgh, PA, p.A5915


D22 REAL WORLD MEDICATION USE IN PULMONARY DISEASES

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:  
T. Bryant-Stephens, MD, Philadelphia, PA  
J. Foster, BSc(Hons), PhD, Sydney, Australia


1006 Real-World Patterns and Implications of Short-Acting Beta-Agonist Use Among Adolescent and Adult Patients with Asthma/N. Lugogo, I. Gilbert, N. Goshi, H. Gandhi, L. Moore-Schiltz, J. Tkacz, M. Lanz, Ann Arbor, MI, p.A5924


1011 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


210 Ultrasound Evaluation of the Quadripares Muscle in Patients with Chronic Obstructive Pulmonary Disease: Relationships with Clinical Symptoms, Disease Severity and Diaphragm Contractility/A.-C. Maynard-Paquette, C. Poirier, B. P. Dubé, Montreal, Canada, p.A5949

211 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. Créie, K. Berschneider, V. Obermoser, C. Vogelmeier, R. Buhl, H. Worth, Frankfurt am Main, Germany, p.A5950


215 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. Quayyum, Richmond, VA, p.A5954


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

Chairing: A.L. Gray, MD, Durham, NC

A.L. Olson, MD, Denver, CO


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


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. Bhan, M. Mohanka, S. Bollineni, J. Mullins, V. Kaza, J. Joerns, F. Torres, A. Banga, Dallas, TX, p.A5976

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.A5978


Clinical Outcomes of Single Lung Transplant: Does Laterality Matter?/K. Young, B. Bemiss, Maywood, IL, p.A5981

Incidence of Gallbladder Disease Post Lung Transplant/S. Chandiramani, E. Mancl, S. Quddus, Maywood, IL, p.A5982

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


Effects of Balanced Crayloid vs 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.  

**Abstract Summaries**

9:15-9:45

**Viewing/Discussion**

9:45-11:15

**Chairing:**  
K. Cromar, PhD, New York, NY  
P.K. Henneberger, ScD, ATSF, Morgantown, WV  
S. Bose, MD, MPH, Baltimore, MD

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### HEALTH EFFECTS ASSOCIATED WITH INDOOR AND OUTDOOR AIR POLLUTION

**Rapid Abstract Poster Discussion Session**

**BASIC • CLINICAL • TRANSLATIONAL**

**KBHCCD Arena (Level 2)**

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

#### Abstract Summaries

9:15-9:45

#### Viewing/Discussion

9:45-11:15

**Chairing:**  
K. Cromar, PhD, New York, NY  
P.K. Henneberger, ScD, ATSF, Morgantown, WV  
S. Bose, MD, MPH, Baltimore, MD

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**Biological Effects and Characteristics of Indoor Particulate Matter from Homes of Current and Former Smokers/E. Stapleton, R. Manges, G. Parker, E.A. Stone, T. Peters, R.J. Blount, P.M. Polgreen, O. Chipara, T. Herman, A.P. Comellas, Iowa City, IA, p.A6010**


**Do Known Sources of Indoor Air Pollution Affect Lung Function in Cystic Fibrosis?/S. Carson, J.M. Collaco, G.R. Cutting, K. Psoter, N.E. West, N. Lechtzin, N.N. Hansel, C.A. Merlo, Baltimore, MD, p.A6014**

**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**


**Geospatial Association of Asthma Severity and Traffic Pollutant Exposure in Urban and Suburban Allegheny County, PA/B.M. Byrwa-Hill, Pittsburgh, PA, p.A6019**


MECHANISTIC INSIGHTS INTO BRONCHOPULMONARY DYSPLASIA

9:15 a.m. - 11:15 a.m.
OMNI DALLAS DOWNTOWN
Trinity Ballroom 1-3 (Level 3)

Abstract Summaries
9:15-9:45

Viewing/Discussion
9:45-11:15

Chairing:
T.E. Tipple, MD, Birmingham, AL
B. Shivanna, MD, DM, PhD, Houston, TX
S.H. Abman, MD, Aurora, CO

S1P/S1P1 and STAT3 Signaling Axis Promotes Hyperoxia-Induced Lysyl Oxidase in Lung Endothelium Leading to Bronchopulmonary Dysplasia/A. Harijith, A.W. Ha, D.L. Ebenezer, P. Fu, T. Bai, S. Garzon, E. Berdyhev, G.S. Pryhuber, V. Natarajan, Chicago, IL, p.A6030


Toll-Like Receptor 4-Dependent Suppression of Platelet-Dependent 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 Sna1 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)-ß Signaling/F. 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. Chizinga, E. Papierniak, 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. Jiang, 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, M. Devasahayam, Danville, PA, p.A6061

The Effects of Pulmonary Endarterectomy on Pulmonary Hemodynamics Evaluated by Interventricular Septum Curvature Measured with Electrocardiogram-Gated 320-Slice Multidetector Computed Tomography in Chronic Thromboembolic Pulmonary Hypertension Patients/T. Saito, H. Kasai, T. Sugii, S. Sakao, N. Tanabe, K. Tatsumi, Chiba, Japan, p.A6065


Combination of Balloon Pulmonary Angioplasty and Subcutaneous Treprostinil for the Treatment of Chronic Thromboembolic Pulmonary Hypertension/C. Gerges, G. Kopec, R. Sadushi-Kolci, N. Skoro-Sajer, M. Gerges, H. Matsubara, I.M. Lang, Vienna, Austria, p.A6069


Chairing: M.H. Cho, MPH, MD, Boston, MA
J. Kropski, MD, Nashville, TN
M.-L.N. McDonald, PhD, Birmingham, AL


Unsupervised and Supervised Analysis to Identify Novel Candidate Genes and Therapeutics for Idiopathic Pulmonary Fibrosis/S. Ghandikota, S.K. Madala, A. Jegga, Cincinnati, OH, p.A6074


523 Single Cell Transcriptomics Reveals Gene Expression Changes and Cell Populations Associated with Bleomycin-Induced Pulmonary Fibrosis/J. Koenitzer, E. Donnelly, H. Wu, S. Ramakrishnan, B.D. Humphreys, St. Louis, MO, p.A7462


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


066 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. 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: P. Akuthota, 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/J. 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


P1036 When the Wonder Drug Fails: A Case of Anaphylaxis from Glucocorticoids/D. Patel, E. Matayeva, 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 Chlordiazepoxide Induced Steven-Johnson Syndrome/B. Walsh, New York, NY, p.A6125


P1045 An Unusual Case of Beta Agonist Induced Lactic Acidosis Masquerading as Diabetic Ketoacidosis/A. Amin, S. Kwatra, G. Sharma, U. Khalid, M. Shah, Youngstown, OH, p.A6130


P1047 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


P812 Analysis of Hyperoxic Lung Injury in Mice Deficient in Gene for Cytochrome P450 (CYP)1b1, 1a1 or 1a2/C. J. Cooray, A.C. Veith, M.J. Robertson, K. Lingappan, B. Moorthy, Houston, TX, p.A6138


Facilitator: S. Grazioni, MD, Geneva, Switzerland


P819 Aging Decreases Tissue Protective Function of Regulatory T Cells in the Lung/L. Morales-Nebreda, K. Helmin, B.D. Singer, Chicago, IL, p.A6145


P822 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


P825 The Role of Cell Volume in Macrophage Polarization/Y.-C. Chuang, K.-L. Huang, Taipei City, Taiwan, p.A6151


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 Host from Escherichia Coli-Induced Respiratory Infection/V. Di, 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


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/IRFNL 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 TL3 Signaling in Mouse Lungs/ N. Schaefer, H.W. Chu, Denver, CO, p.A6172

P152 Defining the Preliminary Function of Siglec-F Expressed on Mouse Alveolar Macrophages In Vitro/T. Liu, Y.-H. Feng, F.-P. Wang, H. Mao, Chengdu, China, p.A6174


BASIC • CLINICAL • TRANSLATIONAL
THEMATIC POSTER SESSION

D34 CYSTIC FIBROSIS AND BRONCHIECTASIS: CLINICAL AND MECHANISTIC STUDIES

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.

Facilitator: C. Richards, MD, Boston, MA

P831 Association of Tumour Growth Factor-Beta 1 Levels with df508 Genotype and Clinical Phenotype of Cystic Fibrosis/M. Singh, S. Sagwal, M. Singh, Chandigarh, India, p.A6176


P833 Evaluation of Dehydroepiandrosterone Sulfate (DHEA-S) Levels in Cystic Fibrosis/L. Shaffer, S. Abid, R. Jain, Dallas, TX, p.A6178


P839 Increased NADPH in Human PCD Airway Epithelial Cells: Does the Reducing Environment in Cells with Ciliary Dysfunction Lead to Decreased NO Evolution?/N. Marozkina, L. Smith, C. Cotton, B.M. Gaston, Cleveland, OH, p.A6184

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


P842 Airway Stem Cell Heterogeneity in Advanced Cystic Fibrosis/W. Xian, S. Niroula, F. McKeon, Houston, TX, p.A6189


P846 A Precision Approach to Analyzing Inflammatory-Induced Glycogene Changes in Cystic Fibrosis/J.W. Barnes, C. Esler, E.S. Helton, M. Mazur, R. Denson, R. Zaharias, A. Adewale, S.M. Rowe, S. Krick, Birmingham, AL, p.A6193

P847 The Structure the Calcium Activated Chloride Channel Regulator 1 (CLCA1) VWA Domain and Its Translation Application to Potentiate TMEM16A Anion Channel Activity in Primary CF Airway Cells/T. Brett, K.N. Berry, M. Sala-Rabanal, D.E. Byers, E. Katz, C.G. Nichols, J. Alexander-Brett, St. Louis, MO, p.A6194


P849 Oligotherapeutics to Improve CFTR Correction/F. Lutful Kabir, S. Sasaki, S. Guo, N. Ambalavanan, S.M. Rowe, W.T. Harris, Birmingham, AL, p.A6196


BEHAVIORAL • CLINICAL

THEMATIC POSTER SESSION

D35  TESTING, PROCEDURES, AND OUTCOMES IN PULMONARY AND CRITICAL CARE MEDICINE
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.

Facilitator:  J.M. Kruser, MD, Chicago, IL

P655  Development and Validation of a Nomogram Based on Pulmonary Function Tests for Predicting Prolonged Postoperative Length of Stay in Patients Following Lung Resection/X. Hu, X. Wang, J. Luo, D. Hou, C. Bao, D. Yang, Y. Song, C. Bai, Shanghai, China, p.A6198

P656  Lung Function Deterioration Predicts Elevated Troponin Levels in Apparently Healthy Individuals Throughout a 5-Year Follow-Up/A. Bar-Shai, M. Krubiner, D. Zeltser, I. Shapira, S. Berliner, S. Shenhar-Tsarfaty, O. Rogowski, Ashkelon, Israel, p.A6199


P659  Tranexamic Acid Pharmacokinetics and Dosing in Prolonged Cardiac Surgery/A. Jerath, M. Wasowicz, K.S. Pang, Q. Yang, Toronto, Canada, p.A6202

P660  The Role of Transthrastom Echocardiography as a Safe and Accurate Method for Indicating Surgery in Patients with Congenital Heart Disease/J.M. Njem, Jos, Nigeria, p.A6203

P661  Should Consent Be Weighted by the Risk Profile of Patients Defined by a Risk Stratification Tool?/A. Suri, A. Kaber, A. Ali, A. Menon, S. Biswas, A. Thavakumar, Essex, United Kingdom, p.A6204


Facilitator:  L. Myers, MD, Boston, MA

P663  Outcomes of a Physician-Staffed Advance Care Planning Clinic in a Lung Transplant Program/P. Hutchison, D. Campbell, D.F. Dilling, Maywood, IL, p.A6206


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BEHAVIORAL • CLINICAL

THEMATIC POSTER SESSION

D36  INNOVATIONS IN RESEARCH METHODS AND EVIDENCE SYNTHESIS
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.

Facilitator:  C.R. Cooke, MD, Ann Arbor, MI


Days Alive and Out of Hospital: Validation of a Patient-Centered Outcome for Perioperative Medicine/A. Jerath, P. Austin, D. Wijeyasurya, Toronto, Canada, p.A6216


A Smoking Gun? Challenges in Documentation and “Best Practice” in the Age of EMR/J. Willoughby, L. Dowling, P. Shah, B.T. Tran, Chicago, IL, p.A6219


A Systematic Review of Methodology Used in the Development of Prediction Models for Future Asthma Attack/L. Bonnett, J. Bridge, J.D. Blakely, Liverpool, United Kingdom, p.A6224

The Use of “Goals of Care” in the Medical Literature: A Systematic Review/K.E. Secunda, A.R. Levenson, J. Peterson, J.M. Kruser, Chicago, IL, p.A6225


Patient and Healthcare Professional (HCP); General Practitioner (GP) and Practice Manager (PMI) Insights to Facilitate Engagement in Future Effectiveness Studies: Learnings from the Salford Lung Studies (SLS)/K. Gemmoe, R. Crawford, A. Caress, R. Rushton, A. Shah, S. Collier, L. Doward, R. Vekaria, S. Worsley, D.A. Leather, Uxbridge, United Kingdom, p.A6227

A Systematic Review of Clinical Trial Registration in Major Respiratory Journals 2010-2018/N. Suntila, A. Smith, Y. Al-Dabbagh, J.D. Chalmers, Dundee, United Kingdom, p.A6228


WEDNESDAY MORNING


Facilitator:  T. Siddharthan, MD, Baltimore, MD


P884  Pulmonary Tuberculosis with Hemothysis Cases: Clinical Pathway and Cost Control in Cisarua, Bogor/A. Kosasih, A. Nurudin, Cisarua, Bogor, Indonesia, p.A6241


P888  Risks and Features of Respiratory Diseases in Adult Population of a South Italian Community/G. Della Polla, M. Capunzo, D.C. Christiani, Boston, MA, p.A6245


P890  Resources of Pulmonology in Russia: Dynamics and Regional Gradients/V.P. Kolosov, L.G. Manakov, E.V. Polysantskaya, Blagoveschensk, Russian Federation, p.A6247

P891  Regional Preventive Programs for Patients with Respiratory Disease in the Amur Region/N.P. Kolosov, O.P. Kurganova, L.G. Manakov, O.V. Demura, T.V. Zabolotskikh, Blagoveschensk, Russian Federation, p.A6248

P892  Barriers to the Diagnosis and Treatment of Intestinal Lung Diseases (ILD) in Colombia/O.M. Garcia Morales, J.L. Galindo, D.L. Rey Sanchez, C.A. Cells-Preciado, A. Cañas, Bogota, Colombia, p.A6249


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D38  LUNG TRANSPLANTATION AND DRUG RELATED 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.

Facilitator:  J.L. Todd, MD, Durham, NC


P436  The Unexplained Hypoglycemia: Where Is It All Going?/A. Arjuna, A. Shahmohammadi, S. Chandrashekar, M. Pipkin, T. Machuca, Gainesville, FL, p.A6257


Facilitator:  T.N. Adams, MD, Dallas, TX

P440 Alectinib (ALK Inhibitor) Induced Interstitial Lung Disease

P441 Talc Granulomatosis

P442 Valproic Acid Associated Pleural Effusion

P443 Edoxaban Induced Fatal Interstitial Lung Disease: A Case Report

P444 Moxifloxacin Induced Hypersensitivity Pneumonitis

P445 Flavocoxid-Induced Pulmonary Toxicity

P446 Rapidly Progressing Organising Pneumonia in Association with Tocilizumab Treatment and Underlying Rheumatoid Arthritis

P447 Linezolid Induced Interstitial Lung Disease

P448 How Not to Take a Multivitamin

P449 A Rare Cause of Respiratory Failure: Daptomycin Induced Organizing Pneumonia Secondary to High Dose Everolimus

P450 Trastuzumab Related Granulomatous Mediastinal Lymphadenopathy in a 57 Year Old Breast Cancer Patient

P451 Organizing Pneumonia Secondary to High Dose Everolimus Therapy for Endometrial Carcinoma

P452 Case of a Missing Foreign Body: The Pathologic Clue

P453 Bilateral Pulmonary Nodules Secondary to IgG4-Related Lymphocytic Interstitial Lung Disease

P454 ß-lactam Antibiotics Induced Organizing Pneumonitis: A Case Report

P455 Yttrium-90 Radioembolization-Induced Radiation Pneumonitis

P456 A Rare Etiology of Diffuse Cystic Lung Disease

P457 Native Course of Pulmonary Hyalinizing Granuloma in a Patient with Cystic Lung Disease

P458 Recent Vanishing Bronchus Syndrome Requiring Serial Stent Placement to Achieve Airway Remodeling

P459 A Case of Interstitial Fibrosis Five Years After Bleomycin Exposure

P460 Imatinib Induced Pneumonitis, a Rare but Serious Complication

D39 RARE DPLD CASE REPORTS

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.

Facilitator: L.T. Vaszar, MD, Scottsdale, AZ

P462 A Calcified Curse: A Case of Pulmonary Alveolar Microlithiasis

P463 A Case of Lymphangioleiomyomatosis with Normal Vascular Endothelial Growth Factors

P464 A Rare Etiology of Diffuse Cystic Lung Disease

P465 Long-Term Follow-Up of a Patient with GM-CSF Antibody-Negative Pulmonary Alveolar Proteinosis Following Exposure to Dust After the Great East Japan Earthquake

P466 Co-Existant Sarcoidosis and Lymphangioleiomyomatosis in a Patient with Cystic Lung Disease

P467 Infracostal Ganglioneuromas in a Patient with Neurofibromatosis Type I

P468 Bilateral Pulmonary Nodules Secondary to IgG4-Related Respiratory Disease: An Unusual Mimicker of Malignancy

P469 Recurrent Pneumonia in Pregnancy Unveils Common Variable Immunodeficiency and Associated Granulomatous Lymphocytic Interstitial Lung Disease

P470 ‘Finding Pneumo’: a Series of Unfortunate Events Leading to a Very Rare Diagnosis of Lymphangioleiomyomatosis in a Male

P471 Natural Course of Pulmonary Hyalinizing Granuloma in a Decade
A Case of Not so “Benign” Metastasizing Leiomyomatosis/A. Thota, A. Geervarghese, G. Acash, Boston, MA, p.A6292

Facilitator: R. Boente, MD, Indianapolis, IN

Gluten Intolerance of the Lung/M. Koters, R. Dean, C. Martinez-Balzano, Syracuse, NY, p.A6293

Cystic Lung: Manifestation of Light Chain Deposition Disease/S. Kunnath Velayudhan, D. Santoriello, S.M. Coley, G. Bhagat, T.V. Colby, A. Saqi, Manhattan, NY, p.A6294


Sirolimus Improves Lymphangioleiomyomatosis and Pneumothorax in a Patient with Tuberous Sclerosis Carrying a Novel TSC2 Mutation/D. Wang, C. Liu, Chengdu, China, p.A6296

Lung Fibrosis with Persistent Elevation of Anti-Mitochondrial Antibodies - A Pulmonary Manifestation of Quiescent Primary Biliary Cholangitis?/L.T. O’Murchadha, S. Roche, R.J. Fahy, Dublin, Ireland, p.A6297


Concrete Heavy Lungs Due to Calcium Stones: Pulmonary Ossification/B. Gyawali, C. Huntley, P. Chohan, A. Fahim, Wolverhampton, United Kingdom, p.A6301

Unicentric Castlemans Disease in a Man Originally Diagnosed with Sarcoidosis/W. Grist, Y. Elamir, Jersey City, NJ, p.A6302

An Alternative Approach of Diagnosing Diffuse Pulmonary Meningotheliomatosis (DPMs) with Transbronchial Cryobiopsy/ J. Seo, F. Shaikh, J. Goldstein, T. He, S.S. Oh, Los Angeles, CA, p.A6303


Facilitator: R.J. Shah, MD, MSCE, San Francisco, CA


Severe Cystic Lung Disease and a Renal Mass in a 35-Year-Old Man: Diagnostic and Management Challenges/P. Patel, H.R. Harris, W.A. Jensen, S.S. Rajan, Y. Kim, Santa Clara, CA, p.A6306

DISHing Out Pulmonary Calcifications/B.P. Farrell, I.A. Grasso, Bethesda, MD, p.A6307


A Rare Form of Cystic Lung Disease/Z. Berg, A. Kravac, E. Williams, M.Y. Hurley, G. Kamel, St. Louis, MO, p.A6309

Facilitator: B. Sunwoo, MBBS, San Diego, CA

A Rare Association Between Pulmonary Idiopathic Diffuse Neuroendocrine Hyperplasia and Organizing Pneumonia/D.B. Takizawa, P.F.B. Colares, F.M. da Costa, B.G. Baldi, R.A. Kairalla, C.R.R. Carvalho, Sao Paulo, Brazil, p.A6310

A Rare Case Report: Diffuse Idiopathic Pulmonary Neuroendocrine Cell Hyperplasia/M. Bailey, S. Chaudhary, Tucson, AZ, p.A6311


Amyloid Lung: A Rare Entity of Pulmonary Nodule/B. Gyawali, A. Chu, T.T. Aung, A. Shawkat, Syracuse, NY, p.A6313

A Unique Case of Diffuse Alveolar-Septal Pulmonary Amyloidosis/M. Mody, A. Arjuna, P.S. Patel, H. Seethamraju, Newark, NJ, p.A6314

Holy Cysts! A Rare Pulmonary Manifestation of Von Recklinghausen’s Disease/G.M. Sanchez Palacios, N. Victor, D. Kruse, Omaha, NE, p.A6315

The Many Faces of Interstitial Lung Disease: Transformation of Non Specific Interstitial Pneumonia into Pulmonary Langerhans Cell Histiocytosis/C. Huntley, P. Chohan, A. Fahim, Wolverhampton, United Kingdom, p.A6316

A Rare Case of Tuberous Sclerosis Associated Lymphangioleiomyomatosis/Y.T. Debella, V. Arunthari, H. Baig, B. Yarlagadda, C. Vadlamudi, Jacksonville, FL, p.A6317

All That Wheezes Is Not Asthma/A. Mertens, L. Duffalo, Newark, DE, p.A6318


Hiding in Plain Sight/A. Gandhi, M. Akbik, P. Bejarano, S. Aleyas, Weston, FL, p.A6322

Erdheim-Chester Disease Presenting with Spontaneous Pneumothorax/T. Özlü, M.B. Coskuner, Trabzon, Turkey, p.A6323


A Curious Case of Hypoxia: Pulmonary T-Cell Lymphoma/H. Bakhtiari, I. Singh, Norwalk, CT, p.A6326
D40 NON-INFLAMMATORY DPLDs CASE REPORTS
9:15 a.m. - 3:30 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: N. Patel, MD, Philadelphia, PA


P509 Dendriform Pulmonary Ossification Complicated by Recurrent Spontaneous Pneumothorax/Y. Gao, T. Moua, Rochester, MN, p.A6328

P510 Acceleration of Idiopathic Pulmonary Fibrosis in the Setting of Bortezomib Therapy/G. George, F. Romero, R.S. Summer, Philadelphia, PA, p.A6329

P511 To Treat or Not to Treat: The DIP Question/Y. Wang, P. Ochieng, Scranton, PA, p.A6330

P512 Pulmonary Fibrosis and Embolism Secondary to Silicone Implant Leak/A. Azeem, S. Khuwaja, R. Parthvi, T. Persaud, Forest Hills, NY, p.A6331


P515 Pulmonary Fibrosis and Pyoderma Gangrenosum: What’s the Common Denominator?/A. Shah, M. Ragland, J.S. Lee, Aurora, CO, p.A6334


P517 Smoking-Related Interstitial Fibrosis (SRIF) Related to Use of Cocaine-Based Substances/C.A. Celis-Preciado, J. Torres-Gonzalez, L. Arias, J. Rodriguez-Sarmiento, Bogota, Colombia, p.A6336

Facilitator: J.H. Fisher, BS(Hons), MD, Toronto, Canada


P520 Cryobiopsy Distinguished Between Treatable and Non-Treatable Interstitial Lung Disease SpARING a Patient from Unnecessary Treatment/K.D.V. Tovar, B. Garnet, S.A. Arias, P. Bejarano, M. Mirsaeidi, Miami, FL, p.A6339


P522 Smoking-Related Diffuse Cystic Lung Disease/L. Riley, K. Fredenburg, M. Brantly, A. Ataya, Gainesville, FL, p.A6341


P525 Long Term Minimally Progressive Interstitial Fibrosis in a Dental Technician/K. Schwabach, J. Barney, Birmingham, AL, p.A6344


P527 Coexisting Together: Pleuroparenchymal Fibroelastosis with Usual Interstitial Pneumonia/M. Hener, K.A. McPherson, T.J. Huie, Aurora, CO, p.A6346

Facilitator: A.G. Desai, MD, Stony Brook, NY

P528 Idiopathic Pulmonary Fibrosis Concealing Lung Adenocarcinoma/V. Kang, K. Jordan, Columbus, OH, p.A6347


P530 Idiopathic Pulmonary Fibrosis with Extremely Elevated IgE/I. Kuna, M. Panek, Lodz, Poland, p.A6349

P531 Idiopathic Pulmonary Fibrosis - Using the Example of Microscopic Usual Interstitial Pneumonia Image in a Patient with Polycyclic Changes in Lungs - Case Study/G. Kardas, A. Gabryelska, P. Miana, W. Kanka, G. Kuna, M. Panek, Lodz, Poland, p.A6351


P534 Idiopathic Pulmonary Fibrosis and Nonspecific Interstitial Pneumonia: A Diagnostic Conundrum/A. Brooks, B. Doan, D. Pizzimenti, Corinth, MS, p.A6354
P535  Spontaneous Pneumomediastinum in a Patient With Chronic Fibrotic Hypersensitivity Pneumonitis/M. Azar, C.D. Onofrei, Marion, IN, p.A6355

P536  Cryptogenic Organizing Pneumonia (COP): A Rare Disease with a Common Presentation That Is Often Overlooked/M.D. Saleem, Kalamazoo, MI, p.A6356

P537  An Unusual Case of Hypoxic Respiratory Failure/S. Amin, S.R. Kher, Boston, MA, p.A6357

Facilitator:  K. Thavarajah, MD, MS, Detroit, MI


P540  Chemical Exposure May Induce and Deteriorate Interstitial Lung Disease in Sjögren’s Syndrome/C.M. Tseng, M.-Y. Chen, C.-Y. Kao, C.-W. Tao, Taipei, Taiwan, p.A6360


P543  A Lady with Persistent Wheezing/R. Mathur, P.S. Pandya, London, United Kingdom, p.A6363

P544  A Rarity in the Airways/D. Ramadurai, J. Knoeckel, M.T. Kearsns, Aurora, CO, p.A6364


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P550  Which Came First: The Chicken or the Cough?/J. Blair, D.R. Lazarus, J. Cuevas, Houston, TX, p.A6368


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P558  An Unusual Case of Diffuse Alveolar Hemorrhage as a Clinical Manifestation of Hemolytic Uremic Syndrome/M. Tahboub, M. Hamarshi, Kansas City, MO, p.A6376


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P566  Oh... My Lady!!!/V. Lamboy-Hernandez, J.R. Aleman-Ortiz, D. Irizarry-De Jesús, M.D. Rivera-Morales, Ponce, PR, p.A6384


P569 A Patient with Multiple Opportunistic Pathogen Infections Accompanied with Increased IgE Due to Anti-Interferon-Gamma Autoantibodies/Z. He, X. Liang, G. Lai, Y. Bin, J. Zhang, X. Zhong, J. Bai, M. Li, J. Deng, Nanning, China, p.A6387


D42 PLEURAL DISEASE CASE REPORTS II

9:15 a.m. - 3:30 p.m. KBHCCD

Area D (Hall F, Level 2)

Viewing: Posters will be on display for entire session.

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

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P574 Grapes of Wrath: When Uveal Melanoma Targets the Pleura/E. Ho, E. Gill, P. Hegde, Fresno, CA, p.A6391

P575 Does Your Chest Tube “Got Milk?” Pleural Effusion from Central Venous Catheter Placement/N. Nowalk, T. Hotze, C.K. Morgan, Houston, TX, p.A6392

P576 A Rare Entity of Pleural-Based Pulmonary Nodules After Abdominal Trauma/H.-I. Liao, K.A. Radigan, Chicago, IL, p.A6393

P577 Hepatic Cystopleural Fistula Presenting as a Recurrent Pleural Effusion in a Patient with Autosomal Dominant Polycystic Kidney Disease (ADPKD)/A. Abu Homoud, Z. Almajthoub, K.A. Radigan, Chicago, IL, p.A6394

P578 As High as the Eye Can See: Iatrogenic Horner’s Syndrome from Tube Thoracostomy/N.K. Singh, J.R. Vintch, Torrance, CA, p.A6395


P580 A Rare Case of Pancreatitis-Induced Chylothorax/O. Agbaji, D. Gritters, A. Conterato, Grand Rapids, MI, p.A6397


P584 Pulmonary Coccidioidomycosis Resulting in Constrictive Pericarditis/B. Wiese, T. Iden, Richmond, VA, p.A6401

P585 Herniation and Empyema of the Post-Pneumonectomy Space/S. Schechter, B.K. Gehlbach, Iowa City, IA, p.A6402

P586 Spleen-Pleural Fistula as a Complication of Metastatic Diffuse Large B-Cell Lymphoma/S. Hussain, M. Hayat, S.H. Ijaz, A. Ul Haq, Oklahoma City, OK, p.A6403

P587 Tension Hemothorax Secondary to Tracheostomy Tube Placement/A. Mirrakhimov, B. Murguia, M.S. Harkins, Albuquerque, NM, p.A6404


P590 Bilateral Primary Spontaneous Pneumothorax: A Case Report and a Review of Literature/J. Kewcharoen, P. Morris, C. Kanitsoraphan, H. La, N. Sriratanaviriyakul, Honolulu, HI, p.A6407


P592 Spontaneous Hemothorax After Doxycycline Pleurodesis/A. Bhatt, K.M. Hena, New York, NY, p.A6409


P594 Bilateral Recurrent Chylothorax Following Treatment with Dasatinib/I. Ismail-Sayed, A. Zamir, J. Cardenas-Garcia, Hershey, PA, p.A6411


P596 Recurrent Non-Catamenial Hemopneumothorax Secondary to Diaphragmatic and Pleural Endometriosis/A. Khan, M. Saeed, Boston, MA, p.A6413


P598 Infectious Mononucleosis Induced Persistent Spontaneous Pneumothorax in Anorexia Nervosa/S. Brahmandam, Dayton, OH, p.A6415

P599 The Missing Piece, Sometimes the Answer Is Not in the Chest/J.M. Galvis, R. Kim, H.L. Rivas-Perez, Louisville, KY, p.A6416

P600 Pleural Confusion/S. Kenth, B. Hooks, P.P. Patel, Kalamazoo, MI, p.A6417
P601 Yellow Nail Syndrome (YNS)/Chylous Cardiac Tapenade with Chylothoracies Secondary to Persistent Pulmonary Pleural Effusions in a Patient with Immunosuppressants Causing a Devastating Malignancy

P602 Spilled Milk: A Case of Diffuse Chylous Effusions

P603 Antifungal Fallout: Pleural Effusion Caused by Itraconazole

P604 Diagnostic Pressure: A Case of Recurrent Unilateral Effusion

P605 Chylosus Cardiac Tapenade with Chylothoracies Secondary to Hodgkin’s Lymphoma: The First Recorded Case of Successful Octreotide Treatment

P606 An Unusual Pleural Effusion in a Patient with Heart Failure

P607 Eosinophilic Pleural Effusion Due to Topical Minoxidil Use

P608 A Bleeding Heart, an Unusual Presentation of Hemothorax

P609 Calm Before the Storm - Sterile Exudative Pleural Effusion

P610 A Complex Effusion

P611 Lymphoma in the Chest: A Different Paradigm

P612 Diagnostic Pressure: A Case of Recurrent Unilateral Effusion Due to Central Vein Stenosis

P613 Antifungal Fallout: Pleural Effusion Caused by Itraconazole Therapy

P614 Spilled Milk: A Case of Diffuse Chylosus Effusions

P615 Immunosuppressants Causing a Devastating Malignancy

P616 Recurrent Pneumothorax: A Rare Complication of Ascaris Lumbricoides Infestation

P617 Yellow (Toe) Nail Syndrome

P618 Breaking the Bars of the Imprisoned Lung Trapped Lung Secondary to Fibrothorax Presenting as Cor Pulmonale: A Case Report

P619 Persistent Pulmonary Pleural Effusions in a Patient with Systemic Amyloidosis

P620 Bilateral Catamenial Pneumothorax

P621 Chylothorax: A Rare Complication of Upper Extremity Deep Venous Thrombosis

P622 Pancreatico-Pleural Fistula and Pancreatico-Pericardial Fistula: Unusual Complications of Pancreatitis

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

P625 Platypnea and Orthodeoxia in Advanced Emphysema with No Evidence of Vascular Shunt

P626 Subcutaneous Emphysema: A Rare Complication of Robotic Surgery

P627 An Unusual Association Between Alpha-1 Antitrypsin Deficiency and Interstitial Lung Disease: Case Report

P628 Ubi Pus, Ibi Evacua: A Case of an Infected Emphysematous Bulla Requiring Percutaneous Drainage

P629 Reduced COPD Exacerbation and Hospitalization in High Risk Patient Using Nasal High Flow Therapy in the Home

P630 Do Not Get Tricked; Stop the Nebulizer Treatment. A Case of Type B Lactic Acidosis

P631 A Case of Symptomatic Giant Bullous Emphysema

P632 Acute COPD Exacerbation Associated with a Rare Pathogen: A Case of Tsukamurella Pulmonis

P633 More than Just Chronic Obstructive Pulmonary Disease: A Case of Peripheral Pulmonary Arteriovenous Malformation
P641 The Use of Heliox and High Heated Humidity Nasal Cannula to Treat a COPD Patient with a Bronchiectasis Exacerbation/S. E. Morgan, M.E. Strek, U. Dyyemenahalli, H.T. Duong, G.M. Mutlu, J.P. Kress, Chicago, IL, p.A6455


P646 Tracheobronchomegaly A Case of Mounier Kuhn’s Syndrome/M.L. Konopka, N. Raya, Chicago, IL, p.A6460


P649 When the Immune System Fails and Lungs Fill Up with Mucus Plugs: A Case of CVID Induced Severe Bronchiectasis/M. Saleh, K. Leung, M. Ehtesham, Southfield, MI, p.A6463


P651 Brain Abscess in a Patient with Cystic Fibrosis: Don’t Always Assume It Is the Same Bug/A.A. Innabi, M. Mahendran, J. Lascano, Gainesville, FL, p.A6467

P652 Rare Presentation of an H-Type Tracehoesophageal Fistula in an Adolescent Male with Cystic Fibrosis/T. Klouda, E. Lindholm, E. Poletto, S. Rani, L. Valentta, 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

P639 Beyond Young’s Syndrome: Diagnosis, Management, and Prognosis of Primary Ciliary Dyskinesia/N.K. Veerabattini, A.S. Niven, Rochester, MN, p.A6451


P635 Kartagener Syndrome in Identical Male Twins/ Parasitic Infection Leading to Bronchiectasis/


P633 Brain Abscess in a Patient with Cystic Fibrosis: Don’t Always Assume It Is the Same Bug/A.A. Innabi, M. Mahendran, J. Lascano, Gainesville, FL, p.A6467

P632 Rare Presentation of an H-Type Tracehoesophageal Fistula in an Adolescent Male with Cystic Fibrosis/T. Klouda, E. Lindholm, E. Poletto, S. Rani, L. Valentta, J. Velasco, Philadelphia, PA, p.A6468


P630 Tobramycin Pharmacokinetics in a Postpartum Patient with Cystic Fibrosis Receiving ECMO/N. Martin, J.D. Dickinson, G. Peitz, Omaha, NE, p.A6470

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, Edmonton, 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. Adaqpata, N. Bhavasar, B. Goldstein, N.R. MacIntyre, Durham, NC, p.A6478

Facilitators: J.R. Klinger, MD, Providence, RI
F. Angrimian, 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, a.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

CLINICAL • TRANSLATIONAL

THEMATIC POSTER SESSION

D45 CRITICAL CARE: LOVE IN THE TIME OF CHOLERA - INFECTION AND SEPSIS IDENTIFICATION AND MANAGEMENT

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: 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. Hayrabadian, J. Park, E. Elueze, Tyler, TX, p.A6503


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  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  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


P718  Beating the Body When It’s Down! Influenza as the Cause of Hemophagocytic Lymphohistiocytosis in a Patient with Unknown Myelodysplastic Syndrome/S. Zulfiqar, A. Khan, P. Bhardwaj, D.C. Johnson, Springfield, MA, p.A6513


P720  Idiopathic Hemophagocytic Lymphohistiocytosis (HLH) Leading to Spontaneous Intracranial Hemorrhage/Y. Ahmad, A. Aseyinka, F.N. Rahaghi, S. Shah, C. Filip, Salem, MA, p.A6515

P721  Rare Case of Hemophagocytic Lymphohistiocytosis (HLH) with Anaplastic Large Cell Lymphoma (ALCL) and Hypereosinophilic Syndrome (HES)/S. Gandhi, D. Attalla, J.H. Rhee, Towson, MD, p.A6516

P722  A Rare Case of Hemophagocytic Lymphohistiocytosis (HLH) Triggered by West Nile Virus/N. Al Nasrallah, D. Patel, Indianapolis, IN, p.A6517

P723  Hodgkin Lymphoma-Associated Hemophagocytic Lymphohistiocytosis: Subtype Matters/L. Delasos, Farmington, CT, p.A6518

P724  A Deadly Trigger of Hemophagocytic Syndrome/A. Shallal, M. Reaume, S. Kenth, P. Boapimp, Kalamazoo, MI, p.A6519


P726  Is It Really Sepsis of Unknown Origin: A Case of HLH/M. Saleh, K. Leung, M. Ehtesham, Southfield, MI, p.A6521

### D47  CRITICAL CARE CASE REPORTS: INFECTION AND SEPSIS I

**9:15 a.m. - 3:30 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.

#### Facilitators: P.D. Sottile, MD, Aurora, CO  
M. Hilty, MD, Zurich, Switzerland

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<td>Austrian Syndrome - A Rare Entity in Current Era of Antibiotics/N. Kumar, P. Chung, D.M. Kelley, Los Angeles, CA, pA6566</td>
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<td>Diffuse Alveolar Hemorrhage (DAH)- A Rare Life-Threatening Manifestation of Anaplasmosis/A. Ward, A. Abdullah, K. Young, J.P. Sugunraj, Danville, PA, pA6567</td>
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<td>The Hidden Infection Waiting to Strike: A Rare Case of Strongyloides Hyperinfection Syndrome/X. Cao, A. Scribner, B. Elhalwagi, Longview, TX, pA6570</td>
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<td>A Rare Case of Staphylococcal Scalded Skin Syndrome in an Adult/P. Desai, H. Amin, V.V. Tambe, Syracuse, NY, pA6571</td>
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<td>J. Parsons, H. Hirzallah, F.M. Zeid, Huntington, WV, pA6557</td>
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P29 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

P30 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


P32 Well’s Disease: An Unlikely Cause of Shock/R. Riaz, J.B. Sutter, Wynnewood, PA, p.A6584

P33 Clostridium Septicum Bacteremia Presenting as a Para-Neoplastic Sepsis/Y. Vorakunthada, W. Lilihwat, Lubbock, TX, p.A6585

P34 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

P35 A Lethal Combination of Disseminated Herpes Simplex Virus-1 (HSV-1) and Varicella Zoster Virus (VZV) Co-Infection in an Immunosuppressed Adult/M. Tahiboub, A. Al-Shyoukh, L. Numan, O. Abughaniimeh, M. Younis, A. Gohar, Kansas City, MO, p.A6587


P37 Primary CNS Aspergillosis Without Antecedent Pulmonary Infection or Rhinosinusitis/V. Kumar, G. Khubaib, T.-H. Le, A. Rahman, A. Kaell, Port Jefferson, NY, p.A6589


THEMATIC POSTER SESSION

D48 CRITICAL CARE CASE REPORTS: INFECTION AND SEPSIS II

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: E. Carlton, MD, Ann Arbor, MI
S.W. Robison, MD, Birmingham, AL


P41 Don’t Forget Doxycycline: A Case of Ehrlichiosis Complicated by Myocarditis and Hemophagocytic Lymphohistiocytosis/Z.B. Strumpf, E. Wilding, Baltimore, MD, p.A6592


P44 Between a Kidney Stone and a Hard Place: Disseminated Candidiasis Following Nephrolithiasis/D. Lee, M. Farishta, P.P. Patel, Kalamazoo, MI, p.A6595

P45 West Nile Virus Infection Presenting as Acute Symmetric Flaccid Paralysis/G.S. Thind, S. Noh, S.P. Dugar, Cleveland, OH, p.A6596


Facilitators: D.N. Hager, MD, Baltimore, MD
R. Kindle, MD, Boston, MA

P50 Rhinovirus-Induced Rapidly Progressing ARDS in an Immunocompetent Host/S. Ng, S. Praevalz, A. Avula, M.N. Chalhoub, Staten Island, NY, p.A6601

P51 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

P52 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. McGarry, Elmhurst, NY, p.A6603

P53 Lemi Teach You Something: A Case of Septic Thrombophlebitis and Severe Thrombocytopenia/J. Jolly, M. Megally, V. Kaul, T. Flaim, E. Diringer, R. Kindle, MD, Boston, MA, p.A6604

P54 CRYPTOCOCCOSIS in an Immunocompetent Well-Controlled Diabetic/V. Badami, R. Zulfikar, Morgantown, WV, p.A6605

P55 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


P102 Masquerading as Multiple Sclerosis: A Severe Case of Neuromyelitis Optica/A. Lalani, C. Castro, S. Merjanah, H.L. Paz y Mar, Cleveland, OH, p.A6652


P104 Unmasking Parkinsonism in the ICU/M. Lyons, E. Homsy, J.N. Allen, Columbus, OH, p.A6654


P110 Russian Roulette Sparks Fever and Tachycardia/R. Akkar, E. Kyeer-Tuah, Cheverly, MD, p.A6660

Facilitators: S. Figueroa, MD, Dallas, TX
E.M. Viglianti, MD, MPH, Ann Arbor, MI

P111 The Downside to Upside Down Yoga: Headstand Induced Subdural Hematomas/P. Chabra, N. Hotchandani, W. Khan, New Brunswick, NJ, p.A6661


P113 Atypical Presentation of Rostral Brain Stem Syndrome During the Management of Hypertension Emergency/I.D. Ibrahim, A.A. Abouarab, M. Rouah, M.K. Hussein, Warwick, RI, p.A6663

P114 100%FiO2 Supplemental Oxygen for Traumatic Pneumocephalus Without Evidence of Fracture on Serial CT Scan of the Head/A. Venkatarayan, R. Beneza, R. Kosinski, Long Branch, NJ, p.A6664


P117 MPO-ANCA Associated Hypertrophic Pachymeningitis/A. Syed, R. Masurej, C. Teba, Cleveland, OH, p.A6667

Facilitators: E. Wilcox, MD, MPH, Toronto, Canada
A. Kukota, MD, Atlanta, GA

P85 A Case of Acute Systolic Heart Failure Induced by Prolonged Dexmedetomidine Infusion/M. Faggioni, M. Saeed, Z. Khan, M. Bachan, Bronx, NY, p.A6635


P87 Is Too Little Too Much? A Perplexing Case of Propofol Infusion Syndrome/A. Graham, M.M. Hayes, Boston, MA, p.A6637


P89 Seizures and Neurogenic Pulmonary Edema Following Moderate Sedation and Bronchoscopy/D. Jun, F. Shaikh, S.S. Ohi, G.W. Soo Hoo, Los Angeles, CA, p.A6639


Facilitators: A. Parker, MD, Baltimore, MD
M.E. Modes, MD, Seattle, WA


P93 Induced Hypothermia in a Comatose Patient with Traumatic Asphyxiation/H. Salat, V. Madireddy, V. Basarahalli, N. Trenard, R. Loganathan, Bronx, NY, p.A6643

P94 A Shocking Case of Neuropathy/D. Ramadurai, D. Gergen, D. Low, Aurora, CO, p.A6644


P96 Mirtazapine as the Cause of New Onset Psychosis/P. Limphan-udom, M. Saliaj, M. Bachan, Z. Khan, Bronx, NY, p.A6646


P99 Low to High: The Pons Really Does Fry/K. Parikh, S. Thomas-Nadler, O.N. Obi, Greenville, NO, p.A6649

P100 A Workout to Remember: CrossFit Induced Vertebral Artery Dissection/N. Rothbard, S. Sahni, M.A.I. Cheema, A. Adial, A. Gibbs, I. Hendrickson, Portland, OR, p.A6650

Facilitators: E. Wilcox, MD, MPH, Toronto, Canada
A. Kukota, MD, Atlanta, GA

P102 Masquerading as Multiple Sclerosis: A Severe Case of Neuromyelitis Optica/A. Lalani, C. Castro, S. Merjanah, H.L. Paz y Mar, Cleveland, OH, p.A6652


P104 Unmasking Parkinsonism in the ICU/M. Lyons, E. Homsy, J.N. Allen, Columbus, OH, p.A6654


P110 Russian Roulette Sparks Fever and Tachycardia/R. Akkar, E. Kyeer-Tuah, Cheverly, MD, p.A6660

Facilitators: S. Figueroa, MD, Dallas, TX
E.M. Viglianti, MD, MPH, Ann Arbor, MI

P111 The Downside to Upside Down Yoga: Headstand Induced Subdural Hematomas/P. Chabra, N. Hotchandani, W. Khan, New Brunswick, NJ, p.A6661


P113 Atypical Presentation of Rostral Brain Stem Syndrome During the Management of Hypertension Emergency/I.D. Ibrahim, A.A. Abouarab, M. Rouah, M.K. Hussein, Warwick, RI, p.A6663

P114 100%FiO2 Supplemental Oxygen for Traumatic Pneumocephalus Without Evidence of Fracture on Serial CT Scan of the Head/A. Venkatanarayan, R. Beneza, R. Kosinski, Long Branch, NJ, p.A6664


P117 MPO-ANCA Associated Hypertrophic Pachymeningitis/A. Syed, R. Masurej, C. Teba, Cleveland, OH, p.A6667

Facilitators: E. Wilcox, MD, MPH, Toronto, Canada
A. Kukota, MD, Atlanta, GA
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

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.

Facilitators: J.R. Curtis, MD, MPH, Seattle, WA M. Hua, MD, MSc, 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. Walczak, N. Goniu, K. Hamann, S. Aslakson, Stanford, CA, p.A6688


ATS 2019 • Dallas, TX
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. Bilhari, 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

Facilitators: D.A. Kaufman, MD, ATSF, New York, NY
J.N. McNeill, MD, Boston, MA


P792 Early and Late Cardiovascular Failure in ICU Patients/E.M. Vigiliani, X.Q. Wang, T.J. Iwashyna, Ann Arbor, MI, p.A6702


P794 Lactate Levels at 6 Hrs. Is More Prognostic of in Hospital Mortality than A >=50 % Lactate Clearance in Severe Sepsis/M. Ayad, S. Karanth, B. Patel, Houston, TX, p.A6704


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
M.F. Ragland, K. Young, G.L. Kinney, B.J. Make, J.E. Hokanson, Aurora, CO, p.A6709
D53  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


P1053  The Effect of Inhaled Corticosteroids on Pediatric Patients Hospitalized with Acute Asthma Exacerbations/C. Toochich, 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. Surujbally, A. Scrimgeour, S. Snape, Chippenden, 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. Mullerling, 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. Venugopala, 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, S. 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. Ramirez, 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


P1066 An Open-Label, Non-Drug Study to Evaluate the Use of a Mouthpiece with the VR647 Inhalation System in Patients Aged Less than 5 Years/ L. B. Bacharier, G. Burgess, B. Muellinger, S. Snape, St. Louis, MO, p.A6732

Facilitator: C. Spencer, MD, New York, NY


P1068 Association Between Vitamin D Levels and Asthma Control in Children from a Developing Country/K. R. Jat, N. Goel, R. Lodha, N. Gupta, S.K. Kabra, New Delhi, India, p.A6734

P1069 Evaluating Adherence Data in the Clinical Setting: What Tools Should We Use to Describe Behavior?/H. Hoch, K. Pickett, J. Brinton, S.J. Szefler, Aurora, CO, p.A6735

P1070 Fractional Exhaled Nitric Oxide as a Prognostic Tool in Urban Minority Children with Asthma/L. Chen, A. Roth, I. Agalliu, A. Bidiwala, D. Rastogi, Bronx, NY, p.A6736

P1071 Clinical and Molecular Predictors of Recurrent Wheezing After the First Hospitalization Due to Viral Bronchiolitis/M. Arroyo, K. Salka, G.F. Perez, J.J. Agarwal, P. Pradhan, Chandigarh, India, p.A7472


P1073 Mepolizumab in Pediatric Patients with Severe Eosinophilic Asthma: A Single Center Experience/S. M. Rotolo, S. Hegde, Chicago, IL, p.A7473

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D54 TO LIVE AND LET DIE: THE ENDOTHELIUM IN PAH

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.

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. Forkas, 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. Cheivanambi, M. Clauss, 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.**  
**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

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**P952**  
Cement Emboli and Subsequent Traumatic Hemothorax as a Rare Complication of Vertebroplasty/M. Bernshteyn, A. Cortese, A. Nat, Syracuse, NY, p.A6752

**P953**  
When You Can’t Lyse, Use a Device/N.M. Pradhan, R. Lookstein, H.D. Poor, New York, NY, p.A6753

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**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

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Masquerading in Plain Sight! Severe Tricuspid Regurgitation Mimicking Right Heart Strain on CT Imaging/L. Lahoti, E. Pagan, P. Agarwal, A. Saluja, S. Jagpal, New Brunswick, NJ, p.A6758

**P959**  
Pulmonary Arterial Hypertension: A Rare, Yet Life-Threatening Complication of Neurofibromatosis Type 1/M. Rojas, A. Mubarak, L. Chauhan, F. Agha, E.A. Henderson, A. Vaziri, A. Iqbal, F. Haq, A. Waheed, S. Muddassir, Brookville, FL, p.A6759

**P960**  
Acute Pulmonary Embolism in an Extreme Video Gamer/S. Tijani, M. Oriaikhi, M. Olibrice 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**  
Hypoplasia of the Left Pulmonary Artery Associated with Aspergiloma - Case Report/P. M. Cavalcante Neto, S.L.K. Matias, F.G. Lastebasse, P.K. Vitoria, I.M. Holz, M.V. Cruz de Oliveira Castellano, Sao Paulo, Brazil, p.A6763

**P964**  

**Facilitator:** Z. Safdar, MD, MS, ATSF, Houston, TX

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**P966**  
Recurrent Sub-Massive Pulmonary Embolisms Treated with Catheter Directed Thrombolysis Using Alternative Access Sites/R.R. Golamari, J.J. Finley, Darby, PA, p.A6766

**P967**  
Looks and Smells Like PAH...The Great Mimicker “PVOD”/A.A. Khan, T. Marston, K. Olson, S. Santhanakrishnan, T.N. Hodges, R. Sagar, Phoenix, AZ, p.A6767

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**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, P. Irukulla, Weatherford, TX, p.A6770

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**P972**  
A Rare Case of Recurrent Pneumonia in a Young Healthy Adult with Pulmonary Sequestration/P.T. Taweesedt, D. Kumar, J. Stoeckel, Bronx, NY, p.A6772

**P973**  
Right Heart Thrombus in Transit Successfully Treated with Half Dose Thrombolytics/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

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**Facilitator:** S. Mirza, MD, Rochester, MN

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A Case of Massive Pulmonary Embolism Post Knee Arthroscopy/I.T. Sam Varghese, S. Tolia, M. Ehtesham, A.E. Gelray, Southfield, MI, p.A6778

Have You Seen a Pulmonary Embolus this Big in a Guy this Young? A Case Report/M. Tahboub, O. Abuhghanimeh, 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


Severe Right Lower Quadrant Pain: Have You Considered Pulmonary Embolism???/M. Bilal, A. Umar, E.Y. Chang, M.E. Faqih, B.S. Elhammali, Atlanta, GA, p.A6785

Submassive Ven thromboem bolism Associated Right Ventricular Dysfunction Resolves After Two Weeks of Anticoagulation with Apixiban/A. Tawadros, N. Hotchandi, W. Khan, Plainsboro, NJ, p.A6786


Portopulmonary Hypertension: A Case Report with Management Considerations/S. Randhawa, E. Griffin, M. 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 Morphogenetic 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-Quintana, 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. Shafarin, 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 Vascular 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 BMP2R 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

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


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

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


Changes of Serum Collagen Biomarkers in Patients with Different Types of Pulmonary Hypertension W. Pang, Z.-G. Zhai, Beijing, China, p.A6811


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

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


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. Kuri, Madison, WI, p.A6819

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


Communications will be on display for entire session. Authors will be present for discussion with assigned facilitators.

P158 Disseminated Nocardiosis Masquerading as an Obstructive Endobronchial Mass/C. Morris, L. Sorrell, E. Podgaetz, A.A. Mora, J.M. Kopita, Dallas, TX, p.A6826


P161 A Case of Primary Mediastinal Nocardiosis Presenting as an Anterior Mediastinal Mass/B. Alvarez Concocejo, J.E.T. Marshall, T.J. Brown, Dallas, TX, p.A6829


Facilitator: C.R. Marion, DO, PhD, Winston Salem, NC


P166 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

P167 A Rare Presentation of Rothia Mucliginosam, Masquerading as a Solitary Nodule in an Immunocompetent Patient/A. Umar, M. Bilal, E.Y. Chang, A. Gopalakrishnan, M.E. Faquil, O. Gabriela, D.J. Thomas, E.L. Flenaugh, Atlanta, GA, p.A6835


P170 Manipulating the Complex Language of Microbes in the Treatment of Acute or Chronic Lung Infection/K. Mahan, J.M. Dunitz, Minneapolis, MN, p.A7474


P173 A Necessary Surgical Intervention: A Case of Empyema Necessitans/T.J.P. Young, N. Kamangar, Los Angeles, CA, p.A6839

P174 In Hiding: A Case of Pleural Tuberculosis/A. Liou, C.E. Rodrigo, R.T. Zeik, W.S. Prince, Temple, TX, p.A6840

P175 Empyema, It’s Not Always Bacterial/H.A. Badi, F.A. Solorio, F.M. Khateeb, F. Safi, Toledo, OH, p.A6841


P177 A Case of Persistent Pleural Effusion After Colon Resection Surgery/C. Yurosko, G. Bollin, N. Haller, A. Diwakar, Akron, OH, p.A6843

P178 A Rare Case of Hydropneumothorax and Necrotizing Pneumonia by Clostridium Perfringens/N. Duduki, S. Summers, M. Maxfield, R. Leslie, Worcester, MA, p.A6844


D59  FUNGAL INFECTION CASE REPORTS

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: O. Epelbaum, MD, ATSF, Valhalla, NY

P184  Aspergillus Overlap Syndrome: A Rare Presentation/Y. Rahim, M. Irfan, M. Usman, Karachi, Pakistan, p.A6849

P185  A Rare Case of Endobronchial Lesion: Endobronchial Aspergilloma/A. Osman, Wilkes-Barre, PA, p.A6850

P186  An Interesting Case of Invasive Pulmonary Aspergillosis/M. Mahendra, A.A. Innabi, D. Urbine, Gainesville, FL, p.A6851

P187  A Case of Aspergillus Tracheobronchitis in an Immunocompromised Man/R. Story, J.A. Englert, Columbus, OH, p.A6852

P188  Left Ventricular Aspergilloma: A Case of Mural Endomyocardial Aspergillosis/P. K. Moore, T. Zaman, E.D. Chan, Aurora, CO, p.A6853


P190  Polymicrobial Lung Abscess Complicating Autologous Hematopoietic Stem Cell Transplant/R. Farhat, A.C. Miller, D. Picker, St. Louis, MO, p.A6855


P192  Pulmonary Mucormycosis Due to Concurrent Aspergillus and Neocystalidium Dimidiatum Infection/M. Bailey, K. Kumar, C. Meadows, N.J. Mahmoud, L.E. Meinke, Tucson, AZ, p.A6857


P194  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

Facilitator: J.E. McGinniss, MD, Philadelphia, PA


P196  Reversed Halo and Halo Signs in Severe Chemotherapy Induced Immunosuppression/K. Sandhu, J.D. Cox, Tampa, FL, p.A6861


P198  When It Rains It Pours: A Case of Rhizopus Infection After Hurricane Michael/J. Lee, S.X. Lee, T. Lim, Lawrenceville, GA, p.A6863


P200  Mucormyco-CYSTS: An Unusual Presentation of a Deadly Fungus/R. Sengupta, M. Kwahar, H. Memon, Y. Huang, M.V. Indihar, Cincinnati, OH, p.A6865

P201  Cut It Out: A Case of Endobronchial Pulmonary Mucormycosis/M. Megally, V. Kaul, J. Jolly, T.M. McGarry, Elmhurst, NY, p.A6866

P202  Pulmonary Mucormycosis Diagnosed by Ultrasound-Guided Transthoracic Biopsy in a Mechanically Ventilated Patient in the Intensive Care Unit/H.-C. Yang, C.-K. Huang, Taipei, Taiwan, p.A6867


P204  A ‘Mass’ Caused by Dust: Disseminated and Severe Coccidioidomycosis in an Immunocompetent Person/E. Au, K. Modi, Las Vegas, NV, p.A6869


Facilitator: J.E. McGinniss, MD, Philadelphia, PA

P206  Fluconazole Non Susceptible Disseminated Coccidioidomycosis in a Critically Ill Patient Without Known Immunosuppression/M. Eltayeb, S. Asad, A. Malik, Y. Cao, W.Y. Yu, A. Hong, Las Vegas, NV, p.A6871


P209  Disseminated Cocci Packs a Punch/N. Achamallah, L. Kuklinski, M. Miller, S. Hosea, Santa Barbara, CA, p.A6874


P213 Blastomycosis Presenting as Erythema Nodosum/M.F. Khaliq, H.E. Mohamed, Charleston, WV, p.A6878


Facilitator: G.N. Dy-Agra, MD, San Juan, Philippines


P218 Cavitary Pneumocystis Jirovecii on Dupixent and Corticosteroid Therapy/P.A. Berger, S. Helberg, A. Elshami, T. Oliver, N. Foss, J. Degroot, Sioux Falls, SD, p.A6883


P221 A Tale of Exotic Lizard Induced Respiratory Tract Infection from Candida in a Healthy Young Female/F. Lim, Z. Solangi, K. Eneh, Danville, PA, p.A6886

P222 The Never Ending Pneumonia/H. Bakalli, L. Bellini, Whiteriver, AZ, p.A6887


Clinical • Translational

Thematic Poster Session

D60 Pulmonary Function and Exercise Testing and Training

9:15 a.m. - 3:30 p.m. 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: N.S. Cox, PhD, PT, Melbourne, Australia


P904 Cardiac Autonomic Behavior During Passive Postural Change in Individuals in the Overlapping of Chronic Obstructive Pulmonary Disease and Obstructive Sleep Apnea Syndrome/P. Camargo, L.C. Soares de Carvalho Junior, L. Luporini, G. Ganzro, C. Goulart, P. dos Santos, R. Marinho, R. Arbex, A. Borghi-Silva, Sao Carlos, Brazil, p.A6892


P908 Lung Function, Respiratory Muscles and Functional Capacity of Obese Women with Type 2 Diabetes and Hypertension/E.M. Pazzianotto-Forti, R.V. Zerbeto, T.A. De Mori, S. Baruki, E. Pacheco, T. Tanaka, Piracicaba, Brazil, p.A6896


Facilitator: N.J. Greening, MBBS, PhD, Leicester, United Kingdom

P911 Pulmonary Function Interlaboratory Quality Control/M. Jurisic, S. Johnston, P. Rogers, Adelaide, Australia, p.A6899
P239 Pulmonary Nodule in a Low Risk Patient Presenting as an
A Rare Presentation of Disseminated Intravascular
Discussion:

P914 The Pathophysiology of Chronic Fatigue Syndrome: Results
from an Invasive Cardiopulmonary Exercise Laboratory/P.
Oliveira, M. Faria Urbina, A.B. Waxman, D.M. Systrom, Boston,
MA, p.A6902

P915 Title: Are Shorter Distances Comparable to Six Minute Walk
Distance When Evaluating Patients with Cardiopulmonary
Disease?/J. Kaur, S. Palasamudram Shekar, J.P. Mehta, J.M.
Dolan, A. Gandhi, M. Akbiek, C.C. D’Angelo, A. Daya, Weston, FL,
p.A6903

P916 Exercise Induced Laryngeal Obstruction Measured by Vocal
Cord Ultrasonography During Maximal Effort in
Cardiopulmonary Exercise Testing/W.I. Giron Matute, J. García
de Pedro, P.A. Benedetti, J. De Miguel Diez, L. Puente-Maestu,
Madrid, Spain, p.A6904

P917 Effects of Breathing Oxygen (FIO2:1.0) During
Cardiopulmonary Exercise Testing in Patients with Interstitial
Lung Disease/J. Cournoyer, C.F. Ramos, B. Sturgill, F. Tang, N.
DeLuca, M. Mirsaedi, R.M. Jackson, Miami, FL, p.A6905

P918 Six Minute Walk Test and Cardiopulmonary Exercise Testing
Elicit the Same Physiological Response in Pulmonary
Hypertension/N. Morris, A. Lin, J.F. Feenstra, M. Trotter, H. Seale,
Gold Coast, Australia, p.A6906

P240 Pulmonary Lymphangitic Carcinomatosis Presenting with
Colon Cancer/A. Noor, A. Desai, S. Sama, A. Khan, Farmington,
CT, p.A6910

P241 Filled with Fluid; A Rare Case of Chylosus Effusions Related to
Malignant Recurrence/V. Fonseca, M. Milan Esteva, E. Sobrino,
D. Vera, K.K. Rivera, San Juan, Puerto Rico, p.A6911

P242 An Unusual Presentation of a Mediastinal Mass/S. Shetty, A.
Arora, K. Gunasekaran, J.S. Kwon, P. Simkovicz, Bridgeport, CT,
p.A6912

P243 A Case of Bronchopulmonary Sequestration Causing
Recurrent Pneumonia/Y. Usman, M. Bajwa, Oklahoma City, OK,
p.A6913

P244 Yolk Sac Carcinoma in an Young Adult - Case Report/P.M.
Cavalante Neto, R. Milinavicius, A.A.K. Garcia, A.R. Bertoldi,
P.C.C. dos Santos, E.B. Misao, S.L.K. Matias, M.V. Cruz de
Oliveira Castellano, Sao Paulo, Brazil, p.A6914

P245 Not Your Usual Chronic Cough: A Case of Lymphomatoid
Granulomatosis with Tracheal Obstruction/A. Shah, D. Low,
Aurora, CO, p.A6915

P246 Abdominal Pain: An Unusual Presentation of Marantic
Endocarditis Lead to Diagnosis of Lung Cancer/K. Souri, T.
Said Ahmed, R. Shadid, M.T.T. Awad, R.M. Assaly, Toledo, OH,
p.A6916

P247 A Rare Case of Primary Pleural Epithelioid Angiosarcoma/S.
Jasuja, J. Yanagawa, S. Nelson, J. Bando, Los Angeles, CA,
p.A6917

Facilitator:  E.M. DeBiasi, MD, New Haven, CT

P248 Peripheral Primary Pulmonary Leiomyoma/M. Abu-Hishmeh, A.
Martin, O. Epelbaum, Valhalla, NY, p.A6918

P249 “Keep an Eye on That Cancer”- A Rare Case of Lung
Adenocarcinoma Metastasizng to the Vitreous/ N. Phillips, M. Kakol,
S. Ijaz, A. Keruakous, Oklahoma City, OK, p.A6920

P250 Invasive Thymic Carcinoma Causing Superior Vena Cava
Syndrome by Direct Invasion/S.A. Ansari, Salem, MA, p.A6920

P251 All That Is Transudative Is Not Benign/N. Phillips, M. Kakol,
S. Ijaz, A. Keruakous, Oklahoma City, OK, p.A6921

P252 Myeloid Sarcoma of the Lung in the Absence
Hyperleukocytosis: A Rare Phenomenon/S. Nusrat, S. Hussain,
S. Ijaz, A. Keruakous, Oklahoma City, OK, p.A6922

P253 Hyponatremia-Induced Seizure as the First Presentation of
Small Cell Lung Cancer/L. Numan, O. Abuaghanimeh, M. Younis,
M. Tahboub, Kansas City, MO, p.A6923

P254 Isolated Renal Metastasis from Primary Lung Squamous Cell
Carcinoma with Synchronous Small Cell Lung Cancer/L.

P255 Pulmonary Benign Metastasizing Leiomyoma: A Case

P256 Diagnosis of a Rare Entity: Primary Pulmonary Choriocarcinoma/
B. Lee, C.D. Onofrei, A. Noor, Indianapolis, IN, p.A6926

CLINICAL
THEMATIC POSTER SESSION

D61 THORACIC ONCOLOGY CASE REPORTS I
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.

Facilitator: M.A. Shatat, MD, Cleveland, OH

P237 Pulmonary Involvement by Intravascular B Cell Lymphoma/M.
Venkata subramani, G. George, Philadelphia, PA, p.A6907

P238 A Rare Presentation of Disseminated Intravascular
Coagulation as the Initial Clinical Manifestation of
Adenocarcinoma of the Lung: A Case Report/A. Murabia, J.
Moore, D. Boxer, A.M. Ahasic, Norwalk, CT, p.A6908

P239 Pulmonary Nodule in a Low Risk Patient Presenting as an
Unexpected Diagnosis/ S. Ullah, P.P. Kyaw, F. Nayeemuddin, M.
Song, Springfield, IL, p.A6909

P242 An Unusual Presentation of a Mediastinal Mass/S. Shetty, A.
Arora, K. Gunasekaran, J.S. Kwon, P. Simkovicz, Bridgeport, CT,
p.A6912

P243 A Case of Bronchopulmonary Sequestration Causing
Recurrent Pneumonia/Y. Usman, M. Bajwa, Oklahoma City, OK,
p.A6913

P244 Yolk Sac Carcinoma in an Young Adult - Case Report/P.M.
Cavalante Neto, R. Milinavicius, A.A.K. Garcia, A.R. Bertoldi,
P.C.C. dos Santos, E.B. Misao, S.L.K. Matias, M.V. Cruz de
Oliveira Castellano, Sao Paulo, Brazil, p.A6914

P245 Not Your Usual Chronic Cough: A Case of Lymphomatoid
Granulomatosis with Tracheal Obstruction/A. Shah, D. Low,
Aurora, CO, p.A6915

P246 Abdominal Pain: An Unusual Presentation of Marantic
Endocarditis Lead to Diagnosis of Lung Cancer/K. Souri, T.
Said Ahmed, R. Shadid, M.T.T. Awad, R.M. Assaly, Toledo, OH,
p.A6916

P247 A Rare Case of Primary Pleural Epithelioid Angiosarcoma/S.
Jasuja, J. Yanagawa, S. Nelson, J. Bando, Los Angeles, CA,
p.A6917

Facilitator: E.M. DeBiasi, MD, New Haven, CT

P248 Peripheral Primary Pulmonary Leiomyoma/M. Abu-Hishmeh, A.
Martin, O. Epelbaum, Valhalla, NY, p.A6918

P249 “Keep an Eye on That Cancer”- A Rare Case of Lung
Adenocarcinoma Metastasizng to the Vitreous/ N. Phillips, M. Kakol,
S. Ijaz, A. Keruakous, Oklahoma City, OK, p.A6920

P250 Invasive Thymic Carcinoma Causing Superior Vena Cava
Syndrome by Direct Invasion/S.A. Ansari, Salem, MA, p.A6920

P251 All That Is Transudative Is Not Benign/N. Phillips, M. Kakol,
S. Ijaz, A. Keruakous, Oklahoma City, OK, p.A6921

P252 Myeloid Sarcoma of the Lung in the Absence
Hyperleukocytosis: A Rare Phenomenon/S. Nusrat, S. Hussain,
S. Ijaz, A. Keruakous, Oklahoma City, OK, p.A6922

P253 Hyponatremia-Induced Seizure as the First Presentation of
Small Cell Lung Cancer/L. Numan, O. Abuaghanimeh, M. Younis,
M. Tahboub, Kansas City, MO, p.A6923

P254 Isolated Renal Metastasis from Primary Lung Squamous Cell
Carcinoma with Synchronous Small Cell Lung Cancer/L.

P255 Pulmonary Benign Metastasizing Leiomyoma: A Case

P256 Diagnosis of a Rare Entity: Primary Pulmonary Choriocarcinoma/
B. Lee, C.D. Onofrei, A. Noor, Indianapolis, IN, p.A6926
P257 Eosinophilia in Pulmonary Adenocarcinoma; An Extremely Rare Paraneoplastic Manifestation/M. Alsharif, K. Islam, M. Abdou, T. Vo, Amarillo, TX, p.A6927

Facilitator: A. Begnaud, MD, Minneapolis, MN

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. Gandhihiraj, 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


P271 The Thrombus that Stumped Us - A Rare Case of Symptomatic Post-Lobectomy Pulmonary Artery Stump Thrombosis that Appeared as Hilary Adenopathy/M. Young, E. Rabold, B.E. DiSilvio, C. Xu, T.J. Cheema, Pittsburgh, PA, p.A6940


P274 A Rare Case of Inflammatory Myofibroblastic Tumor/F. Ogundipe, T. Ogundipe, V. Poddar, Washington, DC, p.A6943

P275 Recurrent Pneumonia or a Sticky Situation? A Rare Form of Lung Cancer/S.B. Ogake, A. Lampkin, Winston-Salem, NC, p.A6944


P277 An Unusual Cause of Facial Flushing in the Healthy Adult/S. Esperiti, V. Collier, D. Patel, V. Nambudiri, Myrtle Beach, SC, p.A6946


P280 A Young Man Presents with Thyrotoxicosis: Months Later, a Large Mediastinal Mass Is Discovered/D. Nguyen, R. Sanchez, Iowa City, IA, p.A6949


P283 Unique Presentation of a Rare Neoplasm: Mucoepidermoid Tumor of the Lung/J. Mbae, P.J. Oliveira, S. Khan, Worcester, MA, p.A6952

P284 Nonbacterial Thrombotic Endocarditis and Myocardial Infarction in Pancreatic Adenocarcinoma/Y. Saperstein, J. Davidson, I.M. McFarlane, Brooklyn, NY, p.A6953


P288 A Rare Malignant Nonsmoker Tumor: Lung Sarcoma/W. Rodriguez, M.M. Rivera Agosto, San Juan, Puerto Rico, p.A6957
P289 Solitary Lung Metastasis Four Years After Stage 1 HPV-Related Adenocarcinoma of the Uterine Cervix/O. Adeoye, S. Mukhopadhay, T. Temes, Cleveland, OH, p.A6958
P292 Rare Case of Uterine Adenosarcoma Metastasis to the Lung 24 Years After Curative Resection/S. Hanna, J. Hucks, Columbia, SC, p.A6961
P293 Sarcomatoid Carcinoma of the Lung Presenting as Subcutaneous Nodules/A. Tambe, Syracuse, NY, p.A6962
P294 Mediastinal Presentation of Renal Papillary Cell Carcinoma/M.D. Saleem, Kalamazoo, MI, p.A6963
P296 Diffuse Large B-Cell Lymphoma Presenting as a Recurrent Pneumonia/A. Malik, A.M. Abdul Hameed, A. Raja, Z. Khan, K. Magsi, A. Afrah, A. Pillai, Darby, PA, p.A6965
P298 A Winding Maze to the Mediastinum/D. Quigley, B. Kennedy, P. Kerr, C. Ryan, J. Meaney, Dublin, Ireland, p.A6967
P300 Pulmonary Actinomycosis Associated with Squamous Cell Carcinoma: Case Report/I.V. Lamboy-Hernandez, J.R. Aleman-Ortiz, G.M. Gonzalez-Santiago, A. Torres-Torres, Ponce, Puerto Rico, p.A6969
Facilitator: D. Ha, MD, Aurora, CO

P303 Thymomas: Can They Be More Rare?/V. Singh, K. Patel, A. Fromenta, S. Kagathur, D. Sukhai, R. Allan, Brandon, FL, p.A6972

P305 A Challenging Clinical Case of Rare Paraneoplastic Syndrome in Thymoma/A.C. Alves Moreira, A. Rodrigues, Lisboa, Portugal, p.A6974
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. Malik, K. Keshava, Brooklyn, NY, p.A6979

THEMATIC POSTER SESSION

D63 THORACIC ONCOLOGY CASE REPORTS III
9:15 a.m. - 3:30 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: M. New, MD, Aurora, CO

P318 A Fatal Case of Pulmonary Torsion Following Right Upper Lobectomy/K. Zuidema, J. Gordon, Pueblo, CO, p.A6986

ATS 2019 • Dallas, TX
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


Low Dose Naltrexone and Lung Cancer: A Case Report and Discussion/J. Miskoff, M. Chaudhri, Neptune, NJ, p.A6992

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


A Double Check on Cancer Progression: Combined Nivolumab and Ipilimumab for Recurrent Small Cell Lung Cancer/N. Lopetegui-Lia, S. Sama, V. Thomas, J. Vredenburgh, Farmington, CT, p.A6996

Facilitator: H. Li, MD, Richmond, VA

Can One Be Transformed?/N. Verma, P.H. Patel, S. Patolia, N. Poddar, St. Louis, MO, p.A6997

Near Complete Response in Ros1 Rearranged Stage IV Adenocarcinoma of the Lung/A. Tambe, G. Stephen, M. Badrinath, Syracuse, NY, p.A6998


Transforming or Coexisting: Pleural Mesothelial Hyperplasia and Mesothelioma/A. Mallaw, A.I. Saeed, A. Wright, Albuquerque, NM, p.A7002


A Case of Mixed Squamous Cell and Glandular Pulmonary Papilloma Presenting with Intraoperative Hypoxemia/D.W. Neupane, J.F. Durran, M. Krishnamurthy, Easton, PA, p.A7006

Incidental Finding of Two Different Cancers in Separate Lungs/S. Bastakoti, M. Rai, Syracuse, NY, p.A7005

When Antibiotics Fail: Unsuspecting Young Female with Asthma-Like Exacerbations and Recurrent Pneumonias/R. Attah, V. Patel, Newark, NJ, p.A7009


Facilitator: A. Vachani, MD, MS, Philadelphia, PA


Between a Centimeter and a Meter: A Nodules Tale/M. Gruca, R. El-Bizri, Providence, RI, p.A7012


Small Cell Lung Cancer, Does It Cavitate/E. Jabbour, P. Siddom, R. El-Bizri, Providence, RI, p.A7012

Malignant Solitary Fibrous Tumor of the Pleura: About a Patient with Pancreatic Lymphadenitis/P. Patel, V. Kumar, Port Jefferson, NY, p.A7013


In Disguise: A Case of Primary Squamous Cell Carcinoma of Lung Mimicking a Lung Abscess/C. Trujillo, A. Asharaf, V. Prado, Chicago, IL, p.A7014


Lung Cancer Mimicking Community Acquired Pneumonia/M. Idrees, R. MacLean, M. Canary, S. Chikoli, Cooperstown, NY, p.A7016

A Fortunate Encounter with a Clinical Mimic/D. Quigley, B. Kennedy, Dublin, Ireland, p.A7017
**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; Clinical Problems; 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.**

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
11:45 High Efficiency Gene Editing of Primary Airway Epithelial Cells Using Viral and RNP CRISPR-Cas9 Methods
M.A. Seibold, PhD, Denver, CO

12:00 Establishing a Primary Epithelial Cell Model Using Non-Lentiviral Delivery of CRISPR/Cas9
S. Siddiqui, PhD, Frisco, TX

12:15 Utilizing CRISPR/Cas9 to Insert Modifications to Model Rare Lung Diseases
A.L. Ryan, PhD, Los Angeles, CA

12:30 High Throughput CRISPR-Based Analyses of Gene Function
D.J. Erle, MD, San Francisco, CA

12:45 CRISPR Screening in Airway Smooth Muscle Cells
Q. Lu, PhD, Boston, MA

1:00 In Vivo Delivery of Cas9 RNP and Donor DNA with Gold Nanoparticles
N. Murthy, PhD, Berkeley, CA

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**CLINICAL WORKSHOP**

CME Credits Available: 1.5

**WS8 PREDICTIVE MODELING IN CRITICAL CARE: PRINCIPLES AND PRACTICE**

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

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**CC5 CRITICAL CARE CLINICAL CORE CURRICULUM I**

11:45 a.m. - 1:15 p.m.

**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

**Target Audience**
Physicians, clinical scientists, nurses, paraprofessionals, educators, health care providers

**Objectives**
- 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

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**L22** ASTHMA PHENOTYPES’ RISK FACTORS AND ROLE OF RESPIRATORY VIRUSES AND BACTERIA IN EXACERBATIONS: LESSONS FROM THE NIAID, NIH INNERCITY ASTHMA CONSORTIUM

**Target Audience**
Clinicians, researchers, health care administrators, public health specialists, asthma educators

**Objectives**
- 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

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**L23** RESEARCH FUNDING OPPORTUNITIES

**Target Audience**
Any ATS members who are conducting research and seeking research funding

**Objectives**
- 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**

**12:15 p.m. - 1:15 p.m.**

Room D167/D174 (Level 1)

**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 how the use of nontraditional health care workers 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

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**L25 CLINICAL FINDINGS FROM THE NHLBI PVDOMICS PROGRAM IN PATIENTS WITH PULMONARY HYPERTENSION**

**12:15 p.m. - 1:15 p.m.**

Room D221/D225/D226 (Level 2)

**Target Audience**

Health providers, trainees, and researchers.

**Objectives**

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

- learn about sleep characterization in PH;
- learn about new radiomics, genomics, and proteomics findings in PH;
- learn about new clinical phenotypes clustering in PH.

Pulmonary hypertension (PH) currently has no cure, thus PH research remains a high priority for NHLBI. The currently accepted classification of PH is challenging to apply clinically in the age of precision medicine. In 2014, NHLBI launched a major multi-center clinical study of PH named: Redefining Pulmonary Hypertension through Pulmonary Vascular Disease Phenomics (PVDOMICS). This program includes one Data Coordinating Center (DCC) and six U.S. clinical centers that are conducting an observational study in patients with all types of PH. The overall goal of the PVDOMICS network is to perform comprehensive phenotyping across WHO groups as well as intermediate phenotypes in order to reconstruct the traditional classification and define new meaningful subclassifications. Currently, since the start of enrollment in 2017, there have been over 750 participants with a goal of 1500 by the fall of 2019. This session will describe the clinical results from the study in approximately the first 1000 subjects.

**Chairing:**

L. Xiao, MD, PhD, Bethesda, MD

N.S. Hill, MD, Boston, MA

**12:15** Sleep Disordered Breathing Across Pulmonary Hypertension WHO Groups: Novel Findings from the PVDOMICS Study

R. Mehra, MD, Cleveland, OH

**12:30** Radiomics in Pulmonary Hypertension: What Have We Learned from PVDOMICS?

J. Lempel, MD, Cleveland, OH

**12:45** Cluster Analysis of Pulmonary Hypertension Patients in PVDOMICS Using Extensive Multi-Layered Clinical Phenotypes

J. Barnard, PhD, Cleveland, OH

**1:00** Novel Proteomics and Genomics Findings in Pulmonary Hypertension Patients from PVDOMICS Study

M. Aldred, PhD, Indianapolis, IN
**DIVISION OF LUNG DISEASES, NHLBI/NIH**

**L26 THE MOLECULAR ATLAS OF LUNG DEVELOPMENT (LUNGMAP)**

12:15 p.m. - 1:15 p.m.  
**KBHCCD**  
Room D220/D227 (Level 2)

**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

12:15 LungMAP.net: A Public Online Resource for Lung Development Research and Education  
R. Clark, PhD, Durham, NC

12:25 Adaptation of Pulmonary Cells to Air Breathing at Birth at Single Cell Level  
J.A. Whitsett, MD, Cincinnati, OH

12:35 A Multi Scale View of Lung Alveolar and Airway Development from Anatomy to Cells to Molecules  
D. Warburton, MD, ATSF, Los Angeles, CA

12:45 Epigenetics in Normal Lung Development  
J.S. Hagood, MD, Chapel Hill, NC

12:55 Multi-Scale Omics and Imaging Characterization of the Lung During Development on Behalf of PNNL/TACC Team  
G. Clair, PhD, Richland, WA

1:05 Sharing the BRINDL LungMAP Biorepository  
G.S. Pryhuber, MD, Rochester, NY

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**ATS 2019 • Dallas, TX**

**Wednesday Afternoon, May 22**

**CLINICAL**

**ADULT CLINICAL CORE CURRICULUM**

1:30 p.m. - 3:30 p.m.  
**KBHCCD**  
Room D163/D165/D170/D172 (Level 1)

**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;

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:**  
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 Sedation, Analgesia, and Delirium  
N.R. Nadig, MD, Charleston, SC

2:00 Exacerbations of Obstructive Lung Disease  
T.J. Scialla, MD, Durham, NC
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

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, 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 Expert CT Scan Interpretation in This Patient With ILD
S. Hobbs, MD, Lexington, KY

3:02 Case Presentation Part 4
S.K. Danoff, MD, PhD, Baltimore, MD

3:04 Audience Question #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.

1:33 Introduction
R. Hallowell, MD, Boston, MA

1:36 Case Presentation Part 1
R. Hallowell, MD, Boston, MA

1:38 Audience Question #1
R. Hallowell, MD, Boston, MA

1:46 How to Approach My ILD Patient With a Positive Autoimmune Serology?
R. Vij, MD, Chicago, IL

2:06 Case Presentation Part 2
L.L. Silhan, MD, Dallas, TX

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, 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 Expert CT Scan Interpretation in This Patient With ILD
S. Hobbs, MD, Lexington, KY

3:02 Case Presentation Part 4
S.K. Danoff, MD, PhD, Baltimore, MD

3:04 Audience Question #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
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, MBCiB, 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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**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)

**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
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

2:30 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.  
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.  
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

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| 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. Beiko, MD, Charleston, SC  
E. Attia, MD, MPH, Seattle, WA

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| 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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SCIENTIFIC SYMPOSIUM
CME Credits Available: 2

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. KBHCCD 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

BASIC • TRANSLATIONAL
MINI SYMPOSIUM
D92 THE MICROBIOME AND LUNG DISEASE
1:30 p.m. - 3:30 p.m. KBHCCD 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
D93 PANDING 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.
Bremmer, 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
2:15 Effect of High-Deductible Health Plans on Healthcare Access,
Financial Strain, Medication Adherence, and Outcomes for
Patients with COPD: Findings from the National Health
Interview Survey/A.W. Gaffney, A.C. White, S. Woolhandler, D.
Himmelstein, D.C. Christiani, D. McCormick, Boston, MA, p.A7033
2:30 Exacerabation Costs Associated with FF/UMEC/VI Therapy in
COPD Compared with FF/VI and UMEC/VI Therapy/M. Bogart, S.
Hopson, H.-C. Shih, R.H. Stanford, A.D. Coutinho, Research
Triangle Park, NC, p.A7034
2:45 The Economic Burden of Pulmonary Hypertension Among
Patients with Chronic Obstructive Pulmonary Disease and
Interstitial Lung Disease/A. Hemnes, C.E. Ventetuolo, S.
Manaker, J. Noone, R. Howden, P. Classi, M. Sketch, A. Nails, A.
3:00 Managing Asthma Care Costs: A Typology of Consumer
Behaviors and Implications for Adherence/A.C. Wu, M.B.
Gilkey, L. Cripps, D. Washington, K. Przywara, A. Galbraith,
Boston, MA, p.A7036

Featured Speaker
3:15 The Affordability of Prescription Medications/M.R. Patel PhD,
MPH, Ann Arbor, MI

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
1:30 First-in-Human Results of Bronchial Rheoplasty: An
Endobronchial Treatment for Chronic Bronchitis (CB)/A.
Valipour, A. Ing, J.P. Williamson, T. Saghaie, D. Steinfort, G. Snell,
E.J. Dabscheck, S. Martel, M. Fortin, W.S. Krimsky, S.
Fernandez-Bussy, Vienna, Austria, p.A7037
1:45 Neighborhood Deprivation in Young Adulthood Is
Longitudinally Associated with Impaired Respiratory Health:
The CARDIA Lung Study/S. Thatipelli, L. Sivarajan, L. Colangelo,
Washko, T. Parekh, K. Kershaw, M. Carnethon, R. Kalhan,
Chicago, IL, p.A7038
2:00 Prediction of Emphysema and Airway Disease from Spirometry
Using Neural Networks/S. Bodduluri, A. Nakhmani, P. Kandhare,
Castaldi, M.-L.N. McDonald, P.V. Bangalore, T. Anthony, H.P.
Nath, M.T. Dransfield, S.P. Bhatt, Birmingham, AL, p.A7039
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
2:30 Under Detection of Left Heart Failure in COPD: Results from the
COSYCONET Cohort/P. Alter, B.A. Mayerhofer, K. Kahnert, H.
Watz, B. Waschki, F. Bieritz, R. Bals, C.F. Vogelmeier, R.A. Jörres,
Marburg, Germany, p.A7041
2:45 Impact of the Number of Years with Exacerbations During
Maintenance Therapy on Lung Function Decline in COPD/M.
Kerkhof, J. Voorham, C. Cabrera, P. Darken, P. Dorinsky, J.W.H.
Kocks, M. Sadatsafavi, D.D. Sin, D.B. Price, Singapore, Singapore,
p.A7042
3:00 Histopathologic Results Post Bronchial Rheoplasty/S.
Fernandez-Bussy, P. VanderLaan, A. Ing, J.P. Williamson, T.
Saghaie, D. Steinfort, G. Snell, E.J. Dabscheck, I. Lou, S. Martel,
M. Fortin, W.S. Krimsky, A. Valipour, Ponte Vedra Beach, FL,
p.A7043
3:15 Asthma COPD Overlap Is Associated with Increased Mortality
and Respiratory Events, the NHLBI Pooled Cohorts Study/N.
Putch, P. Balte, P.A. Cassano, P. Chaves, D. Couper, D. Jacobs,
R. Kalhan, R. Kronmal, L.R. Loehr, S. London, R. Kaplan, G.T.
O'Connor, J. Schwartz, L.J. Smith, W. White, S. Yende, E. Oelsner,
Baltimore, MD, p.A7045
**D95**  
**CRITICAL CARE: ALL’S WELL THAT ENDS WELL - TRANSLATING PRACTICE TO OUTCOMES FOR OUR PATIENTS WITH CRITICAL ILLNESS**

1:30 p.m. - 3:30 p.m.  
OMNI DALLAS DOWNTOWN  
Trinity Ballroom 4/8 (Level 3)

**Chairing:**  
A. Amaral, MD, Toronto, Canada  
R.C. Hyzy, MD, ATSF, Ann Arbor, MI

**Oral Presentations:**

1:30  

1:45  

2:00  

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

2:30  

2:45  

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**

1:30 p.m. - 3:30 p.m.  
KBHCCD

**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:**

1:30  

1:45  

2:00  

2:15  

2:30  

2:45  

3:00  

3:15  

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**D97**  
**FUNGAL INFECTIONS: FROM BENCH TO BEDSIDE**

1:30 p.m. - 3:30 p.m.  
KBHCCD

**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
Ballroom D Two (Level 3)

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-Vinasc, S. Sammar, C. Kemph, R.C. Oita, 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.A7074
2:30  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

502 Efficacy and Safety of a Fixed Combination Extrafine Budesonide/Formoterol, Fumarate, and Glycopyrronium Bromide (BDP/FF/GB) pMDI Treatment Compared to Fixed Combination BDP/FF in Patients with Uncontrolled Asthma on Medium Dose ICS/LABA/P. Paggiaro, P. Kuna, M. Kots, S. Corre, E. Carzana, A. Vele, G. Georges, S. Petruzzelli, J.C. Virchow, Pisa, Italy, p.A7080


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 (AECOPD)/V. 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. Lucci, 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 Tiotropium/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


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. Churpek, 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


Predictors of Mortality on Cardiopulmonary Exercise Testing 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

Physiological Response to Exercise and Vital Prognosis in Patients with Combined Pulmonary Fibrosis and Emphysema: Comparison to Chronic Obstructive Pulmonary Disease and Idiopathic Pulmonary Fibrosis/C. Boily-Daoust, J. Chalaoui, C. Poirier, J. Morisset, B.-P. Dubé, Montreal, Canada, p.A7140


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


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/E. Mayad, S. Rajasekar, A. Mohsin, 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, Stanford, CA, p.A7173


**RAPID: RAPID ABSTRACT POSTER DISCUSSION SESSION**

D105 IMPROVING PEDIATRIC ASTHMA CONTROL AND OUTCOMES

1:30 p.m. - 3:30 p.m.  OMNI DALLAS DOWNTOWN

Dallas Ballroom E-F (Level 3)

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. Simonneau, Y. Sun, N. Gherlone, S. Almeida, M. Manice, J.P. Hollenbach, 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. Dhalwal, 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. Chorvinsky, 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.A. Brooks, E. Chorvinsky, D.K. Pillai, S. Worgall, New York, NY, p.A7479

306 A Microrna96 Mimic Delivered Direct to the Lungs Can Reverse Sugen/Hypoxia-Induced Pulmonary Hypertension in the Rat/C.K. Docherty, S. Fisher, M. Nilsen, M.R. MacLean, Glasgow, United Kingdom, p.A7198

307 Overexpression of miR125b Induces Group3 Pulmonary Hypertension in Pre-Existing Pulmonary Fibrosis/S. Umur, M. Vaillancourt, G. Ruffenach, J. Hong, N. Cao, T. Le, C. Makar, M. Mikhail, L. Saddic, F. Sy, D. Younessi, M. Li, M. Eghbali, Los Angeles, CA, p.A7199


309 microRNA-483 Ameliorates Pulmonary Arterial Hypertension/J. Zhang, X. Wang, J. Zhang, Z. Jing, J. Shyy, Xi’an, China, p.A7201


311 FTY720 S-Phosphonate Significantly Inhibits MRSA Induced Permeability, Inflammation and Epigenetic Changes in Lung Endothelium/L. Wang, S.M. Dudek, Chicago, IL, p.A7203


318 Opposite Effects of Guanosine in Inflammatory Versus Angioproliferative Experimental Pulmonary Hypertension/S.P. Tofovic, J. Hu, F. Schneider, E. Jackson, Pittsburgh, PA, p.A7210

319 Smooth Muscle Cell Loss of the Tumor Suppressor WWOX Contributes to the Development of Pulmonary Hypertension/M. Teixeira Gomes, J. Chen, S. Haider, Y. Bai, S. Singla, R.F. Machado, Indianapolis, IN, p.A7211

320 Survivin Inhibition as a Potential Target for Pulmonary Arterial Hypertension/J. Blanco, M. Marquina, O. Tura- Ceide, V.I. Peinado, J.A. Barbera, Barcelona, Spain, p.A7212

321 Non-Muscle Myosin Light Chain Kinase Activity Mediates Endothelial Cell Proliferation and Inhibits Apoptosis in Pulmonary Arterial Hypertension/M. Anis, J.R. Jacobson, D.R. Fraidenburg, Chicago, IL, p.A7213


D107 MITOCHONDRIA AND ER STRESS IN HOMEOSTASIS AND REPAIR

1:30 p.m. - 3:30 p.m.  KBHCCD

Poster Viewing 1:30-2:15
Discussion 2:15-3:30

Chairing: P. Lee, MD, New Haven, CT
K. Suresh, MD, Baltimore, MD
A. Saikar, PhD, Columbus, OH


602 Mitochondrial Malate Dehydrogenase (MDH2) Regulates Macrophage Alternative Activation During Pulmonary Fibrosis Development/C. He, J.L. Casey, L. Gu, A.B. Carter, Birmingham, AL, p.A7216


Circulating Mitochondrial DNA Is Associated with Fibroblast Activation and Disease Progression in Scleroderma


Increased Susceptibility to Gammaherpesvirus-Induced Lung Injury and Fibrosis of Transgenic Mice with Conditional Overexpression of the Pro-Apoptotic ER-Stress-Factor Chop in 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

Expression of the Combined Activities of Molecular Functions in Mice 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


The Sphingosine Kinase 1 Inhibitor, PF543, Mitigates Circulating Mitochondrial DNA Is Associated with Fibroblast Activation and Disease Progression in Scleroderma


Cell Injury Cluster Progression During Ventilator-Induced Injury/C. Mattson, K. Okamura, M. Kiselevach, B.J. Smith, Aurora, CO, p.A7238


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


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POSTER DISCUSSION SESSION

D108 MECHANISM OF LUNG INJURY

1:30 p.m. - 3:30 p.m. KBHCCD

Poster Viewing 1:30-2:15

Discussion 2:15-3:30

Chairing: B.J. Smith, PhD, Aurora, CO

T. Winkler, PhD, Boston, MA


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. Bandar Alsabri, S. Serene Favaz, M. Hamdon, E.W. Hagen, M.S. Badr, P. Peppard, Detroit, MI, p.A7273


D110 LUNG CANCER: OPTIMIZING SCREENING, DIAGNOSIS, AND TREATMENT
1:30 p.m. - 3:30 p.m.  

Abstract Summaries 1:30-2:00  
Viewing/Discussion 2:00-3:30

Chairing: H.C. Cain, MD, MS, New Haven, CT  
V.S. Nair, MSCR, MD, Tampa, FL  
M.B. Schabath, PhD, Tampa, FL

1. Fish Intake, Dietary Polyunsaturated 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
2. 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
3. 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
8. Incidence and Outcomes of Patients with Metastatic Lung Cancer Requiring Mechanical Ventilation/H.-. Liao, S.B. Smith, Chicago, IL, p.A7284

19. 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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