Welcome to ATS 2017 Washington, DC.

Dear Clinician,

Each year, the ATS International Conference offers clinicians from many disciplines the opportunity to learn about the latest developments in the fields of pulmonary, critical care, and sleep disorders. As one of the largest gatherings of its kind, the conference fosters professional networks that individuals can call upon when they have a difficult case or are looking for integrated clinical approaches or research collaborators. The conference also provides attendees with state of the art information and cutting-edge insights into the diagnosis and management of lung diseases, critical illness, and sleep disorders.

New for 2017: in addition to the highly popular adult and pediatric core curriculum sessions, select scientific symposia are eligible for CME and American Board of Internal Medicine (ABIM) or American Board of Pediatrics (ABP) MOC. Sessions offering MOC points are marked in the Final Program.

To help those interested in advancing their clinical skills and knowledge to get the most out of the 2017 ATS International Conference, we have produced this condensed program book, Highlights for Clinicians, which contains selected sessions of particular interest for practicing clinicians in a simple and readable pocket guide format. The sessions that are highlighted will be presented by some of the world’s most respected clinicians, educators, and scientists in the fields of pulmonary, critical care, and sleep medicine today. Please use the Highlights for Clinicians as your personal guide to ATS 2017.

We are delighted that you have joined us at the ATS International Conference and hope that you will have a productive and enjoyable week in Washington, DC.

David Gozal, MD, MBA
President,
American Thoracic Society

Zea Borok, MD
Chair;
International Conference Committee
The Highlights for Clinicians contains only those sessions thought to be of interest to the clinician attendee. Some of the scientific symposia and none of the abstract-based sessions are included in this publication. To view the entire program and abstract sessions, please see the ATS 2017 Final Program.

Highlights for Clinicians is published by ATS as a service to attendees. While every effort is made to ensure accuracy, ATS makes no warranties, expressed or implied, related to the information. The information contained herein is as of March 9, 2017 and is subject to change without notice.

We invite you to take time out of your Conference schedule to visit the Exhibit Hall in the Walter E. Washington Convention Center, Hall A-B (South Building, Lower Level). See the latest products, equipment and services displayed by exhibitors in your field.

**EXHIBIT HALL HOURS**

- Sunday, May 21 .......10:30 a.m. – 3:30 p.m.
- Monday, May 22 ......10:30 a.m. – 3:30 p.m.
- Tuesday, May 23 ......10:30 a.m. – 3:30 p.m.

Take advantage of the Exhibit Hall Only time from 1:15 – 2:15 p.m. each day.
The ATS Foundation would like to thank our 2016 partners in research for helping to make this program a success:

- Alpha-1 Foundation
- Alliance for Academic Internal Medicine
- American Lung Association
- American Lung Association of the Mountain Pacific
- ATS Foundation Tobacco-Dependence Research Fund
- The Association of Specialty Professions
- Breathe California of Los Angeles County
- Genentech
- Hermansky-Pudlak Syndrome Network
- Primary Ciliary Dyskinesia (PCD) Foundation
- Pulmonary Fibrosis Foundation
- Pulmonary Hypertension Association
- Scleroderma Foundation

Our members, partners, and friends have made the ATS Foundation Research Program astoundingly successful launching research careers dedicated to scientific discovery—and better patient care.

Research Program awards and grants provide crucial support for early-career investigators from around the world.

The **Ninth Annual ATS Foundation Research Program Benefit** will celebrate the Research Program awardees and the 2017 Breathing for Life Honoree. We hope to see you there on Saturday, May 20 at 7 p.m. Funds raised will support research.
The ATS Keynote Series provides state of the art lectures on selected topics in an unopposed format showcasing major discoveries in pulmonary critical care and sleep medicine.

The series includes two lectures from internationally recognized clinician scientists daily in from 8:15 – 9:00 a.m. The Series is held in the Walter E. Washington Convention Center.

**SUNDAY, MAY 21**

*East Salon A-C (South Building, Street Level)*

AIDS to Zika: The Perpetual Challenge of Emerging and Re-Emerging Infectious Diseases
A. Fauci, MD

*West Salon G-I (South Building, Street Level)*

Telomeres and Telomerase in Pulmonary Fibrosis and Emphysema
M. Armanios, MD

**MONDAY, MAY 22**

*East Salon A-C (South Building, Street Level)*

Toward Eliminating All Harms
P.J. Pronovost, MD, PhD

*West Salon G-I (South Building, Street Level)*

Cystic Fibrosis Lung Disease: Looking Back and Looking Forward
M.J. Welsh, MD

**TUESDAY, MAY 23**

*East Salon A-C (South Building, Street Level)*

Changing Face of an Old Enemy: New Insights into the Pathogenesis and Management of Drug-Resistant TB
K.U.J. Dheda, MD, PhD

*West Salon G-I (South Building, Street Level)*

Lung Cancer Trials in the Age of Precision Medicine
E. Vokes, MD

**WEDNESDAY, MAY 24**

*East Salon A-C (South Building, Street Level)*

Climate Change and Global Warming: A Geological Perspective
K.R. Johnson, PhD

*West Salon G-I (South Building, Street Level)*

Hypoxia-Inducible Factors in Physiology and Medicine
G.J. Semenza, MD, PhD
Clinicians Center

SUNDAY, MAY 21 – TUESDAY, MAY 23  
WEDNESDAY, MAY 24
7 a.m. – 5 p.m.  
7 a.m. – 1 p.m.

Walter E. Washington Convention Center, Hall D (Middle Building, Level 2)
The Clinicians Center is an area designed to enhance the International Conference experience for pulmonary, critical care and sleep medicine practitioners. Meet, network, relax, refresh and learn in a comfortable and congenial environment while gathering information and resources suited for clinicians and interprofessionals.

Events and Education at the 2017 Clinicians Center include:

- **Nurses Meet & Greet Reception**  
  Sunday, May 21, 11 a.m. – 12:30 p.m.

- **ATS Coding and Billing Practices – The Basics**  
  Sunday, May 21, 1 – 2 p.m.

- **Organizing and Operating a Pediatric Bronchoscopy Program**  
  Monday, May 22, 11:30 a.m. – 12:30 p.m.

- **ATS Coding and Billing Practices – Advanced**  
  Monday, May 22, 1 – 2 p.m.

- **Outstanding Clinician Award Reception**  
  Monday, May 22, 4 – 5 p.m.

- **Results of the ATS Pulmonologist Survey Regarding Knowledge, Attitudes and Practices with Inhalation Devices for COPD**  
  Tuesday, May 23, 1 – 2 p.m.

- **Resources** for clinicians including **Year in Review** books, and **Highlights for Clinicians**

Learning Labs
Observe Educational Session Demos in the adjacent Learning Labs while you enjoy light fare and refreshments.

<table>
<thead>
<tr>
<th>SUNDAY, MAY 21</th>
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<td>11:30 – 12 noon</td>
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<tr>
<td>Tracheostomy Troubleshooting</td>
<td>EBUS Transbronchial Needle Aspiration – Improving Your Yield</td>
<td>Early Mobility in the ICU: Evidence and Demonstration</td>
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<td>Noon – 1 p.m.</td>
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<tr>
<td>Mechanical Ventilation: Case Studies</td>
<td>Advanced Topics in Pediatric Bronchoscopy</td>
<td>Home Care Technologies</td>
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<td>Difficult Airways Management</td>
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Free coffee and light breakfast available every morning from 7 – 9 a.m.
The American Thoracic Society is dedicated to improving the International Conference experience for pulmonary, critical care and sleep medicine professionals. To assist you with planning for the Conference, we have highlighted some events and resources which we feel will enhance your overall experience at ATS 2017.

**THE NETWORKING EXCHANGE FOR EARLY CAREER PROFESSIONALS**

**Saturday, May 20, 5:30 p.m. – 6:30 p.m.**
*Marriott Marquis Washington, University of DC/Catholic University (Level M1)*

The Networking Exchange for Early Career Professionals is an annual networking event for early career professionals and first time conference attendees. This 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 are served.

**CENTER FOR CAREER DEVELOPMENT**

**Sunday, May 21 – Tuesday, May 23, 7 a.m. – 5 p.m.**
**Wednesday, May 24, 7 a.m. – 1 p.m.**
*Walter E. Washington Convention Center, Hall D (Middle Building, Level 2)*

The Center for Career Development is a professional networking and career development forum for early career professionals (medical students, residents, fellows, post docs, other allied health care and research professionals) in training or transitioning from training in pulmonary, critical care and sleep medicine. Informal workshops aimed at enhancing the professional development for early career professionals are held each day.

**CLINICIANS CENTER**

**Sunday, May 21 – Tuesday, May 23, 7 a.m. – 5 p.m.**
**Wednesday, May 24, 7 a.m. – 1 p.m.**
*Walter E. Washington Convention Center, Hall D (Middle Building, Level 2)*

The Clinicians Center is an area designed to enhance the International Conference experience for pulmonary, critical care and sleep medicine practitioners. Meet, network, relax, refresh, and learn in a comfortable and congenial environment while gathering information and resources suited for clinicians and interprofessionals.

**INTERNATIONAL PARTICIPANTS CENTER**

**Sunday, May 21 – Tuesday, May 23, 7 a.m. – 5 p.m.**
**Wednesday, May 24, 7 a.m. – 1 p.m.**
*Walter E. Washington Convention Center, Hall D (Middle Building, Level 2)*

The International Participants Center is designed to enhance the conference experience for participants from outside North America and provide opportunities for all participants to become more knowledgeable about ATS international activities. The Center also provides a place to meet with colleagues, network or just relax during your time at ATS 2017.

**SCIENCE & INNOVATION CENTER**

**Sunday, May 21 – Tuesday, May 23, 7 a.m. – 5 p.m.**
**Wednesday, May 24, 7 a.m. – 1 p.m.**
*Walter E. Washington Convention Center, Hall D (Middle Building, Level 2)*

The Science & Innovation Center is a forum for scientists and researchers to meet, network, learn, and relax. The Center also offers SIC 101, a series which will provide basic principles of some of the high profile scientific symposia.
NEW FOR 2017: The ATS is offering MOC for participation in the Core Curriculum and selected symposia. Participants have the flexibility to take MOC exams for any or all of the eligible symposia attended for the conference to earn MOC.

ABIM CME/MOC ACCREDITED
Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 46.5 MOC in the American Board of Internal Medicine’s (ABIM) Maintenance of Certification (MOC) program. It is the CME activity provider’s responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

AMERICAN BOARD OF PEDIATRICS PART 2 MOC
Successful completion of this CME activity, which includes participation in the activity, with individual assessments of the participant and feedback to the participant, enables the participant to earn up to 10 MOC points in the American Board of Pediatrics’ (ABP) Maintenance of Certification (MOC) program. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABP MOC credit.

See the Final Program, conference app or itinerary for information on the sessions eligible for MOC. For information on how to earn MOC, visit http://conference.thoracic.org/program/moc.php or email moc@thoracic.org.

CONTINUING EDUCATION
The ATS is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The ATS partners with National Jewish Health® to provide Nursing Contact Hours for selected sessions. Provider approved by the California Board of Registered Nursing, Provider Number 12724.

To claim credits and/or hours, go to http://conference.thoracic.org/program/cme-nursing-ce.php or you may use the designated computers located in the Walter E. Washington Convention Center, L Street Bridge (Level 2).
The members of the ATS Interprofessional Team have identified a variety of symposia and review sessions within the Highlights for Clinicians that may be of specific interest to the Interprofessional Clinician (RN, APN, PA, PT, OT, and RT). Please also search through the entire International Conference Final program for research symposia and poster sessions related to your specific research or clinical interests.

SUNDAY, MAY 21

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

A7  HOT TOPICS IN PULMONARY REHABILITATION: A PRO/CON DEBATE

A12 THE PROMISE AND REALITY OF WEARABLE HEALTH TECHNOLOGY

A82 IDIOPATHIC PULMONARY FIBROSIS. CONTROVERSIES IN MANAGEMENT – PRO/CON DEBATE

A84 THE NEW ENGLAND JOURNAL OF MEDICINE AND JAMA. DISCUSSION ON THE EDGE: REPORTS OF RECENTLY PUBLISHED CRITICAL CARE RESEARCH

A86 THE SLEEP STATE OF THE UNION: TAKING OSA MANAGEMENT TO WASHINGTON

A91 CATCHING FIRE: THE GLOBAL HEALTH ISSUE OF HOUSEHOLD AIR POLLUTION

WS1 TURNING DATA INTO WISDOM: DATABASES AND REGISTRIES FOR BETTER LUNG CANCER OUTCOMES

WS2 GLOBAL HEALTH CAREERS IN PULMONARY AND CRITICAL CARE MEDICINE

MONDAY, MAY 22

K3  TOWARD ELIMINATING ALL HARMs

B2  THE LONG-TERM OXYGEN TREATMENT TRIAL (LOTT): IMPLICATIONS FOR COPD PATIENT CARE

B3  THE CANCER MOONSHOT: ATS = MISSION CONTROL FOR LUNG CANCER

B4  HUMANIZING THE INTENSIVE CARE UNIT: NEW PERSPECTIVES ON AN OLD PROBLEM

B5  SMOKERS WITH PRESERVED SPIROMETRY: EARLY COPD?

B6  MECHANICAL VENTILATION IN THE NICU, PICU AND AT HOME: WHAT THE PEDIATRIC PULMONOLOGIST SHOULD KNOW
ATS Interprofessional Team Guide

B7 FROM RESEARCH TO BEDSIDE: OPTIMIZING WELL-BEING THROUGH INTEGRATIVE THERAPY
B8 REALIZING THE PARIS CLIMATE AGREEMENT TO IMPROVE CARDIO-PULMONARY HEALTH: WHERE SCIENCE MEETS POLICY
B9 GAMING THE SYSTEM OR SAVING LIVES: PAY FOR PERFORMANCE IN THE 21ST CENTURY
B10 SEPSIS GOES TO WASHINGTON: REGULATIONS, DEFINITIONS, AND RESEARCH SHAPING THE FUTURE OF SEPSIS
B12 THE IMPORTANCE OF TECHNOLOGY IMPLEMENTATION IN RESPIRATORY CARE AND PUBLIC HEALTH
B83 A MULTIDISCIPLINARY, CASE-BASED APPROACH TO HOT TOPICS IN CTD-ILD
B84 CHRONIC, PERSISTENT, PROLONGED, AND JUST PLAIN STUCK: INSIGHTS IN CHRONIC CRITICAL ILLNESS
B90 DISCUSSION AND DEBATE IN THE MANAGEMENT OF PULMONARY EMBOLISM
B91 IMPLEMENTATION SCIENCE IN PULMONARY, CRITICAL CARE, SLEEP AND PEDIATRIC MEDICINE: HOW SOON IS NOW?
WS3 MEDICAL SIMULATION TO IMPROVE ICU SAFETY

TUESDAY, MAY 23
C4 A STITCH IN TIME: CONTROVERSIES IN CRITICAL CARE BEST PRACTICES AND THEIR EFFECT ON PATIENT CENTERED OUTCOMES
C6 REDUCING READMISSIONS FOR COPD: STRATEGIES, ISSUES AND RESULTS
C12 PHYSICIAN PAYMENT IN THE UNITED STATES: PAST, PRESENT AND FUTURE OR WHAT IS MACRA (MEDICARE ACCESS AND CHIP REAUTHORIZATION ACT OF 2015)
C86 CLINICAL ADVANCES IN RESPIRATORY HEALTH: WHAT TO TELL YOUR PATIENTS RIGHT NOW
C90 PULMONARY REHABILITATION ACROSS HEALTH CARE SETTINGS

WEDNESDAY, MAY 24
D6 SLEEP AND HEALTH: A PUBLIC HEALTH CALL TO ACTION
D82 PUTTING THE 2017 GOLD COPD RECOMMENDATIONS INTO CLINICAL PRACTICE
D84 50 YEARS OF ARDS: LOOKING BACK, AND AHEAD
D91 ATS CLINICAL PRACTICE GUIDELINES: CLINICAL PRACTICE ON THE CUTTING EDGE

8 ATS 2017 Highlights for Clinicians
The ATS gratefully acknowledges educational grants from Acetelion Pharmaceuticals US, Inc., AstraZeneca LP, and Sunovion Pharmaceuticals, Inc. in support of the Fellows Track Symposium.

The American Thoracic Society is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. This live activity has been designated for 16 AMA PRA Category 1 Credit(s)™.

For more information, email: fellows@thoracic.org or lguzman@thoracic.org

FRIDAY, MAY 19 AND SATURDAY, MAY 20
Walter E. Washington Convention Center, L Street South Lobby (South Building, Street Level)

The 2017 FTS Program Topics are as follows:

**PULMONARY**
- Asthma: Treatment Advances
- Interstitial Lung Disease: Diagnosis and Treatment
- Clinical Trials Designs: Understanding Trial Results
- Pulmonary Arterial Hypertension
- Advances in COPD
- Interventional Pulmonology
- Pulmonary Rehabilitation: Who, When, How
- New Paradigms in Lung Cancer Screening, Diagnosis and Treatment
- Sarcoidosis: New Understanding

**SLEEP**
- Obesity Hypoventilation
- Preoperative Screening for Sleep Apnea and CPAP Therapy: What Is the Evidence?
- Diagnosis of OSA
- Management of Sleep Apnea: Why You Should Care
- Management of Obstructive Sleep Apnea as a Chronic Disease

**CRITICAL CARE**
- Managing Severe Hypoxemia
- Neurological Emergencies in the ICU
- Ventilator Problems Unraveled
- Issues in the Management of Sepsis
- ECMO and Ventricular Assist Devices in the ICU
- Critical Care Ultrasonography
- New Paradigms in Lung Cancer Screening, Diagnosis and Treatment
- Sarcoidosis: New Understanding

**PEDIATRIC**
- Congenital Abnormalities of the Lower Airways and Lungs
- Severe Asthma
- Sleep in Children: Diagnostic and Therapeutic Issues
- Interstitial Lung Disease in Children
- Primary Ciliary Dyskinesia
- Lung Transplantation
- Cystic Fibrosis in Children
- Pulmonary Arterial Hypertension
- Respiratory Disorders in Children Infected with HIV
- Interventional Bronchoscopy in Pediatrics: EBUS, Needle Biopsy, and Thermoplasty
- Complicated Pneumonia and Pleural Effusions
- Care of the Technology Dependent Child
- Pulmonary Testing in Infants and Young Children
- Mycobacteria Tuberculosis
- Bronchopulmonary Dysplasia
Postgraduate Courses

Postgraduate Courses are held Friday, May 19 and Saturday, May 20 and use a lecture format. Several courses also consist of a practical skills component with equipment demonstrations and these are marked below. Course attendance is limited and requires additional registration and fees.

PG1A and PG1B are parts of a 2-day course held on Friday and Saturday. Those registering for PG1A will be enrolled for both days. Below is a list of courses. Complete program and registration information is provided in the conference Final Program.

FRIDAY, MAY 19 8:00 A.M. – 4:00 P.M.

PG1A CRITICAL CARE ULTRASOUND AND ECHOCARDIOGRAPHY I
(PRACTICAL SKILLS COURSE)
Walter E. Washington Convention Center, Room 145 A (Middle Building, Street Level)
Chairing: M.J. Lanspa, MD, MS, X. Monnet, MD, PhD
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.

PG2 HOW TO USE ‘OMICS TO STUDY LUNG DISEASE
Walter E. Washington Convention Center, Room 152 A (Middle Building, Street Level)
Chairing: B.E. Himes, PhD, A.N. Gerber, MD, PhD, M.M. Wurfel, MD, PhD

PG3 LOOK BEFORE YOU LEAP: SKILLS FOR CRITICAL EVALUATION OF CLINICAL RESEARCH
Walter E. Washington Convention Center, Room 204 B-C (South Building, Level 2)
Chairing: A.J. Walkey, MD, MSc, H.B. Gershengorn, MD

PG4 INTERSTITIAL LUNG DISEASE: CURRENT TRENDS IN DIAGNOSIS AND MANAGEMENT
Walter E. Washington Convention Center, Room 202 A (South Building, Level 2)
Chairing: G. Raghu, MD, L. Richeldi, MD, PhD

PG5 A PHYSIOLOGIC APPROACH TO THE TREATMENT OF SHOCK
Walter E. Washington Convention Center, Room 152 B (Middle Building, Street Level)
Chairing: C.C. Hardin, MD, PhD, K.A. Hibbert, MD

PG6 LUNG INNATE IMMUNITY: FRONTLINES OF HOST DEFENSE
Walter E. Washington Convention Center, Room 145 B (Middle Building, Street Level)
Chairing: H. Koziel, MD, J.P. Mizgerd, ScD

PG7 PEDIATRIC RESPIRATORY PHYSIOLOGY: WHEN IT’S NORMAL AND WHEN IT’S NOT
Walter E. Washington Convention Center, Room 143 B-C (Middle Building, Street Level)
Chairing: H.B. Panitch, MD, J.L. Allen, MD
PG8  PRACTICAL OUTCOME TOOLS IN COPD: FROM CLINICAL CARE TO CLINICAL TRIALS  
Walter E. Washington Convention Center, Room 201 (South Building, Level 2)  
Chairing: W. Man, MD, PhD, S.J. Singh, PhD  
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.

PG9  MASTER PHYSIOLOGY CLASS: HEMODYNAMICS  
Walter E. Washington Convention Center, Room 151 A (Middle Building, Street Level)  
Chairing: A.M. Luks, MD, R.W. Glenny, MD

PG10  ORAL APPLIANCE THERAPY AND RELATED TOPICS IN DENTAL SLEEP MEDICINE  
Walter E. Washington Convention Center, Room 202 B (South Building, Level 2)  
Chairing: J.E. Metz, DDS

PG11  LUNG CANCER STATE OF THE ART: 2017  
Walter E. Washington Convention Center, Room 144 A-B (Middle Building, Street Level)  
Chairing: M.P. Rivera, MD, D.J. Feller-Kopman, MD

SATURDAY, MAY 20 8:00 A.M. – 4:00 P.M.

PG1B  CRITICAL CARE ULTRASOUND AND ECHOCARDIOGRAPHY II  
(PRACTICAL SKILLS COURSE)  
Walter E. Washington Convention Center, Room 145 A (Middle Building, Street Level)  
Chairing: M.J. Lanspa, MD, MS, X. Monnet, MD, PhD  
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.

PG12  BRONCH DAY: A COMPREHENSIVE, HANDS-ON GUIDE TO BASIC BRONCHOSCOPY AND EBUS (PRACTICAL SKILLS COURSE)  
Walter E. Washington Convention Center, Room 145 B (Middle Building, Street Level)  
Chairing: C.L. Channick, MD, S. Oh, MD

PG13  FLOW CYTOMETRY IN HUMAN AND MOUSE LUNGS: FROM EXPERIMENTAL DESIGN TO ANALYSIS  
Walter E. Washington Convention Center, Room 204 B-C (South Building, Level 2)  
Chairing: R.M. Tighe, MD, A.V. Misharin, MD, PhD, C. Jakubzick, PhD

PG14  RACING TO EXCELLENCE: THE ART AND SCIENCE OF CRITICAL CARE QUALITY IMPROVEMENT  
Walter E. Washington Convention Center, Room 209 A-B (South Building, Level 2)  
Chairing: D.W. Ford, MD, MSCR, A. Amaral, MD, M.E. Mikkelsen, MD, MSCE
PG15 ADVANCES IN THE DIAGNOSIS AND MANAGEMENT OF SARCOIDOSIS

_Walter E. Washington Convention Center, Room 143 B-C (Middle Building, Street Level)_

Chairing: D.A. Culver, DO, M. Drent, MD

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

PG16 CASED-BASED REVIEW OF THORACIC IMAGING FOR THE PULMONOLOGIST AND CRITICAL CARE PHYSICIAN

_Walter E. Washington Convention Center, Room 144 A-B (Middle Building, Street Level)_

Chairing: J.P. Kanne, MD, C.C. Wu, MD

PG17 BEST PRACTICES AND CLINICAL RESEARCH SKILLS DEVELOPMENT FOR CLINICAL RESEARCH COORDINATORS

_Walter E. Washington Convention Center, Room 152 A (Middle Building, Street Level)_

Chairing: N.E. Bracken, MSN, ACNP-BC, K.O. Lindell, PhD, RN

PG18 AERODIGESTIVE APPROACH TO COMPLEX CHRONIC PEDIATRIC DISEASES

_Walter E. Washington Convention Center, Room 202 B (South Building, Level 2)_

Chairing: R.P. Boesch, DO, M. Kazachkov, MD

PG19 CRITICAL CARE OF THE PATIENT WITH PULMONARY VASCULAR DISEASE

_Walter E. Washington Convention Center, Room 202 A (South Building, Level 2)_

Chairing: C.E. Ventetuolo, MD, MS, T.M. Bull, MD, T. Lahm, MD

PG20 THE HALLMARKS OF AGING IN THE LUNG

_Walter E. Washington Convention Center, Room 152 B (Middle Building, Street Level)_

Chairing: P.J. Lee, MD, M. Rojas, MD, A.V. Misharin, MD, PhD

PG21 PULMONARY FUNCTION AND CARDIOPULMONARY EXERCISE TESTING: MOVING FROM THEORY TO CLINICAL PRACTICE

_Walter E. Washington Convention Center, Room 207 B (South Building, Level 2)_

Chairing: C.E. Berry, MD, M.C. McCormack, MD, MHS, D.A. Kaminsky, MD

PG22 PULMONARY AND CRITICAL CARE REVIEWS: BUILT AROUND THE 2016 ABIM-SEP MODULES

_Walter E. Washington Convention Center, Room 207 A (South Building, Level 2)_

Chairing: J.T. Poston, MD
Sunday, May 21 Sessions

SUNDAY MORNING, MAY 21 7:00 A.M. – 11:15 A.M.

PCC1 PEDIATRIC CLINICAL CORE CURRICULUM
7:00 a.m. – 8:00 a.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: J. Rettig, MD
7:00 Severe Asthma: Outpatient Evaluation, J. Gaffin, MD
7:30 Severe Asthma: Inpatient Management, K.R. Ross, MD
This session and the International Conference are supported by an educational grant from Teva 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.

K1 ATS KEYNOTE SERIES
8:15 a.m. – 9:00 a.m.
Walter E. Washington Convention Center, East Salon A-C (South Bldg., Street Level)
AIDS To Zika: The Perpetual Challenge of Emerging and Re-Emerging Infectious Diseases, A. Fauci, MD

K2 ATS KEYNOTE SERIES
8:15 a.m. – 9:00 a.m.
Walter E. Washington Convention Center, West Salon G-I (South Bldg., Street Level)
Telomeres and Telomerase in Pulmonary Fibrosis and Emphysema, M. Armanios, MD

A1 CLINICAL YEAR IN REVIEW 1
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)
Chairing: D.J. Lederer, MD, MS, D.W. Ford, MD, MSCR, V.E. Ortega, MD, PhD
9:15 New Tools to Support Acute Respiratory Failure, D. Brodie, MD
9:45 General Critical Care, D.W. Ford, MD, MSCR
10:15 The Brain and Critical Care, T.P. Bleck, MD, MCCM
10:45 Sleep Disordered Breathing, S.S. Redline, MD, MPH

A2 JAMA AND THE NEW ENGLAND JOURNAL OF MEDICINE. DISCUSSION ON THE EDGE: REPORTS OF RECENTLY PUBLISHED PULMONARY RESEARCH
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 207 A-B (South Building, Level 2)
Chairing: G.T. O’Connor, MD, MS, J.M. Drazen, MD
This session will provide a forum for attendees to interact with the authors and editors about papers published in JAMA and the New England Journal of Medicine. Papers presented will be recent publications, selected by the editors, to be of significant importance to the field of pulmonary medicine. Attendees will have the opportunity to hear presentations directly from the author and address questions to both the authors and editors. The discussion is intended to provide a unique insight into these papers, the selection process, and how the research applies directly to the field of pulmonary medicine.
Speakers and talks to be announced
A3 FELLOWS CASE CONFERENCE
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom C (South Building, Level 3)
Chairing: L.E. Crotty Alexander, MD

9:15 Welcome and Introduction, L.E. Crotty Alexander, MD, K. Burkart, MD, MSc

9:20 Case Presentations
The Mystery Lungs: Is Smoking or Asthma the Cause?, A.A. Alsaad, MD
Climbing High: A Rare Complication of High Altitude Pulmonary Edema, N. Mansori, MD
Pulmonary and Aortic Masse: When the Rare Meets the Unusual, O.A. Odunusi, MD
Lung Disease in the Setting of AIDS: An Under-Recognized Entity, V. Kundel, MD
Cough Up the Diagnosis! D.M. Golovyan, MD
When Asthma Is Not Just Asthma, S. Campbell, DO

10:30 Experts
Clinicians, M.I. Schwarz, MD, A.H. Limper, MD
Pathologist, J.L. Myers, MD
Radiologist, C.T. Lin, MD

A4 DETERMINANTS OF LONG-TERM OUTCOMES AMONG CRITICALLY ILL OLDER ADULTS: FROM CELL TO POPULATION
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 146 A-B (Middle Building, Street Level)
Chairing: L. Ferrante, MD, N.E. Brummel, MD, W.J. Ehlenbach, MD

9:15 Aging Biology and Critical Illness: Bidirectional Mechanistic Insights, D.C. Files, MD

9:35 Phenotypic, Deficit Accumulation, and Social Perspectives of Frailty in Older Adults with Critical Illness, N.E. Brummel, MD

9:55 The Importance of Pre-ICU Factors on Long-Term Outcomes Among Critically Ill Older Adults, L. Ferrante, MD

10:15 Personalizing ICU Care for Older Adults: Applying Outcomes Research to Older Adults with Critical Illness, W.J. Ehlenbach, MD

10:35 Finding Hidden Data About Pre-ICU Functioning to Understand the Long Arc of Your Patient’s Life, T.J. Iwashyna, MD, PhD

10:55 Meet the NIA: Research Opportunities at the Nexus of Aging and Critical Illness, S. Zieman, MD, PhD

A6 BARBARIANS AT THE GATE: VIRUSES AND THE AIRWAY EPITHELIUM IN ASTHMA
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom A (South Building, Level 3)
Chairing: P.G. Woodruff, MD, MPH, D. Byers, MD, PhD, R.S. Peebles, MD

9:15 Epithelial Barrier Programs in Asthma and Allergic Disease, M.J. Holtzman, MD

9:35 Host and Viral Determinants of Infant and Childhood Allergy and Asthma, T. Hartert, MD, MPH

9:55 Mechanisms and Environmental Determinants of Rhinovirus Illness Severity, J.E. Gern, MD

10:15 Epithelial Determinants of Childhood Asthma, G.K. Hershey, MD, PhD
10:35 Epithelial Control of Responses to Allergen Challenge and Viral Exacerbation, S.F. Ziegler, PhD

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

A7 HOT TOPICS IN PULMONARY REHABILITATION: A PRO/CON DEBATE
9:15 a.m. - 11:15 a.m.
Walter E. Washington Convention Center, Room 143 A-C (Middle Bldg., Street Level)
Chairing: M.L. Moy, MD, MSc, W. Man, MD, PhD

9:15 PRO: We Can Increase Access to Pulmonary Rehabilitation, C.L. Rochester, MD
9:25 CON: We Cannot Increase Access to Pulmonary Rehabilitation, C.M. Garvey, FNP, MSN, MPH
9:39 PRO: A Mortality Study Is Needed to Prove Efficacy of Pulmonary Rehabilitation, R. Casaburi, MD, PhD
9:49 CON: A Mortality Study is Not Needed to Prove Efficacy of Pulmonary Rehabilitation, B.R. Celli, MD
10:03 PRO: “Add-Ons” Should Be Used in Conventional Pulmonary Rehabilitation, S.P. Bhatt, MD
10:13 CON: “Add-Ons” Should Not Be Used in Conventional Pulmonary Rehabilitation, H. Demeyer, PhD
10:27 PRO: Pulmonary Rehabilitation Should Be Delivered at Home, A.E. Holland, PhD
10:37 CON: Pulmonary Rehabilitation Should Not Be Delivered at Home, J. Bourbeau, MD
10:51 PRO: Directly Measured Physical Activity Should Be Routinely Assessed in Clinical Care, T. Troosters, PhD
11:01 CON: Directly Measured Physical Activity Should Not Be Routinely Assessed in Clinical Care, H.Q. Nguyen, PhD, RN

A9 IN MEMORY OF PETER T. MACKLEM: EMERGENT PHENOMENA AND HETEROGENEITY IN RESPIRATORY DISEASE
9:15 a.m. – 11:15 a.m.
Marriott Marquis Washington, Marquis Ballroom 5 (Level M2)
Chairing: G.K. Prisk, DSc, PhD, T. Winkler, PhD, J.P. Butler, PhD

9:15 Cell Migration and Long Range Correlations, J.J. Fredberg, PhD
9:35 Emergent Oscillatory Behavior in Breathing, J.P. Butler, PhD
9:55 Airway Instability and Runaway Bronchoconstriction, T. Winkler, PhD
10:15 The Mechanical Consequences of Emergent Behavior in the Lung, J.H.T. Bates, DSc, PhD
10:35 Nonlinear Dynamics and Pulmonary Arterial Hypertension, S.R. Hopkins, MD, PhD
10:55 General Discussion, G.K. Prisk, DSc, PhD
A10  A PRO/CON DEBATE IN PEDIATRIC ASTHMA
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: T. Simoneau, MD, E. Forno, MD, MPH, A. Bush, MD

9:15  Early Allergen Exposure Prevents Asthma, W. Phipatanakul, MD
9:25  Early Allergen Exposure Does Not Prevent Asthma, G.B. Marks, MBBS, PhD
9:35  General Discussion
9:41  Rebuttal, W. Phipatanakul, MD
9:43  Rebuttal, G.B. Marks, MBBS, PhD
9:45  Vitamin D Supplementation Should Be a Part of Asthma Management, B.L. Chawes, MD, PhD
9:55  Vitamin D Supplementation Should Not Be a Part of Asthma Management, J.C. Celedon, MD, DrPH
10:05  General Discussion
10:11  Rebuttal, J.C. Celedon, MD, DrPH
10:13  Rebuttal, B.L. Chawes, MD, PhD
10:15  FeNO Measurement Should Be a Standard Part of Asthma Monitoring, A. Bush, MD
10:25  FeNO Measurement Should Not be a Standard Part of Asthma Monitoring, M. Pijnenburg, MD, PhD
10:35  General Discussion
10:41  Rebuttal, A. Bush, MD
10:43  Rebuttal, M. Pijnenburg, MD, PhD
10:45  Intermittent ICS Is the Preferred Management for Preschool Children with Intermittent Asthma, L. Bacharier, MD
10:55  Intermittent ICS Is Not the Preferred Management for Preschool Children with Intermittent Asthma, F. Ducharme, MD
11:05  General Discussion
11:11  Rebuttal, L. Bacharier, MD
11:13  Rebuttal, F. Ducharme, MD

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A11 LUNG CANCER SCREENING AND TOBACCO CESSATION: THE TEACHABLE MOMENT?
9:15 a.m. – 11:15 a.m.
Marriott Marquis Washington, Independence Ballroom A-D (Level M4)
Chairing: H. Kathuria, MD, L.T. Tanoue, MD, R.S. Wiener, MD, MPH

9:15  A Patient Perspective on Lung Cancer Screening and Tobacco Use Cessation, K. Fennig
9:20  The Effect of Screening on Smoking Cessation: What Do We Know? C. van der Aalst, PhD
9:45  Minimizing Disparities: Tobacco Dependence Treatment and Lung Cancer Screening in Underserved Populations, M.P. Rivera, MD
10:10  Innovative Approaches to Implementing Tobacco Treatment in Lung Cancer Screening, J.T. Fathi, ARNP, DNP
10:35  Message Framing for Tobacco Dependence Disorder within the Lung Cancer Screening Setting, B. Toll, PhD
11:00  Maximizing the Moment: Future Directions for Integrating Smoking Cessation with Lung Cancer Screening, H. Kathuria, MD
A12 THE PROMISE AND REALITY OF WEARABLE HEALTH TECHNOLOGY
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 152 A-B (Middle Bldg., Street Level)
Chairing: G.T. Ferguson, MD, T.M. Powell-Wiley, MD, MPH, B.J. Make, MD
9:15 Wearable Devices and Smoking Cessation: What Have We Learned About Using Wearables in Behavior Change? S.A. Murphy, PhD
9:39 The Role of Wearable Devices in Sleep Medicine, M. Hirshkowitz, PhD
10:03 Use of Mobile Health Technology in Vulnerable Populations, T.M. Powell-Wiley, MD, MPH
10:27 Wearable Technology in Assessing the Impact of Pulmonary Rehabilitation, F.C. Sciurba, MD
10:51 Activity Monitors for Precision Assessment of Activity in COPD Patients, R. Bowler, MD, PhD

SUNDAY MID-DAY, MAY 21 11:45 A.M. — 1:15 P.M.

WS1 TURNING DATA INTO WISDOM: DATABASES AND REGISTRIES FOR BETTER LUNG CANCER OUTCOMES
11:45 a.m. – 1:15 p.m.
Marriott Marquis Washington, Archives (Level M4)
Registration Fee: $75 Attendance is limited. Pre-registration is required.
Chairing: E.C. Stone, MBBS, MMed, M.K. Gould, MD, MS
11:45 More than Just Excel: A Brief Introduction to Databases for Clinicians, E.C. Stone, MBBS, MMed
11:50 The Value of a Comprehensive National Lung Cancer Database: The Danish Experience, E. Jakobsen, MD, MPM
12:05 What Do Databases Offer for Clinical Practice? Lessons from U.S. Registry Data (Including SEER and AQuIRE), D.E. Ost, MD, MPH
12:20 The Promises and Pitfalls of Data Linkage: Experience from the Victorian Lung Cancer Registry, R. Stirling, BSc(Hons), MBChB
12:35 Building a Database for Clinicians: The ACR Lung Cancer Screening Registry, E.A. Kazerooni, MD
12:50 Interactive Discussions, E.A. Kazerooni, MD, D.E. Ost, MD, MPH, R. Stirling, BSc(Hons), MBChB, E. Jakobsen, MD, MPM
1:10 Summary of Session and Final Questions to Panel, M.K. Gould, MD, MS

WS2 GLOBAL HEALTH CAREERS IN PULMONARY AND CRITICAL CARE MEDICINE
Marriott Marquis Washington, Capitol/Congress (Level M4)
Pre-registration is required. Attendance is limited. There is no additional fee.
Chairing: A. Papali, MDCM, N.K. Adhikari, MD
11:45 Pulmonary/Critical Care and Global Health: Yes You Can! A. Papali, MDCM
11:55 How to Have a Successful Academic Global Health Career, E.D. Riviello, MD, MPH
12:07 Productive Research in LMICs: The Importance of Partnerships, S. Gordon, MD
12:19 Faith-Based Global Health Careers, B.W. Lee, MD
12:31 Global Health and Medical Education, E.J. Carter, MD
12:43 WHO Consulting, R. Fowler, MD, MDCM, MSc
12:55 General Discussion

**CC1 CRITICAL CARE CLINICAL CORE CURRICULUM I**
11:45 a.m. – 1:15 p.m.
Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)
Chairing: J.I. McSparron, MD, A.M. Luks, MD
11:45 Acute Liver Failure, A.E. Morris, MD
12:15 Acute Pancreatitis, J.D. Farkas, MD
12:45 Hematologic and Oncologic Emergencies, R.S. Stephens, MD

**MP MEET THE PROFESSOR SEMINARS**
12:15 p.m. – 1:15 p.m.
Marriott Marquis Washington
Registration Fee: $70. Attendance is limited. Pre-registration is required.
See Final Program for seminar titles and speakers.

**TSS1 EVOLVING CONCEPTS IN EARLY COPD**
12:15 p.m. – 1:15 p.m.
Marriott Marquis Washington, Monument (Level M4)
This is a 4-part series. Those registering for this seminar series are registered for all 4 parts.
Registration Fee: $170. Attendance is limited. Pre-registration is required.
Preventing Lung Function Decline in Early COPD, P. Calverley, MBChB
  - Part 2, Monday, May 22, 12:15 p.m. – 1:15 p.m.
  - Part 3, Tuesday, May 23, 12:15 p.m. – 1:15 p.m.
  - Part 4, Wednesday, May 24, 7:00 a.m. – 8:00 a.m.

**SUNDAY AFTERNOON, MAY 21**
2:15 P.M. – 4:15 P.M.

**A81 NURSING YEAR IN REVIEW**
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 102 A-B (South Building, Street Level)
Chairing: J. Choi, PhD, RN, J.A. Tate, PhD, RN
2:15 Symptom Science the ICU Setting: THE ICU SETTING: Implications for Future Research, L.L. Chlan, PhD, RN
2:35 Implementation Science, D.K. Costa, PhD, RN
2:55 End of Life Communication in the ICU, J.B. Seaman, PhD, RN
3:15 Topics in Onco-Critical Care, J.A. Tate, PhD, RN
3:35 ICU Survivorship, J. Choi, PhD, RN
3:55 Updates on the Use of Telemedicine in the ICU, R.M. Kleinpell, PhD, RN

**A82 IDIOPATHIC PULMONARY FIBROSIS: CONTROVERSIES IN MANAGEMENT – PRO/CON DEBATE**
Walter E. Washington Convention Center, Ballroom A (South Building, Level 3)
Chairing: G. Raghu, MD
2:15 Introduction, G. Raghu, MD
2:20 PRO: Patients with IPF Should Be Treated for Gastroesophageal Reflux, Y. Ghebre, PhD

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2:34  CON: Patients with IPF Should Be Treated for Gastroesophageal Reflux, M. Kreuter, MD
2:48  PRO: Surgical Lung Biopsy Is Required to Eliminate Other Diagnoses Before Making a Diagnosis of IPF, G. Raghu, MD
3:02  CON: Surgical Lung Biopsy Is Required to Eliminate Other Diagnoses Before Making a Diagnosis of IPF, Y. Inoue, MD, PhD
3:16  PRO: Multidisciplinary Discussion Is Necessary in Ascertainining a Diagnosis of IPF, S.K. Danoff, MD, PhD
3:30  CON: Multidisciplinary Discussion Is Necessary in Ascertainining a Diagnosis of IPF, A.U. Wells, MD
3:44  PRO: N-Acetylcysteine Is Useful for Some Patients with IPF, F.J. Martinez, MD
3:58  CON: N-Acetylcysteine Is Useful for Some Patients with IPF, J. Behr, MD

A83 GREAT CASES: CLINICAL, RADIOLOGIC, AND PATHOLOGIC CORRELATIONS BY MASTER PHYSICIANS
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Ballroom C (South Building, Level 3)
Chairing: S.P. Kantrow, MD, LA, S. Kirtland, MD
2:15  Case Presentations
She Who Sings Frightens Away Her Ills, J. Nguyen, MD, Sylmar, CA
The Naked Trachea, U. Chaddha, MBBS, MD
Mysterious Masses, B. Tran, MD
There's Nothing Cute About this Chest Syndrome, M.J. Bruehl, MD
A Nagging Pimple, H. Kular, MD
When a Bird Is a Herring: Guilt by Association, K.S. Sai Kakker, MBBS
Zebras Have Hooves Too, P. Charoenpong, MD
3:25  Experts
Master Clinicians, S.I.S. Rounds, MD, M.I. Schwarz, MD, P.C. Stillwell, MD
Master Radiologist, A.G. Wilcox, MD
Master Pathologist, J.L. Myers, MD

A84 THE NEW ENGLAND JOURNAL OF MEDICINE AND JAMA. DISCUSSION ON THE EDGE: REPORTS OF RECENTLY PUBLISHED CRITICAL CARE RESEARCH
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 207 A-B (South Bldg, Level 2)
Chairing: J.M. Drazen, MD, P.B. Fontanarosa, MD, MBA
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. 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.

Speakers and talks to be announced
A86  THE SLEEP STATE OF THE UNION: TAKING OSA MANAGEMENT TO WASHINGTON
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 152 A-B (Middle Building, Street Level)
Chairing: R. Bhattacharjee, MD, J.L. Pepin, MD, PhD, M.J. Morrell, PhD
2:15  General Discussion: Current State of OSA, Implications of OSA on Individuals, on Society, on Government, R.J. Kirkoff, MD
2:30  What's in a Number? How Diagnosis of OSA Is Determined by a 4 or a 3, N.M. Punjabi, MD, PhD
2:50  Diagnosing Pediatric OSA: Is Home Testing Plausible? C. Marcus, MBChB
3:10  Inpatients with Possible OSA: Should, Can, and How Do We Study Them in Hospital? B. Prasad, MD
3:25  OSA Is a Work and Driving Hazard: Should Untreated OSA Lead to License or Work Suspensions? A. Pack, MBChB, PhD
3:50  Treating OSA With Positive Airway Pressure. Is 4 Hours, 70%, 30 Days Realistic? T. Weaver, PhD, RN

A88  SEX, SUGAR, SALT AND STRESS: NEUROHORMONAL SIGNALING AS A NOVEL THERAPEUTIC TARGET IN RIGHT VENTRICULAR FAILURE
2:15 p.m. – 4:15 p.m.
Marriott Marquis Washington, Liberty Ballroom I-L (Level M4)
Chairing: T. Lahm, MD, C.E. Ventetuolo, MD, MS, F. De Man, PhD
2:15  Hormones 101: What Do Physicians Need to Know When Studying Hormones and Hormonal Signaling? H. Nakshatri, PhD
2:35  Sex in the Heart: Sex Hormones as Modifiers of RV Function, T. Lahm, MD
2:55  Hungry Heart: How Do Insulin Resistance and Altered Fatty Acid Oxidation Affect RV Function? A.R. Hennens, MD
3:15  Salt Water in My Veins Part 1: The Role of the Renin-Angiotensin System in RV Failure, F. De Man, PhD
3:35  Salt Water in My Veins Part 2: The Role of Aldosterone in Mediating RV Stress, J. Leopold, MD
3:55  Pure Adrenaline: Is There a Role for Targeting the Sympathetic Nervous System in RV Failure? H.J. Bogaard, MD, PhD

A90  MAKING NEW LINKS: MECHANISMS OF ORGAN FAILURE IN SEPSIS AND ARDS
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 146 A-B (Middle Building, Street Level)
Chairing: C.C. Dos Santos, MD, I.S. Douglas, MD, J. Marshall, MD
2:15  The Genomic Response to Sepsis, T. van der Poll, PhD
2:35  Metabolic Adaptation Establishes Disease Tolerance to Sepsis, M. Soares, PhD
2:55  Potato or Potahto: Immune Exhaustion Vs. Innate Immune Suppression, D. Remick, MD
3:15  Poking the Cyclops in the Eye! Disruption in Immune Surveillance and Outcomes from Sepsis, P. Kubes, PhD
3:35  Microbial Surveillance and Pulmonary Microbiome, I.S. Douglas, MD
3:55  Contextualizing Sepsis Research: Where Are the Translational Signals Pointing To? J. Marshall, MD
Sunday, May 21 Sessions

**A91 CATCHING FIRE: THE GLOBAL HEALTH ISSUE OF HOUSEHOLD AIR POLLUTION**
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 145 A-B (Middle Building, Street Level)
Chairing: P.J. Sime, MD, G.P. Downey, MD, N. Lugogo, MD, P.J. Barnes, MD, DSc R. Vlahos, PhD

2:15 Household Air Pollution: A Call to Action, A. Lee, MD, MS
2:25 Inflammatory Lung Diseases in Vulnerable Populations Exposed to HAP, S. Salvi, MD, PhD
2:40 Household Air Pollution Exposure Occurs in Developed Countries As Well! A. Sood, MD, MPH
2:55 Studying Biologic Mechanisms of HAP-Induced Diseases, C.E. McCarthy, MS
3:15 The Role of Biomass Smoke in Respiratory Infections, S. Gordon, MD
3:35 Translational Approaches to Understand the Effects of Biomass Smoke, I. Jaspers, PhD
3:55 Does Exposure to Household Air Pollution Increase Cardiovascular Morbidity and Mortality? J.R. Balmes, MD

**A92 IT’S NOT DOROTHY ANDERSEN’S CF ANYMORE**
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: S.D. Davis, MD, S.H. Randell, PhD

2:15 Introduction, S.D. Davis, MD
2:20 A Patient’s Perspective, E. Kramer-Golinkoff
2:35 The Mucus Biophysical Maelstrom at the Airway Surface, R.C. Boucher, MD
2:55 Lessons Learned from the CF Noah’s Ark, D.A. Stoltz, MD, PhD
3:15 CF in the Lungs’ Most Formative Years, S. Stick, MBBS
3:35 CFTR Modulators and the Pipeline, B.W. Ramsey, MD
3:55 The Future of CF Therapeutics: Emerging Challenges and How We Will Address Them, M.P. Boyle, MD

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MONDAY MORNING, MAY 22  7:00 A.M. – 11:15 A.M.

SS  SUNRISE SEMINARS
7:00 a.m. – 8:00 a.m.
Marriott Marquis Washington
Registration Fee: $50. Attendance is limited. Pre-registration is required.
See Final Program for seminar titles and speakers.

PCC2 PEDIATRIC CLINICAL CORE CURRICULUM
7:00 a.m. – 8:00 a.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: J.E. Pittman, MD, MPH
7:00  ILD: Approaches to Evaluation and Diagnosis, T.J. Vece, MD
7:30  ILD: Management and Treatment, A.M.H. Casey, MD

K3  ATS KEYNOTE SERIES
8:15 a.m. – 9:00 a.m.
Walter E. Washington Convention Center, East Salon A-C (South Building, Street Level)
Toward Eliminating All Harms, P.J. Pronovost, MD, PhD

K4  ATS KEYNOTE SERIES
8:15 a.m. – 9:00 a.m.
Walter E. Washington Convention Center, West Salon G-I (South Building, Street Level)
Cystic Fibrosis Lung Disease: Looking Back and Looking Forward, M.J. Welsh, MD

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B1  CLINICAL YEAR IN REVIEW 2
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)
Chairing: D.J. Lederer, MD, MS, D.W. Ford, MD, MSCR, V.E. Ortega, MD, PhD
9:15  ILD, T.J. Corte, MBBS, BSc (Med), PhD
9:45  Asthma, E. Bleecker, MD
10:15  COPD, M.K. Han, MD, MS
10:45  Pulmonary Vascular Diseases, A.R. Hemnes, MD

This session and the International Conference are supported by educational grants from Actelion Pharmaceuticals US, Inc., AstraZeneca LP, Teva 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  THE LONG-TERM OXYGEN TREATMENT TRIAL (LOTT): IMPLICATIONS FOR COPD PATIENT CARE
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom A (South Building, Level 3)
Chairing: G.J. Criner, MD, W.C. Bailey, MD, A.L. Fuhlbrigge, MD
9:15  Rationale for the Long-Term Oxygen Treatment Trial (LOTT), R.A. Wise, MD
9:30  Design of the Long-Term Oxygen Treatment Trial, J. Cooper, MD
9:45  Methods and Data Analysis of the Long-Term Oxygen Treatment Trial, F.C. Sciurba, MD
10:00  Main Outcomes of the Long-Term Oxygen Treatment Trial, G.J. Criner, MD
10:15  Types of Devices and Compliance with O2 Therapy in LOTT, A.L. Fuhlbrigge, MD
10:30  PRO: Oxygen Therapy Benefits Patients with Mild to Moderate Hypoxemia at Rest and Those with Desaturation on Exertion Only, F.J. Martinez, MD
Monday, May 22 Sessions

10:40 CON: Oxygen Therapy Benefits Patients with Mild to Moderate Hypoxemia at Rest and Those with Desaturation on Exertion Only, R.D. Yusen, MD, MPH
10:50 Rebuttal, F.J. Martinez, MD
10:55 Rebuttal, R.D. Yusen, MD, MPH
11:00 Panel Discussion, G.J. Criner, MD, W.C. Bailey, MD, A.L. Fuhlbrigge, MD

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B3 THE CANCER MOONSHOT: ATS = MISSION CONTROL FOR LUNG CANCER
9:15 a.m. – 11:15 a.m.
Marriott Marquis Washington, Marquis Ballroom 6 (Level M2)
Chairing: V.C. Broaddus, MD, N.T. Tanner, MD, M.M. Fuster, MD, P. Mazzone, MD, MPH
9:15 Introduction to the NCI's Cancer Moonshot, D. Lowy, MD
9:37 Lung Cancer Prevention: The Launch Pad for the Moonshot, R.L. Keith, MD
9:51 Lung Cancer Screening: The Booster Rockets for the Moonshot, L. Kinsinger, MD, MPH
10:05 Lung Cancer Early Detection and Biomarkers: The Fuel for the Moonshot, P. Nana-Sinkam, MD
10:19 Lung Cancer Screening and Pulmonary Nodule Evaluation: How Do We Help Everyone Who Wants to Go to the Moon Get There and Back Safely? M.K. Gould, MD, MS
10:33 Lung Cancer Immunotherapy: Building a Force-Field of Protection, S. Dubinett, MD
10:47 Lung Cancer, Lung Injury, and Lung Repair: Don’t Forget the Toolbox, M. Königshoff, MD, PhD
11:01 Lung Cancer Treatment: The VALOR Lunar Module, D. Moghanaki, MD, MPH

B4 HUMANIZING THE INTENSIVE CARE UNIT: NEW PERSPECTIVES ON AN OLD PROBLEM
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 146 A-B (Middle Bldg., Street Level)
Chairing: E. Hirshberg, MD, MS, E.K. Kross, MD, W.D. Schweickert, MD
9:15 A Patient's Perspective, S. East
9:20 The Psychology of Dehumanization, R.O. Hopkins, PhD
9:35 Evidence-Based Communication in the ICU, J.R. Curtis, MD, MPH
9:50 Personalized Care During Serious Illness: Rebooting Advance Care, S.M. Brown, MD, MS
10:05 Facilitated Sensemaking and Post-Intensive Care Syndrome in Family Members, J. Davidson, DNP, RN
10:20 Creating Lasting Collaboration: Patient-Family Advisory Councils, B. Sarnoff Lee, MSW, LICSW
B5  SMOKERS WITH PRESERVED SPIROMETRY: EARLY COPD?
9:15 a.m. – 11:15 a.m.
Marriott Marquis Washington, Independence Ballroom E-H (Level M4)
Chairing: D.D. Sin, MD, C. Thamrin, PhD, C. Farah, MBBS, PhD

9:15  Why Should We Care About “Early” COPD?  D.D. Sin, MD
9:30  Smokers with Preserved Spirometry: Results from COPDGene, M.K. Han, MD, MS
9:45  Smokers with Preserved Spirometry: What We Know from the SPIROMICS Study, P.G. Woodruff, MD, MPH
10:00  Small Airways and Ventilation in Smokers with Preserved Spirometry, G. King, MBChB, PhD
10:15  Reduced Diffusion Capacity in Smokers with Preserved Spirometry, R.G. Crystal, MD
10:30  Role of Environmental Influences and Inflammation in “Early” COPD, M.R. Stampfli, PhD
10:45  Should We Be Treating “Early” COPD?  N. Berend, MD
11:00  Panel Discussion

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.

B6  MECHANICAL VENTILATION IN THE NICU, PICU AND AT HOME: WHAT THE PEDIATRIC PULMONOLOGIST SHOULD KNOW
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom C (South Building, Level 3)
Chairing: A.C. Koumbourlis, MD, MPH, S.H. Abman, MD

9:15  The Role of the Pediatric Pulmonologist in the Care of Mechanically Ventilated Patients, A.C. Koumbourlis, MD, MPH
9:45  Ventilatory Strategies for Acute Respiratory Failure in Preterm and Term Infants, A. Greenough, MD, MBBS
10:05  Ventilatory Strategies for Infants with Established BPD and Pulmonary Hypertension, S.H. Abman, MD
10:25  Choosing Ventilatory Support for Patients with Neuromuscular Disorders, G. Perez, MD
10:45  Caring of and Weaning the Ventilated Child at Home, A. Halbower, MD
11:05  Round Table Discussion, A.C. Koumbourlis, MD, MPH, S.H. Abman, MD, C.J.L. Newth, MBChB, A. Greenough, MD, MBBS, G. Perez, MD, A. Halbower, MD

B7  FROM RESEARCH TO BEDSIDE: OPTIMIZING WELL-BEING THROUGH INTEGRATIVE THERAPY
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 102 A-B (South Building, Street Level)
Chairing: T.T. Von Visger, MSN, CNS, CCNS, PCCN, N. Liang, MD

9:15  Patient Education/A Patient’s Perspective, V. Sharma, PhD
9:35  Mindfulness for Patients with COPD, R. Benzo, MD, MSc
### Monday, May 22 Sessions

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<th>Time</th>
<th>Title</th>
<th>Presenter(s)</th>
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<tr>
<td>9:55</td>
<td>Music Intervention in Critically Ill Patients</td>
<td>L.L. Chlan, PhD, RN</td>
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<td>10:15</td>
<td>Tai Chi Practice for Patients with Pulmonary Conditions</td>
<td>M.L. Moy, MD, MSc</td>
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<td>10:35</td>
<td>NIH Funding for Integrative Therapy Research</td>
<td>L.M. Mudde, PhD</td>
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<td>10:55</td>
<td>Integrative Therapy Use and Practice: International Perspective</td>
<td>J. Adams, PhD</td>
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<td><strong>REALIZING THE PARIS CLIMATE AGREEMENT TO IMPROVE CARDIO-PULMONARY HEALTH: WHERE SCIENCE MEETS POLICY</strong></td>
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<td>9:15</td>
<td>Climate Change in Africa: A Physician’s Perspective from Cameroon</td>
<td>M.M. Nganda, MD</td>
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<td>9:40</td>
<td>Air Pollution Health Effects of Energy Sources: Which Are the Most Toxic?</td>
<td>G.D. Thurston, DSc</td>
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<td>9:55</td>
<td>Hot Temperatures and Ground-Level Smog: Who Is Most Likely to Die?</td>
<td>J. Schwartz, PhD</td>
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<td>10:15</td>
<td>Effects of Climate Change on Children and Adults with Asthma</td>
<td>K.C. Nadeau, MD, PhD</td>
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<td>10:55</td>
<td>Making the Paris Agreement a Reality: Challenges and Opportunities</td>
<td>S. Whitehouse, JD</td>
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<td><strong>GAMING THE SYSTEM OR SAVING LIVES: PAY FOR PERFORMANCE IN THE 21ST CENTURY</strong></td>
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<td>9:15</td>
<td>ICU Quality Metrics in the U.K.: Past Experience and Implications for P4P,</td>
<td>K. Rowan, PhD, MSc</td>
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<td>9:35</td>
<td>To Game or Not to Game: Unintended Consequences of Pay for Performance</td>
<td>C.R. Cooke, MD, MSc</td>
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<td>9:55</td>
<td>PSP: The Payer Perspective</td>
<td>R. Duseja, MD, MS</td>
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<td>10:15</td>
<td>Sepsis Core Measures: In Need of Resuscitation?</td>
<td>J. Stevens, MD</td>
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<td>10:35</td>
<td>Back to Basics: Are Comprehension and Efficacy of Quality Metrics Linked?</td>
<td>S. Govindan, MD</td>
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<td>10:55</td>
<td>P4P and QI: A Call to Arms</td>
<td>M. Howell, MD, MPH</td>
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<td><strong>SEPSIS GOES TO WASHINGTON: REGULATIONS, DEFINITIONS, AND RESEARCH SHAPING THE FUTURE OF SEPSIS</strong></td>
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<td>9:15</td>
<td>A Patient’s Perspective</td>
<td>C. Lentz</td>
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www.thoracic.org  25
B11 THE LUNG ENDOTHELIUM PRO/CON SESSION: THE KEY CULPRIT IN CHRONIC LUNG DISEASE
9:15 a.m. – 11:15 a.m.
Marriott Marquis Washington, Marquis Ballroom 5 (Level M2)
Chairing: P.J. Lee, MD, I. Petrache, MD, E.R. Neptune, MD
9:15 PRO: The Endothelium Is Key to COPD, M. Sauler, MD
9:25 CON: The Endothelium Is NOT Key to COPD, A.O. Yildirim, PhD
9:40 PRO: The Endothelium Is Key to ILD, B. Shea, MD
9:55 CON: The Endothelium Is NOT Key to ILD, E. Herzog, MD, PhD
10:10 PRO: The Endothelium Is Key to Pulmonary Hypertension, H. Chun, MD
10:25 CON: The Endothelium Is NOT Key to Pulmonary Hypertension, T. Stevens, PhD
10:40 PRO: The Endothelium Is Key to Asthma, K. Asosingh, PhD
10:50 CON: The Endothelium Is NOT Key to Asthma, P.A. Verhoef, MD, PhD
11:00 General Discussion

This session and the International Conference are supported by educational grants from Actelion Pharmaceuticals US, Inc., AstraZeneca LP, Teva 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.

B12 THE IMPORTANCE OF TECHNOLOGY IMPLEMENTATION IN RESPIRATORY CARE AND PUBLIC HEALTH
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 202 B (South Building, Level 2)
Chairing: T. Witek, DrPH, T.F. Reiss, MD
9:15 Optimizing Integration of Respiratory Care Innovation, T. Witek, DrPH
9:35 Humanomics Trumps Genomics: Very Practical Perspectives on Technology Implementation, J.M. Fitzgerald, MB, MCh, BAO, MD
10:05 The Negative Impact of Human Behavior and Organizational Inertia on Maximizing Personalized Lung Cancer Care, N. Leighl, MD
10:35 Beyond Bronchodilators: What Is Missing in COPD Care, B.R. Celli, MD
10:55 Health Information Technology: Long on Promises but Still Very Short on Details, J. Bourbeau, MD

B13 A POTPOURRI OF EPIGENETICS AND RESPIRATORY DISEASE
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 202 A (South Building, Level 2)
Chairing: D. Gozal, MD, MBA
9:15 Biological Aging and Air Pollution, A. Peters, MD
### Monday, May 22 Sessions

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<th>Session</th>
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<td>9:40</td>
<td>Senescence in COPD: Potential Role of Epigenetics, P.J. Barnes, MD, DSc</td>
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<td>10:05</td>
<td>Epigenetics and the Human Asthma/COPD Continuum, D. Vercelli, MD</td>
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<td>10:30</td>
<td>Pulmonary Hypertension: An Epigenetic Target? S. Archer, MD</td>
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<td>10:55</td>
<td>Sleep Apnea: Epigenetic Complications, D. Gozal, MD, MBA</td>
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**MONDAY MID-DAY, MAY 22  11:45 A.M. – 1:15 P.M.**

**WS3 MEDICAL SIMULATION TO IMPROVE ICU SAFETY**

11:45 a.m. – 1:15 p.m.  
*Marriott Marquis Washington, Archives (Level M4)*  
Registration Fee: $75. Attendance is limited. Pre-registration is required.  
Chairing: N. Seam, MD, N. Knudsen, MD  
11:45 Simulation and ICU Safety, N. Seam, MD  
12:00 Practical Tips to Effective Debriefing, G. Ng, MS, CNM, RNC-OB, C-EFM  
12:10 Practicum: Debriefing Critical Care Teams in Simulation, G. Ng, MS, CNM, RNC-OB, C-EFM, N. Knudsen, MD  
12:40 Practicum: Competency for Critical Care Procedures, J. Mikita, MD, N. Seam, MD  
1:10 Conclusions/Next Steps, N. Knudsen, MD

**WS4 CAREER ADVANCEMENT FOR CLINICIAN EDUCATORS: FOSTERING LEADERSHIP, SCHOLARSHIP AND OPPORTUNITIES FOR SUCCESS**

11:45 a.m. – 1:15 p.m.  
*Marriott Marquis Washington, Capitol/Congress (Level M4)*  
Attendance is limited. Pre-registration is required. There is no additional fee.  
Chairing: S. Kassutto, MD, T.S. Wang, MD  
11:45 Introduction and Overview of Clinician Educator Career Pathways in Pulmonary and Critical Care, S. Kassutto, MD, T.S. Wang, MD  
11:55 Job Hunting and Negotiations, J. Hansen-Flaschen, MD, H. Fessler, MD, J.T. Poston, MD, R. Kotloff, MD, J.W. McCallister, MD, G. Tino, MD, T.S. Wang, MD, M.M. Hayes, MD  
12:35 Maximizing Scholarly Productivity, D. Roberts, MD  
12:55 Networking and Harnessing Your Leadership Potential, K. Burkart, MD, P.A. Kritek, MD

**CC2 PULMONARY CLINICAL CORE CURRICULUM I**

11:45 a.m. – 1:15 p.m.  
*Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)*  
Chairing: C.L. Channick, MD  
11:45 Venothromboembolic Disease (Acute to Chronic), B. Rivera-Lebron, MD, MS  
12:15 Pleural Disease, F. Maldonado, MD  
12:45 Smoking Cessation, Electronic Cigarettes, and Other Adjuncts (VAPE), C.G. Slatore, MD
### MP MEET THE PROFESSOR SEMINARS
12:15 p.m. – 1:15 p.m.
Marriott Marquis Washington

**Registration Fee:** $70. Attendance is limited. Pre-registration is required.
See Final Program for seminar titles and speakers.

### TSS1 EVOLVING CONCEPTS IN EARLY COPD
12:15 p.m. – 1:15 p.m.
Marriott Marquis Washington, Monument (Level M4)

This is a 4-part series. Those registering for this seminar series are registered for all 4 parts.

**Registration Fee:** $170. Attendance is limited. Pre-registration is required.

The Symptomatic Smoker: The Need to Bring Back GOLD 0, P. Woodruff, MD, MPH

- **Part 1:** Sunday, May 21, 12:15 p.m.–1:15 p.m.
- **Part 3:** Tuesday, May 23, 12:15 p.m.–1:15 p.m.
- **Part 4:** Wednesday, May 24, 7:00 a.m.–8:00 a.m.

### CC3 CRITICAL CARE CLINICAL CORE CURRICULUM II
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)
Chairing: J.I. McSparron, MD, A.M. Luks, MD

- **2:15** Extracorporeal Membrane Oxygenation, M.E. Prekker, MD, MPH
- **2:45** Right Heart Failure, M.J. Cuttica, MD, MS
- **3:15** Assessment of Volume Responsiveness, K.A. Hibbert, MD
- **3:45** Update in Early Goal Directed Therapy, R. Clouser, DO

### B81 PEDIATRIC YEAR IN REVIEW
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: A.C. Koumbourlis, MD, MPH, P.E. Moore, MD

- **2:15** Viruses and the Respiratory Health of Infants and Children, M.B. Hershenson, MD
- **2:45** Disparities and Respiratory Health, B.J. Sheares, MD, MS
- **3:15** Environmental Exposures and Respiratory Health, E. von Mutius, MD, MS
- **3:45** The Promise and Challenge of Precision Medicine in CF and Beyond, M. Rosenfeld, MD, MPH

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

### B82 HOT TOPICS IN COPD: A PRO/CON DEBATE
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Ballroom A (South Building, Level 3)
Chairing: M.K. Han, MD, MS, S.P. Bhatt, MD, F.J. Martinez, MD

- **2:15** PRO: Blood Eosinophils Are a Useful Biomarker to Guide Therapy in COPD, I. Pavord, MD
- **2:27** CON: Blood Eosinophils Are NOT a Useful Biomarker to Guide Therapy in COPD, K.F. Rabe, MD, PhD
- **2:39** PRO: Long-Term Oxygen Therapy Benefits COPD Patients with Moderate Hypoxemia, L.M. Fabbri, MD
- **2:51** CON: Long-Term Oxygen Therapy Does NOT Benefit COPD Patients with Moderate Hypoxemia, R.A. Wise, MD
Monday, May 22 Sessions

3:03 PRO: Inhaled Corticosteroids Are Required to Maximize Reduction in Acute Exacerbations, S.D. Singh, MD, NP
3:15 CON: Inhaled Corticosteroids Are NOT Required to Maximize Reduction in Acute Exacerbations, J.A. Wedzicha, MD, PhD
3:27 PRO: Interventions Can Reduce COPD Readmissions, B. Thomashow, MD
3:39 CON: Interventions Do NOT Reduce COPD Readmissions, J.A. Krishnan, MD, PhD
3:51 PRO: Pharmacotherapy Slows Disease Progression in COPD, C. Jenkins, MD, MBBS
4:03 CON: Pharmacotherapy Does NOT Slow Disease Progression in COPD, P.J. Barnes, MD, DSc

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.

B83 A MULTIDISCIPLINARY, CASE-BASED APPROACH TO HOT TOPICS IN CTD-ILD
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Ballroom C (South Building, Level 3)
Chairing: J.S. Lee, MD, A. Fischer, MD
2:15 Session Introduction, J.S. Lee, MD
2:25 Difficult Case 1, K.R. Flaherty, MD, MS, J.H. Chung, MD, C. Cool, MD
2:40 UIP Vs. NSIP - Does It Really Make a Difference in CTD-ILD? V. Cottin, MD, PhD
2:55 Difficult Case 2, K.R. Flaherty, MD, MS, J.H. Chung, MD, C. Cool, MD
3:10 Smells Like an Autoimmune Condition, but I Can’t Quite Put My Finger on It..., T.J. Corte, MD, PhD
3:25 Difficult Case 3, K.R. Flaherty, MD, MS, J.H. Chung, MD, C. Cool, MD
3:40 Beyond Conventional Immunosuppression: Are There Any Other Options? S.K. Danoff, MD, PhD
3:55 Panel Discussion, A. Fischer, MD

This session and the International Conference are supported by an educational grant from Gilead Sciences, 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.

B84 CHRONIC, PERSISTENT, PROLONGED, AND JUST PLAIN STUCK: INSIGHTS IN CHRONIC CRITICAL ILLNESS
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 146 A-B (Middle Bldg., Street Level)
Chairing: J. Kruser, MD, T.J. Iwashyna, MD, PhD, C.L. Hough, MD
2:15 A Patient’s Perspective, K. Duffy Lambros
2:20 Trajectories into and Out of Chronic Critical Illness: An International Account, T.J. Iwashyna, MD, PhD
Persistent Critical Illness or Persistent Critical Care? K. Rowan, PhD, MSc

Outcomes After Prolonged Mechanical Ventilation, C.L. Hough, MD

How Do People Get Stuck and Become Persistently Critically Ill? E.M. Viglianti, MD, MPH

Communication and Palliative Care in Patients with Chronic Critical Illness, S.S. Carson, MD

Discovering Best Practices in the Care of Patients with Chronic Critical Illness, J. Kahn, MD, MS

“SIGNED, SEALED, DELIVERED”: EXTRACELLULAR VESICLES AS MESSAGERS, BIOMARKERS, AND THERAPEUTIC VEHICLES

Extracellular Vesicle Biology, Trafficking, Key Concepts and Functions, J. Lotvall, MD, PhD

Extracellular Vesicle Transfer from Macrophages to Epithelium Facilitates Homeostasis and Is Deregulated in Inflammatory Disease, M. Peters-Golden, MD

Exosomal miRNA in Chronic Inflammatory Lung Disease, A.M. Wheelock, PhD

Human Mesenchymal Stem Cell Microvesicles for the Treatment of Acute Lung Injury, J. Lee, MD

REPROGRAMMING OF LUNG TUMOR MICROENVIRONMENT: A PATH TO CANCER CARE FOR BETTER THERAPEUTIC BENEFIT

Lung Tumor Microenvironment: Targeting Tumor Fibroblasts, S.M. Albelda, MD

Reprogramming of Tumor Associated Macrophages As a Novel Anti Cancer Therapy, R. Savai, PhD

Re-Educating Lung Tumor Microenvironment by Targeting Inflammatory Cytokine Network, S.J. Moghaddam, MD

Augmenting Antigen Presentation with Chemokines for Lung Cancer Therapy, S. Dubinett, MD

Tumor- Lymphatic Interactions in the Lung Carcinoma Microenvironment, M.M. Fuster, MD

THE GENE-ENVIRONMENT INTERACTION IN INTERSTITIAL LUNG DISEASE

A Patient’s Perspective, M. Stojic

Functional Genetics of Interstitial Lung Disease, D.A. Schwartz, MD

The Environment, Epigenetics, Non-Coding RNAs and Interstitial Lung Disease, N. Kaminski, MD

Air Pollution and Interstitial Lung Disease, M.B. Rice, MD, MPH

Occupational Exposures and Interstitial Lung Disease, C. Rose, MD, MPH

The Exposome and Its Applications to Interstitial Lung Disease, J.R. Balmes, MD

Nature, Nurture, and Early Pulmonary Fibrosis Detection: The Way Forward, G.M. Hunninghake, MD
Monday, May 22 Sessions

B89 IMMUNOCOMPROMISED HOST PNEUMONIA: EXPANDING RISKS AND NOVEL MANAGEMENT STRATEGIES
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, West Salon G-I (South Bldg., Street Level)
Chairing: S.E. Evans, MD, M.I. Restrepo, MD, MSc, K.A. Crothers, MD
2:15 HIV-Associated Pneumonia, K.A. Crothers, MD
2:35 Novel Biologic Agents and Pneumonia, J.M. Keane, MD
2:55 Pneumonia in Patients with Solid Organ Transplants, C.A. Hage, MD
3:15 Pneumonia in Stem Cell Transplantation and Cancer Chemotherapy, S.E. Evans, MD
3:35 Pneumonia in the Elderly, M.I. Restrepo, MD, MSc
3:55 Pneumonia in Immunocompromising Metabolic Conditions, S. Aliberti, MD

B90 DISCUSSION AND DEBATE IN THE MANAGEMENT OF PULMONARY EMBOLISM
2:15 p.m. – 4:15 p.m.
Marriott Marquis Washington, Liberty Ballroom I-L (Level M4)
Chairing: T.M. Bull, MD, R.N. Channick, MD, B. Rivera-Lebron, MD, MS
2:15 PRO: IVC Filters Play an Important Role in the Management of PE, V.F. Tapson, MD
2:30 CON: IVC Filters Should Rarely Be Used in Acute PE, T.M. Bull, MD
2:50 PRO: Thrombolytics for Intermediate Risk PE, S. Konstantinides, MD, PhD
3:05 CON: Thrombolytics for Intermediate Risk PE, D. Jimenez, MD, PhD
3:25 PE Out of the ED, J.A. Kline, MD
3:50 You Make the Call: Real Life Cases of PE. What Would You Do? What Was Actually Done? What Was the Outcome? R.N. Channick, MD, B. Rivera-Lebron, MD, MS

B91 IMPLEMENTATION SCIENCE IN PULMONARY, CRITICAL CARE, SLEEP AND PEDIATRIC MEDICINE: HOW SOON IS NOW?
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, East Salon A-C (South Bldg., Street Level)
Chairing: D.K. Costa, PhD, RN, C.H. Weiss, MD, M.N. Gong, MD, MS
2:15 Quality Improvement on Speed? Defining What Implementation Science Is and Is Not, L.C. Feemster, MD, MSc
2:25 Is Implementation Local or Global? How Implementation Science Frameworks Can Guide Research and Practice, D.K. Costa, PhD, RN
2:35 Where’s the Bulls Eye? Identifying Targets for Implementation in Pulmonary Rehabilitation, S.J. Singh, PhD
2:50 Implementation During Imperfect Evidence: Lung Cancer Screening, D.E. Midthun, MD
3:05 When Guidelines Aren’t Enough: Barriers to Implementing Tuberculosis Guidelines for Children and Adults, P. LoBue, MD
3:20 Beyond Barriers: Strategies to Optimize Implementation in CPAP Treatment Adherence Research, T. Weaver, PhD, RN
3:35 Competing Interests? Strategies for Collaborative Implementation with Multiple Stakeholders, K.J. Cummings, MD, MPH
3:50 Show Me the Money! Funding Priorities for Translating Evidence into Practice, L. Price, PhD
4:00 Questions and Answers: Panel Discussion, D.K. Costa, PhD, RN

B92 100 YEARS OF AJRCCM 1917-2017
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 202 A (South Building, Level 2)
Chairing: J.R. Balmes, MD, R. Hubmayr, MD
2:15 AJRCCM at 100, J.A. Wedzicha, MD, PhD
2:30 Key Papers That Have Changed Practice: Respiratory, P. Calverley, MBChB
2:45 Key Papers That Have Changed Practice: Critical Care, L.J. Brochard, MD
3:00 AJRCCM Centenary Papers: COPD, F.J. Martinez, MD
3:15 AJRCCM Centenary Papers: Asthma, F.D. Martinez, MD
3:30 AJRCCM Centenary Papers: Critical Care, B.T. Thompson, MD
3:45 Recent Developments in Medical Publishing and a Look to the Future, J.M. Drazen, MD

TUESDAY MORNING, MAY 23 7:00 A.M. – 11:15 A.M.

SS SUNRISE SEMINARS
7:00 a.m. – 8:00 a.m.
Marriott Marquis Washington
Registration Fee: $50. Attendance is limited. Pre-registration is required.
See Final Program for seminar titles and speakers.

PCC3 PEDIATRIC CLINICAL CORE CURRICULUM
7:00 a.m. – 8:00 a.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: M.K. Abe, MD
7:00 BPD: Pathophysiology and NICU Management, E.G. Shepherd, MD
7:30 BPD: Outpatient Management, H.B. Panitch, MD

K5 ATS KEYNOTE SERIES
8:15 a.m. - 9:00 a.m.
Walter E. Washington Convention Center, East Salon A-C (South Building, Street Level)
Changing Face of an Old Enemy: New Insights into the Pathogenesis and Management of Drug-Resistant TB, K.U.J. Dheda, MD, PhD

K6 ATS KEYNOTE SERIES
8:15 a.m. - 9:00 a.m.
Walter E. Washington Convention Center, West Salon G-I (South Building, Street Level)
Lung Cancer Trials in the Age of Precision Medicine, E. Vokes, MD

C1 CLINICAL YEAR IN REVIEW 3
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)
Chairing: D.J. Lederer, MD, MS, D.W. Ford, MD, MSCR, V.E. Ortega, MD, PhD
9:15 Tuberculosis and Nontuberculous Mycobacteria, C.L. Daley, MD

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Tuesday, May 23 Sessions

9:45 The Host Microbiome in Lung Disease, Y.J. Huang, MD
10:15 Bronchiectasis, J.D. Chalmers, MD, PhD
10:45 Lung Transplantation, L.G. Singer, MD

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.

C2 PRACTICE CHANGING CLINICAL TRIALS IN PLEURAL DISEASES: IMPACT ON DAY-TO-DAY CARE
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom A (South Building, Level 3)
Chairing: V.C. Broaddus, MD, Y.C.G. Lee, MBChB, PhD

9:15 Breathlessness with Pleural Effusion: Latest Results on Why and How to Measure, E. Mishra, MRCP, DPhil
9:30 Practice Changing Clinical Trials in Malignant Pleural Effusions, Y.C.G. Lee, MBChB, PhD
9:55 Practice Changing Clinical Trials in Pleural Infection, N.M. Rahman, MD, PhD
10:20 Practice Changing Clinical Trials in Malignant Mesothelioma, D.H. Sterman, MD
10:45 Practice Changing Clinical Trials in Pneumothorax, N.A. Maskell, MD
11:00 Novel Intervention and Imaging Impacting on Pleural Management, D.J. Feller-Kopman, MD

C3 OBESITY AND LUNG DISEASE
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom C (South Building, Level 3)
Chairing: T. Beiko, MD, A.E. Dixon, MD

9:15 Impact of Obesity on Pulmonary Mechanics, N. Berend, MD
9:35 Asthma and Obesity, A.E. Dixon, MD
9:55 COPD and Obesity, T. Beiko, MD
10:15 OSA/Obesity Hypoventilation Syndrome and Obesity, A.R. Schwartz, MD
10:35 Acute Respiratory Distress Syndrome and Obesity, A.J. Goodwin, MD, MSCR
10:55 Pulmonary Hypertension and Obesity, A.R. Hemnes, MD

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

C4 A STITCH IN TIME: CONTROVERSIES IN CRITICAL CARE BEST PRACTICES AND THEIR EFFECT ON PATIENT CENTERED OUTCOMES
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 146 A-B (Middle Bldg., Street Level)
Chairing: C.L. Hough, MD, R.N. Bakhru, MD, W.D. Schweickert, MD

9:15 PRO: Don’t Hold Back Those Fluids Just Because Your New Gadget Says So, M.W. Sjoding, MD
9:30 CON: Wading in the Ocean: It’s Time to Stop Salt-Loading Our Patients, K. Mitchell, MD
9:45 Panel Discussion
9:55 PRO: Just a Little Neuromuscular Blockade Helps the Medicine Go Down, D.C. Files, MD
10:10 CON: Muscles Can No Longer Be Collateral Damage, M.S. Herridge, MD, MPH
10:25 Panel Discussion
10:35 CON: Moving the Unmovable, M. Moss, MD
10:50 PRO: It’s Time to Get Our Patients Moving! W.D. Schweickert, MD
11:05 Panel Discussion

C6 REDUCING READMISSIONS FOR COPD: STRATEGIES, ISSUES AND RESULTS
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 146 C (Middle Building, Street Level)
Chairing: L.C. Feemster, MD, MSc, D.H. Au, MD, MS, V.G. Press, MD, MPH
9:15 COPD Readmission and Social Determinants of Health: What Are They, Can I Do Anything About Them? A.S. Gershon, MD, MSc
9:35 Improving Care Delivery by Partnering with Patient Navigators and Peer Advocates, M. Joo, MD, MPH
9:55 Pulmonary Rehabilitation: When and Where? J. Bourbeau, MD
10:15 A Value-Based CMS Reimbursement Demonstration Project to Reduce COPD Readmissions, S.P. Bhatt, MD
10:35 A Program and Policy Level Analysis of an Inter-Professional COPD Readmissions Reduction Program, V.G. Press, MD, MPH
10:55 Health Systems Approach to Engagement and Learning, D.H. Au, MD, MS
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.

C8 PRECISION MEDICINE IN PULMONARY VASCULAR DISEASES: ARE WE READY FOR THE FUTURE?
9:15 a.m. – 11:15 a.m.
Marriott Marquis Washington, Liberty Ballroom I-L (Level M4)
Chairing: C.E. Ventetuolo, MD, MS, M. Wilkins, MD, R.T. Zamanian, MD
9:15 A Patient’s Perspective, K.A. Lewis
9:20 Precision Medicine: A Novel Paradigm to Improve Our Understanding and Management of Pulmonary Vascular Disorders, V. De Jesus Perez, MD
9:35 Genetics for Pulmonary Vascular Disorders: A Blueprint for Action, E. Austin, MD
9:55 Proteomics and Risk Stratification for Pulmonary Vascular Diseases: Role of Precision Medicine, R.T. Zamanian, MD
10:15 Capturing the Clinical Heterogeneity of Pulmonary Vascular Diseases with Metabolomics, M. de Perrot, MD, MSc
10:35 Pharmacogenomics for Pulmonary Vascular Diseases: Role in Drug Discovery, M. Wilkins, MD
10:55 Role of a Comprehensive Electronic Medical Record in Precision Medicine: What Is Needed, E. Brittian, MD
This session and the International Conference are supported by an educational grant from Actelion Pharmaceuticals US, 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.
Tuesday, May 23 Sessions

C11  POLLUTION EFFECTS ON THE EPIGENOME IN THE DEVELOPMENT OF CHRONIC LUNG DISEASE
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 147 A-B (Middle Bldg., Street Level)
Chairing: S.K. Huang, MD, Z. Borok, MD, I. Yang, PhD
9:15  Epigenomic Effects of Environmental Exposures, D. Dolinoy, PhD
9:35  Effect of Pollution on the Epigenetic Profile of T Cells in Asthma, K.C. Nadeau, MD, PhD
9:55  Effect of Traffic Pollution on Epigenomic Changes in Bronchial Epithelium, C. Carlsten, MD, MPH
10:15  Circulating Extracellular Vesicles: Novel Mediators of Environmental Effects on the Lung, A. Baccarelli, PhD
10:35  Role of Epigenetic Changes in the Pathogenesis of Pulmonary Hypertension, K.R. Stenmark, MD
10:55  Smoke Signaling in Epigenetic Chromatin Modifications in COPD, I.K. Sundar, PhD

This session and the International Conference are supported by educational grants from AstraZeneca LP, Teva 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.

C12  PHYSICIAN PAYMENT IN THE UNITED STATES: PAST, PRESENT AND FUTURE OR WHAT IS MACRA (MEDICARE ACCESS AND CHIP REAUTHORIZATION ACT OF 2015)
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 102 A-B (South Bldg., Street Level)
Chairing: S. Hoffmann, MD, K. Nicolacakis, MD
9:15  Introduction, S. Hoffmann, MD
9:25  CMS Update on MACRA, K. Bryant, JD
10:00  Tips for MIPS (The Merit-Based Incentive Payment System), O. Hussain, DO
10:15  APMs (Advanced Alternative Payment Models) or Who’s Ready for Prime Time? K. Nicolacakis, MD
10:30  MIPS or APMs: What Is Right for You? S. Hoffmann, MD
10:40  Big System Vs. Little Practice: What You Need to Know, R.M. Hamrick, MD
10:55  Preparation and Questions and Answers: Apocalypse or Not, K.L. Kovitz, MD, MBA

Tuesday, May 23

TUESDAY MID-DAY, MAY 23 11:45 A.M. – 1:15 P.M.

WS5  REVIEW OF THE NEW CYSTIC FIBROSIS DIAGNOSIS GUIDELINES
11:45 a.m. – 1:15 p.m.
Marriott Marquis Washington, Archives (Level M4)
Registration Fee: $75. Attendance is limited. Pre-registration is required.
Chairing: C.L. Ren, MD
11:45  Introduction, C.L. Ren, MD
12:00  Applying Genetic Testing to the Diagnosis of CF, P. Sosnay, MD
12:25  Diagnostic Challenges Arising from CF Newborn Screening, C.L. Ren, MD
12:50 The Role of Ancillary Testing in the Diagnosis of CF, I. Sermet-Gaudelus, MD
This session and the International Conference are supported by an educational grant from Vertex Pharmaceuticals, Inc. All CME sessions have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) and are free of the control of commercial interests.

WS6 CAREER DEVELOPMENT WORKSHOP: HOW TO START YOUR INDEPENDENT RESEARCH LABORATORY
11:45 a.m. – 1:15 p.m.
Marriott Marquis Washington, Capitol/Congress (Level M4)
Pre-registration is required. Attendance is limited. There is no additional fee.
Chairing: D.T. Tambe, PhD, D. Kasahara, PhD
11:45 Starting a New Lab at NIH, R. Balaban, PhD
11:55 Common Successful Strategies Employed in the Startup Package, J. Solway, MD
12:05 Challenges and Opportunities at Large Versus Small Universities, T. Stevens, PhD
12:15 Starting a New Lab in an Engineering School, G.N. Maksym, PhD
12:25 Managing to Set up a New Laboratory Together with Clinical Practice, Teaching and Grant Writing, C.C. Hardin, MD, PhD
12:35 Developing the Budget, V. Anathy, PhD
12:45 General Discussion

CC4 SLEEP MEDICINE CLINICAL CORE CURRICULUM I
11:45 a.m. – 1:15 p.m.
Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)
Chairing: S. Jamil, MD
11:45 Insomnia: Pharmacologic Therapies, M.E. Billings, MD, MSc
12:15 Insomnia: Non-Pharmacologic Therapies, P. Gehrman, PhD
12:45 Sleep in Psychiatric Diseases, J.L. Martin, PhD

MP MEET THE PROFESSOR SEMINARS
12:15 p.m. – 1:15 p.m.
Marriott Marquis Washington
Registration Fee: $70. Attendance is limited. Pre-registration is required.
See Final Program for seminar titles and speakers.

TSS1 EVOLVING CONCEPTS IN EARLY COPD
12:15 p.m. – 1:15 p.m.
Marriott Marquis Washington, Monument (Level M4)
This is a 4-part series. Those registering for this seminar series are registered for all 4 parts.
Registration Fee: $170. Attendance is limited. Pre-registration is required.
Screening for COPD: Beyond the Current Guidelines, R.A. Wise, MD
Part 1, Sunday, May 21, 12:15 p.m.–1:15 p.m.
Part 2, Monday, May 22, 12:15 p.m.–1:15 p.m.
Part 4, Wednesday, May 24, 7:00 a.m.–8:00 a.m.

TUESDAY AFTERNOON, MAY 23
2:15 P.M. – 4:15 P.M.

CC5 PULMONARY CLINICAL CORE CURRICULUM II
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)
Chairing: G.C. Michaud, MD
2:15 Lung Cancer Screening, N.T. Tanner, MD, MSCR
2:45 Lung Cancer Diagnosis, A.V. Gonzalez, MD, MSc
### Tuesday, May 23 Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>3:15</td>
<td>Lung Cancer Staging, M. Liberman, MD, PhD</td>
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<td>3:45</td>
<td>Lung Cancer Treatment, S. Shojaee, MD</td>
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**C82 THE CUTTING EDGE IN LUNG TRANSPLANTATION**

2:15 p.m. – 4:15 p.m.

*Walter E. Washington Convention Center, Ballroom A (South Building, Level 3)*

Chairing: S.M. Palmer, MD, MHS, J.A. Belperio, MD

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>2:15</td>
<td>Ex Vivo Lung Perfusion (EVLP): Changing the Practice of Lung Transplantation for the Better</td>
<td>M. Cypel, MD, MSc</td>
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<td>2:35</td>
<td>Rethinking Primary Graft Dysfunction and Its Prevention</td>
<td>J.D. Christie, MD, MS</td>
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<td>2:55</td>
<td>Lung Transplant Microbiome and Implications for CLAD</td>
<td>L.P. Nicod, MD</td>
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<td>3:15</td>
<td>Cytokine and Chemokine Signals Translate Infections to CLAD</td>
<td>J.A. Belperio, MD</td>
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<td>3:35</td>
<td>New Insights into CLAD Phenotypes, Mechanisms and Treatment</td>
<td>S.M. Palmer, MD, MHS</td>
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<tr>
<td>3:55</td>
<td>Panel Discussion</td>
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**C83 PEDIATRIC CHEST ROUNDS**

2:15 p.m. – 4:15 p.m.

*Walter E. Washington Convention Center, Ballroom C (South Building, Level 3)*

Chairing: S. Goldfarb, MD, J. Harrison, MBChB, MRCP, MRCPCH, J.P. Needleman, MD

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
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<tr>
<td>2:15</td>
<td>Pediatric Clinical Cases</td>
<td>A. Parra, MD, A. Casey, MD</td>
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<td></td>
<td>17 Year Old Female with Progressive Dyspnea and Pulmonary Nodules</td>
<td>A. Parra, MD</td>
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<td>Expert Discussant, A. Casey, MD</td>
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<tr>
<td>2:30</td>
<td>Two Year Old with Bronchiectasis, A. Sathyaprasad MD</td>
<td>A. Sathyaprasad MD</td>
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<td>2:45</td>
<td>Expert Discussant, S. Ogunlesi MD</td>
<td>S. Ogunlesi MD</td>
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<tr>
<td>2:55</td>
<td>19 Year Old Female with Protein Losing Enteropathy and Acute Respiratory Failure, A. Al Baroudi, MD</td>
<td>A. Al Baroudi, MD</td>
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<td>3:15</td>
<td>Expert Discussant, D. Stokes, MD</td>
<td>D. Stokes, MD</td>
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<tr>
<td>3:35</td>
<td>10 Month Old with Recurrent Croup, L. Farhat, MD</td>
<td>L. Farhat, MD</td>
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<td>3:55</td>
<td>Expert Discussant, J. Piccione, DO</td>
<td>J. Piccione, DO</td>
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**C84 BEG, BORROW AND STEAL: THE CHALLENGE OF CHANGING PHYSICIAN BEHAVIOR IN THE ICU**

2:15 p.m. – 4:15 p.m.

*Walter E. Washington Convention Center, Room 146 A-B (Middle Bldg., Street Level)*

Chairing: M.N. Gong, MD, MS, D.K. Costa, PhD, RN, J. Stevens, MD

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<tr>
<td>2:15</td>
<td>“It Depends on the Clinician”: Drivers of Variation in Resource Use in Critical Care, J. Stevens, MD</td>
<td>J. Stevens, MD</td>
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<td>2:30</td>
<td>The Necessary Ingredients: How Improving Unit Culture Sets the Stage for Desired Physician Behavior, J. Marsteller, PhD</td>
<td>J. Marsteller, PhD</td>
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<td>2:45</td>
<td>De-Adoption of Unsuccessful Ideas: The Durability of the Use of Pulmonary Artery Catheters, K. Rowan, PhD, MSc</td>
<td>K. Rowan, PhD, MSc</td>
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<tr>
<td>3:00</td>
<td>Glaring Failures: Physician Incentives and Other Failed Levers of Change, J. Kahn, MD, MS</td>
<td>J. Kahn, MD, MS</td>
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<td>3:15</td>
<td>Getting Moving: Successful Strategies that Have Mobilized Patients and Clinicians, D.K. Costa, PhD, RN</td>
<td>D.K. Costa, PhD, RN</td>
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</table>
3:30 When Changing Physician Behavior Became My Job: Practical Tools and Strategies for Improving Critical Care, M. Howell, MD, MPH
3:45 Question and Answer Session, M.N. Gong, MD, MS

C86 CLINICAL ADVANCES IN RESPIRATORY HEALTH: WHAT TO TELL YOUR PATIENTS RIGHT NOW
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 204 A-C (South Building, Level 2)
Chairing: K.A. Connolly, BS, A. Malhotra, MD
2:15 Introduction to Session, A. Malhotra, MD
2:30 Annual PAR Awards Ceremony, K.A. Connolly, BS
2:40 Recent Advances: Air Pollution, M.B. Rice, MD, MPH
2:50 Recent Advances: Obesity/Sleep Disorders, S.R. Patel, MD
3:05 Recent Advances: Smoking and Electronic Nicotine Delivery Systems, E-Cigs, L.E. Crotty Alexander, MD
3:20 Recent Advances: Critical Care/Acute Respiratory Distress Syndrome, J.R. Beitler, MD, MPH
3:35 Recent Advances: Idiopathic Pulmonary Fibrosis, S. Montesi, MD
3:50 Panel Discussion, A. Malhotra, MD

C88 COPD COMORBIDITIES: GREATER THAN THE SUM OF THE PARTS
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, Room 102 A-B (South Building, Street Level)
Chairing: R.T. Disler, PhD, RN, R. Kalhan, MD, MS, V.M. McDonald, PhD
2:15 Comorbidities in COPD: The Cardiovascular COPD Conundrum, L. Vanfleteren, MD, PhD
2:40 Cognition As a Key Influence on COPD Self-Management and Intervention Efficacy, R.T. Disler, PhD, RN
2:58 Targeting Obesity in COPD, V.M. McDonald, PhD
3:16 The Influence of Skeletal-Muscular Dysfunction on Pulmonary Disease Function and Management, F. Maltais, MD
3:34 Anxiety, Depression and Psychological and COPD: Association and Impact on Management, M. Milic, MD

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.

C89 NON-CYSTIC FIBROSIS BRONCHIECTASIS AND NONTUBERCULOUS MYCOBACTERIA INFECTION: CURRENT KNOWLEDGE AND RECENT ADVANCES
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, West Salon G-I (South Building, Street Level)
Chairing: K.L. Winthrop, MD, MPH, G. Tino, MD, C.L. Daley, MD
2:15 A Patient's Perspective, C. Warden
2:20 Lung Microbiome in Patients with Non-Cystic Fibrosis Bronchiectasis, J.D. Chalmers, MBChB, PhD
2:39 Current Management of Non-Cystic Fibrosis Bronchiectasis, A.E. O’Donnell, MD
2:58 Surgical Management of Non-Cystic Fibrosis Bronchiectasis and Nontuberculous Mycobacteria, J.D. Mitchell, MD
3:17 New Inhaled Antibiotics for Non-Cystic Fibrosis Bronchiectasis, T.R. Aksamit, MD
3:36 Epidemiology of Non-Cystic Fibrosis Bronchiectasis and Colonizing Bacteria, K.N. Olivier, MD, MPH
Tuesday, May 23 Sessions

3:55  New Evidence for the Treatment of Nontuberculous Mycobacteria, D.E. Griffith, MD

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.

C90 PULMONARY REHABILITATION ACROSS HEALTH CARE SETTINGS
2:15 p.m. – 4:15 p.m.
Marriott Marquis Washington, Liberty Ballroom M-P (Level M4)
Chairing: M.L. Moy, MD, MSc, R. Goldstein, MD

2:15  Early Outpatient Rehabilitation in Newly Diagnosed Patients with Chronic Respiratory Disease, F. Franssen, MD, PhD

2:35  Hospital-Based Early Mobility and Pulmonary Rehabilitation in Patients Hospitalized for Acute Exacerbations, N.J. Greening, MBBS, PhD

2:55  Long-Term Inpatient Pulmonary Rehabilitation in the Most Severe Patients, L. Vanfleteren, MD, PhD

3:15  Early Mobilization of Respiratory Patients in Intensive Care Units, D. Needham, MD

3:35  Pulmonary Rehabilitation in the Pre- and Postoperative Setting in Patients Undergoing Lung Surgery, M. Maddocks, PhD

3:55  Pulmonary Rehabilitation, Physical Activity and Exercise in Nursing Home Residents with Lung Disease, R.S. Novitch, MD

C91 TACKLING SEVERE PNEUMONIA AND SEPSIS: WHAT IS READY FOR PRIME TIME?
2:15 p.m. – 4:15 p.m.
Walter E. Washington Convention Center, East Salon A-C (South Bldg., Street Level)
Chairing: S. Yende, MD, MS, M.L. Metersky, MD, G.W. Waterer, MBBS, PhD, MBA

2:15  MDR/XDR Pathogens: Older Drugs of Questionable Efficacy or Newer Expensive Drugs, R.G. Wunderink, MD

2:35  PRO: Patients with Severe Pneumonia and Patients with Septic Shock Should Be Treated with Corticosteroids, A. Torres, MD

2:55  CON: Patients with Severe Pneumonia and Patients with Septic Shock Should Be Treated with Corticosteroids, R. Hotchkiss, MD

3:15  Beyond Steroids: New Immunomodulatory Interventions for Severe Pneumonia and Septic Shock, T. Welte, MD

3:35  Care Models for Survivors of Severe Pneumonia and Sepsis, S. Yende, MD, MS

3:55  Cutting Edge Diagnostics for Severe Respiratory Infections, G.W. Waterer, MBBS, PhD, MBA

C92 STATE OF THE ART ON THORACIC IMAGING AND RADIOGRAPHIC METRICS IN THE QUANTIFICATION OF LUNG DISEASE
2:15 p.m. – 4:15 p.m.
Marriott Marquis Washington, Marquis Ballroom 6 (Level M2)
Chairing: D.A. Lynch, MD, C. Hsia, MD, S.R. Hopkins, MD, PhD

2:15  Lung Cancer Screening by CT: Current Status and Future Direction, E.A. Kazerooni, MD
2:35  Machine Learning As a Tool for Increasing the Accuracy and Efficiency of Radiological Discussions: Application to Lung Nodules, B. van Ginneken, PhD
2:55  Advances in CT Imaging of Pulmonary Fibrosis, D.A. Lynch, MD
3:15  CT-Derived Metrics for Assessing Complex Parenchymal Patterns in Diffuse Parenchymal Lung Disease, J.G. Goldin, MD, PhD
3:35  Imaging Pressure and Prognosis in Pulmonary Hypertension, G. Kicska, MD, PhD
3:55  Recent Advances in CT Quantification of Vascular Pathology in COPD, E.A. Hoffman, PhD

WEDNESDAY MORNING, MAY 24 7:00 A.M. – 11:15 A.M.

SS  SUNRISE SEMINARS
7:00 a.m. – 8:00 a.m.
Marriott Marquis Washington
Registration Fee: $50. Attendance is limited. Pre-registration is required.
See Final Program for seminar titles and speakers.

TSS1  EVOLVING CONCEPTS IN EARLY COPD
7:00 a.m. – 8:00 a.m.
Marriott Marquis Washington, Monument (Level M4)
This is a 4-part series. Those registering for this seminar series are registered for all 4 parts.
Registration Fee: $170. Attendance is limited. Pre-registration is required.
Chronic Bronchitis Without Airflow Obstruction: Epidemiology, Phenotype, and Clinical Consequences, C. Martinez, MD, MPH
  Part 1, Sunday, May 21, 12:15 p.m.–1:15 p.m.
  Part 2, Monday, May 22, 12:15 p.m.–1:15 p.m.
  Part 3, Tuesday, May 23, 12:15 p.m.–1:15 p.m.

PCC4  PEDIATRIC CLINICAL CORE CURRICULUM
7:00 a.m. – 8:00 a.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: A. Horani, MD
7:00  Pulmonary Hypertension, E. Austin, MD
7:30  Pulmonary Manifestations of Rheumatologic Diseases, M. Kitcharoensakkul, MD

K7  ATS KEYNOTE SERIES
8:15 a.m. - 9:00 a.m.
Walter E. Washington Convention Center, East Salon A-C (South Bldg., Street Level)
Climate Change and Global Warming: A Geological Perspective, K.R. Johnson, PhD

K8  ATS KEYNOTE SERIES
8:15 a.m. - 9:00 a.m.
Walter E. Washington Convention Center, West Salon G-I (South Bldg., Street Level)
Hypoxia-Inducible Factors in Physiology and Medicine, G.J. Semenza, MD, PhD

D1  CLINICAL YEAR IN REVIEW 4
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Hall E (Middle Building, Level 2)
Chairing: D.J. Lederer, MD, MS, D.W. Ford, MD, MSCR, V.E. Ortega, MD, PhD
9:15  Thoracic Oncology, L.T. Tanoue, MD
Wednesday, May 24 Sessions

9:45  Thoracic Imaging, S.L.F. Walsh, MD, MRCP
10:15  Health Disparities, J. Roman, MD
10:45  Palliative Care, R.A. Mularski, MD, MSHS, MCR

D2  BRONCHOSCOPIC LUNG VOLUME REDUCTION: IS IT FINALLY A REALITY?
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom A (South Building, Level 3)
Chairing: G.J. Criner, MD, F.J.F. Herth, MD, F.C. Sciurba, MD
9:15  Physiologic and Functional Basis for Lung Reduction, F.C. Sciurba, MD
9:30  Selections of Patients for Bronchoscopic Lung Reduction, G.J. Criner, MD
9:45  Efficacy of Endobronchial Valve Treatment for Heterogenous or Homogeneous Emphysema, K. Klooster, PhD
10:00  Efficacy and Mechanism of Implantable Lung Coils in Advanced Emphysema, P. Shah, MD
10:15  Application of Sequential Bilateral Segmental Vapor Ablation Therapy in Advanced Emphysema: Efficacy and Safety, F.J.F. Herth, MD
10:30  Total Lung Denervation: Impact on Lung Function, Dyspnea and Exercise Performance, D. Slebos, MD, PhD
10:45  Integration of BLVR with LVRS and Transplant: Which Therapy for Which Patient, D. Gompelmann, MD
11:00  Panel Discussion, G.J. Criner, MD, F.C. Sciurba, MD, F.J.F. Herth, MD

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D3  DIAGNOSTIC DILEMMAS IN HYPERSENSITIVITY PNEUMONIA AND THE CLINICAL-RADIOLOGIC-PATHOLOGIC MULTIDISCIPLINARY STANDARD
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom C (South Building, Level 3)
Chairing: M. Salisbury, MD, G. Raghu, MD, K.A. Johannson, MD, MPH
9:15  Disease Definition, Clinical Features, Phenotypes, and a Case Presentation, G. Raghu, MD
9:35  Pathobiology of Hypersensitivity Pneumonia: Evidence for Genetic and/or Immunologic Mediation of Disease, M. Selman, MD
9:55  Imaging in Diagnosis of Hypersensitivity Pneumonia: Sufficient to Make a Diagnosis in the Correct Clinical Setting? D.A. Lynch, MD
10:15  Role of Bronchoscopy, BAL, and Transbronchial Biopsy in HP, M. Vasakova, MD, PhD
10:30  Histopathology in Diagnosis of HP: Distinctive Features and Mimics, J.L. Myers, MD
10:45  Environmental Evaluation: Challenges in Antigen Identification, E. Fernandez Perez, MD
11:00  Treatment of HP and Wrap-Up, M. Salisbury, MD
D4 BALANCING PERSONALIZATION AND PROTOCOL IN THE ICU
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 146 A-B (Middle Building, Street Level)
Chairing: N.J. Meyer, MD, MS, S. Yende, MD, MS
9:15 Contextualizing the Precision Medicine Initiative for the ICU, N.J. Meyer, MD, MS
9:30 A Case for Protocolization: Applying a Business Mindset to ICU Care, H.B. Gershengorn, MD
9:45 Personalizing Lung Protection in ARDS with Tidal Volume Strategy and Neuromuscular Blockade, J.R. Beitler, MD, MPH
10:05 Personalizing Hemodynamic Management in the Post-ProMISE/ProCESS Era, M. Singer, MBBS, MD
10:25 Sedation and Mobilization: Can We Personalize Protocols to Maximize Benefit? W.D. Schweickert, MD
10:45 On the Horizon: Precision Immunotherapy Trials in Sepsis, S. Yende, MD, MS
11:00 Panel Discussion, N.J. Meyer, MD, MS, H.B. Gershengorn, MD

D5 PREVENTING ASTHMA ONSET IN CHILDREN BY IMMUNOMODULATION USING BACTERIA OR BACTERIAL EXTRACTS
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: P.N. Le Souef, MD, MBBS, W.W. Busse, MD
9:15 A Patient’s Perspective, C. Eury
9:20 The Effect of Bacterial Immunomodulation on Immune System Responses in Young Children, I. Laing, PhD
9:43 Does Exposure to Bacteria and Bacterial Lysates Reduce Wheeze in Children? P.N. Le Souef, MD, MBBS
10:06 A Systems Biology Approach to Understanding Immune System Responses to Bacteria, R. Hancock, PhD
10:29 Short and Long-Term Effects of Viruses Versus Bacteria on Immune Responses in Asthma, S. Johnston, MD, MBBS, PhD
10:52 Translational Medicine and Asthma Prevention in Children Using Bacteria or Bacterial Lysates, F.D. Martinez, MD

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

D6 SLEEP AND HEALTH: A PUBLIC HEALTH CALL TO ACTION
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 152 A-B (Middle Building, Street Level)
Chairing: M. Grandner, PhD, E. Tasali, MD
9:15 Sleep and Health: Are We Getting Enough Sleep? M. Grandner, PhD
9:40 Sleep and the Public Health Epidemic of Obesity, J. Chaput, PhD
10:05 Sleep and Health Equity: Implications for Health Disparities and Policy, N. Williams, EdD
10:30 Delayed School Start Times: Impact on Sleep and Public Health, M.L. Chen, MD
10:55 Patient Presentation, Speaker To Be Announced

D9 SCIENTIFIC PROMISE AND TRANSLATIONAL CHALLENGES IN LUNG REGENERATIVE MEDICINE
9:15 a.m. – 11:15 a.m.
Marriott Marquis Washington, Marquis Ballroom 5 (Level M2)
Chairing: A.L. Firth, PhD, A. Wilson, MD, Z. Borok, MD
9:15 Translating Stem Cell Science to the Clinical Arena, G. Gibbons, MD

ATS 2017 Highlights for Clinicians
Wednesday, May 24 Sessions

9:35 Epithelial-Mesenchymal-Niche Interactions Regulating Alveolar Type II Cells, C. Barkauskas, MD

9:55 Dynamics of Lineage Negative Epithelial Cell Notch Signaling in Lung Injury, H. Chapman, MD

10:15 Hippo/Yap Regulation of Lung Stem Cells and Development, X. Varelas, PhD

10:35 Regulation of iPSC Differentiation to Lung Stem Cells, A.L. Firth, PhD


D10 ENVIRONMENTAL POLLUTION AND THE GLOBAL RISE IN COPD FOOTPRINT
9:15 a.m. – 11:15 a.m.
Walter E. Washington Convention Center, Room 145 A-B (Middle Bldg., Street Level)
Chairing: Y.N. Mageto, MD, MPH, B.R. Celli, MD, A.S. Buist, MD

9:15 Epidemiology of Environmental Exposures and the Global Rise in COPD Footprint, K.J. Mortimer, PhD

9:35 Biomass Smoke Exposure, Clinical Expression and Natural History: An Enemy We Need to Defeat, A. Ramirez-Venegas, MD

9:55 Burning of Biomass Fuels and Resulting Obstructive Disease: Effective Intervention with Limited Resources, S. Salvi, MD, PhD

10:15 Progression from Asthma to Chronic Obstructive Pulmonary Disease (COPD): Is Air Pollution a Risk Factor? T. To, PhD

10:35 To Screen or Not to Screen – That Is the Question: If Hamlet Could Understand COPD, D.H. Au, MD, MS

10:55 Environmental Hazard Exposures and Respiratory Symptoms in the Guangzhou Institute of Respiratory Disease COPD Cohort, R. Chen, MD, PhD

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WEDNESDAY MID-DAY, MAY 24
11:45 A.M. – 1:15 P.M.

WS7 MOLECULAR DIAGNOSTICS FOR ACUTE PNEUMONIA: PRACTICAL IMPACT AND FUTURE HORIZONS
11:15 a.m. – 1:15 p.m.
Marriott Marquis Washington, Archives (Level M4)
Registration Fee: $75. Attendance is limited. Pre-registration is required.
Chairing: R. Nusrat, MD, S.T. Qureshi, MD

11:45 Molecular Testing for Acute Pneumonia Diagnosis, M.H. Kollef, MD

12:05 Emerging Diagnostic Technologies for Ventilator-Associated Pneumonia, I.S. Douglas, MD

12:25 Novel Pneumonia Diagnostics: View from the Clinical Microbiology Laboratory, R. Patel, MD

12:45 Molecular Diagnosis of Community Acquired Pneumonia, R.G. Wunderink, MD

1:05 Panel Discussion

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WS8 PREPARING FOR ENTERING THE GRANT SHARK TANK: ATTAINING EARLY CAREER FUNDING
11:15 a.m. – 1:15 p.m.
*Marriott Marquis Washington, Capitol/Congress (Level M4)*
Attendance is limited. Pre-registration is required. There is no additional fee.
Chairing: C.R. Kliment, MD, PhD, K. Jetmalani, PhD
11:45 NIH Awards, W. Wang, PhD
12:05 K Awards and Foundation Mechanisms, L. Smith, MD
12:30 International Funding Mechanisms, A.J. Halayko, PhD
12:45 Navigating Early Career Funding, J. Englert, MD
1:00 General Discussion

WEDNESDAY AFTERNOON, MAY 24 1:30 P.M. – 3:30 P.M.

CC6 SLEEP MEDICINE CLINICAL CORE CURRICULUM II
1:30 p.m. – 3:30 p.m.
*Marriott Marquis Washington, Independence Ballroom E-H (Level M4)*
Chairing: T.S. Wang, MD
1:30 OSA: Diagnosis, M. Kaminska, MD
2:00 OSA: PAP Therapies, L. Wolfe, MD
2:30 OSA: Non-PAP Therapies, T.C. Hammond, MD
3:00 CSA Therapy, J.S. Balachandran, MD

D82 PUTTING THE 2017 GOLD COPD RECOMMENDATIONS INTO CLINICAL PRACTICE
1:30 p.m. – 3:30 p.m.
*Walter E. Washington Convention Center, Ballroom A (South Building, Level 3)*
Chairing: G.J. Criner, MD, B.R. Celli, MD, C. Vogelmeier, MD, R. Rodriguez-Roisin, MD, PhD, A. Agusti, MD
1:30 What Is COPD? R. Rodriguez-Roisin, MD, PhD
1:45 The Diagnosis and Assessment of COPD, C. Vogelmeier, MD
2:00 Overview of Therapeutic Options in COPD, N. Roche, MD
2:15 Treatment of Stable COPD, G.J. Criner, MD
2:30 Definition and Management of Acute Exacerbations, J.A. Wedzicha, MD, PhD
2:45 Comorbidities and COPD, L.M. Fabbri, MD
3:00 Asthma-COPD Overlap, B.R. Celli, MD
3:15 Future Needs and Summary of New Recommendations, A. Agusti, MD

D83 INNOVATIVE CLINICAL TRIALS IN PULMONARY FIBROSIS AND BEYOND
1:30 p.m. – 3:30 p.m.
*Walter E. Washington Convention Center, Ballroom C (South Building, Level 3)*
Chairing: D. Kass, MD, S.K. Danoff, MD, PhD
1:30 Autoantibody Reduction Therapy in IPF, S. Duncan, MD
1:55 Novel Endpoints in Fibrosis: Gene Expression Analysis of Skin Before and After Treatment with Fresolimumab, R. Lafyatis, MD
2:20 Using Data from the Large IPF Trials to Test Novel Hypotheses, M. Kreuter, MD
2:45 When a Genomics Expert Tries to Develop a Drug: Lessons from the NHLBI CADET Program, N. Karminski, MD
3:05 Is Adaptive Clinical Trial Design Possible in IPF? C. Mehta, PhD
Wednesday, May 24 Sessions

D84  50 YEARS OF ARDS: LOOKING BACK, AND AHEAD
1:30 p.m. – 3:30 p.m.
Walter E. Washington Convention Center, Room 146 A-B (Middle Bldg., Street Level)
Chairing: E. Fan, MD, PhD, D. Brodie, MD

1:30  A Patient's Perspective, S. Collins
1:35  A Half Century of ARDS: Progress and Setbacks, A. Slutsky, MD
1:45  Changing Definitions: Progress? G.D. Rubenfeld, MD, MSc
2:05  Mechanical Ventilation in ARDS: Has Anything Changed in 50 Years?
     E. Fan, MD, PhD
2:25  A Ventilator-Free Future? Extracorporeal Support for ARDS, D. Brodie, MD
2:45  Shifting to Prevention: PETAL, R.G. Brower, MD
3:05  Predictions for ARDS 2067: What Will the Future Bring? C.S. Calfee, MD
3:25  Panel Discussion

D85  RECOGNITION, DIAGNOSIS AND MANAGEMENT OF INDOLENT LUNG CANCER
1:30 p.m. – 3:30 p.m.
Walter E. Washington Convention Center, Room 202 A (South Building, Level 2)
Chairing: G.A. Silvestri, MD, MS, F. Maldonado, MD

1:30  Population-Based Screening for Cancer: Hope and Hype, L. Esserman, MD, MBA
1:50  Epidemiology of “Indolent” Lung Cancers, P.P. Massion, MD
2:10  Risk Stratification of Lung Lesions Prior to Therapy: Where Do We Stand?
     T. Peikert, MD
2:30  To Treat or Not To Treat “Indolent” Lung Cancers? F.C. Detterbeck, MD
2:50  What’s the Cost of Overtreatment? and How Do I Tell My Patient About Their
     “Overdiagnosed” Lung Cancer? G.A. Silvestri, MD, MS
3:10  Interactive Case Presentation, F. Maldonado, MD

D86  INTERACTIONS BETWEEN FAT AND FLOW
1:30 p.m. – 3:30 p.m.
Marriott Marquis Washington, Marquis Ballroom 5 (Level M2)
Chairing: A.E. Dixon, MD, J.H.T. Bates, DSc, PhD

1:30  Fat and Flow: The Effects of the Obesity Epidemic on Lung Disease, A.E.
     Dixon, MD
1:40  Ozone and Obesity, S. Shore, PhD
2:05  Pathogenesis of Obstructive Sleep Apnea in Obesity, S. Patil, MD
2:25  Effects of Obesity on Airway Function and Ventilation, G. King, MBChB,
     PhD
2:50  Mechanical Ventilation of Obese Patients, L. Berra, MD
3:10  The Mechanical Consequences of Obesity on Airways Responsiveness,
     J.H.T. Bates, DSc, PhD
D87 OBESITY AND CHRONIC RESPIRATORY DISEASES IN CHILDREN: RECENT ADVANCES AND CLINICAL IMPLICATIONS
1:30 p.m. – 3:30 p.m.
Walter E. Washington Convention Center, Ballroom B (South Building, Level 3)
Chairing: E. Forno, MD, MPH, I. Narang, MD, S. Saglani, MD, MBChB

1:30 Lung Function in Obese Youth with and Without Asthma, E. Forno, MD, MPH
1:50 Obesity-Related Epigenetic Reprogramming of Airway Cells and Remodeling in Lower Airway Disease, R.J. Freishtat, MD, MPH
2:10 Obesity and Sleep Disorders, H. Jalou, MD
2:30 Sleep Disorders: Therapeutic Management and Transition to Adulthood, I. Narang, MD
2:50 The Microbiome: A Link Between Obesity and Lung Disease? N. Ubags, PhD
3:10 Session Summary, Unanswered Questions, and Future Directions, S. Saglani, MD, MBChB

D90 NUDGES IN THE ICU: WHEN AND HOW SHOULD INTENSIVISTS GUIDE SURROGATES’ DECISIONS?
1:30 p.m. – 3:30 p.m.
Walter E. Washington Convention Center, Room 152 A-B (Middle Building, Street Level)
Chairing: G.L. Anesi, MD, MBE, J.N. Mansoori, MD, S.D. Halpern, MD, PhD

1:30 Behavioral Economics, Choice Architecture, and Nudges in the ICU, G.L. Anesi, MD, MBE
1:50 Intensivists’ Use of Informed Assent When Patients Lack Capacity, J.R. Curtis, MD, MPH
2:10 Default to DNR? R.D. Stapleton, MD, PhD
2:30 Integrated ICU Team Communications and the Nursing Perspective, D.K. Costa, PhD, RN
2:50 The (Ambiguous) Role of Autonomy in Surrogate Decision-Making, D.B. White, MD
3:10 Helping Parents with Decisions About Periviable Infants, M.F. Haward, MD

D91 ATS CLINICAL PRACTICE GUIDELINES: CLINICAL PRACTICE ON THE CUTTING EDGE
1:30 p.m. – 3:30 p.m.
Walter E. Washington Convention Center, Room 204 A-C (South Building, Level 2)
Chairing: R. Dweik, MD, R.C. Hyzy, MD, C.C. Thomson, MD, MPH

1:30 Welcome, R. Dweik, MD
1:35 Grading Strength of Recommendations and Quality of Evidence, K.C. Wilson, MD
1:45 ATS/SCCM/ESICM Guidelines on Mechanical Ventilation in ARDS, E. Fan, MD, PhD
2:05 ATS/CHEST Guidelines on Liberation from Mechanical Ventilation, J. Truwit, MD
2:25 ATS/ERS Guidelines on the Treatment of COPD Exacerbations, M. Miravitlles, MD, PhD
2:45 Late Breaking Guidelines, R. Dweik, MD
3:05 Guidelines to Performance Measures, C.H. Weiss, MD
3:25 Closing, C.C. Thomson, MD, MPH

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Saturday, May 20

OPENING CEREMONY

Walter E. Washington Convention Center
Hall E (Middle Building, Level 2)

The American Thoracic Society welcomes you to attend the Opening Ceremony for the 2017 International Conference. The keynote speaker is Nobel Laureate James Heckman, PhD, MA. Professor Heckman has devoted his professional life to understanding the origins of major social and economic problems related to inequality, social mobility, discrimination, skill formation and regulation, and to devising and evaluating alternative strategies for addressing those problems.

The ATS will present 3 Respiratory Health Awards: Public Service Award, World Lung Health Award and Jo Rae Wright Award for Outstanding Science.

Sunday, May 21

AMBERSON LECTURE

Walter E. Washington Convention Center
Hall E (Middle Building, Level 2)

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. Peter D. Pare, MD is the 2017 Amberson Lecturer and will speak on “The Smoking Gun: Genetics and Genomics Reveals Causal Pathways for COPD”.

The ATS will also present the Trudeau Medal and Distinguished Achievement Awards.

Sunday, May 21

ASSEMBLY MEMBERSHIP MEETINGS

The Membership Meetings of the Assemblies on Behavioral Science and Health Services Research and Pediatrics are held on Sunday evening.

BEHAVIORAL SCIENCE AND HEALTH SERVICES RESEARCH

Renaissance Washington Downtown
Grand Ballroom South (Ballroom Level)
Chairing: Christopher H. Goss, MD, MSc

PEDIATRICS

Renaissance Washington Downtown
Grand Ballroom Central (Ballroom Level)
Chairing: J.F. Chmiel, MD, MPH
Monday, May 22 5 – 7 p.m.

The Membership Meetings of the other twelve Assemblies are held on Monday evening.

**ALLERGY, IMMUNOLOGY AND INFLAMMATION**

*Grand Hyatt Washington*

*Independence Ballroom B-E (Independence Level 5B)*

Chairing: M.A. Olman, MA, MD

**CLINICAL PROBLEMS**

*Grand Hyatt Washington*

*Constitution Ballroom C (Constitution Level 3B)*

Chairing: S. Sethi, MD

**CRITICAL CARE**

*Renaissance Washington Downtown*

*Grand Ballroom South (Ballroom Level)*

Chairing: C.S. Calfee, MD

**ENVIRONMENTAL, OCCUPATIONAL, AND POPULATION HEALTH**

*Renaissance Washington Downtown*

*Renaissance Ballroom East (Ballroom Level)*

Chairing: J.R. Harkema, DVM, PhD

**MICROBIOLOGY, TUBERCULOSIS AND PULMONARY INFECTIONS**

*Grand Hyatt Washington*

*Declaration A-B (Declaration Level 1B)*

Chairing: K. P. Fennelly, MD, MPH

**NURSING**

*Renaissance Washington Downtown*

*Renaissance Ballroom West B (Ballroom Level)*

Chairing: E. G. Collins, PhD

**PULMONARY CIRCULATION**

*Renaissance Washington Downtown*

*Grand Ballroom North (Ballroom Level)*

Chairing: T. Stevens, PhD

**PULMONARY REHABILITATION**

*Renaissance Washington Downtown*

*Renaissance Ballroom West A (Ballroom Level)*

Chairing: C.L. Rochester, MD
RESPIRATORY CELL AND MOLECULAR BIOLOGY
Grand Hyatt Washington
Independence Ballroom F-I (Independence Level 5B)
Chairing: I. Petrache, MD,

RESPIRATORY STRUCTURE AND FUNCTION
Grand Hyatt Washington
Independence Ballroom A (Independence Level 5B)
Chairing: B. Camoretti-Mercado, PhD

SLEEP AND RESPIRATORY NEUROBIOLOGY
Grand Hyatt Washington
Constitution Ballroom B (Constitution Level 3B)
Chairing: S.P. Patil, MD, PhD

THORACIC ONCOLOGY
Renaissance Washington Downtown
Congressional Hall A (Ballroom Level)
Chairing: M.K. Gould, MD, MS

Tuesday, May 23
11:45 a.m. – 1:15 p.m.

PLENARY SESSION
Walter E. Washington Convention Center
Room 207 A-B (South Building, Level 2)

The Plenary Session features a talk by Marc L. Busch, PhD, an expert on international trade policy and law. Dr. Busch will address the implications of multinational trade agreements on health care systems.

The Plenary Session will also feature the introduction of the ATS slate of officers for 2017-2018 and the presentation of 3 Respiratory Health Awards: Outstanding Clinician Award, Outstanding Educator Award, and the Research Innovation and Translation Achievement Award.
The American Thoracic Society’s Washington Office works on legislative and regulatory issues on behalf of ATS members. The Washington Office is the hub of an advocacy network that enables ATS members to quickly and easily participate in public policy debates by interacting with members of Congress and the federal government.

Below are just a few examples of the recent accomplishments of the ATS advocacy program:

• Advocated in Congress for research funding increases at NIH, CDC, EPA and VA
• Helped enact legislation to accelerate the development and approval of new antibiotics for drug resistant infections and initiatives to support young investigators through enactment of the CURES Act
• Secured Medicare coverage of lung cancer screening
• Developed new CPT codes for pulmonary, critical care and sleep medicine;
• Participated in multiple court cases to preserve EPA’s authority to reduce air pollution;
• Participated in multiple court cases to defend FDA’s authority to regulate all tobacco products;
• Supported legislation to re-authorize and expand CDC’s domestic and international TB control programs.
• Supported legislation to address “burn pits” research in the VA;

To keep ATS members informed of its activities on Capitol Hill, the Society’s Washington Office publishes the Washington Letter, a weekly e-newsletter that updates members on what’s happening in Washington, DC. To ensure members know about changes related to Medicare coding and regulatory compliance issues, the ATS publishes the ATS Coding & Billing Quarterly, a newsletter which covers ICD-10 codes, CPT codes, Medicare regulations and responses to member questions about coding and billing issues. The ATS also produces the ATS Research News Quarterly, which provides research news on the NIH and other federal research programs. The Washington Office also sends alerts out to the membership when immediate action is needed.

To learn more about ATS advocacy initiatives and recent successes—as well as how you can become involved—please contact the ATS Government Relations staff by regular mail, phone or email, or by visiting the “advocacy” section of our website www.thoracic.org.

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CORPORATE MEMBERSHIP PROGRAM

For more information, please visit www.thoracic.org