



**HARVARD**  
MEDICAL SCHOOL

This course  
sold out the past 2 years.  
Early registration for the 2018  
program is strongly  
advised.

# Pulmonary and Critical Care Medicine 2018

April 29 - May 2, 2018 • Royal Sonesta Boston, Cambridge, MA

**Diagnosis**

**Physical Examination**

**New Therapies**

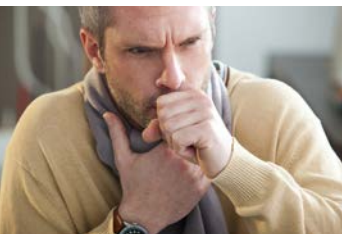
**Treatment Plans**

**Procedures**

**Patient Counseling**

- High-flow oxygen therapy for respiratory failure
- Gut and lung microbiome: emerging implications for lung health
- Incorporating new biologic therapies into your practice
- Pulmonary embolus: the latest treatment strategies
- Expanded diagnostic options for mycobacterial infection
- New practice recommendations for treating sepsis
- ICU advances for ECMO and delirium
- Guidance to conduct end-of-life discussions
- Lung cancer: new targeted therapies and immunotherapies
- Influenza: pathogenesis and emerging therapies
- New oral antithrombotic agents

*Earn up to 34.00 AMA PRA Category 1 Credits™*



R. Scott Harris, MD; Kathryn A. Hibbert, MD; David J. Kanarek, MD; B. Taylor Thompson, MD



MASSACHUSETTS  
GENERAL HOSPITAL

**Register at [PCC.HMSCME.com](http://PCC.HMSCME.com)**

# Course Highlights

Practitioners from around the world attend this course for:

**Pulmonary Physicians**

**Critical Care Physicians**

**Internists**

**Nurse Practitioners**

**Physician Assistants**

**Residents and Fellows**

- The most current guidelines for treating sepsis
- Gut and lung microbiome: emerging implications for lung health
- Best practices to apply the newest asthma and COPD drugs
- How to navigate controversies surrounding therapeutic hypothermia (including if and when to use it)
- New approaches that improve outcomes for patients with unexplained chronic cough
- When and how to utilize high-flow oxygen
- When to consider ECMO in a hypoxemic patient
- 2018 guidelines for management of lung nodules
- Proper usage of new antithrombotic agents
- Targeted therapies and immunotherapies for lung cancer
- When to consider lung transplantation
- When and how to use the new drugs in IPF
- Expert advice on mycobacterial diagnostics and therapy
- 2018 updates for severe influenza: pathogenesis, and when and how to employ peramivir, zanamivir, oseltamivir
- New concepts in the use of vasopressors in septic shock
- New drugs and combinations in pulmonary hypertension
- New management strategies for pulmonary embolus



## Sleep Medicine for the Practicing Pulmonologist

Wednesday,  
May 2, 1:30-4:45 pm

- Treating sleep apnea
- Sleep diagnostics
- Non-invasive ventilation

This program includes comprehensive updates and best practices to optimize outcomes for patients with:

- Chronic cough
- COPD
- Lung nodules
- Sleep apnea
- Asthma
- Influenza
- GERD
- Sarcoidosis
- Sepsis
- ARDS
- Thromboembolism
- Lung cancer
- Interstitial lung disease
- Pulmonary hypertension
- Mycobacterial disease
- Mechanical ventilation
- Neurologic emergencies
- Pleural disease
- Lung transplantation
- Bronchiectasis

This program is among the highest-rated Harvard Medical School CME courses



# HARVARD MEDICAL SCHOOL

Dear Colleague,

As busy clinicians, we have all experienced the growing pile of unread journals or patients' questions about a new medication that we haven't had time to research. It's hard to keep up with the pace of diagnostic and treatment updates, and this puts us at risk of managing patients with outdated strategies.

To effectively synthesize reams of new data in a way that can impact patient outcomes requires protected time away from life's otherwise full schedule. That's why we started this conference over thirty years ago.

Focused on evidence-based and practical strategies, this program:

- Consolidates updates in the areas of greatest importance in pulmonary and critical care medicine.
- Is taught by master clinicians that can deliver information in an entertaining way.
- Ensures that attendees leave not only with new treatment strategies and guidelines and an understanding of newer diagnostic options, but also with specific recommendations to incorporate these updates into practice.
- Actively encourages faculty and participants to develop lasting professional relationships.
- Offers a glimpse into the future of the field with short talks given by world-renowned experts on inspiring and cutting-edge topics.

Most of us went into this profession to use our diagnostic and therapeutic knowledge to help patients. Now, with more attention being paid to "practice variability" by health professionals, the need to continuously hone diagnostic and therapeutic skills has never been greater. We encourage you to join us in April for this timely and important program.

Sincerely,



**R. Scott Harris, MD**  
*Associate Professor  
of Medicine,  
Harvard Medical School*



**Kathryn A. Hibbert, MD**  
*Instructor in Medicine,  
Harvard Medical School*



**David J. Kanarek, MD**  
*Associate Clinical  
Professor of Medicine,  
Harvard Medical School*



**B. Taylor Thompson, MD**  
*Professor of Medicine,  
Harvard Medical School*



# FACULTY

## Harvard Medical School Faculty

Todd L. Astor, MD  
Katharine E. Black, MD  
Robert Brown, MD  
Bartolome R. Celli, MD  
Colleen L. Channick, MD  
Richard N. Channick, MD  
Joselyn L. Cho, MD  
Paul Currier, MD  
Benjamin T. Davis, MD  
Maha Farhat, MD  
Fiona K. Gibbons, MD  
Michael A. Gillette, MD, PhD  
Leo C. Ginns, MD  
Jason Griffith, MD  
C. Corey Hardin, MD, PhD  
R. Scott Harris, MD  
Rebecca Suk Heist, MD  
Dean Hess, PhD, RRT  
Kathryn A. Hibbert, MD  
Calvin Huang, MD  
Rocío M. Hurtado, MD, DTM&H  
Vicki A. Jackson, MD  
David J. Kanarek, MD  
Colleen M. Keyes, MD, MPH  
Rachel Knipe, MD  
Puja Kohli, MD  
Richard L. Kradin, MD  
David J. Kuter, MD, DPhil  
Peggy Lai, MD  
Gregory D. Lewis, MD  
Aidan A. Long, MBBCh  
Theresa C. McLoud, MD  
Benjamin D. Medoff, MD  
James E. Mojica, MD, FAASM  
Sydney B. Montesi, MD  
Isabel Neuringer, MD  
John L. Niles, MD  
Crystal M. North, MD  
Walter J. O'Donnell, MD  
Yuval Raz, MD  
Krishna Reddy, MD  
Josanna M. Rodriguez-Lopez, MD  
Emily Rubin, MD  
Kai Saukkonen, MD  
B. Taylor Thompson, MD  
Vladimir Vinarsky, MD  
Alison Witkin, MD  
Sahar Zafar, MD

## Guest Faculty

L. Christine Oliver, MD  
*Adjunct Faculty, Division of Occupational and Environmental Health, Dalla Lana School of Public Health, University of Toronto*

# OVERVIEW

## Course Description

The objective of Pulmonary and Critical Care Medicine 2018 is to review subjects of major clinical importance together with current approaches to their diagnosis and their management. The topics include a variety of intensive care issues such as sepsis, ARDS, vasopressors and ventilator management, as well as pulmonary issues such as lung transplantation, interstitial lung disease, COPD, pulmonary hypertension, cough, pleural disease, sleep apnea, pneumonia, tuberculous and non-tuberculous mycobacteria, asthma, the management of thromboembolism, and lung cancer. The course utilizes lectures and case discussion, supplemented by extensive lecture notes and an accompanying bibliography, and informal meet-the-professor sessions.

The program features expert speakers with diverse teaching methodologies, including lecture seminars, case discussion and expert panels (Meet-the-Professor) for interactive question/answer sessions. The use of multiple learning methodologies to engage the learners in the educational process will assist them in developing new strategies to use in their daily practice.

Pulmonary and Critical Care Medicine 2018 is presented in the highest standard of academic rigor. The topics presented are evidence based, and will inform and inspire the participants to retain the newly acquired knowledge and incorporate it into their daily practice.

## Learning Objectives

Upon completion of this course, participants will be able to:

- Evaluate the pathophysiology of lung disease and critical illness, including key pathologic and radiologic features
- Apply evidence from recent literature to clinical case management
- Incorporate new clinical practice guidelines into care to improve patient outcomes
- Utilize diagnostic and therapeutic tools offered by specialists outside of pulmonary and critical care medicine to optimally care for complicated patients

## Accreditation

ACCREDITATION COUNCIL FOR CONTINUING MEDICAL EDUCATION  
The Harvard Medical School is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Harvard Medical School designates this live activity for a maximum of 34.00 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### NURSE PRACTITIONERS and NURSES

For the purpose of recertification, the American Nurses Credentialing Center accepts *AMA PRA Category 1 Credit™* issued by organizations accredited by the ACCME (Accreditation Council for Continuing Medical Education). We would also suggest that learners check with their state licensing board to ensure they accept reciprocity with *AMA PRA Category 1 Credit™* for re-licensure.

### PHYSICIAN ASSISTANTS

The National Commission on Certification of Physician Assistants (NCCPA) states that *AMA PRA Category 1 Credits™* are acceptable for continuing medical education requirements for recertification. We would also suggest that learners check with their state licensing board to ensure they accept reciprocity with *AMA PRA Category 1 Credit™* for re-licensure.

### CANADIAN ACCREDITATION

The Royal College of Physicians and Surgeons of Canada recognizes conferences and workshops held outside of Canada that are developed by a university, academy, hospital, specialty society or college as accredited group learning activities.

### EUROPEAN ACCREDITATION

Through an agreement between the American Medical Association and the European Union of Medical Specialists, physicians may convert *AMA PRA Category 1 Credit™* to an equivalent number of European CME Credits® (ECMECs®). Information on the process of converting *AMA PRA Category 1 Credits™* to ECMECs® can be found at: [www.eaccme.eu](http://www.eaccme.eu)

## Disclaimer

CME activities sponsored by Harvard Medical School are offered solely for educational purposes and do not constitute any form of certification of competency. Practitioners should always consult additional sources of information and exercise their best professional judgment before making clinical decisions of any kind.

# PULMONARY AND CRITICAL CARE MEDICINE 2018

## SUNDAY, APRIL 29

7:00 - 7:55	<b>Registration Continental Breakfast</b>
7:55 - 8:00	<b>Welcome</b> David J. Kanarek, MD
<b>Morning Sessions</b> <i>Moderated by Jason Griffith, MD</i>	
8:00 - 8:40	<b>GERD in Pulmonology: When Is It Causing Lung Disease and How Can We Treat It?</b> David J. Kanarek, MD
8:40 - 9:20	<b>Noninvasive Respiratory Support: High-Flow Nasal Cannula, Continuous Positive Airway Pressure, and Noninvasive Ventilation</b> Dean Hess, PhD, RRT
9:20 - 10:00	<b>Emerging Concepts in COPD</b> Bartolome R. Celli, MD
10:00 - 10:20	Coffee break ( <i>refreshments provided</i> )
10:20 - 11:00	<b>Occupational and Environmental Lung Disease: Detection, Diagnosis, Treatment, and Legal Implications</b> L. Christine Oliver, MD
11:00 - 11:40	<b>ECMO</b> Yuval Raz, MD
11:40 - 12:20	<b>Diagnosis and Management of IPF: How Do We Use the New Drugs?</b> Sydney B. Montesi, MD
12:20 - 1:40	Break for lunch*
1:00 - 1:30	<b>Lunch Hour Presentation: MGH Best Cases</b> Fellows ( <i>Bring your own lunch</i> )
<b>Afternoon Sessions</b> <i>Moderated by Krishna Reddy, MD</i>	
1:40 - 2:20	<b>Cystic Fibrosis and Bronchiectasis: Understanding CFTR and New Treatment Options</b> Isabel Neuringer, MD
2:20 - 3:00	<b>Vasopressors in Septic Shock: A New Paradigm</b> R. Scott Harris, MD
3:00 - 3:40	<b>Interstitial Lung Disease and Autoimmune Disease: Which Tests and What Treatment?</b> Katharine E. Black, MD
3:40 - 4:00	Coffee break ( <i>refreshments provided</i> )
4:00 - 4:40	<b>Pleural Disease: 2018 Updates</b> Colleen M. Keyes, MD, MPH
4:40 - 5:20	<b>Uncommon and Rare Lung Disease</b> Leo C. Ginns, MD
5:20 - 6:00	<b>Thoracic Ultrasound in Critical Care</b> Calvin Huang, MD

## MONDAY, APRIL 30

7:00 - 8:00	<b>Meet the Professors Continental Breakfast</b>
<b>Morning Sessions</b> <i>Moderated by Laura Brenner, MD</i>	
8:00 - 8:40	<b>Prognosis and Uncertainty in the ICU</b> Walter J. O'Donnell, MD
8:40 - 9:20	<b>New Therapeutics in Lung Disease: The Age of Immunotherapy</b> Benjamin D. Medoff, MD
9:20 - 10:00	<b>Sedation, Analgesia, and Early Mobility: State of the Art in 2018</b> Crystal M. North, MD
10:00 - 10:20	Coffee break ( <i>refreshments provided</i> )
10:20 - 11:00	<b>ARDS: State-of-the-Art Strategies to Protect the Lung</b> Kathryn A. Hibbert, MD
11:00 - 11:40	<b>Common Neurologic Issues in the ICU</b> Sahar Zafar, MD
11:40 - 12:20	<b>The Pulmonary Microbiome</b> Peggy Lai, MD
12:20 - 1:40	Break for lunch*
1:00 - 1:30	<b>Lunch Hour Presentation: Protein Biomarkers: Improving Diagnostics in Cardiopulmonary and Critical Care Medicine</b> Michael A. Gillette, MD, PhD ( <i>Bring your own lunch</i> )
<b>Afternoon Sessions</b> <i>Moderated by Emily Rubin, MD</i>	
1:40 - 2:20	<b>Pneumonia, Community and Hospital Acquired: Revised 2018 Guidelines and Treatment Strategies</b> Benjamin T. Davis, MD
2:20 - 3:00	<b>New Approaches to the Unexplained Chronic Cough</b> Kai Saukkonen, MD
3:00 - 3:40	<b>Atypical Mycobacterial Disease</b> Rocio M. Hurtado, MD, DTM&H
3:40 - 4:00	Coffee break ( <i>refreshments provided</i> )
4:00 - 4:40	<b>Current Asthma Concepts: 2018 Treatment Approaches and Guidelines</b> Aidan A. Long, MBBSCh
4:40 - 5:20	<b>Palliative Care</b> Vicki A. Jackson, MD
6:00 - 8:00	<b>Networking Reception</b> Paul S. Russell, MD Museum of Medical History & Innovation, MGH

# PULMONARY AND CRITICAL CARE MEDICINE 2018

## TUESDAY, MAY 1

7:00 - 8:00 **Meet the Professors Continental Breakfast**

### Morning Sessions

*Moderated by Vladimir Vinarsky, MD*

8:00 - 8:40 **Interventional Pulmonology in 2018**  
Colleen L. Channick, MD

8:40 - 9:20 **Pathogenesis of Sepsis and Current Treatment Guidelines: Evolution of a New Paradigm**  
B. Taylor Thompson, MD

9:20 - 10:00 **Lung Transplantation: Updates on When to Refer, Lung Allocation, and Patient Selection**  
Todd L. Astor, MD

10:00 - 10:20 Coffee break (*refreshments provided*)

10:20 - 11:00 **Exercise and Cardiopulmonary Disorders: Indications and Interpretation**  
Gregory D. Lewis, MD

11:00 - 11:40 **Treatment of Non-Small Cell Lung Cancer: Traditional Chemotherapy, Targeted Therapies, and Immunotherapies**  
Rebecca Suk Heist, MD

11:40 - 12:20 **The Role of Lung Biopsy in the ICU**  
Richard L. Kradin, MD

12:20 - 1:40 Break for lunch\*

1:00 - 1:30 **Lunch Hour Presentation: MGH Best Cases**  
Fellows (*Bring your own lunch*)

### Afternoon Sessions

*Moderated by Alison Witkin, MD*

1:40 - 2:20 **Severe Influenza Infection: Pathogenesis and Emerging Therapies**  
Josalyn L. Cho, MD

2:20 - 3:00 **Thrombotic Mechanisms and Antithrombotic Agents: How Do the New Oral Agents Fit In?**  
David J. Kuter, MD, DPhil

3:00 - 3:40 **Sarcoidosis: How to Approach Treatment Challenges**  
Fiona K. Gibbons, MD

3:40 - 4:00 Coffee break (*refreshments provided*)

4:00 - 4:40 **Pulmonary Embolism and DVT: Updates in Diagnosis and Improved Treatment**  
Richard N. Channick, MD

4:40 - 5:20 **Pulmonary Hypertension: Evaluation and Controversy in Management**  
Josanna M. Rodriguez-Lopez, MD

5:20 - 6:00 **Stratification of Lung Nodules**  
Theresa C. McLoud, MD

## WEDNESDAY, MAY 2

7:00 - 8:00 **Meet the Professors Continental Breakfast**

### Morning Sessions

*Moderated by Rachel Knipe, MD*

8:00 - 8:40 **New Diagnostic Approaches to Tuberculosis and Implications for Emerging Resistance in Other Pathogens**  
Maha Farhat, MD, MSc

8:40 - 9:20 **Therapeutic Hypothermia: Controversies and Consensus in 2018**  
R. Scott Harris, MD

9:20 - 10:00 **There's No Such Thing as "Weaning"**  
Robert Brown, MD

10:00 - 10:20 Coffee break (*refreshments provided*)

10:20 - 11:00 **Physiology Principles in the ICU**  
C. Corey Hardin, MD

11:00 - 11:40 **Hemorrhage and ANCA-Associated Disease**  
John L. Niles, MD

11:40 Course Adjourns

## WEDNESDAY AFTERNOON



**Sleep Medicine for the Practicing Pulmonologist**  
*Presiding: Puja Kohli, MD*

*Presenter: James E. Mojica, MD, FAASM*

1:30 - 2:15 **Obstructive Sleep Apnea**

2:15 - 3:00 **Central Sleep Apnea**

3:00 - 3:15 Coffee break (*refreshments provided*)

3:15 - 4:00 **Sleep Diagnostics: Home Testing, Lab-Based Testing, Pulse Oximetry, and Device Downloads Using Cards and Wi-Fi**

4:00 - 4:45 **Non-invasive Ventilation for Neuromuscular Disorders and Alveolar Hypoventilation Syndromes**

\*There are many convenient and varied lunch options within a short walking distance of the course.

Program changes/substitutions may be made without notice. To view the most up-to-date version of the course program, please visit the course website.



## Register at [PCC.HMSCME.com](http://PCC.HMSCME.com)

	Course Tuition	
<b>Pulmonary and Critical Care Medicine 2018</b> Course #732605-1802	Register after March 15, 2018	Register on or before March 15, 2018
<b>Physicians</b>	\$1,295	\$1,195 (SAVE \$100)
<b>Allied Health Professionals and Residents/Fellows</b>	\$1,195	\$1,095 (SAVE \$100)
<b>SPECIAL ADD-ON WORKSHOP (OPTIONAL)</b>		
<b>Sleep Medicine for the Practicing Pulmonologist</b> <i>Wednesday, May 2, 1:30 - 4:45 pm</i>	\$185	

Your tuition includes all breakfasts and coffee breaks, complimentary internet access, and a special reception at the Russell Museum on Monday evening, April 30. All attendees of Pulmonary and Critical Care Medicine 2018 will receive a flash drive containing course materials. You can purchase a printed copy of these materials at the time of registration for \$50, or on site at the course for \$90 (while supplies last).

### Registration, Payment, Confirmation and Refund Policy

Registrations for Harvard Medical School CME programs are made via our secure online registration system. To register for this course, please visit the course website at [PCC.HMSCME.com](http://PCC.HMSCME.com).

At the end of the registration process, a \$5 non-refundable processing fee will be added to your registration, and you will have the choice of paying by check or credit card (Visa, MasterCard, or American Express).

If you are paying by check (draft on a US bank), the online registration system will provide you with instructions and a printable form for remitting your course fees by check. Postal, telephone, fax, and cash-payment registrations are not accepted. Fees shown in USD.

Upon receipt of your paid registration, an email confirmation from the HMS GCE office will be sent to you. Be sure to include an email address that you check frequently. Your email address is used for critical information, including registration confirmation, evaluation, and certificate. Refunds, less an administrative fee of \$75, will be issued for all cancellations received two weeks prior to the start of the course. Refund requests must be received by postal mail, email, or fax. No refund will be issued should cancellation occur less than two weeks prior. "No shows" are subject to the full course fee and no refunds will be issued once the conference has started.

### Venue

Royal Sonesta Boston  
40 Edwin Land Boulevard  
Cambridge, Massachusetts 02142  
+1 617-806-4200

### Accommodations

A limited number of discounted rooms\* have been reserved at the Royal Sonesta Boston until April 6, 2018. Please call the hotel directly at 617-806-4200 and ask for Reservations, or toll free at 1-800-SONESTA (766-3782). It is important to identify yourself as part of the Harvard Pulmonary & Critical Care Course 2018 to take advantage of the special group rate of \$289 per person single/double occupancy. You can also make your discounted reservation online before April 6 by going to the course website at [PCC.HMSCME.com](http://PCC.HMSCME.com) and clicking on the dedicated reservation link on the Venue page.

\*Please note that the discounted rooms may sell out before the deadline.

**Please do not make non-refundable travel arrangements until you have received an email from the HMS GCE office confirming your paid registration.**

### Questions?

Call 617-384-8600 Mon-Fri 9am – 5pm (ET). Send e-mail to [CEPrograms@hms.harvard.edu](mailto:CEPrograms@hms.harvard.edu).

