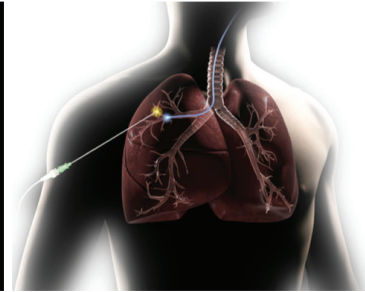
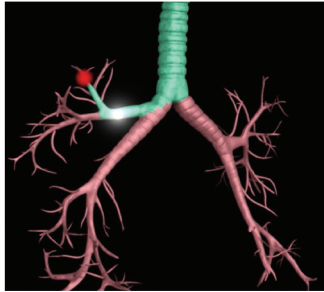
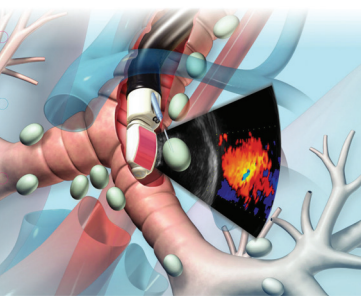


Johns Hopkins University School of Medicine  
Division of Pulmonary and Critical Care Medicine  
*presents*

# **EBUS** and **Advanced Diagnostic Bronchoscopy: The Seventh Year**



**July 26-27, 2018**  
**Hyatt Regency Chesapeake Bay**  
**Cambridge, Maryland**

This activity has been approved for **AMA PRA Category I Credits™**.



This course has been endorsed by  
the American Thoracic Society.

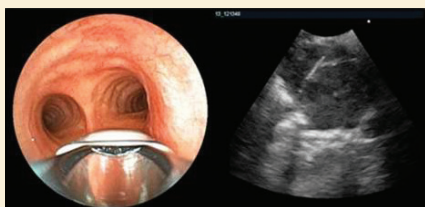


This course has been endorsed by the  
World Association for Bronchology  
and Interventional Pulmonology.



**JOHNS HOPKINS**  
MEDICINE

## Description



This activity is designed to educate the practicing pulmonologist and thoracic surgeon as well as other health care professionals in the teaching of endobronchial ultrasound (EBUS) and advanced bronchoscopy. The course is designed to offer a comprehensive training session in EBUS and advanced bronchoscopy and to allow the participant the opportunity to train with experts in the field. Participants will develop a comprehensive knowledge

of the indications and algorithms for approaching patients with mediastinal adenopathy and integrate the information from lecture sessions and hands-on experience to earn a certificate of completion for EBUS.

## Who Should Attend

This activity is intended for pulmonologists, thoracic surgeons, certified registered nurse anesthetists, nurse practitioners, physician assistants, nurses, respiratory therapists, and any allied health professionals interested in the up-to-date care of patients with thoracic malignancy.

## Objectives

After attending this activity, the participant will demonstrate the ability to:

- Use endobronchial ultrasound to guide mediastinal staging.
- Discuss the relevance of mediastinal pathophysiology and how it relates to lung cancer diagnosis and staging.
- Improve evaluation and management of patients with mediastinal/hilar adenopathy and lung nodules.

## ACCREDITATION STATEMENT

The Johns Hopkins University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.



## CREDIT DESIGNATION STATEMENT

The Johns Hopkins University School of Medicine designates this live activity for a maximum of 12.25 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## MOC STATEMENT

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 12.25 MOC points and patient safety MOC credit in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.



## PAIN MEDICINE STATEMENT

This activity should cover topics that are required under the Maryland Board of Physicians pain management requirement.

## OTHER CREDIT

**American Academy of Nurse Practitioners National Certification Program** accepts *AMA PRA Category 1 Credit*<sup>™</sup> from organizations accredited by the ACCME.

**American Academy of Physician Assistants (AAPA)** accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit*<sup>™</sup> from organizations accredited by ACCME. Physician assistants may receive a maximum of 12.25 AAPA Category 1 CME credits for completing this program.

Application has been made to the **American Association for Respiratory Care (AARC)** for continuing education contact hours for respiratory therapists.

**American Nurses Credentialing Center (ANCC)** accepts *AMA PRA Category 1 Credit*<sup>™</sup> from organizations accredited by the ACCME.

The Johns Hopkins University has approved this activity for 12.25 **contact hours for non-physicians**.

## POLICY ON SPEAKER AND PROVIDER DISCLOSURE

It is the policy of the Johns Hopkins University School of Medicine that the speaker and provider globally disclose conflicts of interest. The Johns Hopkins University School of Medicine OCME has established policies in place that will identify and resolve all conflicts of interest prior to this educational activity. Detailed disclosure will be made in the instructional materials.

# General Information

## EARLY REGISTRATION

Wednesday, July 25, 2018 - 3:00 - 5:00 p.m.

## REGISTRATION

Thursday, July 26, 2018 - 7:30 a.m.

## LOCATION

Hyatt Regency Chesapeake Bay  
100 Heron Boulevard  
Cambridge, Maryland 21613

## FEES

**Methods of Payment:** We require full payment prior to the start of the activity. On-site payments by credit card only. For group registrations that must pay by one company check, please call (410) 955-2959 for special instructions. Early bird registration is available for registrations received prior to 5 p.m. ET on **May 1, 2018**. The registration fee includes instructional materials, continental breakfasts, refreshment breaks, and lunches.

	Early Bird Before 5/1/18	Regular After 5/1/18
<b>Registration Fees</b>		
Physicians (Full Course).....	\$1,095.....	\$1,295
Physicians (Lectures Day One Only) .....	\$695 .....	\$795
Residents*, Fellows*, AHP's, CRNA's, NP's, PA's, RN's, and RT's (Full Course).....	\$295 .....	\$350
Residents*, Fellows*, AHP's, CRNA's, NP's, PA's, RN's, and RT's (Lectures Day One Only) .....	\$195 .....	\$250
*with verification of status		

You will receive a confirmation by e-mail. If you have not received it by **July 19, 2018**, call (410) 502-9634 to confirm that you are registered. A transcript of attendance will be available upon attestation of your credit hours and submission of the post activity online evaluation.

The Johns Hopkins University reserves the right to cancel or postpone any activity due to unforeseen circumstances. In this event, the University will refund the registration fee but is not responsible for travel expenses. Additionally, we reserve the right to change the venue to a comparable venue. Under such circumstances registrants will be notified as soon as possible.

## LATE FEE AND REFUND POLICY

A \$50 late fee applies to registrations received after 5:00 p.m. ET on **July 19, 2018**. A handling fee of \$50 will be deducted for cancellation. An additional fee may apply for cancellation of other events, including workshops and social activities. Refund requests must be received by fax or mail by **July 19, 2018**. No refunds will be made thereafter. Transfer of registration to another Johns Hopkins activity in lieu of cancellation is not possible.

## SYLLABUS

The syllabus will be accessible online and via your mobile device in the CloudCME App prior to the activity.

## WELCOME RECEPTION

A complimentary reception for registrants and faculty will be held 6:00 - 7:00 p.m. on Wednesday, **July 25, 2018**. Please indicate your attendance on the registration form.

*Please note:* The commercial support received is solely for the educational component of this activity and will not be used to support this social event.

## HOTEL AND TRAVEL INFORMATION

### Hyatt Regency Chesapeake Bay

100 Heron Boulevard  
Cambridge, Maryland 21613  
Phone: (410) 901-1234  
Fax: (410) 901-6302  
Website: [www.chesapeakebay.hyatt.com](http://www.chesapeakebay.hyatt.com)

## HOTEL RESERVATION CUT-OFF DATE:

**June 26, 2018**

An extraordinary Eastern Shore experience awaits you at the Hyatt Regency Chesapeake Bay. Beautifully situated on the banks of the Choptank River, this 400-acre hotel and resort in Cambridge, Maryland is a delightful location to immerse yourself in paradise. Get away from the city grind with golf, swimming, sailing, fishing, and spa services, all available on-site at this AAA Four Diamond hotel. It's all within reach of Philadelphia, Washington, Baltimore, or wherever you call home. Make your reservation online at <https://aws.passkey.com/go/EBUS2018> or call (888) 421-1442 and specify that you are attending the **Johns Hopkins EBUS** course to receive the special group rate of \$259, single or double, plus \$30 resort fee, plus tax. On-site self parking is complimentary. Valet parking is available at an additional charge. Check-in time is 4:00 p.m. Check out time is 11:00 a.m.

# General Information *continued*

## HOW TO OBTAIN CREDIT

Post activity, an online evaluation will be available to attendees to evaluate the activity and individual presentations and to identify future educational needs. Upon completion of the evaluation, the learner must attest to the number of hours in attendance. Credits earned will be added to the learner's transcript and immediately available for print. The last day to access the evaluation and attest to your credits is **September 10, 2018**.

An outcome survey will be sent to all physician attendees within two months post activity to assist us in determining what impact this activity had on the learner's practice.

## EMERGENCY CALLS

On July 25 – 27, 2018, direct emergency calls to (410) 901-1234 and ask that a message be sent to the Johns Hopkins registration desk. Messages will be posted for participants.

## AMERICANS WITH DISABILITIES ACT

The Johns Hopkins University School of Medicine fully complies with the legal requirements of the ADA and the rules and regulations thereof. *Please notify us if you have any special needs.*

## ACKNOWLEDGEMENT

Applications for commercial support from health care related industries are pending. A complete list of contributors will be provided in the syllabus. Please note that commercial support received is solely for the educational component of the activity and will not be used to provide food and beverage.

*Please note:* The Physician Payments Sunshine Act was enacted by Congress to increase public awareness of financial relationships between drug and medical device manufacturers and physicians. In compliance with the requirements of this Act, the commercial supporter/s of this activity may require the Johns Hopkins University School of Medicine to report certain professional information (such as name, address, National Provider Identifier (NPI), and State License number) of physician attendees who receive complimentary food and beverage in conjunction with a CME activity. The commercial supporter is required to submit the collected data to the Centers for Medicare and Medicaid Services which will then publish the data on its website.

## TO REGISTER or FOR FURTHER INFORMATION

Register Online.....	<a href="https://hopkinscme.cloud-cme.com/aph.aspx?P=5&amp;EID=11444">https://hopkinscme.cloud-cme.com/aph.aspx?P=5&amp;EID=11444</a>
Register by Phone .....	(410) 502-9634
Register by Fax.....	(866) 510-7088
Confirmation/Certificates/Transcripts .....	(410) 502-9634
General Information .....	(410) 955-2959
E-mail the Office of CME.....	<a href="mailto:cmenet@jhmi.edu">cmenet@jhmi.edu</a>

Follow us on Twitter: <http://twitter.com/HopkinsCME>

Facebook: <http://www.facebook.com/HopkinsCME>

Sponsoring Division Website: [www.hopkinsmedicine.org/IP](http://www.hopkinsmedicine.org/IP)

For general information, the direct link for this CME activity web page is:  
<https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11444>



Check out our mobile app **CloudCME**.  
Organization Code: **HopkinsCME**

For website and CloudCME mobile app technical difficulties, email: [cmetechnsupport@jhmi.edu](mailto:cmetechnsupport@jhmi.edu).

# Program

## Wednesday, July 25, 2018

- 3:00 - 5:00 Early Registration  
6:00 - 7:00 Welcome Reception

## Thursday, July 26, 2018

- 7:30 - 7:55 Registration and Continental Breakfast  
7:55 - 8:00 **Welcome and Conference Goals**  
Lonny Yarmus, DO, FCCP  
8:00 - 8:20 **The Importance of Staging in Lung Cancer**  
Gerard Silvestri, MD, MS  
8:20 - 8:40 **The History of Conventional TBNA**  
Ko-Pen Wang, MD  
8:40 - 9:00 **Convex EBUS: The Principles and the Data**  
Fabien Maldonado, MD  
9:00 - 9:20 **EBUS Step by Step, Mastering the Basics**  
Diana Yu, MD  
9:20 - 9:40 **The Little Needle that Could: EBUS Specimens for Next Generation Sequencing**  
Andrew Lerner, MD  
9:40 - 10:00 **Pathology Perspective: A Pulmonologist Hands Me a Needle: Now What?**  
Peter Illei, MD  
10:00 - 10:20 Refreshment Break  
10:20 - 10:40 **EBUS in the Periphery: Current Landscape and Future Concepts**  
Alexander Chen, MD  
10:40 - 11:00 **Diagnostics in the Periphery of the Lung: The Final Frontier**  
Hans Lee, MD  
11:00 - 11:20 **Sedation for Bronchoscopy: Pearls and Pitfalls**  
Haitham Al-Grain, MD  
11:20 - 11:40 **In Office Tracheobronchoscopy and Airway Procedures**  
Alexander Hillel, MD  
11:40 - 12:00 **Advanced Therapeutics in COPD, Asthma, and Robotics in Lung Cancer**  
David Feller-Kopman, MD, FCCP  
12:00 - 12:20 **Business Pearls and Pitfalls for Starting an EBUS Program**  
Momen Wahidi, MD, MBA, FCCP  
12:20 - 12:45 **Bronchoscopy in High Risk Patients: An Expert Panel**  
Haitham Al-Grain, MD  
Nadia Hansel, MD, MPH  
Fabien Maldonado, MD  
Stephen Mathai, MD, MHS  
Meredith McCormack, MD, MHS  
Christian Merlo, MD, MHS  
David Misselhorn, RRT  
12:45 - 1:45 Lunch

## Physician Track

- 1:45 - 4:00 **Hands-On: EBUS High and Low Fidelity Simulation**  
Alexander Chen, MD,  
Fabien Maldonado, MD, and  
Momen Wahidi, MD, MBA, FCCP

## Contributory Professionals and Procedural Specialists Track (AHP's, CRNA's, NP's, PA's, RN's, and RT's)

- 1:45 - 2:00 **Welcome and Breakout Goals**  
Lonny Yarmus, DO, FCCP  
2:00 - 2:30 **Nursing Roles in Pulmonary Procedures**  
Kelly Walter, BSN  
2:30 - 3:00 **Role of Respiratory Therapy in Bronchoscopy Procedures**  
David Misselhorn, RRT  
3:00 - 3:30 **Role for Advanced Practice Nurses and Physician Assistants in Pulmonary Procedures**  
Joseph Patrick Balao, MSN, CRNP  
3:30 - 4:00 **Mastering the EBUS Specimen: How to Optimize Yield with Hands-On**  
Peter Illei, MD

## Friday, July 27, 2018

- 7:30 - 8:00 Continental Breakfast  
8:00 - 8:05 **Welcome and Hands-On Goals**  
Lonny Yarmus, DO, FCCP  
8:05 - 3:00 **Hands-On Stations:**
  - Cryobiopsy and Tumor Ablation
  - EBUS-TBNA The Basics
  - High-Fidelity EBUS Stimulation
  - Interventions for Pleural Effusions and Pneumothorax
  - Management of the Prolonged Airleak
  - Navigational Bronchoscopy
  - Navigational Transthoracic Needle Biopsy
  - Needle Advancements in EBUS TBNA
  - Radial EBUS Basic Principles
  - Rigid Bronchoscopy and Airway Stents/ Tumor Extraction Techniques/ Balloon Dilation
  - ROSE (Rapid Onsite Evaluation) of EBUS Specimens

10:00 - 10:30 Refreshment Break  
12:00 - 1:00 Lunch  
3:00 Adjourn

You will receive an email notification to complete the evaluation form and to attest to the number of hours in attendance.

The registration desk will remain open during conference hours.

*This schedule is subject to change.*

*The Johns Hopkins University School of Medicine takes responsibility for the content, quality and scientific integrity of this CME activity.*

# Speakers

## ACTIVITY DIRECTOR

**Lonny Yarmus, DO, FCCP**

Associate Professor of Medicine and Oncology

## JOHNS HOPKINS SPEAKERS

**Haitham Al-Grain, MD**

Assistant Professor of Anesthesiology and Critical Care Medicine

**Joseph Patrick Balao, MSN, CRNP**

Acute Care Nurse Practitioner

**Nadia Hansel, MD, MPH**

Associate Professor of Medicine

**Alexander Hillel, MD**

Associate Professor of Otolaryngology-Head and Neck Surgery

**David Feller-Kopman, MD, FCCP**

Professor of Medicine, Anesthesiology and Critical Care Medicine, and Otolaryngology-Head and Neck Surgery

**Peter Illei, MD**

Assistant Professor of Pathology

**Hans Lee, MD**

Associate Professor of Medicine

**Andrew Lerner, MD**

Clinical Associate  
Sibley Memorial Hospital  
Washington, D.C.

**Stephen Mathai, MD, MHS**

Associate Professor of Medicine

**Meredith McCormack, MD, MHS**

Associate Professor of Medicine

**Christian Merlo, MD, MHS**

Associate Professor of Medicine

**Kelly Walter, BSN**

Endoscopy Nurse  
Johns Hopkins Bayview Medical Center

**Ko-Pen Wang, MD**

Associate Professor of Medicine and Otolaryngology-Head and Neck Surgery

## JOHNS HOPKINS HANDS-ON FACULTY

**Hitesh Batra, MD**

Assistant in Medicine

**Jesi Oswiecimka, CT (ASCP)**

Cytopathology Technician

**Susan Otell, CT (ASCP)**

Cytopathology Technician

**Majid Shafiq, MD, MPH**

Assistant in Medicine

## GUEST SPEAKERS

**Alexander Chen, MD**

Assistant Professor of Medicine  
Washington University School of Medicine in St. Louis  
St. Louis, Missouri

**Fabien Maldonado, MD**

Associate Professor of Medicine and Thoracic Surgery  
Vanderbilt University School of Medicine  
Nashville, Tennessee

**David Misselhorn, RRT**

Registered Respiratory Therapist  
Barnes-Jewish Hospital  
Washington University School of Medicine  
St. Louis, Missouri

**Gerard Silvestri, MD, MS**

Professor of Medicine  
Medical University of South Carolina  
Charleston, South Carolina

**Momen Wahidi, MD, MBA, FCCP**

Director, Interventional Pulmonology and  
Bronchoscopy  
Duke University School of Medicine  
Durham, North Carolina



# Registration Form

Course Number 80044484 / EID 11444

## EBUS and Advanced Diagnostic Bronchoscopy: The Seventh Year

July 26-27, 2018

To Register: **Online:** <https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11444>

**By fax:** (866) 510-7088 **By phone:** (410) 502-9634

Or mail this form to the Johns Hopkins University, Office of Continuing Medical Education, 720 Rutland Avenue, Turner 20, Baltimore, Maryland 21205-2195. Include e-check or credit card information below.

FULL PAYMENT IS REQUIRED PRIOR TO THE START OF THE ACTIVITY.

I am a Johns Hopkins speaker for this activity.

Please type or print clearly:

last name		first name	m.i.	
highest degree	primary specialty		Hopkins faculty/staff only JHED ID	
For Physicians Only: NPI – 10 digits		State License #	State of License	
ABIM#		Birth Month	Birth Day	
<input type="checkbox"/> I provide permission for my MOC completion information to be shared and transmitted to the Accreditation Council for Continuing Medical Education (ACCME).				
mailing address				
city		state	ZIP	country
daytime telephone		fax number		
e-mail (required)				

Check here if you wish to receive e-mail notices about upcoming CME activities.

I plan to stay at the Hyatt Regency Chesapeake Bay in Cambridge, Maryland.

What do you hope to learn by attending this activity? \_\_\_\_\_

Please notify us if you have any special needs. \_\_\_\_\_

### Registration Fees:

**Early Bird** (Before 5/1/18)

**Regular** (After 5/1/18)

Physicians (*Full Course*) ..... \$1,095 ..... \$1,295

Physicians (*Lectures Day One Only*) ..... \$695 ..... \$795

Residents\*, Fellows\*, AHP's, CRNA's, NP's, PA's, RN's, and RT's  
(*Full Course*) ..... \$295 ..... \$350

Residents\*, Fellows\*, AHP's, CRNA's, NP's, PA's, RN's, and RT's  
(*Lectures Day One Only*) ..... \$195 ..... \$250

\*with verification of status

### Welcome Reception:

Yes  No \_\_\_\_ Number of Additional Guests

The registration fee includes instructional materials and food and beverage. Early bird registration is available for registrations received prior to 5:00 p.m. ET on **May 1, 2018**. For registrations received after 5:00 p.m. ET on **July 19, 2018**, include a \$50 late fee. On-site registrations are payable only by credit card.

For group registrations that must pay by one company check, please call (410) 955-2959 for special instructions.

Total amount \$ \_\_\_\_\_

### Payment Type:

**JHU Faculty/Staff Only:** If you are using your Tuition Remission Benefit or an ION budget, please upload your fully completed and approved form in the payment section of the online activity link above.

TR Form: <http://benefits.jhu.edu/documents/trffacandstaff.pdf>

ION Form: <http://hopkinscme.edu/migration/IonRequest.pdf>

**e-Check** Routing Number \_\_\_\_\_ Account Number \_\_\_\_\_

**Credit Card:**  VISA  MASTERCARD  DISCOVER  AMEX

Card # \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Exp. Date \_\_\_\_\_

Billing Zip Code \_\_\_\_\_ Security Code \_\_\_\_\_

Name on Card

Signature and Date



**JOHNS HOPKINS**  
M E D I C I N E

Office of Continuing Medical Education  
Turner 20, 720 Rutland Avenue  
Baltimore, Maryland 21205-2195

# **EBUS** and **Advanced Diagnostic Bronchoscopy: The Seventh Year**

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**CloudCME**

Check out our mobile app **CloudCME**.  
Organization Code: **HopkinsCME**

<https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11444>



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