ANESTHESIOLOGY UPDATE 2019
Boston, MA • May 13-17, 2019

Education, Advances, and Updates to Optimize Patient Outcomes
Guidelines, Practice Recommendations, Drug Updates, Risk Management

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

- Perioperative myocardial protection
- Evidence-based neuroprotection strategies
- Trauma and blood management
- Difficult airway
- Advances in regional anesthesia
- Care of the parturient
- Apology and disclosure
- Opioid crisis
- New drugs in the anesthesia pipeline
- Multimodal general anesthesia
- Enhanced recovery after surgery
- End-of-life care
- Preventing burnout

Optional Hands-On Workshops
- Regional Anesthesia
- ACLS Recertification
- Difficult Airway
- Acupuncture
- Meditation for Stress Mitigation

Optional Excursion
- Tour of the Ether Dome

Register at Anesthesiology.HMSCME.com
Anesthesiology Update 2019

Course Description
This in-depth course, sponsored by the Harvard Medical School Departments of Anesthesia and Continuing Education, is intended to provide anesthesia practitioners with a comprehensive review of the most important advances in clinical anesthesiology and each of its major subspecialties, including ambulatory, thoracic, pediatric, obstetric, regional, and cardiac anesthesia. The program will include lectures, panel discussions, problem-based discussions, and workshops, along with ample time for interaction with faculty.

The course will include basic principles, while emphasizing clinical problems and controversial aspects of patient care. We will continue our popular format from previous years, with intensive all-day programs and evening workshops to provide hands-on instruction and practice, demonstrating our commitment to lifelong learning and providing a dynamic continuing educational experience to clinical and research professionals in the field of anesthesiology.

Learning Objectives
Upon completion of this course, participants will be able to:
• Adopt principles for practicing perioperative ultrasound
• Diagnose and develop a treatment plan for cerebrovascular emergencies
• Recognize best practices in preoperative evaluation and risk assessment
• Integrate updated guidelines into practice when managing the difficult airway
• Implement current principles for appropriate opioid use and pain management
• Embrace the latest evidence-based practices in obstetric anesthesia
• Incorporate multimodal general anesthesia and enhanced recovery into clinical practice
• Adopt best practices in managing patients with morbid obesity and sleep apnea
• Integrate evidence-based protocols when practicing regional anesthesia
• Accept new drugs into anesthesia practice

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

The Harvard Medical School designates this live activity for a maximum of 54.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

• Course only, no Lunch-and-Learn Roundtable Discussions = 37.75 AMA PRA Category 1 Credits™
• Course, including optional Lunch-and-Learn Roundtable Discussions (5.00) = 42.75 AMA PRA Category 1 Credits™
• Course (37.75) with Tues. Regional Workshop (3.75), Weds. Airway Workshop (3.75), and Thurs. ACLS Workshop (3.75) = a maximum of 49.00 AMA PRA Category 1 Credits™
• Course (37.75) with Tues. Ether Dome Tour (2.25) = 40.00 AMA PRA Category 1 Credits™

NURSE ANESTHETISTS
This program has been prior approved by the American Association of Nurse Anesthetists for 50.75 Class A CE credits; Code Number 1036969; Expiration Date 5/17/2019.

RISK MANAGEMENT
This activity meets the criteria of the Massachusetts Board of Registration in Medicine for 17.50 hours of Risk Management Study. This includes 7.00 credits in Opioid Education and Pain Management Training and 1.75 credits of End-of-Life Care Studies. Please check your individual state licensing board requirements before claiming these credits.

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.
Monday, May 13

6:30-7:30  Registration and Continental Breakfast

Physiology and Pharmacology: The New Essentials
Moderator: Sugantha Sundar, MD

7:30-8:15  TIVA vs. Inhalation Anesthesia: A Practical Comparison
Talmage D. Egan, MD

8:15-9:00  Anesthesiologists as Master Physiologists: The New Perioperative Physician
Jeanine P. Wiener-Kronish, MD

9:00-9:45  Management of Patients with Obesity: Best Practices in Clinical Pharmacology of Intravenous Anesthetics
Talmage D. Egan, MD

9:45-10:00 Q&A
Drs. Egan, Sundar and Wiener-Kronish

10:00-10:15 Break (refreshments provided)

Improving Outcomes for Our Patients
Moderator: Keira P. Mason, MD

10:15-11:00 Findings from the Perioperative Brain Health Initiative and Their Impact on Day-to-Day Practice
Lee A. Fleisher, MD

11:00-11:45 Measuring Patient Outcomes in the Perioperative Period
Lee A. Fleisher, MD

11:45-12:30 Updates in Multimodal General Anesthesia Principles and Practices
Emery Brown, MD, PhD

12:30-12:45 Q&A
Drs. Brown, Mason and Fleisher

12:45-2:15 Optional Lunch-and-Learn Roundtables

2:15-3:00 Airway Management in 2019
Moderator: Hovig Chitilian, MD

2:15-3:00 Improved Methods for Awake Fibreoptic Intubation and New Difficult Airway Society Guidelines
Ellen O’Sullivan, FRCA, FCAI, FCPSP

3:00-3:45 The Role of Videolaryngoscopy in 2019
Hovig Chitilian, MD

3:45-4:30 Emergency Surgical Airway following “Can’t Intubate and Can’t Oxygenate”
Ellen O’Sullivan, FRCA, FCAI, FCPSP

4:30-5:15 Key Lessons Learned from the Difficult Airway Registry
Peter Kovatsis, MD

5:15-5:30 Q&A
Drs. Chitilian, Kovatsis and O’Sullivan

Reception and Scientific Poster Session

5:30-7:30 Join faculty and colleagues for refreshments and current research in anesthesiology
Detailed submission guidelines, abstract submission form, and disclosure form can be found at: Anesthesiology.HMSCME.com/abstracts

Tuesday, May 14

6:30-7:30  Continental Breakfast

What Is New in the Anesthesia Literature?
Moderator: Sugantha Sundar, MD

7:30-8:10 Myocardial Injury after Non-Cardiac Surgery
Daniel I. Sessler, MD

8:10-8:50 Nitrous Oxide in Adult Anesthesia: Is This the End?
Philippe Richebé, MD, PhD, DESAR

8:50-9:00 Q&A
Drs. Richebé, Sessler and Sundar

9:00-9:15 Break (refreshments provided)

Tools to Reduce Hospital Length of Stay
Moderator: Jeremi R. Mountjoy, MD, MSc, FRCPC

9:15-9:55 How to Implement Enhanced Surgical Recovery and Get It to Stick
Michael (Monty) G. Mythen, MBBS, MD, FRCA, FFICM, FCAI (Hon)

9:55-10:25 Persistent Postsurgical Pain (PPSP): The Science and Clinical Implications for the Anesthesia Practitioner
Philippe Richebé, MD, PhD, DESAR

10:25-10:55 Perioperative Thermoregulation
Daniel I. Sessler, MD

10:55-11:20 Clinical Applications of Tranexamic Acid: When It’s a Friend (and When It’s a Foe)
Susan Goobie, MD, FRCP

11:20-11:30 Q&A
Drs. Goobie, Mountjoy, Mythen, Richebé and Sessler

11:30-1:00 Optional Lunch-and-Learn Roundtables

Preoperative Assessment
Moderator: Assia Valovska, MD

1:00-1:30 Challenging Cases in Anesthesiology: Adult Patients
Angela M. Bader, MD, MPH

1:30-2:00 Challenging Cases in Anesthesiology: Pediatric Patients
Lynne R. Ferrari, MD

2:00-2:15 Q&A
Drs. Bader, Ferrari and Valovska

2:15-2:30 Break (refreshments provided)

Care of the Parturient
Moderator: Philip Hess, MD

2:30-3:00 HELLP! How to Keep Moms with Preeclampsia Safe
Brian T. Bateman, MD, MSc

3:00-3:30 Practicing Obstetric Anesthesia in the Wake of Drug Shortages
Lisa Leffert, MD

3:30-4:00 Cardiac Disease in the Parturient
Philip Hess, MD

4:00-4:30 Obstetric General Anesthesia: Ten Ways to Reduce Risk and Incidents
Lawrence C. Tsen, MD

4:30-5:00 PDPH Diagnosis and Treatment: Review of Recent Research and Its Immediate Clinical Implications
Michaela Farber, MD

5:00-5:30 Q&A
Drs. Bateman, Farber, Hess, Leffert and Tsen

Optional Workshop or Tour

5:30-10:00 Regional Anesthesia Workshop
Hyun Kee Chung, MD (Limited to 50 attendees)
Includes dinner

5:30-8:00 Ether Dome Tour
Susan Vassallo, MD (Limited to 50 attendees)
Includes transportation and refreshments
### Agenda

#### Wednesday, May 15

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30-7:30</td>
<td>Continental Breakfast</td>
</tr>
<tr>
<td>7:30-8:10</td>
<td><strong>Old Debates: New Evidence</strong> Moderator: Keira P. Mason, MD</td>
</tr>
<tr>
<td>8:10-8:50</td>
<td>Fit for Surgery: What Does This Mean? Michael (Monty) G. Mythen, MBBS, MD, FRCA, FFICM, FCAI (Hon)</td>
</tr>
<tr>
<td>8:50-9:30</td>
<td>Fluids or Vasopressors: From Waterworld to Wasteland Wadid Habre, MD, PhD</td>
</tr>
<tr>
<td>9:30-10:05</td>
<td>Perioperative Management of Traumatic Brain Injury Christian Werner, MD, PhD</td>
</tr>
<tr>
<td>10:05-10:15</td>
<td>Q&amp;A                      Drs. Habre, Mason, Mythen and Werner</td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>Break (refreshments provided)</td>
</tr>
<tr>
<td></td>
<td><strong>Everyday Clinical Challenges</strong> Moderator: Keira P. Mason, MD</td>
</tr>
<tr>
<td>10:30-11:10</td>
<td>Monitoring the Central Nervous System in 2019 Christian Werner, MD, PhD</td>
</tr>
<tr>
<td>11:10-11:50</td>
<td>Are We Poisoning Our Patients? Neurotoxicity and Other Toxicity of Anesthetic Agents in Children Gregory Hammer, MD</td>
</tr>
<tr>
<td>11:50-12:30</td>
<td>Perioperative Management of Implantable Cardioverter Defibrillator Scott Streekenbach, MD</td>
</tr>
<tr>
<td>12:30-12:45</td>
<td>Q&amp;A                      Drs. Hammer, Mason, Streekenbach and Werner</td>
</tr>
<tr>
<td>12:45-2:15</td>
<td>Optional Lunch-and-Learn Roundtables</td>
</tr>
<tr>
<td>2:15-2:40</td>
<td>Advances and New Research in Cardiac Anesthesia J. Daniel Muehlschlegel, MD, MMSc</td>
</tr>
<tr>
<td>2:40-3:05</td>
<td>Improving Outcomes in Esophageal Surgery Jeremi R. Mountjoy, MD, MSc, FRCPc</td>
</tr>
<tr>
<td>3:05-3:30</td>
<td>Establishing and Refining a Culture of Safety in Anesthesia and Sedation Keira P. Mason, MD</td>
</tr>
<tr>
<td>3:30-3:45</td>
<td>Q&amp;A                      Drs. Mason, Mountjoy, Muehlschlegel and Valovska</td>
</tr>
</tbody>
</table>

#### Thursday, May 16

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30-7:30</td>
<td>Continental Breakfast</td>
</tr>
<tr>
<td>7:30-8:10</td>
<td><strong>Protecting Myocytes: The Aging Neurons</strong> Moderator: Sujatha Sundar, MD</td>
</tr>
<tr>
<td>8:10-8:50</td>
<td>Cardioprotective Effects of Anesthetic Agents: Myth or Reality? Stefan De Hert, MD, PhD</td>
</tr>
<tr>
<td>8:50-9:30</td>
<td>What to Do with Perioperative Beta-Blocking Therapy, Anno 2019 Stefan De Hert, MD, PhD</td>
</tr>
<tr>
<td>9:30-9:45</td>
<td>Q&amp;A                      Drs. Crosby, De Hert and Sundar</td>
</tr>
<tr>
<td>9:45-10:00</td>
<td>Break (refreshments provided)</td>
</tr>
<tr>
<td></td>
<td><strong>Perioperative Care of the Obese Patient</strong> Moderator: Stephanie B. Jones, MD</td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Predicting and Managing MODA: The Morbid Obesity Difficult Airway naveen eipe, MBBS, MD</td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Evidence-Based Management of Obstructive Sleep Apnea Ewar Sundar, MD</td>
</tr>
<tr>
<td>11:00-11:30</td>
<td>The Obese Patient in the PACU: VTE, Rhabdomyolysis and PONV Stephanie B. Jones MD</td>
</tr>
<tr>
<td>11:30-12:00</td>
<td>Ambulatory Surgery in Morbid Obesity: Controversies and Conundrums naveen eipe, MBBS, MD</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td>Q&amp;A                      Drs. Eipe, Jones and Sundar</td>
</tr>
<tr>
<td>12:15-1:45</td>
<td>Optional Lunch-and-Learn Roundtables</td>
</tr>
<tr>
<td>1:45-2:15</td>
<td><strong>The Art of Ambulatory and Office-Based Anesthesia</strong> Moderator: Jeremi R. Mountjoy, MD, MSc, FRCPc</td>
</tr>
<tr>
<td>2:15-2:45</td>
<td>Office-Based Anesthesia: Practice Management and Accreditation Fred Shapiro, DO</td>
</tr>
<tr>
<td>2:45-3:15</td>
<td>Clinical Applications of Ketamine Satya Krishna Ramachandran, MD</td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>Q&amp;A                      Drs. Kunze, Mountjoy, Ramachandran and Shapiro</td>
</tr>
<tr>
<td>3:30-3:45</td>
<td>Break (refreshments provided)</td>
</tr>
<tr>
<td></td>
<td><strong>Hot Topics in Pain Management</strong> Moderator: Asia Valovska, MD</td>
</tr>
<tr>
<td>3:45-4:15</td>
<td>Placebo and Clinical Practice Brian E. McGeeney, MD, MPH, MBA</td>
</tr>
<tr>
<td>4:15-4:45</td>
<td>Establishing a Smooth Transition of Care: From Acute to Chronic Pain Musa Anes, MD</td>
</tr>
<tr>
<td>4:45-5:15</td>
<td>Evidence-Based Perioperative Management of the Opioid-Tolerant Patient Thomas Simopoulos, MD, MA</td>
</tr>
<tr>
<td>5:15-5:30</td>
<td>Q&amp;A                      Drs. Aner, McGeeney, Simopoulos and Valovska</td>
</tr>
<tr>
<td>5:30-10:00</td>
<td>Optional Skills Development Workshop</td>
</tr>
</tbody>
</table>

Disclaimer: CME activities accredited 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.
Lunch-and-Learn Roundtables

Tailor your education at Anesthesiology Update 2019 with the optional buffet Lunch-and-Learn Roundtables listed below. Each luncheon session focuses in depth on one important topic, with insights provided and interactive discussion led by a master clinician or subject matter expert. Participation is limited to 25 attendees per session to ensure all participants get their questions answered.

**Friday, May 17**

6:30-7:30  Continental Breakfast

**Management of Trauma and Hemorrhage**
Moderator: Jeremi R. Mountjoy, MD, MSc, FRCP

7:30-8:10  Stat Trauma to the Operating Room: Management Pearls
David Silver, MD

8:10-8:50  Point-of-Care Ultrasound
Feroze Mahmood, MD, FASE

8:50-9:25  Factor Concentrates in the Perioperative Period
Adam Lerner, MD

9:25-10:00  Perioperative Blood Transfusion Guidelines
Lynne Uhl, MD

10:00-10:15  Q&A
Drs. Lerner, Mahmood, Mountjoy, Silver and Uhl

10:15-10:30  Break (refreshments provided)

**End-of-Life Care**
Moderator: Keira P. Mason, MD

10:30-11:05  Comfort: Symptom Management for Patients at the End of Life
Kathleen Lee, MD

11:05-11:40  Communication Needs of Patients and Their Families at the End of Life
Rachelle Bernacki, MD

11:40-12:15  Continuity: Hospice Care and Care of the Bereaved
Sue E. Morris, PsyD

12:15-12:45  Q&A
Drs. Bernacki, Lee, Mason and Morris

12:45-1:00  Closing Remarks
Sugantha Sundar, MD

**Optional Tour of the Ether Dome**
Tuesday evening, May 14

---

**IMPORTANT NOTE:** These roundtable luncheons are not included with the standard conference registration. You must add them onto your registration. Slots are filled on a first-come, first-served basis, and most or all roundtables will sell out, so early registration is strongly recommended.

*Personal finance sessions not eligible for AMA PRA Category 1 Credit™*

---

**Monday, May 13**

**Saving for Retirement: Getting Started, Understanding the Options, and Maximizing Savings for the Long Haul**
Jonathan Griswold, MD

**Risk Mitigation: Apology and Disclosure—Support for the Second Victim**
Patricia H. Folcarelli, RN, MA, PhD and Stephen D. Pratt, MD

**Simple, Effective Solutions for the Management of the Narcotic-Tolerant Patient**
Paragi Rana, MD

**The Witches’ Brew: Street Drugs in 2019**
Assia Valovska, MD

---

**Tuesday, May 14**

**Perioperative Lung Ultrasound**
Achikam Oren-Grinberg, MD, MS

**Financial Considerations for Those Nearing or Entering Retirement: Approaches for Asset Utilization, Social Security, and RMDs**
Jonathan Griswold, MD

**Managing the Obese Parturient**
Vilma E. Ortiz, MD

**Challenging Cases from the Thoracic Operating Room**
Qi Ott, MD and Nelson Thaemert, MD

---

**Wednesday, May 15**

**Becoming More Resilient in the Most Stressful Jobs of Anesthesiology and Critical Care Medicine (How to Thrive, Not Just Survive, in the OR and ICU)**
Gregory Hammer, MD

**Strategies for Saving for College**
Jonathan Griswold, MD

**Tracheostomy Placement: Not Merely Plug and Play**
Stephanie Yacoubian, MD

**Acupuncture Workshop**
Yuan-Chi Lin, MD and Cynthia Tuong, MD, MPH

**The CRNA Perspective: Academic versus Private Practice**
Janet Valicenti, CRNA and Nelson Aquino, CRNA, MS

---

**Thursday, May 16**

**Corporate Structure and Financial Implications for Private Anesthesia Practice**
Anh Ngo, MD

**Anesthetic Implications for Mechanical Thrombectomy after Embolic Stroke**
Lauren Buhl, MD, PhD and Ala Nozari, MD, PhD

**Managing the Pregnant Patient for Non-Obstetric Surgery**
Jaime L. Daly, MD and Richard Steinbrook, MD

**Blocks Beyond the Sciatic Nerve: When and How**
Ivan Valovski, MD

**The Everyday and the Rare: Anesthesia for Interventional Pulmonology Procedures**
Ameeka Pannu, MD and John Pawlowksi, MD, PhD
More than 80 nationally and internationally renowned leaders in the fields of Ambulatory, Cardiac, Critical Care, Obstetric, Pain Management, Pediatric, Regional, and Thoracic Anesthesiology provide focused education, pairing updates and best practices with specific recommendations to incorporate them into practice for improved patient care.

A special feature of the 2019 program is the degree to which you can customize your learning experience. Choose from 23 roundtables and skills development workshops to align your experience with your specific practice needs.

Results-Driven Education

- Patient safety
- Clinical outcomes
- Quality measures
- Improved hands-on skills
- Clinician wellness
- Risk reduction

Register at Anesthesiology.HMSCMEd.com
Registration Information

Anesthesiology Update 2019
(Course #732425-1902)

<table>
<thead>
<tr>
<th></th>
<th>Tuition</th>
<th>Register on or before March 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians and CRNAs</td>
<td>$1,495</td>
<td>$1,395 (SAVE $100)</td>
</tr>
<tr>
<td>Residents, Fellows, and Students</td>
<td>$1,295</td>
<td>$1,195 (SAVE $100)</td>
</tr>
</tbody>
</table>

Optional Activities

**Optional Lunch-and-Learn Roundtables**
*Monday through Thursday afternoons (Each roundtable limited to a maximum of 25 participants)*

- $75 each

**Optional Workshops** *(Optional workshops limited to a maximum of 50 participants)*

- **Tuesday evening, May 14**
  - Ether Dome Tour (off site): Includes refreshments and transportation
  - Regional Anesthesia Workshop (on site): Includes dinner
  - $85

- **Wednesday evening, May 15**
  - Difficult Airway Workshop (off site): Includes dinner and transportation
  - $350

- **Thursday evening, May 16**
  - ACLS Workshop (on site): Includes dinner
  - $350

Your tuition includes all breakfasts and coffee breaks, a reception and poster session on the evening of Monday, May 13, and complimentary internet in the meeting room. All attendees of Anesthesiology Update 2019 will receive an electronic syllabus.

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 Anesthesiology.HMSCME.com.

At the end of the registration process, a $10 non-refundable processing fee will be added to your registration, and you will have the choice of paying by check, credit card (Visa, MasterCard, or American Express), or wire transfer in USD. If you are paying by check (draft on a US bank), the online registration system will provide you with instructions for remitting your course fees. Postal, telephone, fax, and cash-payment registrations are not accepted. Fees shown in USD.

Upon receipt of your paid registration, an email confirmation 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 email. 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
Fairmont Copley Plaza
138 St. James Avenue • Boston, Massachusetts
+1 617-267-5300

ACCOMMODATIONS*
A limited number of discounted rooms have been reserved at Fairmont Copley Plaza until April 18, 2019. You can call the hotel reservation line at 1-800-441-1414 to make a room reservation. When calling the hotel, please specify that you are enrolled in this activity to request a reduced room rate. Hotel arrangements may also be made online by April 18, 2019 by visiting the course website and clicking on the dedicated reservation link on the Venue page.

*Please book early, as the discounted rooms may sell out before the deadline.

Please do not make non-refundable travel arrangements until you have received an email confirming your paid registration.

INQUIRIES
Call 617-384-8600 Monday – Friday, 9am – 5pm (ET). Send email to CEPrograms@hms.harvard.edu

Register at Anesthesiology.HMSCME.com