Cardiovascular Medicine 2017
Updates for the Practitioner
APRIL 30 - MAY 4
BOSTON, MA

New Findings and Advances for:

- Atherosclerosis, CAD, and inflammation
- Antithrombotic and antiplatelet agents
- Advanced heart failure and cardiomyopathy
- Devices and procedures in the cardiac cath lab, including TAVR and transcatheter mitral valve therapies
- Electrophysiology interventions
- Valvular heart disease
- Vascular medicine, including PAD, diseases of the aorta, and vasculitis
- Confronting challenges in atrial fibrillation

Under the direction of
Samuel Z. Goldhaber, MD
Peter Libby, MD
Patrick O’Gara, MD

> Diagnosis and treatment of vascular emergencies such as dissection of the aorta and acute massive/submassive pulmonary embolism
> Case-based approaches to heart failure management
> Emerging imaging and therapeutic technologies
> Intersection of cardiovascular medicine with internal medicine

Earn up to: 39.50 AMA PRA Category 1 Credits™
39.50 Prescribed credits from the AAFP

Register at Cardiovascular.HMSCME.com
Dear Colleague:

On behalf of Brigham and Women’s Hospital and Harvard Medical School, I invite you to attend the acclaimed biennial course, Cardiovascular Medicine 2017: Updates for the Practitioner.

You can rely on this comprehensive program for critical updates and practice recommendations in all major areas of cardiovascular medicine, including:

- Atherosclerosis: prevention and inflammation
- Valvular heart disease
- Advanced heart failure and cardiomyopathy
- Atrial fibrillation
- Cardio-oncology
- Ventricular arrhythmias, ICDs and pacemakers
- Pulmonary embolism and pulmonary hypertension
- Vascular medicine, including peripheral artery disease, hypertension, aortic dissection, and vasculitis

Our faculty, world-renowned for their clinical, research and teaching achievements, cover recent advances and current controversies in:

- Stroke prevention and treatment, including management tips for patients with atrial fibrillation
- Mechanical circulatory support
- Novel oral anticoagulants and antiplatelet agents
- Integrated multimodality cardiovascular imaging
- Management of obstructive sleep apnea and its cardiovascular consequences
- Late-breaking information regarding cardiovascular benefits and risks of anti-diabetic drugs

With so many rapid advances in cardiovascular medicine, it is critically important to ensure your knowledge is both current and comprehensive. Our course provides new and returning attendees the opportunity to learn and interact closely with our faculty.

Sincerely yours,

Samuel Z. Goldhaber, MD
Course Director
Professor of Medicine, Harvard Medical School
Section Head, Vascular Medicine, Cardiovascular Division
Brigham and Women’s Hospital

Register at Cardiovascular.HMSCME.com
Course Description

This course is an intensive and comprehensive review of cardiovascular medicine geared to mid-career practitioners.

The objective of this 5-day course is to provide a concise, state-of-the-art overview of the epidemiology, diagnosis, treatment, and prevention of cardiovascular disease, with focused sessions on atherosclerosis, acute coronary syndromes, congestive heart failure, cardiomyopathy, electrophysiology, vascular medicine, venous thromboembolism, cardiovascular imaging, and valvular heart disease.

Who Should Attend

Physicians, Nurse Practitioners, Physician Assistants and Pharmacists in the following fields:

- Cardiology
- Internal Medicine
- Family Medicine
- Gerontology
- Interventional Cardiology
- Vascular Medicine
- Hospital Medicine
- Emergency Medicine
- Critical Care Medicine

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 39.50 AMA PRA Category 1 Credit™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AMERICAN ACADEMY OF FAMILY PHYSICIANS

This Live activity, Cardiovascular Medicine 2017: Updates for the Practitioner, with a beginning date of 04/30/2017, has been reviewed and is acceptable for up to 39.50 Prescribed credit(s) by the American Academy of Family Physicians. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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.

ABMS/ACGME COMPETENCIES

This course is designed to meet one or more of the following American Board of Medical Specialties and Accreditation Council of Graduate Medical Education competencies: medical knowledge, and practice-based learning and improvement.

IOM COMPETENCIES

This course is designed to meet one or more of the following Institute of Medicine competencies: provide patient-centered care, employ evidence-based practice, and utilize informatics.

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### SUNDAY • APRIL 30, 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>6:30 am</td>
<td>Registration and Breakfast</td>
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<tr>
<td>7:45 am</td>
<td>Seating</td>
</tr>
<tr>
<td>8:00 am</td>
<td>Welcome, Introductions, Course Objectives</td>
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<tr>
<td></td>
<td>Samuel Z. Goldhaber, MD; Peter Libby, MD;</td>
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<td></td>
<td>Patrick O’Gara, MD; Calum A. MacRae, MD, PhD</td>
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<tr>
<td>8:50 am</td>
<td>Discussion, Q&amp;A</td>
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<tr>
<td>9:00 am</td>
<td>Targeting and Reducing Inflammation in Atherothrombosis:</td>
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<td></td>
<td>JUPITER, CANTOS, and CIRT Trials</td>
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<td></td>
<td>Paul M Ridker, MD, MPH</td>
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<tr>
<td>9:35 am</td>
<td>Discussion, Q&amp;A</td>
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<tr>
<td>9:45 am</td>
<td>Rapid-Fire Lipid Disorder Cases: Low HDL, High Triglycerides,</td>
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<td></td>
<td>Lack of Statin Adherence, PCSK9 Inhibitors</td>
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<td></td>
<td>Jorge Plutzky, MD</td>
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<tr>
<td>10:20 am</td>
<td>Discussion, Q&amp;A</td>
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<tr>
<td>10:30 am</td>
<td>Coffee Break (refreshments provided)</td>
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### THOMAS W. SMITH, MD MEMORIAL LECTURE

Session Chair: Peter Libby, MD

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10:50 am</td>
<td>Diabetic Cardiomyopathy: Foxglove, FoxO, and Failure</td>
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<td>Joseph A. Hill, MD, PhD</td>
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<tr>
<td>11:40 am</td>
<td>Discussion, Q&amp;A</td>
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<tr>
<td>11:50 am</td>
<td>Lunch Break</td>
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### VALVULAR HEART DISEASE SYMPOSIUM

Session Chair: Deepak L. Bhatt, MD, MPH

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1:00 pm</td>
<td>Mitral Valve Disease: Hemodynamics, Clinical Assessment, and Guidelines</td>
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<tr>
<td></td>
<td>Patrick O’Gara, MD</td>
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<tr>
<td>1:35 pm</td>
<td>Discussion, Q&amp;A</td>
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<tr>
<td>1:45 pm</td>
<td>Transcatheter Aortic and Mitral Valve Therapies</td>
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<td>Pinak B. Shah, MD</td>
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<td>2:20 pm</td>
<td>Discussion, Q&amp;A</td>
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### EUGENE BRAUNWALD, MD LECTURE

Session Chair: Patrick O’Gara, MD

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>2:30 pm</td>
<td>Congestive Heart Failure: The Past, the Present, and the Future</td>
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<td>Eugene Braunwald, MD</td>
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<tr>
<td>3:10 pm</td>
<td>Discussion, Q&amp;A</td>
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<td>3:20 pm</td>
<td>Snack Break (refreshments provided)</td>
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### ATRIAL FIBRILLATION

Session Chair: Laurence M. Epstein, MD

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>3:40 pm</td>
<td>Stroke Prevention in Atrial Fibrillation: Warfarin, Antiplatelet</td>
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<td>Therapy, and Novel Oral Anticoagulants: Where Do We Stand?</td>
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<td>Has the Dust Settled?</td>
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<td>Christian T. Ruff, MD, MPH</td>
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<tr>
<td>4:15 pm</td>
<td>Discussion, Q&amp;A</td>
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<tr>
<td>4:25 pm</td>
<td>Atrial Fibrillation: Rate versus Rhythm Control, Antiarrhythmic</td>
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<td>Therapy, Ablation, and Left Atrial Appendage Occlusion</td>
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<td>Gregory Michaud, MD</td>
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<tr>
<td>5:00 pm</td>
<td>Discussion, Q&amp;A</td>
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<tr>
<td>5:10 pm</td>
<td>The Genetics of Atrial Fibrillation</td>
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<td></td>
<td>Calum A. MacRae, MD, PhD</td>
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<tr>
<td>5:45 pm</td>
<td>Discussion, Q&amp;A</td>
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<tr>
<td>5:55 pm</td>
<td>ADJOURN DAY 1</td>
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MONDAY • MAY 1, 2017

CONGENITAL HEART DISEASE, PULMONARY EMBOLISM, PULMONARY HYPERTENSION, AND SYSTEMIC ARTERIAL HYPERTENSION
Session Chair: Samuel Z. Goldhaber, MD

8:00 am  Management of Pulmonary Embolism and Deep Vein Thrombosis, including Pathophysiology, Risk Stratification, Novel Oral Anticoagulants, Thrombolytic Therapy, Pharmacomechanical Therapy in the Cath Lab, Surgical Embolectomy, and Options for Extended Duration Anticoagulation Samuel Z. Goldhaber, MD

8:35 am  Discussion, Q&A

8:45 am  Right Heart Failure Due to Congenital Heart Disease: Several Case-Based Presentations Michael J. Landzberg, MD

9:20 am  Discussion, Q&A

9:30 am  Pulmonary Hypertension: Classification, Diagnosis, and Emerging Therapies Aaron B. Waxman, MD, PhD

10:05 am  Discussion, Q&A

10:15 am  Coffee Break (refreshments provided)

10:40 am  Systemic Arterial Hypertension: What Drugs and What Parameters Should We Use for Blood Pressure Control? Susan Cheng, MD

11:15 am  Discussion, Q&A

11:25 am  Precision Cardiovascular Medicine: Case Study of a Patient with Premature Atherothrombosis—Bedside-to-Bench Analysis and Bench-to-Bedside Implications for Care Joseph Loscalzo, MD, PhD

Noon  Discussion, Q&A

12:10 pm  Lunch Break

INTERSECTION OF CARDIOVASCULAR MEDICINE, INTERNAL MEDICINE, AND HIGH-RISK OBSTETRICS
Session Chairs: Samuel Z. Goldhaber, MD and Patrick O’Gara, MD

1:20 pm  What the General Cardiologist Needs to Know about Amyloidosis Rodney H. Falk, MD

1:55 pm  Discussion, Q&A

2:05 pm  Pericardial Disease: Etiology, Anti-Inflammatory Therapy, Duration of Therapy, Use of Colchicine, and Tips on Weaning from Prednisone Leonard S. Lilly, MD

2:40 pm  Discussion, Q&A

2:50 pm  Cardiovascular Management of High-Risk Pregnancy Anne Marie Valente, MD

3:25 pm  Discussion, Q&A

3:35 pm  Snack Break and Transition to Breakout Sessions

BREAKOUT SESSIONS I/II/III

3:50 pm  Session I: Rapid-Fire ECG Quiz Philip J. Podrid, MD

3:50 pm  Session II: Case-Based Stroke Prevention in Atrial Fibrillation Christian T. Ruff, MD, MPH

3:50 pm  Session III: Case-Based Geriatric Cardiology Conundrums Susan Cheng, MD

4:40 pm  Transition

4:50 pm  Session I: Rapid-Fire ECG Quiz Philip J. Podrid, MD

4:50 pm  Session II: Case-Based Stroke Prevention in Atrial Fibrillation Christian T. Ruff, MD, MPH

4:50 pm  Session III: Case-Based Geriatric Cardiology Conundrums Susan Cheng, MD

5:40 pm  Transition

5:50 pm  Session I: Rapid-Fire ECG Quiz Philip J. Podrid, MD

5:50 pm  Session II: Case-Based Stroke Prevention in Atrial Fibrillation Christian T. Ruff, MD, MPH

5:50 pm  Session III: Case-Based Geriatric Cardiology Conundrums Susan Cheng, MD

6:40 pm  ADJOURN DAY 2
“Among the many bullet points I have taken from this phenomenal program: maximizing beta blockade in CHF clinic; more use of bisoprolol; and improved assessment strategies in PVD.”

“I am utilizing the ideas presented in this course to start an outpatient heart failure clinic to decrease readmissions.”

“My practice has updated its use of platelet assays, its approach to STEMI/ NSTEMI treatment options and diagnosis, and the evaluation of surgical therapy.”

“The availability of the faculty at this course to answer questions was truly remarkable.”

“I have new insight into prevention of heart failure prior to onset.”

“The bench-to-bedside approach to teaching—pulling disease pathophysiology from the cellular/biochemical level and expanding it to human case examples and to the public health sphere—was exceptional.”
Learning Objectives

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

- Apply new guidelines and practice recommendations for lipid therapy with PCSK9 inhibitors and advanced heart failure therapies.
- Utilize methods for optimal integration of multimodality cardiovascular imaging with magnetic resonance, coronary CT, nuclear medicine, and echocardiography.
- Develop strategies to troubleshoot problems with pacemakers and ICDs.
- Utilize new strategies for minimizing hospital readmission rates for congestive heart failure.
- Determine when to refer patients for combination therapy of idiopathic pulmonary hypertension and which combinations of drugs are most successful.
- Discuss cardiovascular safety in athletes.
- Manage cardiovascular problems in high-risk pregnancies.
- Apply advances in amyloidosis management to their daily practice.
- Integrate updates in pericardial diseases into their practice.

DISCLOSURE POLICY: Harvard Medical School (HMS) adheres to all ACCME Essential Areas, Standards, and Policies. It is HMS's policy that those who have influenced the content of a CME activity (e.g., planners, faculty, reviewers, and others) disclose all relevant financial relationships with commercial entities so that HMS may identify and resolve any conflicts of interest prior to the activity. These disclosures will be provided in the activity materials along with disclosure of any commercial support received for the activity. Additionally, faculty members have been instructed to disclose any limitations of data and unlabeled or investigational uses of products during their presentations.

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.
### ADVANCED HEART FAILURE AND CARDIOMYOPATHY
Session Chair: Mandeep R. Mehra, MD, MPH

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<tr>
<th>Time</th>
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| 8:00 am| Advanced Heart Failure: State of the Art, including Mechanical Circulatory Support  
Mandeep R. Mehra, MD, MPH |
| 8:35 am| Discussion, Q&A                                                         |
| 8:45 am| Optimizing Medical Therapy of Hospitalized Patients with Advanced Heart Failure: Tricks of the Trade  
Garrick C. Stewart, MD |
| 9:20 am| Discussion, Q&A                                                         |
| 9:30 am| Preventing Readmission of Advanced Heart Failure Patients within 30 Days of Discharge: Optimizing Disease Management with Implementation Science and Therapies such as CardioMEMS® and Entresto®  
Akhay S. Desai, MD, MPH |
| 10:05 am| Discussion, Q&A                                                      |
| 10:15 am| Coffee Break (refreshments provided)  |
| 10:40 am| Clinical Importance of Assessing Quality of Life in Advanced Heart Failure Patients: Correlation with Prognosis and Association with Socioeconomic and Racial/Ethnic/Cultural Considerations  
Eldrin F. Lewis, MD, MPH |
| 11:15 am| Discussion, Q&A                                                      |

### CATH LAB REVASCULARIZATION OF ACUTE MI: CHANGE IN PHILOSOPHY REGARDING EXTENT OF REVASCULARIZATION?
Session Chair: Gregory Piazza, MD, MS

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<tr>
<th>Time</th>
<th>Session</th>
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| 11:25 am| Acute Coronary Syndromes: Revascularization in the Cardiac Cath Lab—Culprit Artery Only or ‘Complete Revascularization’?  
Laura Mauri, MD, MSc |
| Noon   | Discussion, Q&A                                                      |

### VASCULAR MEDICINE
Session Chairs: Samuel Z. Goldhaber, MD and Gregory Piazza, MD, MS

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 12:10 pm| Vasculitis, including Takayasu’s Arteritis, Giant Cell Arteritis, Thromboangiitis Obliterans (Buerger’s Disease), and Kawasaki Disease in the Adult  
Gregory Piazza, MD, MS |
| 12:45 pm| Discussion, Q&A                                                      |
| 12:55 pm| Lunch Break                                                             |
| 1:55 pm| “Code Aorta”: How to Organize a Strategic Multidisciplinary Response to a Potentially Fatal Vascular Emergency: Initial Results and Rapid-Fire Case Presentations  
Marc P. Bonaca, MD, MPH |
| 2:30 pm| Discussion, Q&A                                                      |
| 2:40 pm| Peripheral Arterial Disease: Pathophysiology, Intermittent Claudication, and Critical Limb Ischemia  
Gregory Piazza, MD, MS |
| 3:15 pm| Discussion, Q&A                                                      |
| 3:25 pm| Cardiovascular Benefits and Risks of Anti-Diabetic Drugs  
Marc A. Pfeffer, MD, PhD |
| 4:00 pm| Discussion, Q&A                                                      |
| 4:10 pm| Ongoing Potential Practice-Changing Trials in Pulmonary Embolism and Deep Vein Thrombosis: Do You Worship at the Altar of P < 0.05?  
Samuel Z. Goldhaber, MD |
| 4:45 pm| Discussion, Q&A                                                      |
| 4:55 pm| General Discussion, Wrap-up                                          |
| 5:00 pm| ADJOURN DAY 5                                                          |

Updates to diagnose, treat, and improve care for patients with:

- Acute coronary syndromes
- Congestive heart failure
- Atherosclerosis and inflammation
- Atrial fibrillation
- Congenital heart disease
- Diseases of the aorta
- Pulmonary thromboembolism
- Venous thromboembolism
- Pulmonary hypertension
- Diseases of the peripheral arteries and veins

Register at Cardiovascular.HMSCME.com
Cardiovascular Medicine 2017
(Course #732555-1702)

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<th>Tuition</th>
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<tr>
<td>Physicians</td>
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<tr>
<td>Allied Health Professionals, Residents, and Fellows</td>
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Your tuition includes continental breakfast, morning and afternoon coffee breaks, complimentary internet in the meeting room, course materials on flash drive, and a printed program book.

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 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, 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 DCE 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

The Fairmont Copley Plaza
138 St. James Avenue
Boston, Massachusetts
1-866-540-4417

ACCOMMODATIONS

A limited number of rooms have been reserved at the Fairmont Copley Plaza Hotel until April 7, 2017. When calling the hotel, be sure to specify that you are enrolled in this activity to receive a reduced room rate. Hotel arrangements can also be made online before April 7 by going to the course website and clicking on the course-specific link on the Venue page.

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

INQUIRIES

Call 617-384-8600 Mon-Fri 9am – 5pm EST. Send e-mail to CEPrograms@hms.harvard.edu.