



**HARVARD**  
MEDICAL SCHOOL

This special program is offered only once every 3 years. Early registration is strongly advised.

# Thrombosis and Thromboembolism

October 18–19, 2018 | Boston MA

Under the direction of Samuel Z. Goldhaber, MD and Paul M Ridker, MD, MPH

Evaluation  
Diagnostics  
Therapies  
Devices  
Treatment plans  
Prevention  
Patient care

## Guidance and state-of-the-art approaches to:

Acute coronary syndromes

Anti-inflammatory therapy to reduce risk of cardiovascular death and stroke (CANTOS trial)

Pulmonary embolism and DVT

LDL and triglyceride reduction

Stroke prevention in atrial fibrillation

Genetics, thrombosis, and personalized medicine



Earn up to 16.00 AMA PRA Category 1 Credits™ • 16.00 ABIM MOC points (NEW) • 16.00 AAFP Prescribed credits

**BRIGHAM HEALTH**  
BRIGHAM AND  
WOMEN'S HOSPITAL

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



# HARVARD MEDICAL SCHOOL

Dear Colleague:

Our understanding of thrombosis and thromboembolism has evolved rapidly. Advances in prevention, diagnosis, management, epidemiology, and pathophysiology will improve our clinical practice and yield more favorable patient outcomes.

Since 1997, the two-day Harvard Medical School CME course, **Thrombosis and Thromboembolism**, has been providing practical and timely education about these innovations in the field. Our upcoming 2018 curriculum promises to be the best in this program's 21-year history, with master clinicians updating and guiding us so we can integrate these changes into our daily practice.

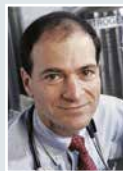
This once-every-3-years course provides an opportunity to quickly, efficiently, and effectively ensure we are current with the state of the art for:

- The etiology and pathophysiology of atherothrombosis
- Understanding of the link between inflammation and thrombotic illnesses
- Dual therapy with low-dose anticoagulation and aspirin
- Stroke prevention (and stroke prediction) in atrial fibrillation
- Caring for patients who have or are at risk for deep vein thrombosis and pulmonary embolism — this is a comprehensive look, from every angle
- The most exciting new predictive, diagnostic and treatment options, including genetics, personalized medicine, and lipid biology
- The nuances of prescribing dual antiplatelet therapy, including optimal duration and ways to minimize bleeding complications

The 2018 course offers new and returning attendees a fast-paced, intellectually invigorating learning experience and a forum in which new professional friendships will take root with faculty and colleagues who share common interests. We have had the privilege of co-directing this course from its inception, and count ourselves among the many professionals who have been enriched by the knowledge-sharing and networking opportunities that this special program offers. We hope you will attend, and we look forward to welcoming you in person to this special Boston event.



**Samuel Z. Goldhaber, MD**  
Course Director  
Professor of Medicine, Harvard Medical School  
Interim Chief, Division of Cardiovascular Medicine  
Section Head, Vascular Medicine  
Director, Thrombosis Research Group  
Brigham and Women's Hospital



**Paul M Ridker, MD, MPH**  
Course Director  
Eugene Braunwald Professor of Medicine  
Harvard Medical School  
Senior Physician  
Brigham and Women's Hospital

**BRIGHAM HEALTH**



BRIGHAM AND  
WOMEN'S HOSPITAL

**BRIGHAM HEALTH**



BRIGHAM AND  
WOMEN'S HOSPITAL

## Harvard Medical School Faculty

**Deepak L. Bhatt, MD, MPH**  
Professor of Medicine

**Eugene Braunwald, MD**  
Hersey Professor of Medicine

**Umberto Campia, MD**  
Harvard Medical School Faculty

**Jean Connors, MD**  
Assistant Professor of Medicine

**Samuel Z. Goldhaber, MD**  
Professor of Medicine

**Sekar Kathiresan, MD**  
Associate Professor of Medicine

**Peter Libby, MD**  
Mallinckrodt Professor of Medicine

**Calum A. MacRae, MD, PhD**  
Associate Professor of Medicine

**Gregory Piazza, MD, MS**  
Assistant Professor of Medicine

**Aruna Pradhan, MD**  
Assistant Professor of Medicine

**Paul M Ridker, MD, MPH**  
Eugene Braunwald Professor of Medicine

**Christian T. Ruff, MD, MPH**  
Assistant Professor of Medicine

**Marc Sabatine, MD, MPH**  
Professor of Medicine

## Featured Guest Speakers

**Sonia Anand, MD, PhD**  
Professor, Division of Cardiology, Department of Medicine,  
McMaster University

**Henri Bounameaux, MD**  
Dean of the Faculty of Medicine, University of Geneva

**John Eikelboom, MD**  
Associate Professor, Department of Medicine,  
McMaster University

**John Fanikos, RPh, MBA**  
Director of Pharmacy, Brigham and Women's Hospital

**Jessica Rimsans, PharmD**  
Pharmacist, Brigham and Women's Hospital

## Course Directors

**Samuel Z. Goldhaber, MD**  
Professor of Medicine, Harvard Medical School  
Interim Chief, Division of Cardiovascular Medicine  
Section Head, Vascular Medicine  
Director, Thrombosis Research Group  
Brigham and Women's Hospital

**Paul M Ridker, MD, MPH**  
Eugene Braunwald Professor of Medicine,  
Harvard Medical School  
Senior Physician, Brigham and Women's Hospital

## Now offering ABIM MOC Points

### 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 16.00 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### MOC STATEMENT

Successful completion of this CME activity enables the participant to earn up to 16.00 MOC points 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 points.

#### AMERICAN ACADEMY OF FAMILY PHYSICIANS

This Live activity, Thrombosis and Thromboembolism 2018, with a beginning date of 10/18/2018, has been reviewed and is acceptable for up to 16.00 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.

#### NURSE PRACTITIONERS and REGISTERED NURSES

For the purpose of recertification, the American Academy of Nurse Practitioners Certification Board and American Nurses Credentialing Center accept *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).

# Agenda

## Reasons to Attend

### You will get timely and important updates for:

- DVT/PE diagnosis, testing, parenteral and oral anticoagulants
- Atherothrombosis: etiology, pathophysiology, therapy
- Anti-inflammatory therapy to reduce risk of cardiovascular events
- Hypercoagulability: testing and management
- Pharmacomechanical catheter-directed therapy
- New approaches to treat high LDL cholesterol and hypertriglyceridemia
- Dual antiplatelet therapy: dose, duration, reversibility
- Stroke prevention in atrial fibrillation
- Special considerations for VTE in cancer and pregnancy

## Who Should Attend

**PHYSICIANS, NPs, PAs, SURGEONS, PHARMACISTS and RESEARCHERS** who work in the following fields of medicine and care for patients with or at risk for thromboses in the venous and arterial systems:

- Hematology
- Oncology
- Internal Medicine
- Cardiovascular Medicine
- Vascular Medicine
- Obstetrics
- Critical Care Medicine
- Pulmonary Medicine
- Primary Care Medicine
- Hospital Medicine
- Family Medicine

## Course Description

Thrombosis and Thromboembolism provides a comprehensive review of the most important changes and advances impacting the care of patients who have—or are at risk for—these afflictions. Updates in diagnosis, treatment and prevention are provided by world-renowned experts and Harvard Medical School's leading clinical faculty.

Thrombosis and Thromboembolism has provided practical and timely education about innovations in this field since 1997. First-time and returning attendees consistently report that the knowledge they acquire from this update changes their practice and drives better outcomes for patients.

In 2018, participants will learn cutting-edge new advances in preventing VTE in medically ill patients; how dual anti-platelet therapy can prevent MI, stroke, and leg amputation; improved stroke prediction and prevention; and a better understanding of the link between inflammation and thrombotic illnesses.

This acclaimed course, offered only once every three years, is intended for all general internists and cardiovascular, peripheral vascular, critical care, pulmonary, surgical, and hematologic specialists who are called upon to care for patients with thromboses in the venous and arterial systems. The course will be interactive with time set aside for active discussion with faculty.

## Learning Objectives

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

- Describe how low-dose anticoagulation and low-dose aspirin prevent MI, stroke, leg amputation
- Apply new strategies to prevent DVT/PE in hospitalized patients and in the month following hospital discharge
- Identify the optimal duration of anticoagulation for PE and DVT
- Provide advanced therapy beyond anticoagulation in PE and DVT: thrombolysis, catheter-directed therapy, surgical embolectomy
- Identify the etiology and pathophysiology of atherothrombosis
- Recognize the link between inflammation and thrombotic illnesses
- Explain new tools for stroke prevention (and stroke prediction) in atrial fibrillation

# Agenda

Thursday, October 18

- 6:45am **Registration and Breakfast**
- 7:45am *Seating*
- 8:00am **Welcome and Course Objectives** Samuel Z. Goldhaber, MD and Paul M Ridker, MD

## ARTERIAL THROMBOSIS

Co-Chairs: Paul M Ridker, MD, MPH and Peter Libby, MD  
(All sessions include 10 minutes of Q&A and discussion)

- 8:15am **Atherosclerosis: Biology and Pathophysiology** Peter Libby, MD
- 8:45am **Aggressive Lipid Reduction to Minimize Cardiovascular Risk: Focus on PCSK9 Inhibitors**  
Marc Sabatine, MD, MPH
- 9:15am **Anti-inflammatory Therapy to Reduce Risk of Cardiovascular Events and Lung Cancer: CANTOS and Canakinumab**  
Paul M Ridker, MD, MPH
- 10:05am **Reduction of Cardiovascular Events by Decreasing Triglyceride Risk: The PROMINENT Trial**  
Aruna Pradhan, MD
- 10:35am **Combined Antithrombotic and Antiplatelet Therapy to Reduce Cardiovascular Risk: COMPASS Trial, Part I** John Eikelboom, MD
- 11:15am *Coffee Break (Refreshments provided)*
- 11:35am **Combined Antithrombotic and Antiplatelet Therapy to Reduce Lower Extremity Arterial Disease: COMPASS Trial, Part II** Sonia Anand, MD
- 12:15pm **Peripheral Arterial Disease and Thrombotic Risk: Ongoing and Future Trials** Umberto Campia, MD
- 12:45pm **Link Between Arterial and Venous Thrombosis** Samuel Z. Goldhaber, MD
- 1:15pm *Break for lunch\**

## VENOUS THROMBOSIS

Co-Chairs: Gregory Piazza, MD, MS and Samuel Z. Goldhaber, MD  
(All sessions include 10 minutes of Q&A and discussion)

- 2:15pm **Diagnosis of VTE: Clinical Assessment, D-dimer Testing, and Optimal Strategy for Imaging**  
Henri Bounameaux, MD
- 2:55pm **Overview of PE: Epidemiology and Pathophysiology** Samuel Z. Goldhaber, MD
- 3:30pm **Anticoagulants for VTE: Focus on DOACs – Ongoing Challenges and Dilemmas**  
Samuel Z. Goldhaber, MD
- 4:05pm **Advanced Therapy: Beyond Anticoagulation** Gregory Piazza, MD, MS
- 4:45pm **Inferior Vena Cava Filters: The Good, the Bad, and the Ugly**  
Henri Bounameaux, MD
- 5:15pm *Break*

## ONE BRAVE IDEA: DINNER LECTURE

Chair: Samuel Z. Goldhaber, MD



- 6:15pm *Seating*
- 6:30pm **One Brave Idea** Calum A. MacRae, MD, PhD
- 7:20pm **Dinner**
- 8:30pm **Daily Program Concludes**

## Dinner & Networking

Be our guest for this special dinner

### Dinner Speaker: Calum A. MacRae, MD, PhD

Dr. MacRae is the recipient of the American Heart Association's \$75 million One Brave Idea award to understand the earliest stages of coronary heart disease. He is also the Vice Chair of Innovation at the Brigham and Women's Hospital (BWH), a leading investigator at the BWH Genomics Center, a principal faculty member at the Cardiovascular Research Center and the Harvard Stem Cell Institute, and an associate member at the Broad Institute.

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

# Agenda

Friday, October 19

7:00am **Breakfast**  
7:45am *Seating*

## THROMBOSIS PHARMACOLOGY

Co-Chairs: Samuel Z. Goldhaber, MD and Paul M Ridker, MD, MPH  
(All sessions include 10 minutes of Q&A and discussion)

8:00am **DOAC Reversibility: Idaracizumab and Andexanet** Jean Connors, MD  
8:30am **Cancer and VTE: Beyond Low Molecular Weight Heparin Monotherapy**  
Jean Connors, MD  
9:00am **Heparin-Induced Thrombocytopenia** Jessica Rimsans, PharmD  
9:30am **Adherence to Thrombosis Medications: Problems with Polypharmacy and Promising Solutions**  
John Fanikos, RPh, MBA  
10:00am **Genetics 2018: What Every Clinician Should Know** Sekar Kathiresan, MD  
10:30am *Coffee break (Refreshments provided)*

## ATRIAL FIBRILLATION AND ANTIPLATELET THERAPY

Co-Chairs: Deepak L. Bhatt, MD, MPH and Christian T. Ruff, MD, MPH  
(All sessions include 10 minutes of Q&A and discussion)

10:50am **KEYNOTE: History of Anticoagulation**

**Keynote Speaker: Eugene Braunwald, MD**

For more than 30 years, Dr. Braunwald has served as Chairman of the TIMI Study Group. *Science Watch* listed him as the most frequently cited author in cardiology; the living Nobel Prize winners in medicine voted Dr. Braunwald “the person who has contributed the most to cardiology in recent years.”



11:40am **Mortality Reduction and Stroke Prevention in Atrial Fibrillation: Emergence of Biomarkers for Risk Stratification**  
Christian T. Ruff, MD, MPH  
12:20pm **Single and Dual Antiplatelet Therapy** John Eikelboom, MD  
12:50pm **Is Triple Therapy with Warfarin Dead?** Deepak L. Bhatt, MD, MPH  
1:20pm *Break for lunch\**

## DIABETES, HYPERCOAGULABILITY, AND VTE PREVENTION

Co-Chairs: Gregory Piazza, MD, MS and Samuel Z. Goldhaber, MD  
(All sessions include 10 minutes of Q&A and discussion)

2:30pm **Reducing Cardiovascular Thrombotic Events with Contemporary Pharmacologic Therapy for Diabetes Mellitus**  
Deepak L. Bhatt, MD, MPH  
3:10pm **Hypercoagulability Testing: When, Who, and Why**  
Jean Connors, MD  
3:50pm **VTE: Fertility and Pregnancy**  
Gregory Piazza, MD, MS  
4:30pm **VTE Prevention: Meeting the Critical Gap in Prophylaxis During the First Month after Hospitalization**  
Samuel Z. Goldhaber, MD  
5:10pm **Closing Remarks and Adjournment**

*\*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.*

This program is among the highest-rated Harvard Medical School CME courses. It is offered once every three years. To be assured a place in the 2018 program, early registration is strongly advised.

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

This special program is offered only once every 3 years. Early registration is strongly advised.



# HARVARD MEDICAL SCHOOL

## Thrombosis and Thromboembolism

Oct 18–19  
**2018**  
Boston, MA

Evaluation | Diagnostics | Therapies | Devices | Treatment Plans | Prevention

### Timely and important updates for **PHYSICIANS, NPs, PAs**

- Low-dose anticoagulation and low-dose aspirin to prevent MI, stroke, leg amputation (COMPASS trial)
- DVT/PE: prevention in hospitalized patients and in the month following hospital discharge (APEX trial)
- Dual antiplatelet therapy: dose, duration, reversibility
- Optimal duration of anticoagulation for PE and DVT (EINSTEIN CHOICE)
- Advanced therapy beyond anticoagulation in PE and DVT: thrombolysis, catheter-directed therapy, surgical embolectomy
- Heparin-induced thrombocytopenia



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

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

BRIGHAM HEALTH



BRIGHAM AND  
WOMEN'S HOSPITAL





**Thrombosis and Thromboembolism 2018**

Course #732495-1901

	Tuition
<b>Physicians</b>	\$865
<b>Allied Health Professionals Residents and Fellows</b>	\$765

*Tuition includes breakfast each morning, coffee breaks, and a special dinner and lecture on Thursday evening. Complimentary internet will be provided in the meeting room.*

*All attendees of Thrombosis and Thromboembolism 2018 will receive a printed course 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 [Thrombosis.HMSCME.com](http://Thrombosis.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 United States 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. All 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 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  
617-267-5300

**Accommodations**

A limited number of discounted rooms have been reserved at Fairmont Copley Plaza until September 27, 2018. You can call the hotel reservation line to make a room reservation: 1-800-441-1414. Please specify that you are enrolled in this activity in order to request the reduced room rate. You can also make your discounted reservation online by September 27, 2018 by visiting the course website and clicking on the dedicated reservation link on the Venue page.

The course room block, which is offered at special rates, does fill up quickly, so making your room reservations early is encouraged.

**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 Monday-Friday 9am – 5pm (ET) or send email to [CEPrograms@hms.harvard.edu](mailto:CEPrograms@hms.harvard.edu)**