



**HARVARD**  
MEDICAL SCHOOL

*25th Annual Update*

# NEUROLOGY 2017

OCTOBER 9–13, 2017 • CAMBRIDGE, MA

Comprehensive clinical updates and state-of-the-art practices for outpatient and inpatient neurology

## Diagnosis

## Neurological Examination

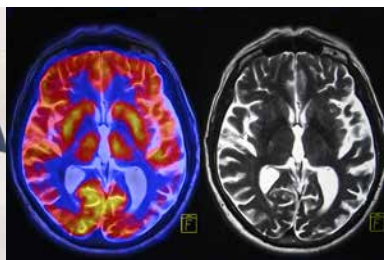
## Neuroimaging

## Treatment Options

## Challenging Cases

## Optimized Outcomes

- Improved outcomes for common conditions
- Guidance for challenging cases
- New options for diagnosis
- Comprehensive treatment strategies
- Updates for pharmacologic treatment
- How to optimize your use of imaging
- Instruction to improve clinical reasoning
- Can't-miss diagnoses
- The newest guidelines
- Video cases and discussions
- Expert opinions on errors and risk management
- New concepts in neurology



*Under the direction of Martin A. Samuels, MD and Tracey A. Milligan, MD*

**BRIGHAM HEALTH**



BRIGHAM AND  
WOMEN'S HOSPITAL

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

# Course Overview



## Updates to diagnose and treat:

- Epilepsy
- Stroke
- Multiple Sclerosis
- Concussions
- N-M Junction Disorders
- Alzheimer's Disease
- Parkinson's Disease
- Neuro-oncology
- Headache
- Spinal Cord Neurology
- Dementia
- Neuropathy
- Movement Disorders
- Coma
- Neurologic Infections
- Visual Disturbances
- Autoimmune Neurology
- Dizziness
- Women's Neurology
- Neuro-ophthalmological Disorders

## Reasons to Attend

- The new guidelines for epilepsy, stroke, neuromuscular disorders
- Expert instruction for neuro-ophthalmology
- Expanded options to diagnose and treat dementia
- Improved management of headache
- Best practices for treatment of neurologic infections and autoimmune disorders
- Steps to ensure delivery of high-quality care in the emergency room and in outpatient settings
- Techniques to effectively manage epilepsy and psychogenic non-epileptic seizures
- Best practices in neuro-oncology
- New insights and best practices for myelopathy and other spinal cord disorders
- Expanded options to treat movement disorders
- Previews of (and how to prepare for) future treatment options
- State-of-the-art approaches to concussion and coma
- Expanded options to diagnose and treat the causes of dizziness
- Alcohol and the nervous system: what we now know
- Use of genetic tests
- Optimal use of imaging

## Harvard Medical School Faculty



**Tracey A. Milligan, MD**  
*Course Co-Director*

Assistant Professor of Neurology,  
Harvard Medical School  
Vice Chair for Education,  
Department of Neurology  
Clinical Competency Director,  
Partners Neurology Residency  
Brigham and Women's Hospital

Anthony A. Amato, MD  
Aaron L. Berkowitz, MD, PhD  
Shamik Bhattacharyya, MD  
Ellen J. Bubrick, MD  
Michael E. Charness, MD  
Thomas I. Cochrane, MD  
Kirk R. Daffner, MD  
Amar Dhand, MD, DPhil  
Barbara A. Dworetzky, MD  
Steven K. Feske, MD  
Michael T. Hayes, MD  
Galen V. Henderson, MD  
Saef Izzy, MD  
Joshua P. Klein, MD, PhD  
Eudocia Quant Lee, MD, MPH  
Jong Woo Lee, MD, PhD  
Elizabeth W. Loder, MD, MPH  
Jennifer L. Lyons, MD

Robert Mallery, MD  
Joseph B. Martin, MD, PhD  
Tracey A. Milligan, MD  
Edison K. Miyawaki, MD  
William J. Mullally, MD  
M. Angela O'Neal, MD  
Page B. Pennell, MD  
David M. Pilgrim, MD  
Sashank Prasad, MD  
Allan H. Ropper, MD  
Martin A. Samuels, MD  
Dennis J. Selkoe, MD  
Reisa A. Sperling, MD  
James M. Stankiewicz, MD  
Chizoba Umeh, MD  
Henrikas Vaitkevicius, MD  
Gregory T. Whitman, MD



# HARVARD MEDICAL SCHOOL

Dear Colleague,

Every year, there are a staggering number of critically important updates that need to be understood and incorporated into the practice of neurology to ensure optimal patient care. This special update synthesizes this vast amount of information and presents it with efficiency and effectiveness to ensure that you are current with these updates and the best ways to incorporate them into practice.

Over the course of a week, you will be immersed in an impactful and inspiring neurology learning experience. The faculty, the leading clinical educators at Harvard Medical School, provide a learning experience that delivers:

- Guidance for clinical reasoning and approaches to enable you to practice state-of-the-art neurology
- Case studies and dedicated time for you to pose your specific questions to leaders in their respective fields of neurology and delve into how information presented in this course can be used in your specific clinical setting
- Practical knowledge that you can “take home” and immediately apply to patient care

Year after year, attendees report they are inspired by the knowledge transfer and find the experience to be invaluable to their clinical practice, understanding of neurologic diseases, diagnostic skills and treatment outcomes.

I hope you will join us in Cambridge in October for this important and rewarding educational experience.

Sincerely,

**Martin A. Samuels, MD**  
*Course Director*

Miriam Sydney Joseph Professor of Neurology  
Harvard Medical School  
Chair, Department of Neurology  
Brigham and Women's Hospital



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# Agenda

## Course Description

Neurologists, primary care providers and specialists who diagnose and treat neurological conditions can rely on this program for a comprehensive, evidence-based review of state-of-the-art practices for outpatient and inpatient neurology. Education covers the latest guidelines, clinical strategies, and recent advances, including the use of genetic tests, optimal use of imaging, new approaches for diagnosis, and expanded options for treatment for a wide array of neurological diseases.

Education is practical and focused on patient outcomes. Led by the foremost authorities in neurology subspecialties, the program provides tools to improve your care of patients with common, complex, and rare neurological conditions. As updates are presented, they are paired with specific practice recommendations to help you optimize patient care and outcomes.

Lectures are designed to be engaging and to quickly and effectively transfer knowledge.

## Learning Objectives

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

- Develop strategies to apply updated research and guidelines for common neurological conditions in their care of patients
- Explain the principles of delivering neurological care in resource-constrained environments
- Recognize immune-mediated neurological diseases and initiate appropriate therapy
- Identify the most common causes of cognitive error in the diagnosis and treatment of neurological diseases
- Identify types of seizures and mimickers of seizures
- Develop strategies to recognize and treat common and uncommon headache disorders
- Review strategies to effectively prevent and manage stroke
- Develop strategies for diagnosing and treating complicated neurologic problems in the outpatient and inpatient settings
- Recognize and treat causes of dizziness

## Monday, October 9

7:00-8:00	<b>Registration and Continental Breakfast</b>
8:00-8:05	<b>Introduction</b> Martin A. Samuels, MD
8:05-9:00	<b>Dementia Cases</b> Kirk R. Daffner, MD
9:00-9:45	<b>New Concepts in Autoimmune Neurology</b> Henrikas Vaitkevicius, MD
9:45-10:15	<i>Break (refreshments provided)</i>
10:15-11:00	<b>Challenging Stroke Cases</b> Allan H. Ropper, MD
11:00-12:00	<b>Challenges in Outpatient Neurology</b> David M. Pilgrim, MD
12:00-1:30	<i>Lunch break</i>
1:30-2:15	<b>Video Cases in Parkinsonism and Hypokinetic Movement Disorders</b> Chizoba Umeh, MD
2:15-3:15	<b>Hyperkinetic Movements</b> Edison K. Miyawaki, MD
3:15-3:45	<i>Break (refreshments provided)</i>
3:45-4:30	<b>New Concepts in Stroke Recovery and Social Networks</b> Amar Dhand, MD, DPhil
4:30-5:15	<b>Spinal Cord Neurology</b> Shamik Bhattacharyya, MD

# Agenda

## Tuesday, October 10

7:00-8:00	<b>Continental Breakfast</b>
8:00-8:45	<b>Myopathies and N-M Junction Disorder Cases</b> Anthony A. Amato, MD
8:45-9:30	<b>Neuropathy Cases</b> Thomas I. Cochrane, MD
9:30-10:00	<i>Break (refreshments provided)</i>
10:00-10:45	<b>Current Approaches in the Treatment of Dementia</b> Reisa A. Sperling, MD
10:45-11:30	<b>Professor Rounds</b> Joseph B. Martin, MD, PhD
11:30-1:00	<i>Lunch break</i>
1:00-1:45	<b>Global Neurology</b> Aaron L. Berkowitz, MD, PhD
1:45-2:30	<b>Current Approaches in Stroke Prevention and Treatment</b> Galen V. Henderson, MD
2:30-3:00	<i>Break (refreshments provided)</i>
3:00-4:00	<b>Updates for Hemorrhagic Stroke</b> Steven K. Feske, MD
4:00-5:00	<b>Non-Pharmacologic Rx of Movement Disorders</b> Michael T. Hayes, MD

## Wednesday, October 11

7:00-8:00	<b>Continental Breakfast</b>
8:00-8:45	<b>State-of-the-Art Differential Diagnosis of Epilepsy: Video Cases</b> Tracey A. Milligan, MD
8:45-9:30	<b>Best Practices for Psychogenic Non-Epileptic Seizures</b> Barbara A. Dworetzky, MD
9:30-10:00	<i>Break (refreshments provided)</i>
10:00-10:45	<b>Updates in Pharmacological Treatment of Epilepsy</b> Jong Woo Lee, MD, PhD
10:45-11:30	<b>New Concepts in Non-Pharmacologic Rx of Epilepsy</b> Ellen J. Bublick, MD
11:30-1:00	<i>Lunch break</i>
1:00-1:45	<b>Meet the Professor: Problematical Epilepsy Cases</b> Page B. Pennell, MD
1:45-2:30	<b>Coma</b> Martin A. Samuels, MD
2:30-3:00	<i>Break (refreshments provided)</i>
3:00-4:00	<b>Selected Topics in Neurological Infections</b> Jennifer L. Lyons, MD
4:00-5:00	<b>Neurology of Alcohol</b> Michael E. Charness, MD

*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.*

## 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 29.75 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### AMERICAN ACADEMY OF FAMILY PHYSICIANS

Application for CME credit has been filed with the American Academy of Family Physicians. Determination of credit is pending.

### 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*<sup>™</sup> to an equivalent number of European CME Credits<sup>®</sup> (ECMECs<sup>®</sup>). Information on the process of converting *AMA PRA Category 1 Credits*<sup>™</sup> to ECMECs<sup>®</sup> can be found at: [www.eaccme.eu](http://www.eaccme.eu).

# Agenda

## Thursday, October 12

- 7:00-8:00 **Continental Breakfast**
- 8:00-8:45 **Cancer Neurology**  
Eudocia Quant Lee, MD, MPH
- 8:45-9:30 **Update in Alzheimer's Disease Diagnosis**  
Dennis J. Selkoe, MD
- 9:30-10:00 *Break (refreshments provided)*
- 10:00-10:45 **Visual Disturbances**  
Sashank Prasad, MD
- 10:45-11:45 **Eye Movement Disorders**  
Robert Mallery, MD
- 11:45-1:00 *Lunch break*
- 1:00-1:45 **Imaging in Neurologic Diseases**  
Joshua P. Klein, MD, PhD
- 1:45-2:30 **Neurological Emergencies**  
Saef Izzy, MD
- 2:30-3:00 *Break (refreshments provided)*
- 3:00-3:45 **Concussion**  
William J. Mullally, MD
- 3:45-4:45 **Best Practices for the Treatment of Multiple Sclerosis**  
James M. Stankiewicz, MD

## Friday, October 13

- 7:00-8:00 **Continental Breakfast**
- 8:00-8:45 **Dizziness**  
Gregory T. Whitman, MD
- 8:45-9:30 **Headache**  
Elizabeth W. Loder, MD, MPH
- 9:30-10:00 *Break (refreshments provided)*
- 10:00-10:45 **Issues in Women's Neurology**  
M. Angela O'Neal, MD
- 10:45-12:00 **Keynote Address:  
How Neurologists Think:  
What My Errors Taught Me**  
Martin A. Samuels, MD
- 12:00 **Adjourn**

**Disclosure Policy:** Harvard Medical School (HMS) adheres to all ACCME Accreditation Criteria and Policies. It is HMS's policy that those who have influenced the content of a CME activity (e.g. planners, faculty, authors, 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.

## Comprehensive Updates and Best Practices for:

- Neurologists
- Psychiatrists
- Internists
- Family Physicians
- NPs
- PAs

...and other medical professionals who want a comprehensive clinical update of state-of-the-art practices for outpatient and inpatient neurology



Outcomes



# HARVARD MEDICAL SCHOOL

*25th Annual Update*

# NEUROLOGY 2017

October 9–13, 2017 • Cambridge, MA

**Updates to ensure you are current with state-of-the-art neurology practices: diagnosis, treatment, and patient care.**

Epilepsy	Dementia
Stroke	Neuropathy
Multiple Sclerosis	Movement Disorders
Concussions	Coma
N-M Junction Disorders	Neurologic Infections
Alzheimer's Disease	Visual Disturbances
Parkinson's Disease	Autoimmune Neurology
Neuro-oncology	Dizziness
Headache	Women's Neurology
Spinal Cord Neurology	Neuro-ophthalmological Disorders

## **A Practical, Accelerated Update for Busy Clinicians**

Physicians, NPs, PAs can rely on this program for comprehensive updates and for strategies to improve clinical decision making, neurologic evaluation, diagnosis, treatment, and patient outcomes.



*Full agenda inside*



**Keynote Address**  
**Martin A. Samuels, MD**

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**29.75 AMA PRA Category 1 Credits™**



# HARVARD MEDICAL SCHOOL

25th Annual Update  
**Neurology 2017**  
Course #732205-1801

	Tuition	Register on or before September 15, 2017
<b>Physicians</b>	\$1,245	<b>\$1,145 (SAVE \$100)</b>
<b>Allied Health Professionals</b>	\$1,095	<b>\$995 (SAVE \$100)</b>
<b>Residents, Fellows and Trainees</b>		\$845

Your course tuition includes continental breakfast each day, and morning and afternoon refreshment breaks. All course participants receive a flash drive that contains all of the course materials. You can purchase a printed copy of these materials at the time of online registration for \$50, or on site at the course for \$65.

## 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 [Neurology.HMSCME.com](http://Neurology.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

The Royal Sonesta Boston  
40 Edwin H. Land Boulevard  
Cambridge, Massachusetts 02142  
617-806-4200

## Accommodations

A limited number of rooms have been reserved at the Royal Sonesta Boston until September 18, 2017. When calling the hotel, be sure to specify that you are enrolled in the Harvard HMS/Annual Update in Neurology Course to receive a reduced room rate.

Hotel reservations can also be made online by going to the course website at [Neurology.HMSCME.com](http://Neurology.HMSCME.com) by September 18 and clicking on the dedicated link on the Venue page.

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

Questions? Call 617-384-8600 Monday-Friday 9am – 5pm (ET) or send an email to [CEPrograms@hms.harvard.edu](mailto:CEPrograms@hms.harvard.edu)

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