



HARVARD
MEDICAL SCHOOL

27th Annual Update

NEUROLOGY 2019

OCTOBER 21–25, 2019 • CAMBRIDGE, MA

UPDATES and STATE-of-the-ART PRACTICES for INPATIENT and OUTPATIENT NEUROLOGY

Diagnosis

Neurological Examination

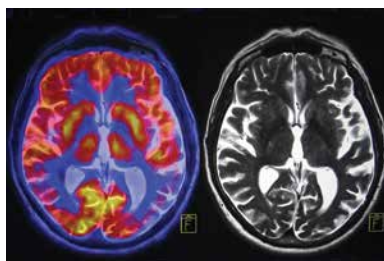
Neuroimaging

Treatment Options

Challenging Cases

Optimized Outcomes

- How to improve outcomes for common conditions
- Updates across all major areas of neurology
- 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
- Expert opinions on errors and risk management
- State-of-the-art treatments of neurologic pain



Course Directors | Martin A. Samuels, MD
Tracey A. Milligan, MD

This course sold out the last two years. Early registration advised.

BRIGHAM HEALTH
 BRIGHAM AND WOMEN'S HOSPITAL

Register at Neurology.HMSCME.com



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.

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

Sincerely,



**Martin A. Samuels, MD, DSc(hon),
FAAN, MACP, FRCP, FANA**
Course Director



Tracey A. Milligan, MD
Course Director

Course Overview



- Epilepsy
- Stroke
- Multiple Sclerosis
- Concussions
- N-M Junction Disorders
- Alzheimer's Disease
- Parkinson's Disease
- Neuro-oncology
- Headache
- Spinal Cord Neurology
- Cerebellar Ataxias
- Pain
- Dementia
- Neuropathy
- Movement Disorders
- Coma
- Neuropsychiatry
- Visual Disturbances
- Autoimmune Neurology
- Neuro-infectious Disease
- Women's Neurology
- Neuro-ophthalmological Disorders

Reasons to Attend

- The new guidelines for epilepsy, stroke, neuromuscular disorders
- Comprehensive updates for treatment of neurologic pain
- Expert instruction for neuro-ophthalmology
- Expanded options to diagnose and treat dementia
- Improved management of headache
- Best practices for treatment of neurologic 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
- Updates in neuro-infectious disease
- State-of-the-art approaches to concussion and coma
- Expanded options to diagnose and treat cerebellar ataxias
- Alcohol and the nervous system: what we now know
- Use of genetic tests
- Optimal use of imaging

Harvard Medical School Faculty

Martin A. Samuels, MD, DSc(hon), FAAN, MACP, FRCP, FANA

Course Director

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

Tracey A. Milligan, MD

Course 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
Tracy Batchelor, MD
Aaron L. Berkowitz, MD, PhD
Shamik Bhattacharyya, MD
David Boyce, MD
Ellen J. Bubrick, MD
Rebecca Burch, MD
Michael E. Charness, MD
Kirk R. Daffner, MD
Claudio Melo De Gusmao, MD
Christopher T. Doughty, MD
Barbara A. Dworetzky, MD
Michael G. Erkinen, MD
Steven K. Feske, MD
Michael T. Hayes, MD
Galen V. Henderson, MD
Saef Izzy, MD
Tamara B. Kaplan, MD
Dorlan J. Kimbrough, MD
Joshua P. Klein, MD, PhD
Eudocia Quant Lee, MD, MPH

Jong Woo Lee, MD, PhD
Robert M. Mallery, MD
Gad A. Marshall, MD
Joseph B. Martin, MD, PhD
Scott M. McGinnis, MD
Tracey A. Milligan, MD
Edison K. Miyawaki, MD
William J. Mullally, MD
Peter Novak, MD, PhD
Mary Angela O'Neal, MD
Jordan Paulson, MD
Page B. Pennell, MD
David M. Pilgrim, MD
Sashank Prasad, MD
Paul B. Rizzoli, MD
Allan H. Ropper, MD
Martin A. Samuels, MD
Chizoba Umeh, MD
Henrikas Vaitkevicius, MD
Victor Wang, MD

NEUROLOGY 2019

The Comprehensive Clinical Update

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:

- 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
- Define types of seizures and mimickers of seizures
- Recognize and treat common and uncommon headache disorders
- Summarize how to effectively prevent and manage stroke
- Develop strategies for diagnosing and treating complicated neurologic problems in the outpatient and inpatient settings

Monday, October 21

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|-------------|---|
| 7:00-8:00 | Registration and Continental Breakfast |
| 8:00-8:05 | Introduction Tracey A. Milligan, MD and Martin A. Samuels, MD |
| 8:05-9:00 | Dementia Cases Kirk R. Daffner, MD |
| 9:00-9:45 | Salient Cases in the Interface of Neurology and Psychiatry Michael G. Erkinen, MD |
| 9:45-10:15 | <i>Morning Break (Refreshments provided)</i> |
| 10:15-11:00 | Imaging in Neurologic Diseases Joshua P. Klein, MD, PhD |
| 11:00-12:00 | CNS Lymphoma Tracy Batchelor, MD |
| 12:00-1:00 | <i>Break for lunch*</i> |
| 1:00-1:45 | Video Cases in Parkinsonism and Hypokinetic Movement Disorders Chizoba Umeh, MD |
| 1:45-2:45 | Hyperkinetic Movements Edison K. Miyawaki, MD |
| 2:45-3:15 | <i>Afternoon Break (Refreshments provided)</i> |
| 3:15-4:00 | Non-Pharmacologic Rx of Movement Disorders Michael T. Hayes, MD |
| 4:00-4:45 | Updates in the Practical Management of Parkinsonism Jordan Paulson, MD |

*There are many convenient and varied lunch options within a short walking distance of the course.

A Comprehensive
Clinical Update of
State-of-the-Art
Practices for Inpatient
and Outpatient
Neurology

Education for:
NEUROLOGISTS
PSYCHIATRISTS
INTERNISTS
FAMILY PHYSICIANS
NPs
PAs

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

NEUROLOGY 2019

The Comprehensive Clinical Update

Tuesday, October 22

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| 7:00-8:00 | Continental Breakfast |
| 8:00-8:45 | Meet the Professor: Approach to Myopathy Cases Anthony A. Amato, MD |
| 8:45-9:30 | Neuropathy and Neuromuscular Junction Cases Christopher T. Doughty, MD |
| 9:30-10:00 | <i>Morning Break (Refreshments provided)</i> |
| 10:00-10:45 | Visual Disturbances Sashank Prasad, MD |
| 10:45-11:30 | Keynote - The Convergence of Research in Neurology and Psychiatry: Should It Affect How We Train Our Students and Residents? Joseph B. Martin, MD, PhD |
| 11:30-1:00 | <i>Break for lunch*</i> |
| 1:00-1:45 | Current Approaches in Stroke Prevention and Treatment Galen V. Henderson, MD |
| 1:45-2:30 | Cases in Neuro-Infectious Disease Steven K. Feske, MD |
| 2:30-3:00 | <i>Afternoon Break (Refreshments provided)</i> |
| 3:00-3:45 | Neurologic Emergencies Saef Izzy, MD |
| 3:45-4:30 | The Neurology of Alcohol Michael E. Charness, MD |

Wednesday, October 23

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|-------------|---|
| 7:00-8:00 | Continental Breakfast |
| 8:00-8:45 | State-of-the-Art Differential Diagnosis of Epilepsy: Video Cases Tracey A. Milligan, MD |
| 8:45-9:30 | Best Practices for Psychogenic Non-Epileptic Seizures Barbara A. Dworetzky, MD |
| 9:30-10:00 | <i>Morning Break (Refreshments provided)</i> |
| 10:00-10:45 | Updates in Pharmacological Treatment of Epilepsy Jong Woo Lee, MD, PhD |
| 10:45-11:30 | New Concepts in Non-Pharmacologic Rx for Epilepsy Ellen J. Bubrick, MD |
| 11:30-1:00 | <i>Break for lunch*</i> |
| 1:00-1:45 | Meet the Professor: Problematic Epilepsy Cases Page B. Pennell, MD |
| 1:45-2:30 | Current Approaches in the Treatment of Dementia Gad A. Marshall, MD |
| 2:30-3:00 | <i>Afternoon Break (Refreshments provided)</i> |
| 3:00-3:45 | Current Approaches in the Diagnosis of Dementia Scott M. McGinnis, MD |
| 3:45-4:30 | The Myth of Herniation Allan H. Ropper, MD |

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

- Main Course, Neurology 2019: 30.75 *AMA PRA Category 1 Credits™*
- Neurologic Pain Workshop: 3.50 *AMA PRA Category 1 Credits™*

AMERICAN ACADEMY OF FAMILY PHYSICIANS: This Live activity, 27th Annual Update in Neurology 2019, with a beginning date of 10/21/2019, has been reviewed and is acceptable for up to 33.25 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.

RISK MANAGEMENT: This activity meets the criteria of the Massachusetts Board of Registration in Medicine for 1.25 credits of Risk Management Study. Please check your individual state licensing board requirements before claiming these credits.

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.

NEUROLOGY 2019

The Comprehensive Clinical Update

Thursday, October 24

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|-------------|--|
| 7:00-8:00 | Continental Breakfast |
| 8:00-8:45 | New Concepts in Autoimmune Neurology Henrikas Vaitkevicius, MD |
| 8:45-9:30 | Best Practices for Diagnosis and Treatment of Multiple Sclerosis Dorlan J. Kimbrough, MD |
| 9:30-10:00 | <i>Morning Break (Refreshments provided)</i> |
| 10:00-10:45 | Below-the-Belt Neurology Tamara B. Kaplan, MD |
| 10:45-11:45 | Cases in Geriatric Neurology David M. Pilgrim, MD |
| 11:45-1:00 | <i>Break for lunch*</i> |
| 1:00-1:45 | Eye Movement Disorders Robert M. Mallery, MD |
| 1:45-2:45 | Cancer Neurology Eudocia Quant Lee, MD, MPH |
| 2:45-3:15 | <i>Afternoon Break (Refreshments provided)</i> |
| 3:15-4:00 | Challenging Cases in Neurology Aaron L. Berkowitz, MD, PhD |
| 4:00-5:00 | Cerebellar Ataxias Claudio Melo De Gusmao, 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.

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.

Friday, October 25

| | |
|-------------|--|
| 7:00-8:00 | Continental Breakfast |
| 8:00-8:45 | Concussion William J. Mullally, MD |
| 8:45-9:30 | Headache Paul B. Rizzoli, MD |
| 9:30-10:00 | <i>Morning Break (Refreshments provided)</i> |
| 10:00-10:45 | Issues in Women's Neurology Mary Angela O'Neal, MD |
| 10:45-12:00 | Keynote - How Neurologists Think: What My Errors Taught Me Martin A. Samuels, MD |
| 12:00-1:00 | <i>Break for lunch*</i> |

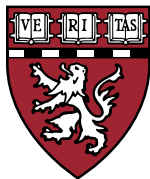
Optional Friday Afternoon Workshop

State-of-the-Art Treatments of Neurologic Pain



| | |
|-----------|---|
| 1:00-1:45 | The New Options for Treating Chronic Migraine Rebecca Burch, MD |
| 1:45-2:30 | How to Deliver the Best Care for Neck and Back Pain Shamik Bhattacharyya, MD |
| 2:30-3:00 | <i>Afternoon Break (Refreshments provided)</i> |
| 3:00-3:30 | Updates in Evaluation and Treatment of Neuropathic Pain, Autonomic Failure and Orthostatic Intolerance Syndromes Peter Novak, MD, PhD |
| 3:30-4:15 | Local Nerve Blocks in the Office: When, Why and How Victor Wang, MD |
| 4:15-5:00 | Updates in What Anesthesiologists Can Now Provide for Pain Management David Boyce, MD |

Register at Neurology.HMSCME.com



HARVARD MEDICAL SCHOOL

27th Annual Update

NEUROLOGY 2019

October 21–25, 2019 • Cambridge, MA



Keynote Address
Martin A. Samuels, MD

Updates and State-of-the-Art Practices for Outpatient and Inpatient Neurology

| | |
|------------------------|----------------------------------|
| Epilepsy | Pain |
| Stroke | Dementia |
| Multiple Sclerosis | Neuropathy |
| Concussions | Movement Disorders |
| N-M Junction Disorders | Coma |
| Alzheimer's Disease | Neuropsychiatry |
| Parkinson's Disease | Visual Disturbances |
| Neuro-oncology | Autoimmune Neurology |
| Headache | Neuro-infectious Disease |
| Spinal Cord Neurology | Women's Neurology |
| Cerebellar Ataxias | Neuro-ophthalmological Disorders |

This course sold out the last two years.
Early registration is advised.

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.



Register at Neurology.HMSCME.com

Earn up to 34.25 AMA PRA Category 1 Credits™ • 33.25 AAFP Prescribed credits



HARVARD MEDICAL SCHOOL

27th Annual Update
Neurology 2019
Course #732205-2001

| | |
|--|---------|
| | Tuition |
| Physicians | \$1,345 |
| Allied Health Professionals | \$1,145 |
| Residents, Fellows and Trainees | \$945 |
| Optional Workshop | |
| State-of-the-Art Treatments of Neurologic Pain <i>Friday, October 25, 1:00 - 5:00 pm</i> | \$145 |

Your course tuition includes continental breakfast each day, morning and afternoon refreshment breaks, and complimentary wireless internet.

Course Materials: All course participants receive electronic access to all of the course materials. If you would like a printed copy of these materials, you can purchase them in advance for \$50 with your online course registration. A very limited supply will be available 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.

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 United States bank) or by wire transfer, the online registration system will provide you with instructions for remitting your course fees. Postal, telephone, fax, and cash-payment registrations are not accepted. All 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. **Please do not make non-refundable travel arrangements until you have received an email confirming your paid registration.** 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 course has started.

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



Venue

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

Accommodations

Royal Sonesta Boston has reserved a block of discounted rooms for course participants.

Important to note:

- The number of discounted rooms is limited
- Discounted rooms are available on a first-come, first-served basis
- The discounted room rate is only available until 5:00pm on September 27, 2019, or until the block sells out, which typically happens well in advance of this date

To reserve your room:

- **Online:** To reserve your room online, please go to the Venue page of the course website at Neurology.HMSCME.com/Venue and use the dedicated reservation link.
- **By phone:** If you are calling the hotel rather than using the dedicated link to request a discounted room, please call 617-806-4200 and specify that you are enrolled in the Harvard HMS/Annual Update in Neurology course. You can also mention the Group Identification Code, 1018HMSNEU.