Continuing Medical Education Program
10524 Euclid Avenue
Cleveland, Ohio 44106-6026

Register online at http://case.edu/medicine/cme/

Additional CME information at UHDoctor.org/Continuing-Medical-Education
On behalf of University Hospitals, we would like to welcome you to our fall Neurology/Neurosurgery Symposium and our annual Neuroscience Nursing Symposium. In the last two decades, there has been nothing short of a revolution in the diagnosis and treatment of neurological disease. What was almost unimaginable in the past is now common. Sophisticated brain imaging and emergent reperfusion therapy for acute stroke, new quantitative EEG techniques for seizures, deep brain stimulation for movement disorders along with new insights and approaches to dementia, multiple sclerosis, brain tumors, neuromuscular disease and pain syndromes. Truly, in the words of Nobel Laureate Bob Dylan, “the times they are a-changin’.”

EDUCATIONAL DESIGN AND METHODOLOGY

The program will consist of didactic lectures followed by question-and-answer sessions and panel discussions. A separate track, focusing on stroke certification, is provided for nursing.

ACCREDITATION STATEMENT

Physicians

Case Western Reserve University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Case Western Reserve University School of Medicine designates this live activity for a maximum of 14 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nurses

University Hospitals is an approved provider of continuing nursing education by the Ohio Nurses Association, an accredited approver by the American Nurses Credentialing Center’s Commission on Accreditation (OBN-001-91) (OH-003, 05/01/2020).

To earn the Nursing credits associated with this course, you must attend all sessions.

LEARNING OBJECTIVES

After attending this program, participants will be able to:

• Identify evidence-based protocol for status epilepticus
• Recognize the causes of autoimmune encephalitis, how to diagnose it and how best to treat it
• Identify the updated guidelines for intravenous t-PA for acute ischemic stroke, and recognize which patients with acute ischemic stroke would be most likely to benefit from mechanical thrombectomy
• Describe the appropriate workup for diagnosis of multiple sclerosis and appropriate treatments
• Describe the appropriate workup for diagnosis of dementia and appropriate treatments for Alzheimer’s dementia
• Identify the most common primary and metastatic brain tumors, make a correct diagnosis and determine the most effective treatment
• Identify the most common movement disorders, make a correct diagnosis and determine the most effective treatment
• Identify which patients with Parkinson’s disease would be most likely to benefit from deep brain stimulation
• Describe the appropriate workup to accurately diagnose peripheral neuropathy
• Identify treatments for Myasthenia gravis
• Identify treatments for headache
• Describe the appropriate workup for diagnosis of post-concussion syndrome
WHO SHOULD ATTEND

This event is designed for physicians, nurses, nurse practitioners, physician assistants and other health professionals in neurology, neurosurgery, internal medicine, emergency medicine and family medicine. Residents/fellows, students, social workers and therapists may also find this education of value and are welcome to attend.

PROGRAM AGENDA

Friday, September 8, 2017

7:15 a.m. Continental Breakfast and Registration
7:55 a.m. Welcome
8:05 a.m. **Joseph M. Foley Lecture**
Anthony Furlan, MD
Neurology and Neurosurgery in the 21st Century: The Times They Are a-Changin'

9 – 10 a.m. **Select Track**

**Neurology/Neurosurgery Symposium**
Session 1: Epilepsy
Moderator: Samden Lhatoo, MD

9 a.m. Samden Lhatoo, MD
Management of Difficult-to-Control Epilepsy

9:20 a.m. Shahram Amina, MD
Management of Status Epilepticus

9:40 a.m. C. Ramos-Estebanez, MD, PhD
Diagnosis and Treatment of Autoimmune Encephalitis

**OR**

**Neuroscience Nursing Symposium: Stroke**
Danielle Sindelar, MSN, RN, CMSRN

9 a.m. Erin Supan, MSN, RN, CNS, CNRN
Anatomy and Physiology

9:20 a.m. Melissa Brately, BSN, RN, CNRN
Preventative Care

9:40 a.m. Jon Zande, MD
Stroke Diagnostics

10 a.m. Break
**PROGRAM AGENDA**

10:15 – 12 p.m.  
**Neurology/Neurosurgery/Neuroscience Nursing Symposium**  
Session 2: Stroke & Neurocritical Care  
Moderator: Cathy Sila, MD

10:15 a.m.  
Cathy Sila, MD  
Update to Guidelines for IV t-PA

10:45 a.m.  
Yin Hu, MD  
Mechanical Thrombectomy: The New Standard

11:15 a.m.  
Alan Hoffer, MD  
Management of Intracerebral Hemorrhage

11:40 a.m.  
Panel Discussion

12 p.m.  
Lunch

1 – 2:20 p.m.  
**Select Track**  
**Neurology/Neurosurgery Symposium**  
Session 3: Movement Disorders  
Moderator: Benjamin Walter, MD

1 p.m.  
Camilla Kilbane, MD  
Approach to Movement Disorders

1:20 p.m.  
Benjamin Walter, MD  
Management of Parkinson's Disease

1:40 p.m.  
Jennifer Sweet, MD  
DBS for Parkinson's Disease – Which Patients and When?

2 p.m.  
Panel Discussion

**OR**  
**Neuroscience Nursing Symposium: Stroke**  
Danielle Sindelar, MSN, RN, CMSRN

1 p.m.  
Kelly Montgomery, BSN, RN, SCRN  
Hyperacute Care

1:30 p.m.  
Ed Kuzma, BSN, RN  
Acute Care Ischemic Stroke

1:55 p.m.  
Erin Supan, MSN, RN, CNS, CNRN  
Acute Care Hemorrhagic Stroke

2:20 p.m.  
Break
2:40 – 4 p.m.  
Select Track

Neurology/Neurosurgery Symposium  
Session 4: Dementia  
Moderator: Alan Lerner MD

2:40 p.m.  
Alan Lerner, MD  
Approach to Dementia

3 p.m.  
Stephanie Towns, PsyD  
Neuropsychology for the Rest of Us

3:20 p.m.  
Maria Kataki, MD, PhD  
Managing Behavioral Changes in the Demented Patient

3:40 p.m.  
Panel Discussion

OR

Neuroscience Nursing Symposium: Stroke  
Danielle Sindelar, MSN, RN, CMSRN

2:40 p.m.  
Jason Makii, PharmD, MBA  
Medications

3:10 p.m.  
Julie Fussner, RN, CPHQ, SCRN  
Post-Acute Care

3:30 p.m.  
Julie Fussner, RN, CPHQ, SCRN  
Systems of Care and Quality

3:40 p.m.  
Wrap Up and Discussion

4:05 p.m.  
Robert B. Daroff Lecture  
Michael De Georgia, MD  
Struck Down: How Strokes in Six World Leaders Impacted the History of the 20th Century

4:45 p.m.  
Adjourn
**Saturday, September 9, 2017**

<table>
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<th>Event</th>
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<tr>
<td>7 a.m.</td>
<td>Continental Breakfast and Registration</td>
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<td>Welcome</td>
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<tr>
<td>8:05 a.m.</td>
<td><strong>Frank E. Nulsen Lecture</strong>&lt;br&gt;Robert Kirsch, PhD&lt;br&gt;BrainGate: Harnessing Brain Waves for Movement</td>
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**Session 1: Neuro-Oncology**<br>Moderator: Lisa Rogers, DO

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<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
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<tbody>
<tr>
<td>9 a.m.</td>
<td>Lisa Rogers, DO</td>
<td>Neurological Complications of Cancer</td>
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<tr>
<td>9:20 a.m.</td>
<td>Mitchell Machtay, MD</td>
<td>Updates in the Treatment of Brain Metastasis</td>
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<tr>
<td>9:40 a.m.</td>
<td>Andrew Sloan, MD</td>
<td>Updates in Surgical Treatment of Brain Tumors</td>
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<td>10 a.m.</td>
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<td>Break</td>
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**Session 2: Multiple Sclerosis**<br>Moderator: Hesham Abboud, MD

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>10:15 a.m.</td>
<td>Mari Tani, MD</td>
<td>Approach to Multiple Sclerosis</td>
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<tr>
<td>10:45 a.m.</td>
<td>Alessandro Serra, MD, PhD</td>
<td>Update in Therapy for Multiple Sclerosis</td>
</tr>
<tr>
<td>11:15 a.m.</td>
<td>Hesham Abboud, MD</td>
<td>Neuromyelitis Optica</td>
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<td>11:40 a.m.</td>
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<td>Panel Discussion</td>
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<td>12 p.m.</td>
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<td>Lunch</td>
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### Session 3: Neuromuscular Disorders
Moderator: David Preston, MD

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>1 p.m.</td>
<td>Bashar Katirji, MD</td>
<td>Update on Myasthenia Gravis</td>
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<tr>
<td>1:20 p.m.</td>
<td>David Preston, MD</td>
<td>Approach to Neuropathies</td>
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<tr>
<td>1:40 p.m.</td>
<td>Bashar Katirji, MD</td>
<td>Approach to Myopathies</td>
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<tr>
<td>2 p.m.</td>
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<td>Panel Discussion</td>
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<td>2:20 p.m.</td>
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<td>Break</td>
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### Session 4: Headache and Pain Syndromes
Moderator: Deborah Reed, MD

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<tr>
<th>Time</th>
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<th>Topic</th>
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<tbody>
<tr>
<td>2:40 p.m.</td>
<td>Deborah Reed, MD</td>
<td>Headache Update</td>
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<tr>
<td>3 p.m.</td>
<td>Christopher Bailey, PhD</td>
<td>Post-Concussion Syndrome</td>
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<tr>
<td>3:20 p.m.</td>
<td>Edwin Capulong, MD</td>
<td>Back Pain – Acute to Chronic</td>
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<td>3:40 p.m.</td>
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<td>Panel Discussion</td>
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<tr>
<td>4 p.m.</td>
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<td><strong>Alan Freed Lecture</strong></td>
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<tr>
<td></td>
<td>Daniel Goldmark, PhD</td>
<td>The Music of Bob Dylan</td>
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</tbody>
</table>
SPEAKERS

Hesham Abboud, MD
Department of Neurology,
UH Neurological Institute
Assistant Professor of Neurology,
Case Western Reserve University
School of Medicine

Shahram Amina, MD
Program Director,
Clinical Neurophysiology and Epilepsy,
UH Cleveland Medical Center
Instructor of Neurology,
Case Western Reserve University
School of Medicine

Christopher Bailey, PhD
Director, UH Neurological Institute
Concussion Program
Director, UH Sports Medicine
Concussion Center
Assistant Professor of Neurology,
Case Western Reserve University
School of Medicine

Melissa Brately, BSN, RN, CNRN
Advanced Clinical Nurse,
UH Cleveland Medical Center

Edwin Capulong, MD
Director, Medical Spine/Physical Medicine and Rehabilitation,
UH Neurological Institute
Assistant Professor of Neurological Surgery,
Case Western Reserve University
School of Medicine

Michael De Georgia, MD
Course Director
Director, Neurocritical Care Center,
Director, Center for Music and Medicine,
UH Cleveland Medical Center
Professor of Neurology,
Case Western Reserve University
School of Medicine

Anthony Furlan, MD
Co-Director, UH Neurological Institute
Chairman, Department of Neurology,
UH Cleveland Medical Center
Professor of Neurology,
Case Western Reserve University
School of Medicine

Julie Fussner, RN, CPHQ, SCRN
Manager, Stroke Operations,
UH Neurological Institute

Daniel Goldmark, PhD
Professor of Music,
Head of Popular Music,
Director, Center for Popular Music Studies,
Case Western Reserve University
College of Arts and Sciences

Alan Hoffer, MD
Department of Neurological Surgery,
UH Neurological Institute
Assistant Professor of Neurosurgery,
Case Western Reserve University
School of Medicine

Yin Hu, MD
Department of Neurological Surgery,
UH Neurological Institute
Clinical Associate Professor of Neurosurgery,
Case Western Reserve University
School of Medicine

Maria Katak, MD, PhD
Clinical Assistant Professor,
Department of Neurology,
The Ohio State University
Wexner Medical Center
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<td>Bashar Katirji, MD</td>
<td>Director, Neuromuscular Center and EMG Laboratory, UH Cleveland Medical Center Professor of Neurology, Case Western Reserve University</td>
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<td>Camilla Kilbane, MD</td>
<td>Department of Neurology, UH Neurological Institute Assistant Professor of Neurology, Case Western Reserve University School of Medicine</td>
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<tr>
<td>Robert Kirsch, PhD</td>
<td>Allen H. and Constance T. Ford Professor of Biomedical Engineering, Case Western Reserve University Executive Director, Department of Veterans Affairs Research and Development Service Center for Functional Electrical Stimulation</td>
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<tr>
<td>Ed Kuzma, BSN, RN</td>
<td>Nurse Manager, Neuro Intensive Care, UH Cleveland Medical Center</td>
</tr>
<tr>
<td>Alan Lerner, MD</td>
<td>Director, Brain Health and Memory Center, UH Cleveland Medical Center Professor of Neurology, Case Western Reserve University School of Medicine</td>
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<tr>
<td>Samden Lhatoo, MD</td>
<td>Director, Epilepsy Center, UH Cleveland Medical Center Professor of Neurology, Case Western Reserve University School of Medicine</td>
</tr>
<tr>
<td>Mitchell Machtay, MD</td>
<td>Chair, Department of Radiation Oncology, UH Cleveland Medical Center Professor of Radiation Oncology, Case Western Reserve University School of Medicine</td>
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<tr>
<td>Jason Makii, PharmD, MBA</td>
<td>Manager, Pharmacy, UH Cleveland Medical Center</td>
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<tr>
<td>Kelly Montgomery, BSN, RN, SCRN</td>
<td>Stroke Center Coordinator, UH Cleveland Medical Center</td>
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<td>David Preston, MD</td>
<td>Vice Chair, Department of Neurology, UH Cleveland Medical Center Professor of Neurology, Case Western Reserve University School of Medicine</td>
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<tr>
<td>C. Ramos-Estebanez, MD, PhD</td>
<td>Research Director, Neurocritical Care, UH Cleveland Medical Center Assistant Professor of Neurology, Case Western Reserve University School of Medicine</td>
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<td>Deborah Reed, MD</td>
<td>Department of Neurology, UH Neurological Institute Clinical Assistant Professor of Neurology, Case Western Reserve University School of Medicine</td>
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<td>Lisa Rogers, DO</td>
<td>Medical Director, Neuro-Oncology Program, UH Cleveland Medical Center Professor of Neurology, Case Western Reserve University School of Medicine</td>
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SPEAKERS

Alessandro Serra, MD, PhD  
Department of Neurology,  
UH Neurological Institute  
Assistant Professor of Neurology,  
Case Western Reserve University  
School of Medicine

Cathy Sila, MD  
Director, Comprehensive Stroke Center,  
UH Neurological Institute  
Program Director, Vascular Neurology,  
UH Cleveland Medical Center  
Professor of Neurology,  
Case Western Reserve University  
School of Medicine

Danielle Sindelar, MSN, RN, CMSRN  
Nurse Manager,  
Department of Neurology,  
UH Cleveland Medical Center

Andrew Sloan, MD  
Director, Brain Tumor and  
Neuro-Oncology Center,  
Vice Chair, Department  
of Neurological Surgery,  
UH Cleveland Medical Center  
Professor of Neurosurgery,  
Case Western Reserve University  
School of Medicine

Jennifer Sweet, MD  
Department of Neurological Surgery,  
UH Cleveland Medical Center  
Assistant Professor of Neurosurgery,  
Case Western Reserve University  
School of Medicine

Mari Tani, MD  
Department of Neurology,  
UH Neurological Institute

Stephanie Towns, PsyD  
Department of Neurology,  
UH Neurological Institute  
Clinical Assistant Professor of Neurology,  
Case Western Reserve University  
School of Medicine

Benjamin Walter, MD  
Medical Director,  
Deep Brain Stimulation Program,  
Director, Parkinson’s and  
Movement Disorders Center,  
UH Cleveland Medical Center  
Associate Professor of Neurology,  
Case Western Reserve University  
School of Medicine

John Zande, MD  
Department of Neurology,  
UH Cleveland Medical Center

Organizing Committee
Michael DeGeorgia, MD  
Yin Hu, MD  
Julie Fussner, RN, CPHQ, SCRN  
Cathy Sila, MD  
Danielle Sindelar, MSN, RN, CMSRN
Registration includes tuition, access to educational materials (available online), continental breakfast and lunch. Registration fees are refundable if a participant cancels by September 5. No refunds will be made after September 5.

Persons with special needs who require additional assistance should call the CME Program at 216-983-1239 or 1-800-274-8263 not less than two weeks prior to the program.

WAYS TO REGISTER
1. Register online at http://case.edu/medicine/cme/ with your credit card, through September 6
2. Mail the registration form with your check payable to Case Western Reserve University or credit card number to:
   Registrar, Continuing Medical Education Program
   10524 Euclid Avenue
   Cleveland, Ohio 44106-6026
3. Fax the form with your credit card number to 216-844-8133
4. Call 216-983-1239 or 1-800-274-8263 with the information requested on the following page and your credit card number

POLICY DISCLOSURE
The policy of Case Western Reserve University School of Medicine CME Program requires that the Activity Director, planning committee members and all activity faculty (that is, anyone in a position to control the content of the education activity) disclose to the activity participants all relevant financial relationships with commercial interests. Disclosure will be made to activity participants prior to the commencement of the activity. Case Western Reserve University School of Medicine CME Program also requires that faculty make clinical recommendations based on the best available scientific evidence and that faculty identify any discussion of “off-label” or investigational use of pharmaceutical products or medical devices.
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**TUITION (CIRCLE ONE):**

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<td>Students</td>
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**METHOD OF PAYMENT**

- [ ] Enclosed is my check payable to: **Case Western Reserve University**
- [ ] Visa
- [ ] MasterCard
- [ ] Discover Card

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