Mayo School of Continuous Professional Development

Mayo Clinic 8th Annual

Stroke and Cerebrovascular Disease Review 2016

General Session
September 29 - October 1, 2016

Course Directors
Kevin M. Barrett, M.D., M.Sc.
Kelly D. Flemming, M.D.
W. David Freeman, M.D.
Giuseppe Lanzino, M.D.

Co-Directors
Suzanne M. Brown, BSN, RN, CNRN, SCRN
Lesia H. Mooney, MSN, RN, CNRN, SCRN, ACNS-BC

Featuring an
ABPN Approved Self-Assessment Activity

The Ritz-Carlton
Amelia Island, Florida

REGISTER ONLINE NOW!

Registration and additional course information can be found on our
NEW course website: https://ce.mayo.edu/node/13422
COURSE DESCRIPTION
This course will provide attendees with an update across all major areas of clinical interest in vascular neurology. Lectures will cover management of acute ischemic stroke, brain hemorrhage, symptomatic and asymptomatic vascular lesions including arteriovenous malformations, cavernous malformations, cerebral aneurysms, and carotid stenosis. The course will also cover the latest diagnostic and therapeutic approaches to stroke. Lectures will be supplemented with highlights of images in clinical vascular neurology and group discussions of clinical vignettes. Optional hands-on workshops will also be provided.

COURSE LEARNING OBJECTIVES
Upon conclusion of this program, participants should be able to:

• Recognize the eligibility for intravenous TPA in acute ischemic stroke, and endovascular therapy candidates with large vessel occlusion (LVO)
• Identify modifiable stroke risk factors and interventions (e.g., blood pressure control)
• Recognize the signs and symptoms of stroke that prompt emergency evaluation and earlier treatment
• Evaluate the data and outcomes of clinical trials and the impact on treatment options for stroke patients
• Describe recent developments in stroke prevention strategies
• Discuss standard and new treatment options for cerebrovascular diseases

Attendance at this Mayo course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

INTENDED AUDIENCE
This course is designed for neurologists, neurosurgeons, interventional neuroradiologists, cardiologists, primary care physicians, emergency department physicians, neurology residents, vascular neurology fellows, and stroke center team members including nurse practitioners, nurses, physician assistants, physical and occupational therapists and speech language pathologists.

CREDIT
Mayo Clinic College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Mayo Clinic College of Medicine designates this live activity for a maximum of 19.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

MOC
Mayo Clinic College of Medicine designates this self-assessment for a maximum of 2 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AOA
This program has been accredited by the American Osteopathic Association for 19.75 credits of AOA Category 2-A.

Other Health Care Professionals
A certificate of attendance will be provided to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

GRANTS AND EXHIBITS
At the time of this printing, a complete listing of commercial supporters (financial or in-kind) was not available. Appropriate acknowledgment will be given to all supporters at the time of the meeting.

Exhibits will be available for viewing at all scheduled breaks.
REGISTRATION
To register online, visit https://ce.mayo.edu/node/13422. The registration fee includes tuition, electronic course syllabus, continental breakfasts, break refreshments and reception. Although it is not Mayo School of Continuous Professional Development (CPD) policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is advised. A letter of confirmation will be sent upon receipt of payment and completed registration form. Contact us at cme-jax@mayo.edu or 800-462-9633 with any questions.

<table>
<thead>
<tr>
<th>Registration Fees</th>
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<tr>
<td>Physician/Scientists</td>
<td>$750</td>
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<tr>
<td>Residents, RNs, PAs, NPs</td>
<td>$450</td>
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<tr>
<td>1 Day Nursing Workshop (Saturday)</td>
<td>$200</td>
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<tr>
<td>TCD Workshop</td>
<td>$150</td>
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<td>MOC Module</td>
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CANCELLATION POLICY
If you cancel your participation in this course, your registration fee, less a $75 administrative fee, will be refunded when written notification is received by Mayo School of CPD on or before Thursday, September 15, 2016 (cme-jax@mayo.edu). No refunds will be made after Thursday, September 15, 2016. Canceled registrations are non-transferable.

Mayo School of CPD reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Mayo School of CPD must cancel or postpone this course, Mayo School of CPD will refund the registration fee, but is not responsible for any related costs, charges, or expenses to participants, including fees assessed by airline/travel/lodging agencies.

For additional information, contact: Mayo School of Continuous Professional Development Website: ce.mayo.edu E-mail: cme-jax@mayo.edu Phone: 800-462-9633

TRAVEL AND LODGING
ACCOMODATIONS
The Ritz-Carlton Amelia Island
4750 Amelia Island Parkway
Amelia Island, FL  32034
904-277-1100

A block of coastal view rooms, single/double/triple/quad occupancy are reserved for attendees and their guests at the group rate of $209 per night, plus tax. Call reservations at 888-239-1217 and identify yourself as a participant of the Mayo Clinic Stroke course or reserve online at https://aws.passkey.com/g/52765632. Early reservations are recommended due to the limited number of rooms available. In order to receive the special group rate, reservations must be made before the room block is filled or before Wednesday, September 7, 2016, whichever comes first. Check-in time is after 4:00 p.m. and check-out time is before noon. All parking at the resort is provided by valet service. Overnight parking at the resort is $12 per night. Day guest parking is complimentary. Guests will also receive complimentary in-room internet service. Jacksonville International Airport (JAX) is located 35 minutes from The Ritz-Carlton at Amelia Island.

Lodging arrangements are the sole responsibility of the individual registrant.
Mayo School of CPD is not responsible for expenses incurred by an individual who is not confirmed and for whom space is not available at the meeting. Costs incurred by the registrant such as airline or hotel fees or penalties are the responsibility of the registrant.

CHALLENGING STROKE CASE ABSTRACTS
Please submit your abstract for ePoster presentation at this year’s conference. Any challenging stroke case that may be difficult or pose a stroke management dilemma is welcome. Presentation format is a fast-paced presentation (5-6 min) followed by a rapid-fire Q&A from the audience and moderators for group discussion. Submit your abstract by Friday, August 5, 2016. At least one of the authors must register and attend the conference. Details regarding the abstract submission can be found at: https://ce.mayo.edu/node/13422.
HACKL NAMED VISITING PROFESSORSHIP
Honoring Generosity and Commitment

The Hackl Family Visiting Professorship is an important and ongoing educational event presented annually to physicians, medical students and allied health staff. It is made possible by the generous philanthropy of Albert J. and Christine M. Hackl. Mr. and Mrs. Hackl established the Hackl Family Visiting Professorship with their very first gift to Mayo Clinic in 1998. Over the next ten years, their partnership with Mayo Clinic flourished through significant contributions directed to a variety of programs and initiatives at our Florida campus. These include the construction of our new hospital, completed in April 2008, and ongoing support for our Humanities in Medicine Program and Clinical Research in Women's Health.

The Hackl's and their family members have entrusted their health care to Mayo Clinic for many years. Mr. Hackl is the retired chair of the board of Herff Jones, Inc., a manufacturer of recognition awards and graduation-related products for the educational market, and Mrs. Hackl is an artist. They reside in Indianapolis, Indiana, and in Lake Wales, Florida.

Mayo Clinic continues to be grateful to the Hackl family for generously supporting the advancement of medical education. They have built a legacy of philanthropy and progress at our Florida campus that will sustain our patients and staff for generations to come.

FACULTY
Mayo Faculty

Maria I. Aguilar, M.D.
Maya Babu, M.D., M.B.A.
Kevin M. Barrett, M.D., M.Sc.
Benjamin L. Brown, M.D.
Robert D. Brown, Jr., M.D., M.P.H.
Suzanne M. Brown, BSN, RN, CNRN, SCRN
Pablo R. Castillo, M.D.
Brian W. Chong, M.D.
Bart M. Demaerschalk, M.D.
Benjamin H. Eidelman, M.D.
Kelly D. Flemming, M.D.
W. David Freeman, M.D.
Jennifer E. Fugate, D.O.
Josephine F. Huang, M.D.
Sara E. Hocker, M.D.
James P. Klaas, M.D.
Giuseppe Lanzino, M.D.
E. Paul Lindell, M.D.
Michael J. Link, M.D.
James F. Meschia, M.D.
David A. Miller, M.D.
Lesli H. Mooney, MSN, RN, CNRN, SCRN, ACNS-BC
Michael A. Pizzi, D.O., Ph.D.
Peter M. Pollak, M.D.

Alejandro A. Rabinstein, M.D.
Christina C. Smith, ARNP
Rabib G. Tawk, M.D.
Carla Venegas Borsellino, M.D.
Angela Vizzini, RDN, LD/N
R. Scott Wright, M.D.
Waldemar E. Wysokinski, M.D., Ph.D.

Guest Faculty
Jordan Amadio M.D., M.B.A.
Emory University
Atlanta, GA

Laxmi P. Dhakal, M.B.B.S.
Wesley Medical Center
Wichita, KS

James Grotta, M.D.
Memorial Hermann Medical Group
Houston, TX

Linda R. Littlejohns, MSN, RN, FAAN
Past President of the AANN
Integra LifeSciences Holdings Corporation
San Juan Capistrano, California

Nima Mowzoon, M.D., M.B.A.
CEO of Telespecialists
Fort Myers, FL

Mark N. Rubin, M.D.
NorthShore Neurologic Institute
Glenview, IL
**PROGRAM AGENDA**  
**Thursday, September 29, 2016**  
**Fundamentals of Stroke**

Moderator: *W. David Freeman, M.D.*

7:15 a.m.  
**Registration and Continental Breakfast**

7:45  
**Welcome and Pre-test - W. David Freeman, M.D.**

8:00  
**Epidemiology of Stroke - Kevin M. Barrett, M.D., M.Sc.**

8:30  
**Case-based Vascular Neuroanatomy - Kelly D. Flemming, M.D.**

9:00  
**Stroke Pathophysiology - W. David Freeman, M.D.**

9:30  
**Neuroimaging of Acute Stroke-CT, CT Angio-Perfusion, MRI Diffusion Perfusion - E. Paul Lindell, M.D.**

10:00  
**Q&A**

10:15  
**Break**

10:30  
**Transient Ischemic Attack (TIA): Diagnosis and Management - Kevin M. Barrett, M.D., MSc.**

11:00  
**Ischemic Stroke Prevention - Kelly D. Flemming, M.D.**

11:30  
**What’s New in Stroke Drug Therapeutics: Hyperlipidemia & PCSK9 Inhibitors - R. Scott Wright, M.D.**

11:50  
**Q&A**

Noon  
**Lunch**

1:00 p.m.  
**Stroke in the Young - James P. Klaas, M.D.**

1:30  
**Management of Cryptogenic Stroke and PFO - Peter M. Pollak, M.D.**

2:00  
**NOACs (Novel Oral Anticoagulants) and Atrial Fibrillation - Waldemar E. Wysokinski, M.D., Ph.D.**

2:30  
**Nutrition Assessment after Stroke - Angela Vizzini, RDN, LD/N**

3:00  
**Large Vessel Atherosclerotic Occlusive Disease - Josephine F. Huang, M.D.**

3:30  
**Q&A**

3:45 p.m.  
**Adjourn**

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**FACULTY DISCLOSURE**

As a provider accredited by ACCME, Mayo Clinic College of Medicine (Mayo School of Continuous Professional Development) must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course director(s), planning committee, faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials so those participants in the activity may formulate their own judgments regarding the presentation.

**NATIONAL PHYSICIAN PAYMENT TRANSPARENCY PROGRAM**

Mayo Clinic College of Medicine complies with the requirements of the National Physician Payment Transparency Program OPEN PAYMENTS (Physician Payments Sunshine Act).
6:45 a.m. Optional Event: Morning Beach Run for Stroke
Moderator: Kelly D. Flemming, M.D.

7:30 Continental Breakfast

8:00 Commonly Asked Questions in the Management of Unruptured Intracranial Aneurysms - Robert D. Brown, Jr., M.D., M.P.H.

8:30 What’s New in Intracerebral Hemorrhage Management?
Maria I. Aguilar, M.D.

8:55 Cerebral Amyloid Angiopathy - Benjamin H. Eidelman, M.D.

9:20 Q&A

9:35 Break

9:45 Management of Cavernous Malformations and Developmental Venous Anomalies - Kelly D. Flemming, M.D.

10:15 Sleep Disorders and Stroke - Pablo R. Castillo, M.D.

10:45 Telemedicine - Stroke Systems Model of Care (SSMC)
Bart M. Demaerschalk, M.D.

11:15 Q&A

11:30 Break

11:45 Lunch & Learn: Brain Attack Interactive
Moderator: Kevin M. Barrett, M.D., M.Sc.
Expert Q&A Panel:
David A. Miller, M.D., E. Paul Lindell, M.D.,
James F. Meschia, M.D., Jennifer E. Fugate, D.O.
and Michael A. Pizzi, D.O., Ph.D.

1:15 p.m. Hackl Named Visiting Professorship
Development of the First U.S. Mobile Stroke Unit
Keynote Speaker: James Grotta, M.D.

2:15 Q&A

2:30 ePosters - Foyer

3:30 Reception on the Lawn

5:30 Adjourn

6:00-7:00 p.m. Optional Free Event: Stroke Yoga at Sunset
9:45  Acute Management of Aneurysmal Subarachnoid Hemorrhage - Giuseppe Lanzino, M.D.
10:15  Q&A
10:45  Break
11:00  New Approaches for Treatment of Unruptured Cerebral Aneurysms - Benjamin L. Brown, M.D.
11:30  Pre-operative Endovascular Supercomputer Modeling of Brain Aneurysms - Brian W. Chong, M.D.
Noon Q&A and Post-test
12:15 p.m. Lunch on Your Own

CONCURRENT WORKSHOPS

Salon 1 and 2  Business Aspects of Stroke-Included in Registration Fee
1:15  Practical Business Issues about Starting a TeleStroke Practice - Nima Mowzoon, M.D., M.B.A.
Impact of Affordable Care Act on Stroke Centers Maya Babu, M.D., M.B.A.
NeuroLaunch-How can Start-up Companies Transform Health Care? - Jordan Amadio, M.D., M.B.A.

Salon 3  Neurovascular Neurosurgery Case-Based Discussion-Included in Registration Fee
1:15  Moderators: Giuseppe Lanzino, M.D., David A. Miller, M.D., Rabih G. Tawk, M.D., Michael J. Link, M.D.

Santa Maria Transcranial Doppler Hands-On Workshop-$150 Additional Fee
1:15  Moderators: Mark N. Rubin, M.D., Laxmi P. Dhakal, M.B.B.S., Kevin M. Barrett, M.D., M.Sc., Carla Venegas Borsellino, M.D., W. David Freeman, M.D.
(Maximum of 10 participants)
3:15 p.m. Adjourn

Additional Offering: Stroke Nursing Review on Saturday, October 1, 2016 is designed for nurses who provide care to patients with acute stroke in the hospital and/or ICU environment. This course is designed to help enhance nursing knowledge in management of acute stroke patients, hospital assessment and documentation.

Saturday, October 1, 2016
Stroke Nursing Review and Emergency Stroke Providers

Salons 3  Moderators: Suzanne M. Brown, BSN, RN, CNRN, SCRN, Christina C. Smith, ARNP, Lesia H. Mooney, MSN, RN, CNRN, SCRN, ACNS-BC
7:15 a.m. Continental Breakfast
8:00  Anatomy and Physiology of the Stroke Patient using the Anatomage Table - Linda R. Littlejohns, MSN, RN, FAAN
12:15 p.m. Adjourn

Program schedule is subject to change without notice.
SAVE THE DATE

9th Annual
Stroke and Cerebrovascular Disease Review 2017
September 14-16, 2017
The Ritz-Carlton,
Amelia Island, Florida

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