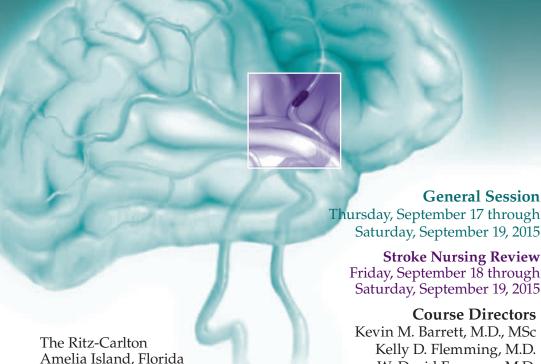


Mayo School of Continuous Professional Development

Mayo Clinic 7th Annual

Stroke and Cerebrovascular **Disease Review 2015**



General Session Thursday, September 17 through

Stroke Nursing Review Friday, September 18 through Saturday, September 19, 2015

Course Directors

Kevin M. Barrett, M.D., MSc 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**

REGISTER ONLINE NOW!

Registration and additional information can be found on our NEW course website: ce.mayo.edu (Search: Stroke)

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 therapists.

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*TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Mayo Clinic College of Medicine designates this Self-Assessment for up to 2.0 *AMA PRA Category 1 Credits*TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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, visit ce.mayo.edu and search: Stroke. The registration fee includes tuition, comprehensive electronic course syllabus, continental breakfast, lunch, 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 is sent upon receipt of payment and completed registration. Contact us at cme-jax@mayo.edu or 800-462-9633 with any questions.

Registration		
Physician/Sc	ientists	
On or before After	08/17/2015 08/17/2015	\$725 \$800
Residents, Re	etirees, RNs, PA	s and NPs
On or before After	08/17/2015 08/17/2015	\$400 \$475
Stroke Nursi (Friday Only)		\$200
ABPN Approved \$25 Self-Assessment		\$25
Hands on Wo (Saturday 1 :1		\$150

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 Friday, September 11, 2015 (cme-jax@mayo.edu or fax#: 904-956-3096). No refunds will be made after Friday, September 11, 2015. 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.

TRAVEL AND LODGING ACCOMODATIONS

The Ritz-Carlton Amelia Island 4750 Amelia Island Parkway Amelia Island, FL 32034

A block of coastal view rooms, single/double/triple/quad occupancy are reserved for attendees and their guests at the group rate of \$199 per night, plus tax. Call reservations at 866-763-2960 and identify yourself as a participant

of the Mayo Clinic Stroke course or reserve online at https://resweb. passkey.com/go/Mayo7thAnnlCerebro Early reservations are recommended due to the limited number of rooms available. Check-in time is after 4 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 inroom 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.

FACULTY

Scott M. Arnold, P.T. Thomas G. Brott, M.D. Benjamin L. Brown, M.D. Robert D. Brown, Jr., M.D. Pablo R. Castillo, M.D. Hali C. Cole, P.T. Bart M. Demaerschalk, M.D. Laxmi P. Dhakal, M.B.B.S. Brynn K. Dredla, M.D. Benjamin H. Eidelman, M.D. Paul A. Friedman, M.D. Jennifer E. Fugate, D.O. Jonathan Graff-Radford, M.D. Josephine Huang, M.D. Sara E. Hocker, M.D. Lisa N.Lazaraton, P.T. E. Paul Lindell, M.D. Michael J. Link, M.D. Robert D. McBane, M.D. James F. Meschia, M.D. David A. Miller, M.D. Lauren Ng, M.D. Michelle D. Owens, M.S.W., L.C.S.W. Luke W. Partridge, OT Sarah H. Peacock, A.R.N.P. Danielle M. Ramsey, A.R.N.P. Mark N. Rubin, M.D. Jason L. Siegel, M.D. Christina C. Smith, A.R.N.P. Rabih G. Tawk, M.D. Amanda D. Tomlinson, A.R.N.P. C. Joseph Yelvington, P.T. Abba C. Zubair, M.D., Ph.D.

Guest Faculty

Linda R. Littlejohns, MSN, RN, FAAN Past President of the AANN Integra LifeSciences Holdings Corporation San Juan Capistrano California Wayne Hodges, RN, PMD UF Health Jacksonville Jacksonville, FL

CHALLENGING STROKE CASE ABSTRACTS

Please submit your abstract for poster presentation at this year's conference. Any challenging stroke case that may be difficult or pose a stroke management dilemma are welcome. Presentation format will be a fast pace presentation (5-6 min) followed by a rapid-fire Q&A from the audience and moderators for group discussion. Submit your abstract by **Monday, August 3, 2015**. 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/neurology-and-neurologic-surgery/node/3483

INNOVATIVE AND HEALTH CARE DELIVERY START-UP ABSTRACTS

Please submit your abstract for reviewed by the Innovative and Health Care Delivery Start-Up panelists. Panelists include stroke content experts, as well as industry, tech and start-up companies. Ideas submitted must impact stroke care either by one or more of the following methods:

- 1.) Practice-changing technology (smartphone app, device, sensors, artificial intelligence, or other technology) that ultimate enhances the value of stroke care (ie.,reduced costs, improved quality, improved efficiency, communication, safety, etc)
- 2.) Health Care Delivery re-design: these may include 'health systems engineering' ideas such as six-sigma product efficiency or LEAN models, improvements in stroke patient care by reducing health care costs using telemedicine or other technology.

Presentation Format: 5minute mini-presentations about ideas following by 5min Q&A by the panel. Accepted ideas will be offered venues for product or idea development. Submit your abstract by **Monday, August 3, 2015**. Details regarding the abstract submission can be found at: https://ce.mayo.edu/neurology-and-neurologic-surgery/node/3483

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).

Thursday, September 17, 2015

Fundamentals of Stroke

7:00 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., MSc
8:30	Evidence-based Primary Stroke Prevention*

Moderator: W. David Freeman, M.D.

James 1	F. Mescl	hia, M.D.	•	

9:00	Stroke Pathophysiology* - W. Davia Freeman, M.D.
9:30	Neuroimaging of Acute Stroke-CT, CT Angio-Perfusion,

MRI Diffusion Perfusion* - E. Pa	aul Lindell, M.D
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10:00	Q&A
10:15	Break

10:30	Case-based Vascular Neuroanatomy*
	Jonathan Graff-Radford, M.D.
11:00	Transient Ischemic Attack (TIA): Diagnosis and Management*
	Kevin M. Barrett, M.D., MSc.
11:30	Secondary Stroke Prevention* - Kelly D. Flemming, M.D.
11:50	Q&A
Noon	Lunch
1:00 p.m.	Intracerebral Hemorrhage – Update in Management*
	Bart M. Demaerschalk, M.D.
1:30	Atrial Fibrillation and Stroke — What you need to know for
	diagnosis and treatment in 2015 - Paul A. Friedman, M.D.
2:00	NOAC's (Novel Oral Anticoagulants) for Stroke Prevention*
	Robert D. McBane, M.D.
2:30	Decision-Making and Medical Management of Common
	Post-Stroke Issues* - Josephine Huang, M.D.
3:00	Q&A
3:30	Keynote Speaker: Thomas G. Brott, M.D.
	CREST-2 and Asymptomatic Carotid Occlusive Disease
4:30 p.m.	Q&A/Adjourn

Friday, September 18, 2015

	Friday, September 18, 2015
	Medical Management and Controversies of Stroke
6:00 a.m.	Optional Event: Morning Beach Run For Stroke
Moderator: Kel	lly D. Flemming, M.D.
7:30 a.m.	Continental Breakfast
8:00	Commonly Asked Questions in the Management of Unruptured
	Aneurysms* - Robert D. Brown, Jr., M.D., M.P.H.
8:30	Cavernous Malformations* - Kelly D. Flemming, M.D.
8:55	Small Vessel Disease* - Benjamin H. Eidelman, M.D.
9:20	Break / Q&A
9:30	Wake Up Stroke: What Now?* - Kevin M. Barrett, M.D., MSc
10:00	Sleep and Stroke - Pablo R. Castillo, M.D.
10:30	Emerging Applications of Telemedicine in Cerebrovascular Care
	Bart M. Demaerschalk, M.D.
11:00	Q&A
11:15	Break
11:30	Lunch & Learn: Brain Attack Interactive*
Moderator: Kell	ly D. Flemming, M.D.
	Expert Q&A Panel: Kelly D. Flemming, M.D.,
	Kevin M. Barrett, M.D., MSc, David A. Miller, M.D.,
	Bart M. Demaerschalk, M.D. and Jennifer E. Fugate, D.O.
1:00 p.m.	Vascular Cognitive Impairment * - Jonathan Graff-Radford, M.D.
1:30	Mesenchymal Stern Cell Regenerative Therapy for Intracerebral
	Hemorrhage - Abba C. Zubair, M.D., Ph.D.
2:00	Viewing of Challenging Stroke Cases Posters (Digital Posters)
2:30	Innovative and Health Care Delivery Start-Up Ideas for Stroke Care
	Mayo Clinic Content Experts, Industry, Business, Technology,
	and Thought Leaders
4:00	Reception on the Lawn
5:30 p.m.	Adjourn

6:00-7:00 p.m. Optional Free Event: Stroke Yoga at Sunset - Kelly S. Johnson, R.N.

Saturday, September 19, 2015

Neurosurgical and Endovascular Stroke Therapy

Moderator	: Moderator: Giuseppe Lanzino, M.D.
7:15 a.m.	Continental Breakfast
7:45	New Approaches for Treatment of Unruptured Cerebral Aneurysms *
	Benjamin L. Brown, M.D.
8:15	Acute Management of Aneurysmal Subarachnoid Hemorrhage*
	Giuseppe Lanzino, M.D.
8:45	Evaluation and Management of Carotid and Vertebral Artery
	Arterial Dissection - Benjamin H. Eidelman, M.D.
9:15	Update in Neuroendovascular Trials*
	Jennifer E. Fugate, M.D.
9:45	Case Studies in Neuroendovascular Stroke*
	Rabih G. Tawk, M.D.
10:15	Q&A
10:45	Break
11:00	Medical and Surgical Management of Cerebral Edema
	Sara E. Hocker, M.D.
11:30	Pros and Cons of Recent Stroke Endovascular Trials
	W. David Freeman, M.D.
Noon	Q&A and post-test
12:15 p.m.	Lunch
1	

Concurrent Workshops

1:15	Workshor	p-Included	in Re	oistration	Fe
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Neurovascular Neurosurgery Case-Based Discussion

Moderators: Giuseppe Lanzino, M.D., David A. Miller, M.D., Rabih G. Tawk, M.D., Michael J. Link, M.D.

1:15 **Workshop-\$150 Additional Fee** - Transcranial Doppler Hands-On Workshop

Moderators: *Mark N. Rubin, M.D., Laxmi P. Dhakal, M.B.B.S., Kevin M. Barrett, M.D., MSc, W. David Freeman, M.D.* (Maximum of 10 participants)

1:15 Workshop-Included in Registration Fee

Stroke Rehabilitation and Hands-on Workshop

- a. Speech Language Pathology: Stroke Dysphagia Workshop and Fiberoptic Endoscopic Evaluation of Swallow (FEES)
- b. Physical and Occupational Therapy Departments
 - i. Cognitive Assessment after Stroke Luke W. Partridge, OT
 - ii. Best Practice Guidelines & Early Mobilization after Stroke Scott M. Arnold, P.T., Hali C. Cole, P.T., Lisa N. Lazaraton, P.T. C. Joseph Yelvington, P.T.
- c. Case Management: Transitions of Care *Michelle D. Owens, M.S.W., L.C.S.W.*

Additional Offering: Stroke Nursing Review – Friday, September 18 through Saturday, September 19, 2015 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, and for nurses who wish to review stroke concepts for stroke center certification or nursing stroke subspecialty review purposes. Stroke Nursing Review lectures are also integrated throughout the course and designates with an asterisk (*).

Friday, September 18, 2015

St	troke Nursing Review & Emergency Stroke Providers
Moderators: Su	zanne Brown, BSN, RN, CNRN, SCRN and
	Lesia H. Mooney, MSN, RN, CNRN, SCRN, ACNS-BC
6:00 a.m.	Optional Event: Morning Beach Run For Stroke
7:30 a.m.	Continental Breakfast
8:00	Functional Assessment and Correlation to Stroke Syndromes:
What t	o expect/what not to expect?
	Linda R. Littlejohns, MSN, RN, FAAN
11:00	Q&A
11:15	Break
11:30	Join Lunch & Learn: Brain Attack Interactive*
	Salons 1&2
	Stroke Systems of Care: Hot Topics
1:00 p.m.	E.M.S., Emergency Department & Stroke Systems of Care
	Wayne Hodges, RN, PMD
2:00	Calculating NIHSS in Patients Who are Difficult to Assess
	Sarah H. Peacock, A.R.N.P.
3:00	ABC's of ICH Hematoma Measurement & ICH Score
	Amanda Tomlinson, A.R.N.P.
3:45	Q&A with Speakers at "Ask the Expert" Table
4:00	Reception on the Lawn
5:30 p.m.	Adjourn
6:00-7:00p.m.	Optional Free Event: Stroke Yoga at Sunset - Kelly S. Johnson, R.N.
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	Saturday, September 19, 2015
	Health Session: Practical Issues about Stroke Symptoms by Gender, Caregivers & Family Issues and Post-Hospitalization
Moderators: Ch	risty A. Smith, A.R.N.P. and Lauren K. Ng, M.D.
7:15 a.m.	Continental Breakfast
8:00	Management of Deep Vein Thrombosis Prophylaxis and
	nary Embolism in Acute Stroke Patients
	Danielle M. Ramsey, A.R.N.P.
9:00	Prevention of Stroke in Women: Reviewing the Guidelines
	Lauren K. Ng, M.D.
10:00	Stroke Family Caregiver and Dyadic Interventions:
Review	ring the Evidence - Brynn K. Dredla, M.D.
11:00	Use of a Personal Health Assistant (PHA) after Stroke
Discha	rge: Results from the Better App Pilot - Jason L. Siegel, M.D.
Noon	Break/ Q&A at "Ask the Expert" Table
12:15 p.m.	Lunch
1:15	Workshop-Included in Registration Fee
	Stroke Rehabilitation and Hands-on Workshop
	a. Speech Language Pathology: Stroke Dysphagia
	Workshop and Fiberoptic Endoscopic Evaluation of
9	Swallow (FEES)
	b. Physical and Occupational Therapy Departments
	i. Cognitive Assessment after Stroke
	Luke W. Partridge, OTR
	ii. Best Practice Guidelines & Early Mobilization after Stroke
	Scott M. Arnold, P.T., Hali C. Cole, P.T.,
	Lisa N. Lazaraton, P.T., C. Joseph Yelvington, P.T.
	c. Case Management: Transitions of Care
2.15	Michelle D. Owens, M.S.W., L.C.S.W.

Adjourn

3:15 p.m.



4500 San Pablo Road

Jacksonville, Florida 32224

FACULTY DISCLOSURE

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



SAVE THE DATE

September 29th through October 1, 2016 Stroke and Cerebrovascular Disease Review 2016 8th Annual

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