

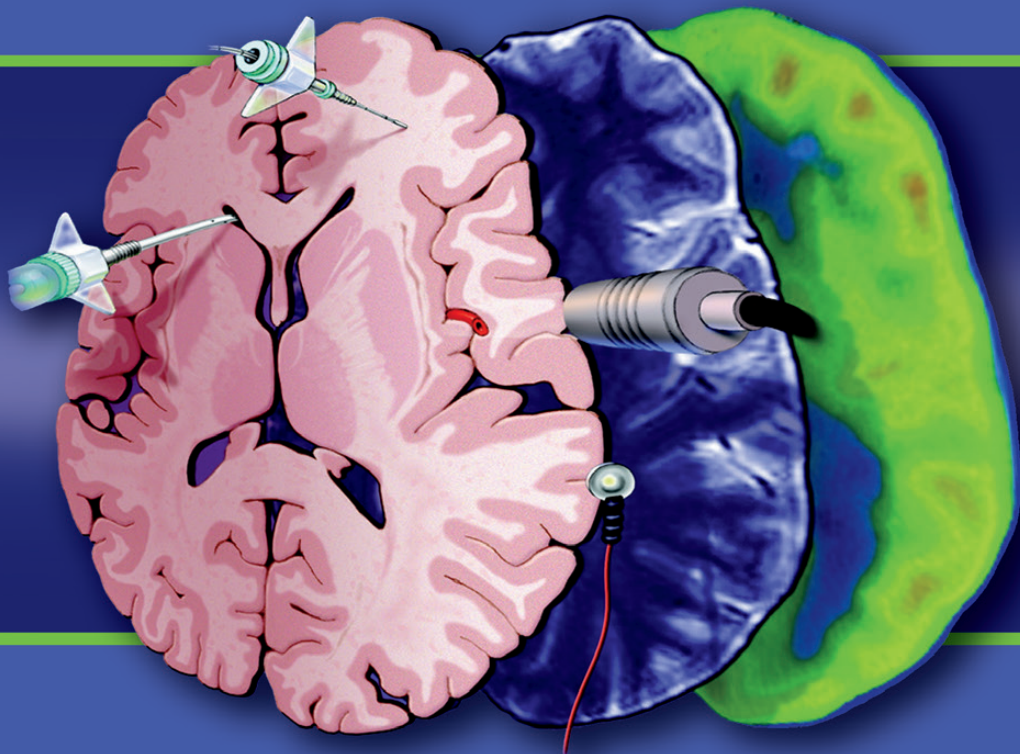


NEW THIS YEAR!
Endorsed by
Neurocritical Care Society
Emergency Neurological Life Support
(ENLS)

3rd Annual

Neuro and Intensive Care: Review and Hands-on Workshops

Mayo Clinic School of Continuous Professional Development



May 4-7, 2017

Four Seasons Resort Orlando
at Walt Disney World®
Orlando, FL



REGISTER NOW!

Registration and additional course information can be found on our course website: ce.mayo.edu/node/21662

Course Directors

W. David Freeman, M.D.
Alejandro A. Rabinstein, M.D.
Elco F. Wijdicks, M.D., Ph.D.

Co-Course Directors

Suzanne M. Brown, BSN, RN, CNRN, SCRN
Daniel A. Jackson, Pharm.D., BCPS
Lesia H. Mooney, MSN, RN, ACNS-BC,
CNRN, SCRN
Christina C. Smith, A.R.N.P.

COURSE DESCRIPTION

This course is designed for medical providers who care for patients with neurological emergencies, acute stroke and brain hemorrhage, acute brain injury, coma and disorders that require hospital, Emergency Department and Intensive Care Unit (ICU) evaluation. The course will provide a mixture of didactic, case-based and evidence based guideline review, as well as hands-on workshops. These hands-on workshops include central line placement, critical care ultrasound including Focus exam, focused cardiac and lung ultrasound, transcranial Doppler ultrasound, intracranial ICP monitor and ventriculostomy placement, hypothermia and targeted temperature management (TTM), mechanical ventilation, multimodal monitoring and ECMO workshops.

COURSE LEARNING OBJECTIVES

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

- Define common neurological and neurosurgical emergencies such as stroke, seizures, respiratory failure, as well as provide updates in best practice for these topics
- Review diagnosis of neurocritical care conditions and diseases, as well as pathophysiologic management of these conditions
- Outline strategies for best practice and evidence-based medicine updates for medical providers caring for patients with neurological critical care and neurosurgical ICU disorders

Attendance at this Mayo Clinic 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 medical providers from a broad array of disciplines including Emergency Medicine, Neurology, Neurosurgery, Pulmonary Medicine, Anesthesia, and Neuro Intensive Care. In addition, ARNP/PA, paramedics/EMS medical personnel, and allied health providers including physical, occupational and speech therapists who care for patients with neurological emergencies, or patients in a Neuro ICU or ICU are encouraged to attend.

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 18.75 *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 18.75 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, visit ce.mayo.edu/node/21662. The registration fee includes tuition, comprehensive electronic course syllabus, continental breakfasts, lunch and break refreshments. Although it is not Mayo Clinic 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.

REGISTRATION FEES	On or before 4/3/17	After 4/3/17
Physicians and Scientists	\$750	\$850
ARNP's & PA's	\$400	\$500
Residents, Fellows, RN's, Allied Health and Retirees	\$375	\$375
Additional Workshops	\$150 each	\$150 each
ENLS: Physicians and Scientists	\$400	\$500
ENLS: ARNP/PA, RN, Allied Health, Residents and Fellows	\$200	\$300

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 Clinic School of CPD on or before April 22, 2017 to cme-jax@mayo.edu. No refunds will be made after April 22, 2017. Canceled registrations are non-transferable.

Mayo Clinic School of CPD reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Mayo Clinic School of CPD must cancel or postpone this course, Mayo Clinic 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 Clinic School of Continuous Professional
Development
Website: ce.mayo.edu
E-mail: cme-jax@mayo.edu
Phone: 800-462-9633

TRAVEL AND LODGING ACCOMODATIONS

Four Seasons Resort Orlando
at Walt Disney World®
10100 Dream Tree Boulevard
Buena Vista, FL 32836
407-313-7777

Guest rooms, single/double occupancy are reserved for attendees and their guests at the group rate of \$289 per night, plus tax. When calling to make a reservation, identify yourself as a participant of the Mayo Clinic Neuro and Intensive Care: Review and Hands-on Workshops 2017. All guests receive complimentary guest room basic wireless internet and a waived resort fee.

Mayo Clinic 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.

MAYO CLINIC AND NEUROCRITICAL CARE SOCIETY EMERGENCY NEUROLOGICAL LIFE SUPPORT (ENLS)

This course will provide attendees with an overview of 14 neurological emergencies, including acute ischemic stroke, intracerebral hemorrhage, subarachnoid hemorrhage, meningitis/encephalitis, coma after cardiac arrest and spinal cord injury. The course is designed for a broad group of providers, including emergency medical service paramedics, nurses, residents, fellows, primary care physicians, and physicians specializing in emergency medicine, intensive care, infectious diseases, neurology, and neurosurgery. Attendees are encouraged to bring laptops or tablets to take emergency neurological life support (ENLS) online quizzes. Attendees who pass the quizzes will receive an ENLS certificate from the Neurocritical Care Society.

ABSTRACTS

An electronic poster session for presentation of original research dedicated to the field of Neuro Critical Care will be held at the meeting. Submitted abstracts may include proposed society guidelines, ongoing randomized trials in neuro critical care, outcome studies, quality improvement or practice innovations and medical poems, artwork, and interesting case reports. Posters will be peer-reviewed. At least one of the authors must register and attend the conference. Details regarding the abstract submission process can be found at: <https://ce.mayo.edu/node/21662>.

FACULTY

Mayo Clinic Faculty

Maya A. Babu, M.D.
Kevin M. Barrett, M.D., MSc
Paul W. Brazis, M.D.
Benjamin L. Brown, M.D.
*Suzanne M. Brown, BSN, R.N.,
CNRN, SCRN*
William E. Clifton, III, M.D.
Bart M. Demaerschalk, M.D.
José L. Díaz-Gómez, M.D.
W. David Freeman, M.D.
Jeffrey L. Garland, M.D.
Kelly Gassie, M.D.
Pramod K. Guru, M.B.B.S.

Karen W. Hampton, R.R.T.
Sara E. Hocker, M.D.
Daniel A. Jackson, Pharm.D., BCPS
William L. Lanier, M.D.
Maria I. Lapid, M.D.
Philip E. Lowman, M.D.
Margaret M. Margretta, A.R.N.P.
Diane C. McLaughlin, A.R.N.P.
*Lesia H. Mooney, MSN, R.N.,
A.C.N.S.-B.C., CNRN, SCRN*
Lauren Ng, M.D.
Jeffrey J. Pasternak, M.D.
Sarah H. Peacock, A.R.N.P.
Michael A. Pizzi, D.O., Ph.D.

Joshua A. Propst, P.A.-C.
Alfredo Quinones-Hinohosa, M.D.
Alejandro A. Rabinstein, M.D.
Robert A. Ratzlaff, D.O.
Leslie A. Rudzinski, M.D.
Jason L. Siegel, M.D.
Leslie V. Simon, D.O.
Christina C. Smith, A.R.N.P.
William Tatum, D.O.
Amanda D. Tomlinson, A.R.N.P.
Tyler F. Vadeboncoeur, M.D.
Charles R. Watts, M.D., Ph.D.
Eelco F. Wijdicks, M.D.

Guest Faculty

Charles F. Bolton, M.D.
Queen's University
Ontario, Canada
Laxmi P. Dhakal, M.B.B.S.
Wesley Medical Center
Wichita, KS
Romergryko G. Geocadin, M.D.
Johns Hopkins University Medical
Center
Baltimore, MD
Brad J. Kolls, M.D., Ph.D., MMCi
Duke University Medical Center
Durham, NC

Christopher L. Kramer, M.D.
University of Chicago Medical
Center
Chicago, IL
Thabele Leslie Mazwi, M.D.
Massachusetts General Hospital
Boston, MA
Soojin Park, M.D.
New York Presbyterian/Columbia
University Medical Center
New York, NY
Mark N. Rubin, M.D.
NorthShore Neurological Institute
Glenview, IL

Aaarti Sarwal, M.D.
Wake Forrest Baptist Medical
Center
Winston-Salem, NC
Joseph R. Shiber, M.D.
University of Florida
Jacksonville, FL

PROGRAM AGENDA

Thursday, May 4, 2017

Fundamentals of Neurocritical Care Day

- 7:00 a.m. Registration/Breakfast
Moderator: Alejandro A. Rabinstein, M.D.
- 7:30 Cerebral Physiology-Intracranial Pressure, Cerebral Perfusion Pressure and Auto regulation
W. David Freeman, M.D.
- 8:00 Disorders of Consciousness
Alejandro A. Rabinstein, M.D.
- 8:30 Utility of Cardiothoracic Ultrasound in Neuro ICU Patients
José L. Díaz-Gómez, M.D.
- 9:00 Neuro-Ophthalmology Pearls for the Neuro ICU
Paul W. Brazis, M.D.
- 9:30 **Keynote:** Critical Illness Acquired Weakness
Charles F. Bolton, M.D.
- 10:00 Panel Q&A/Break

Workshops – Additional Fee

- 10:15-12:15 p.m. Central Line Workshop #1 additional fee \$150
Philip E. Lowman, M.D., Lauren Ng, M.D., Josh Propst, P.A.-C.
- 10:15-12:15 Ultrasound Critical Care: Heart, Lung, Abdomen additional fee \$150
José L. Díaz-Gómez, M.D. and Aarti Sarwal M.D. (Cardiac, and Thoracoabdominal)
- 12:15-1:15 Lunch/Exhibit Hall

Workshops Continued

- 1:15-3:15 Central Line Workshop #2 (with Ultrasound) additional fee \$150
Philip E. Lowman, M.D., Lauren Ng, M.D., Josh Propst, P.A.-C.
- 1:15-3:15 Ventilator Workshop (open, no limit)
Jeffrey L. Garland, M.D., Joseph R. Shiber, M.D., Karen W. Hampton, R.R.T.
- 1:15-3:15 TeleNeuroICU and eICU Models Workshop (open, no limit)
Bart M. Demaerschalk, M.D.
- 3:15 p.m. Adjourn/Exhibit Hall

Friday, May 5, 2017

Acute Management and Evidence-Based Updates

- 7:00 a.m. Breakfast/Exhibit Hall
Moderator: Eelco F. Wijdicks, M.D., Ph.D.
- 7:30 Difficult Decisions in Management of ICH
Eelco F. Wijdicks, M.D., Ph.D.

Friday, May 5, 2017 Continued

- 8:00 a.m. Update in Stroke Interventional Trials: Where are We Now?
Thabele M. Leslie-Mazwi, M.D.
- 8:30 Decompressive Craniectomy for Malignant Cerebral Edema
Eelco F. Wijdicks, M.D., Ph.D.
- 9:00 The Role of Palliative Care in the NeuroICU
Maria I. Lapid, M.D.
- 9:30 Acute Brain Tumor Management-Postoperative Care and Future Therapies
Afredo Quinones-Hinohosa, M.D.
- 10:00-10:15 Q&A/Break/Exhibit Hall
- Workshops – Additional Fee**
- 10:15-12:15 p.m. Tracheostomy/Airway Simulation #1 additional fee \$150
Philip Lowman, M.D., Josh Propst PA-C, Karen W. Hampton R.R.T.
- 10:15-12:15 Transcranial Doppler and Optic Nerve Sheath Diameter additional fee \$150
Laxmi Dhakal, M.B.B.S., Mark N. Rubin, M.D., Michael A. Pizzi, D.O., Ph.D., and Kevin M. Barrett, M.D., MSc
- 10:15-12:15 Intracranial Monitoring Workshop additional fee \$150
Benjamin L. Brown M.D., William E. Clifton, III, M.D., Charles R. Watts, M.D., Ph.D., Neurovascular Fellow, Kelly Gassie, M.D.
- 12:15-1:15 Lunch in Exhibit hall
- Workshops Continued**
- 1:15 - 3:15 Tracheostomy/Airway Simulation #2 additional fee \$150
Philip E. Lowman, M.D., Josh Propst P.A.-C., Karen W. Hampton R.R.T.
- 3:15-4:00 E-Posters/Challenging Cases/Medical Art
- 4:00-6:00 p.m. Reception/Adjourn

Saturday, May 6, 2017

General Session

Advanced Topics Day

Moderator: W. David Freeman, M.D.

- 7:00 a.m. Breakfast/Exhibit Hall
- 7:30 Update in Traumatic Brain and Spinal Cord Injury Guidelines
Maya A. Babu, M.D.

Saturday, May 6, 2017 *Continued*

- 8:00 Afferentation Theory of Cerebral Arousal
William L. Lanier, M.D.
- 8:30 Cerebral Metabolism (CMRO2) and CMRO-CBF Coupling
Jeffrey J. Pasternak, M.D.
- 9:00 Big Data and Informatics in the ICU - *Soojin Park, M.D.*
- 9:30 Q&A/Post-Test
- 10:00 Break/Exhibit Hall
- Workshops – Additional Fee**
- 10:15-12:15 p.m. ICU EEG and Status Epilepticus and Super Refractory Status Cases (open, no limit)
William Tatum, D.O., Brad Kolls, M.D., Ph.D., MMCI, Leslie A. Rudzinski, M.D. and Sara E. Hocker M.D.
- 10:15-12:15 Hypothermia and Targeted Temperature Management (TTM) Protocols (open, no limit)
Christopher L. Kramer, M.D., Fellow, Jason L. Siegel, M.D., Alejandro A. Rabinstein, M.D. and Tyler F. Vadeboncoeur, M.D.
- 10:15-12:15 eCPR/ECMO and Neurological: additional fee, \$150
Pramod K. Guru, M.B.B.S., Robert A. Ratzlaff, D.O., Joseph R. Shiber, M.D., and Romergryko G. Geocadin, M.D.
- 12:15 p.m. Adjourn

Saturday, May 6, 2017**Allied Health Session****ARNP/PA, Nursing, PharmD's****Moderator: W. David Freeman, M.D.**

- 6:30 a.m. Breakfast/Exhibit Hall
- Moderators: Christina C. Smith, A.R.N.P., Suzanne M. Brown, B.S.N., C.N.R.N., S.C.R.N. and Lesia H. Mooney, M.S.N., R.N., A.C.N.S.-B.C.**
- 7:00 Reversal Agents for Antithrombotic Intracranial Bleeding Emergencies: Data, Dosing and Comparative Efficacy - *Daniel A. Jackson, Pharm.D., BCPS*
- 7:40 Neuroanatomy and Localization
William E. Clifton, III, M.D.
- 8:20 Q&A
- 8:30 Break/Exhibitor Hall
- 8:40 Neurological Examination Fundamentals
Kevin M. Barrett, M.D., MSc
- 9:40 Q&A/Break
- Workshops- see above 10:15-12:15pm**
- 12:15 p.m. Adjourn/Lunch on you own

Sunday, May 7, 2017**Emergency Neurological Life Support (ENLS) Certification Course-Care in the 1st Hour***Post-Course, Additional Registration Fee***Directors: W David Freeman, M.D., Leslie V. Simon, D.O. & Sarah H. Peacock, A.R.N.P.**

- 7:00 a.m. Registration/Breakfast
- 8:00 Introduction/Welcoming
Moderator: W. David Freeman, M.D.
- 8:05 Register/Setup for ENLS Website
W. David Freeman, M.D.
- 8:20 Airway, Ventilation and Sedation
Leslie V. Simon, D.O.
- 8:40 Approach to the Comatose Patient - *Margaret M. Margretta, A.R.N.P.*
- 9:00 Elevated ICP and Herniation
W. David Freeman, M.D.
- 9:20 Acute NonTraumatic Weakness
W. David Freeman, M.D.
- 9:40 Intracerebral Hemorrhage
Amanda D. Tomlinson, A.R.N.P.
- 10:00 Break/Self Time for 10 Question Modules
- 10:20 Ischemic Stroke
Kevin M. Barrett, M.D., MSc
- 10:40 Meningitis/Encephalitis
Diane McLaughlin, A.R.N.P.
- 11:00 Resuscitation following Cardiac Arrest
Amanda Tomlinson, A.R.N.P.
- 11:20 Spinal Cord Compression
Sarah H. Peacock, A.R.N.P.
- 11:40 Pharmacotherapy
Michael A. Pizzi, D.O., Ph.D.
- 12:00-1:00 p.m. Lunch/Work on 10 question modules
- 1:00 Status Epilepticus
Michael A. Pizzi D.O., Ph.D.
- 1:20 Subarachnoid Hemorrhage
Alejandro A. Rabinstein, M.D.
- 1:40 Traumatic Brain Injury
Michael A. Pizzi D.O., Ph.D.
- 2:20 Traumatic Spinal Cord Injury
Michael A. Pizzi D.O., Ph.D.
- 2:40-6:00 p.m. Q&A/Online Examination/Adjourn

Note: Attendees of ENLS are encouraged to bring a laptop and/or iPad/Tablet with internet or WiFi access since access to the materials is provided via the Neurocritical Care Society online.

MAYO 4500 San Pablo Road
CLINIC Jacksonville, Florida 32224



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).

4th Annual Neuro and Intensive Care: Review and Hands-on Workshops

May 10-12, 2018

Loews Portofino Bay Hotel Universal Orlando®
Orlando, FL

Save the Date!

MAYO CLINIC | 4500 San Pablo Road | Jacksonville, FL 32224 | mayoclinic.org

©2016 Mayo Foundation for Medical Education and Research. All rights reserved. MAYO, MAYO CLINIC and the triple-shield Mayo logo are trademarks and service marks of MFMEER.

MCC8100-87rev1216

NON-PROFIT ORG.
U.S. POSTAGE
PAID
MAYO CLINIC