

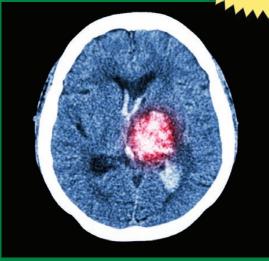
# Innovations in Cerebrovascular Care 2025

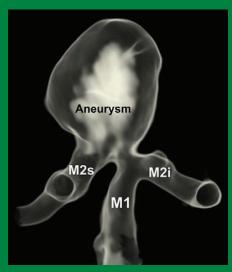
Tuesday June 10 – Wednesday June 11

InterContinental Hotel and Conference Center Cleveland, OH and Live Stream

VENOUS
DISORDERS –
A Special Summit
within Innovations
in Cerebrovascular
Care









Register Today! www.ccfcme.org/IICC

# **Innovations in Cerebrovascular Care 2025**

#### **Overview**

The field of cerebrovascular care is evolving rapidly, with new advancements shaping the way we diagnose, treat, and manage complex conditions. The Cleveland Clinic **Innovations in Cerebrovascular Care 2025** meeting will highlight the latest clinical breakthroughs and technological innovations while fostering multidisciplinary discussions on some of the most pressing challenges in patient care. Designed for practitioners across neurosciences and related specialties, this meeting provides a platform to explore cutting-edge strategies and collaborate on improving outcomes for patients with cerebrovascular conditions. Join us as we explore the future of cerebrovascular care.

#### Who Should Attend?

This educational activity is intended for emergency medicine physicians, fellows, neurointensivists, neurointerventionalists, neurologists, neuroradiologists, neurosurgeons, nurse practitioners, nurses, pharmacists, physician assistants, primary care physicians, and residents who treat cerebrovascular patients.

### **Learning Objectives**

After completing this educational activity, participants will be able to do the following:

- Discuss the relevance of venous anatomy and its implications for venous disorders and stroke.
- Debate the role of venous stenting versus medical therapy in patients with idiopathic intracranial hypertension.
- Critically review the approaches to treating cerebral venous sinus thrombosis, including the use and timing of thrombectomy versus medical therapy.
- Provide an evidence-based review of key advances in cerebrovascular care, including new technologies and artificial intelligence, and describe
  their use in clinical practice.
- Summarize and interpret the latest updates and trial results from the largest cerebrovascular conferences in the world.
- Summarize the issues supporting minimally invasive intracerebral hemorrhage (ICH) evacuation.
- Debate aggressive versus conservative anticoagulation for atrial fibrillation post ICH.
- Describe the potential use of technological innovations, especially artificial intelligence-based models, and wearable devices to improve cerebrovascular outcomes
- Review new therapies and devices in neurocritical care, especially their role in multimodal monitoring, transcranial doppler, and EEG for delayed cerebral ischemia.
- Provide evidence supporting medical versus interventional therapies for the management of cervical carotid webs and define their optimal use in clinical practice.
- List the key issues and latest developments in endovascular versus medical therapy for medium vessel occlusion and aggressive versus permissive strategies for lowering blood pressure in acute stroke.
- Analyze complex cases to evaluate advances in device technology and endovascular techniques for treating cerebral aneurysms, arteriovenous malformations, arteriovenous fistulas, atherosclerotic disease, stroke, and other cerebrovascular disorders.

#### **Cleveland Clinic Course Director**



M. Shazam Hussain, MD, FRCP(C), FAHA
Director, Cerebrovascular Center
Staff, Vascular Neurology and
Endovascular Surgical Neuroradiology
Associate Professor, Cleveland Clinic Lerner
College of Medicine

#### Cleveland Clinic Co-Directors -



Dhimant Dani, MD
Staff Intensivist
Assistant Professor, Medicine and Neurology, CCLCM
Program Director, Neurocritical care Fellowship
Medical Director, NSICU, Akron General Hospital
CO Chair- Eye Tissue and Organ Donation Committee,
Northeast Ohio submarket



Nina Z. Moore, MD, MSE, FAANS, FCNS
Assistant Professor, Neurological Surgery, CCLCM
Lead of Endovascular and Cerebrovascular
Neurosurgery Research, Cerebrovascular Center
Pl/Director, N.Z. Moore Cerebrovascular
Biomechanics Laboratory
Joint Staff, Biomedical Engineering Department,
Lerner Research Institute



Andrew Russman, DO, FAAN, FAHA Head, Cleveland Clinic Stroke Program Medical Director, Comprehensive Stroke Center Staff, Vascular Neurology



Gabor Toth, MD, FAHA, FSVIN
Director of Education
Lead, Endovascular Operations
Staff, Vascular Neurology and Endovascular Intervention,
Cerebrovascular Center
Professor of Neurology, CCLCM

# **Innovations in Cerebrovascular Care 2025**

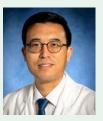
# **Guest Faculty**



Andrew Bauer, MD
Assistant Professor of Neurosurgery and
Residency Program Director,
University of Oklahoma Health Sciences Center
Oklahoma City, Oklahoma



Shyam Prabhakaran, MD, MS
James Nelson and Anna Louise Raymond
Professor of Neurology
Chair of Neurology
The University of Chicago
Chicago, Illinois



Sung-Min Cho, DO, MHS

Associate Professor of Neurology,
Johns Hopkins University

Director of Adult ECMO (Extracorporeal
Membrane Oxygenation) Research,
The Johns Hopkins Hospital

Baltimore, Maryland



Eytan Raz, MD, PhD
Assistant Professor, NYU Langone Medical Center
Director of Interventional Neuroradiology,
Bellevue Hospital
New York City, New York

# **Cleveland Clinic Faculty**

Ammar Abdulrazzak, MD

Marc Babi, MD

Mark Bain, MD, MS, FAANS

Adam Barron, MD Brittany Bolt, DO, PhD

Julia Bucklan, DO

A. Blake Buletko, MD Morgan Carter, PhD

Bing Chen, MD

Rodica Di Lorenzo, MD

Brad Douglas, MSN, ACNP-BC

Joao Gomes, MD, FCCM, FAHA

Marco Gonzalez, MD

Shweta Goswami, MD

Sidonie Ibrikji, MD

Ahmed Itrat, MD

Seby John, MD

Ahmed Kashkoush, MD

G. Abbas Kharal, MD

Ashutosh Mahapatra, MD

Amre Nouh, MD, MBA, FAHA, FAAN

Michal Obrzut, MD

Peter Rasmussen, MD

Scott Raymond, MD

Tina Resser, MSN, ACNP-BC, FNP-BC, CNRN

Carlos Rosales, MD

Vivek Sabharwal, MD

Ashish Sarraju, MD

Nicole Smith, PA-C

Maria Sokola, MD

Jonathan Solomonow, MD

Jenny Tsai, MDCM, FRCP(C)

Ken Uchino, MD, FAHA, FANA

Sarel Vorster, MD

Christina Xia, MD

# **Planning Committee**

**Christine Ahrens, PharmD** 

Marc Babi, MD

Adam Barron, MD

Brittany Bolt, DO, PhD

Rodica Di Lorenzo, MD

Marco Gonzalez, MD

Shweta Goswami, MD

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Nicole Smith, PA-C

Jenny Tsai, MDCM, FRCP(C)

Ken Uchino, MD, FAHA, FANA

#### Additional Planner/Reviewer

Jayashree Sundararajan, MD

# **Agenda**

# Tuesday, June 10

7:15 am Registration/Continental Breakfast/Exhibits
8:00 am Welcome and Introduction – Shazam Hussain

#### **VENOUS DISORDERS SUMMIT**

**Session I:** Venous Disorders – IIH Moderators: Michal Obrzut, Jenny Tsai

8:10 am Venous anatomy and its clinical implications – Eytan Raz

8:25 am The venous etiology and treatment of pulsatile tinnitus – Scott Raymond

8:40 am DEBATE: The role of venous stenting in IIH

Venous stenting as first-line therapy in eligible IIH patients – Jenny Tsai
 Venous stenting is not the first line therapy for IIH patients – Julia Bucklan

9:10 am Current and new devices in venous sinus stenting – Michal Obrzut
 9:25 am Panel discussion. Complex cases in IIH – Sorel Vorster, Session Faculty

10:00 am BREAK/EXHIBITS

Session II: Venous Disorders - CVST

Moderators: Sidonie Ibrikji, Nina Moore

10:20 am How to approach CSF-venous fistulas – Nina Moore

10:35 am DEBATE: Timing of venous thrombectomy in cerebral dural venous sinus thrombosis

• Medical management first, thrombectomy later - Sidonie Ibrikji

• Thrombectomy early without waiting for medical therapy to work – Ammar Abdulrazzak

11:05 am Glymphatics in cerebrovascular pathologies – Seby John
 11:20 am Panel discussion. Complex CVST cases – Session Faculty

12:00 pm LUNCH/EXHIBITS

Session III: Latest and Greatest in Cerebrovascular Care

Moderators: Rodica DiLorenzo, Andrew Russman

1:00 pm Year in Updates from WSO, ISC and ESOC 2025 – Marco Gonzalez

1:15 pm Cerebrovascular diseases in women – Rodica DiLorenzo
 1:30 pm Stroke recovery: rising to prime time – Christina Xia

1:45 pm Middle meningeal artery: a new target for endovascular intervention – Ashutosh Mahapatra

2:00 pm Al Developments in ischemic stroke – Bing Chen

**2:15 pm** Navigating ECMO – Sung-Min Cho

2:30 pm BREAK/EXHIBITS

Session IV: Management of Hemorrhagic Stroke

Moderators: Peter Rasmussen, Tina Resser

**3:00 pm** Code ICH: a novel approach – Brittany Bolt

3:15 pm DEBATE: Minimally invasive ICH evacuation: Outside or inside ENRICH criteria

Stay inside ENRICH criteria – Andrew Bauer
 Expanding outside ENRICH criteria – Mark Bain

3:45 pm DEBATE: Aggressive vs. conservative anticoagulation post ICH

• Aggressive anticoagulation for AFib post ICH – Ahmed Itrat

• Conservative anticoagulation for AFib post ICH – G. Abbas Kharal

**4:15 pm** Panel discussion. Complex aneurysm and AVM cases – Session Faculty

5:00 pm ADJOURN

All presentations include a 5-minute question and answer period.

# **Agenda**

# Wednesday June 11

7:15 am Continental Breakfast/Exhibits 8:00 am Welcome and Introduction

Session I: Next Frontiers in Cerebrovascular Care

Moderators: A. Blacke Buletko, Amir Nouh

**8:10 am** Wearable devices in stroke care – A. Blake Buletko

8:30 am Stroke in the young – Amir Nouh

8:50 am Al in ICH prediction and beyond – Ahmed Kashkoush

9:10 am How to approach innovation? – Morgan Carter

9:30 am Panel Q & A – Session Faculty

9:55 am BREAK/EXHIBITS

**Session II: Neurocritical Care** 

Moderators: Adam Barron, Brad Douglas

10:15 am Rapid and stable BP control in ICH: a new paradigm? – Joao Gomes
 10:30 am Neurophysiologic early detection of DCI in SAH – Shweta Goswami

DEBATE: Standard care vs. multimodal monitoring for cerebral vasospasm

• Standard of care management for cerebral vasospasm - Marc Babi

• Multimodal monitoring for cerebral vasospasm management – Carlos Rosales

11:15 am Neuro rapid response team - future of critical care response focus towards neurological emergency - Vivek Sabharwal

11:30 am Panel Discussion. The Complexed Dynamics of NICU Management – Marc Babi, Adam Barron, Brittany Bolt, Dhimant Dani

12:00 pm LUNCH/EXHIBITS

**Session III: Stroke Prevention** 

Moderators: Nicole Smith, Ken Uchino

1:00 pm DEBATE: Carotid webs – medical therapy vs. intervention

Medical Therapy is best for Carotid Webs – Maria Sokola

• Intervention is necessary for Carotid Webs – Gabor Toth

1:30 pm Novel agents for lipid management – Ashish Sarraju

1:50 pm Panel Discussion. Challenging cases for stroke prevention – Session Faculty

2:30 pm BREAK/EXHIBITS

Session IV: Acute Ischemic Stroke

Moderators: Gabor Toth, John Solomonow

**3:00 pm** Novel Treatments and new thrombolytics for Acute Stroke Therapy – Shyam Prabhakaran

3:15 pm DEBATE: Medical management vs. endovascular thrombectomy for medium and distal vessel occlusion acute stroke

• Medical management for medium and distal vessel occlusion acute stroke - Jonathan Solomonow

• Endovascular treatment for medium and distal vessel occlusion acute stroke - Shazam Hussain

3:45 pm DEBATE: Aggressive vs. conservative blood pressure lowering in acute stroke

• Aggressive lowering blood pressure in acute stroke – Ken Uchino

• Conservative blood pressure lowering in acute stroke – Adam Barron

4:15 pm Panel discussion. Decision making in acute stroke – Session Faculty

5:00 pm ADJOURN

# **Innovations in Cerebrovascular Care 2025**

#### **Fees**

**In Person Fee includes:** Continental breakfast, refreshment breaks, lunch and faculty PowerPoint presentations in PDF format

**Virtual Fee includes:** Access to webinar and faculty PowerPoint presentations in PDF format.

	In Person	Virtual
Physician	\$250	\$250
Non Physician	\$125	\$125
Resident/Fellow*	\$125	\$0

<sup>\*</sup>Letter from program director is required to receive the discounted fee. Cleveland Clinic employee fees and registration are available online only.

#### **Registration and Cancellation**

Preregistrations are accepted online until 5:00 pm (EST), June 6, 2025. In case of cancellation, a full refund will be made if cancelled by June 14, 2025. After June 14, 2025, a 50% cancellation fee will be deducted from your refund. Written notification of your cancellation is required in order to process your refund. NO REFUNDS WILL BE ISSUED AFTER JUNE 10, 2025.

For questions about registration, call 216.448.8710 or email cmeregistration@ccf.org

#### **General Information**

#### Location

InterContinental Hotel and Bank of America Conference Center

9801 Carnegie Avenue Cleveland, OH 44106

Phone: 216.707.4100 or 877.707.8999 www.intercontinentalcleveland.com

#### **Hotel Accommodations**

Hotel reservations are separate from the course registration and are the responsibility of the participant. A block of rooms have been reserved at the InterContinental Hotel for a rate of \$199 plus tax. Please call 216.707.4100 to make your reservation.

The cut-off date for the special rate is May 10, 2025.

#### **Parking**

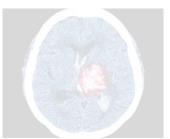
Parking is available in the 100th Street Visitor's Parking Garage at prevailing rates. Valet parking at the hotel is available for an additional charge.

#### Information

For further information about this activity, contact Liz Eaton at:

Phone: 800.223.2273 x55431 Email: eatonl3@ccf.org





#### **Accreditation**

In support of improving patient care, Cleveland Clinic Center for Continuing Education is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

# **Credit Designation**

#### American Medical Association (AMA)

Cleveland Clinic Center for Continuing Education designates this live activity for a maximum of 14.50 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association for Category 2 credit.

#### American Nurses Credentialing Center (ANCC)

Cleveland Clinic Center for Continuing Education designates this live activity for a maximum of 14.50 ANCC contact hours.

#### American Academy of PAs (AAPA)

Cleveland Clinic Center for Continuing Education has been authorized by the American Academy of PAs (AAPA) to award AAPA Category 1 CME credit for activities planned in accordance with AAPA CME Criteria. This activity is designated for 14.50 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation.

#### American Board of Surgery (ABS) MOC

Successful completion of this CME activity enables the learner to earn credit toward the CME requirements of the American Board of Surgery's Continuous Certification program. It is the CME activity provider's responsibility to submit learner completion information to ACCME for the purpose of granting ABS credit.

Credit will be reported within 30 days of claiming credit.

#### **Faculty Disclosure Statement**

The Cleveland Clinic Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Integrity and Independence requiring mitigation of all faculty conflicts of interest. Faculty declaring a relevant financial relationship will be identified in the activity syllabus.

#### **Americans with Disabilities Act**

The Cleveland Clinic Center for Continuing Education fully intends to comply with the legal requirements of the Americans with Disabilities Act. If you need assistance, please notify us at least two weeks prior to the activity.

# **Health and Safety Information**

All applicable Centers for Disease Control (CDC), state, and local safety protocols will be enforced for this event. As participants are responsible for their own health choices, the use of masks by all participants at this event is optional.





Cleveland Clinic Center for Continuing Education reserves the right to cancel or postpone an activity at our sole discretion. In the unlikely event that this occurs, any registration fee(s) paid will be refunded. Be advised that Cleveland Clinic is not responsible for related costs including airline tickets, hotel costs, or any similar fee penalties incurred as a result of any trip cancellations or changes.