

# 11th Annual Cleveland Neurocritical Care & Stroke Conference



*Don't Look Back*

**May 30 & 31, 2014**

**Iris S. and Bert L. Wolstein Research Building  
Case Western Reserve University  
Cleveland, Ohio**

Presented by



Sponsored by



SCHOOL OF MEDICINE

**CASE WESTERN RESERVE**  
UNIVERSITY

# Introduction

In the past few years, there has been nothing short of a revolution in the diagnosis and treatment of cerebrovascular disease. What was almost unimaginable in the past is now common: diffusion-perfusion imaging to define the potential salvagability of tissue, emergent reperfusion therapy to restore cerebral blood flow, multi-modal monitoring to ensure optimal physiological conditions for healing, and advanced medical management to prevent stroke recurrence. For the 11<sup>th</sup> Annual Cleveland Neurocritical Care & Stroke Conference, we have gathered many of the internationally renowned experts who have led this revolution. Our 5<sup>th</sup> Annual Transcranial Doppler Ultrasound Workshop will also provide a complete review of ultrasound principles, techniques, and interpretation.

Please join us for this extraordinary forward-looking conference covering the latest in state-of-the-art stroke care.

## Who Should Attend

This symposium is designed for neurologists, neurosurgeons, neurointensivists, internists, family medicine physicians, and emergency medicine physicians. Nurses and other allied health professionals may also find this education of value.

## Objectives

After attending the **11<sup>th</sup> Annual Cleveland Neurocritical Care & Stroke Conference** participants will be able to:

- Recognize how to apply the new AHA Guidelines to patients with stroke
- Identify where and why the new AHA Guidelines differ from the old guidelines
- Understand the advantages and disadvantages of the new anticoagulant agents for stroke prevention
- Identify the risk and benefits of IV versus IV/IA thrombolysis for patients with acute stroke
- Identify the role that targeted temperature management plays in patients after cardiac arrest

After attending the **5<sup>th</sup> Annual Transcranial Doppler Ultrasound Workshop** participants will be able to:

- Describe the underlying principles of TCD Sonography
- Recognize the role of TCD monitoring in patients with subarachnoid hemorrhage and vasospasm
- Discuss the role of TCD sonography in determining brain death
- Discuss the role of emboli monitoring with TCD sonography
- Describe how to best document, code and bill for TCD services

## Continuing Education

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

Case Western Reserve University School of Medicine designates the 11<sup>th</sup> Annual Cleveland Neurocritical Care & Stroke Conference live activity for a maximum of 7.25 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Case Western Reserve University School of Medicine designates the 5<sup>th</sup> Annual Transcranial Doppler Ultrasound Workshop live activity for a maximum of 3.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

# Faculty

## **Michael De Georgia, MD**

Course Director  
Maxeen Stone and John A. Flower Professor  
of Neurology  
Case Western Reserve University School  
of Medicine  
Director, Neurocritical Care Center  
Co-director, Cerebrovascular Center  
University Hospitals Case Medical Center

## **Guest Faculty**

### **Gary Bernardini, MD, PhD**

Professor of Neurology and Neurosurgery  
Director of Stroke and Neurocritical Care  
Albany Medical Center  
Albany, NY

### **David Crippen, MD**

Professor of Critical Care Medicine  
Co-Director, Neurovascular ICU  
University of Pittsburgh  
Pittsburgh, PA

### **Stephan Mayer, MD**

Director, Institute for Critical Care Medicine  
Departments of Neurology and Neurosurgery  
Icahn School of Medicine at Mt. Sinai  
New York, NY

### **Larry Raber, RDMS, RVT, RT(R)**

Director, Neurosonology  
Cleveland Clinic

## **Case Western Reserve University**

### **Nicholas Bambakidis, MD**

Associate Professor of Neurological Surgery  
Director, Cerebrovascular and Skull Base  
Surgery  
University Hospitals Neurological Institute  
University Hospitals Case Medical Center

### **Kristine Blackham, MD**

Assistant Professor of Radiology  
Program Director, Neuroradiology  
University Hospitals Case Medical Center

### **Anthony Furlan, MD**

Gilbert W. Humphrey Professor and Chair  
Department of Neurology  
Co-director, University Hospitals Neurological  
Institute  
University Hospitals Case Medical Center

### **Alan Hoffer, MD**

Assistant Professor of Neurological Surgery  
Department of Neurological Surgery  
University Hospitals Case Medical Center

### **Karen Lidsky, MD**

Associate Professor of Pediatrics  
Director, Pediatric Critical Care Transport

### **Benjamin Miller, MD**

Department of Neurology  
University Hospitals Case Medical Center

### **Svetlana Pundik, MD**

Assistant Professor of Neurology  
Department of Neurology  
Louis Stokes Cleveland VA Medical Center

### **Warren Selman, MD**

The Harvey Huntington Brown Jr. Professor  
and Chair  
Department of Neurological Surgery  
Director, University Hospitals Neurological  
Institute  
University Hospitals Case Medical Center

### **Tanzila Shams, MD**

Department of Neurology  
University Hospitals Case Medical Center

### **Daniel Simon, MD**

Herman K. Hellerstein Chair in Cardiovascular  
Research and Professor of Medicine  
Director, University Hospitals Harrington Heart &  
Vascular Institute  
Chief, Division of Cardiovascular Medicine  
University Hospitals Case Medical Center

### **Cathy Sila, MD**

George M. Humphrey II Professor of Neurology  
Case Western Reserve University School of  
Medicine  
Director, Stroke & Cerebrovascular Center  
Director, Neurosonology  
University Hospitals Case Medical Center

### **Matthew Smith, MD**

Department of Neurology  
University Hospitals Case Medical Center

### **Sophia Sundararajan, MD, PhD**

Assistant Professor of Neurology  
Department of Neurology  
University Hospitals Case Medical Center

### **Robert Tarr, MD**

Professor of Neuroradiology  
Section Chief, Neuroradiology  
Associate Director, University Hospitals  
Neurological Institute  
University Hospitals Case Medical Center

### **Benjamin Walter, MD**

Assistant Professor of Neurology  
Director, Center for Movement Disorders  
University Hospitals Case Medical Center

# Program Agenda

## Friday, May 30, 2014

7:30 – 8:30am Registration and Continental Breakfast

8:30 – 8:40 Opening Remarks and Welcome  
*Michael De Georgia, MD*

### Session 1: Updates in Stroke Prevention

*Cathy Sila, MD*

8:40 – 9:00 New AHA Guidelines for Cardiovascular Prevention  
*Daniel Simon, MD*

9:00 – 9:20 New Anticoagulant Agents for Atrial Fibrillation  
*Sophia Sundararajan, MD, PhD*

9:20 – 9:40 New Approaches for Cryptogenic Stroke  
*Gary Bernardini, MD, PhD*

9:40 – 10:00 New Approaches for Carotid Stenosis  
*Nicholas Bambakidis, MD*

10:00 – 10:10 Panel Discussion

10:10 – 10:30 Break

### Session 2: Updates in Stroke Treatment

*Anthony Furlan, MD*

10:30 – 10:50 Update on Neuroimaging for Acute Stroke Therapy  
*Kristine Blackham, MD*

10:50 – 11:20 Update on Intravenous Thrombolysis for Acute Stroke  
*Cathy Sila, MD*

11:20 – 11:50 Update on Interventional Therapy for Acute Stroke  
*Robert Tarr, MD*

11:50 – 12:00 Panel Discussion

12:00 – 1:30 Lunch

### Session 3: Updates in Neurosurgery and Neurocritical Care

*Michael De Georgia, MD*

1:30 – 1:50 Update on Intracerebral Hemorrhage  
*Alan Hoffer, MD*

1:50 – 2:10 Update on Subarachnoid Hemorrhage  
*Stephan Mayer, MD*

**11<sup>th</sup> Annual Cleveland Neurocritical Care & Stroke Conference**  
**Friday, May 30**

- 2:10 – 2:30 Update on Hypothermia for Cardiac Arrest  
*Michael De Georgia, MD*
- 2:30 – 3:00 Update on Brain Death  
*David Crippen, MD*
- 3:00 – 3:10 Panel Discussion
- 3:10 – 3:30 Break

**Session 4: Updates in Stroke Rehabilitation**

*Warren Selman, MD*

- 3:30 – 3:50 Stroke Rehabilitation Using Transcranial Magnetic Stimulation  
*Svetlana Pundik, MD*
- 3:50 – 4:10 Stroke Rehabilitation Using Computer-Brain Interface Technology  
*Benjamin Walter, MD*
- 4:10 – 5:00 Looking Forward  
*Anthony Furlan, MD*
- 8:00 The Codes at Panini's Bar and Grill,  
1825 Coventry Road, Cleveland Heights

**5<sup>th</sup> Annual**  
**Transcranial Doppler Ultrasound Workshop**  
**Saturday, May 31**

- |               |   |               |   |
|---------------|---|---------------|---|
| 7:30 – 8:00am | Registration and Continental Breakfast                                      | 9:40 – 10:00  | Break   |
| 8:00 – 8:20   | Physiology<br><i>Cathy Sila, MD</i>   | 10:00 – 10:30 | PFO and Right to Left Shunts (with Demonstration of Bubble Study)<br><i>Tanzila Shams, MD</i> |
| 8:20 – 8:40   | Subarachnoid Hemorrhage<br><i>Matthew Smith, MD</i>                         | 10:30 – 10:50 | Pediatric TCD<br><i>Karen Lidsky, MD</i>  |
| 8:40 – 9:00   | Intracranial Stenosis<br><i>Benjamin Miller, MD</i>                         | 10:50 – 11:10 | Emboli Monitoring<br><i>Larry Raber, RDMS, RVT, RT(R)</i>                                     |
| 9:00 – 9:20   | Cerebrovascular Reactivity and Hyperperfusion<br><i>Benjamin Miller, MD</i> | 11:10 – 11:30 | Documentation, Coding and Billing<br><i>Larry Raber, RDMS, RVT, RT(R)</i>                     |
| 9:20 – 9:40   | Increased ICP and Brain Death<br><i>Michael De Georgia, MD</i>              | 11:30 – 12:00 | Panel Discussion  |

# General

## Meeting Location and Parking

Iris S. and Bert L. Wolstein Research Building  
Case Western Reserve University  
2103 Cornell Road  
Cleveland, OH 44106

Parking is available in the Health Sciences Parking Garage, located under the Biomedical Research Building, accessible from both Cornell Road and Circle Drive; in the Rainbow Babies and Children's Parking Garage on Adelbert Road; or in the University Hospitals Parking Garage located on University Hospitals Drive, just off of Euclid Avenue. You are responsible for your own parking charges.

## The Codes

Following the educational sessions on Friday, come to Panini's Bar and Grill, 1825 Coventry Road, and hear the Codes play at 8pm. Admission and dancing are free. Drinks and food available for purchase.



## Cancellation Policy

Full refunds will be made for cancellations on or prior to May 16 only. Cancellations after May 16 but prior to May 23 require a cancellation fee of \$25.00. No refunds will be made after May 23.

## Registration Information

Conference tuition includes all educational sessions, materials, continental breakfast and lunch.

## Suggested Accommodations:

Courtyard by Marriott Cleveland  
University Circle  
2021 Cornell Rd., Cleveland, Ohio 44106  
Phone (216) 791-5678; (800) 321-2211;  
Fax (216) 791-5342  
[www.courtyard.com/CLECE](http://www.courtyard.com/CLECE)

Doubletree by Hilton—The Tudor Arms Hotel  
10660 Carnegie Avenue  
Cleveland, Ohio 44106  
Phone (216) 452-1260; Fax (216) 231-1816  
[www.doubletreehilton.com](http://www.doubletreehilton.com)

The Glidden House  
1901 Ford Drive, Cleveland, Ohio 44106  
Phone (216) 231-8900; (866) 812-4537;  
Fax (216) 231-2130  
[www.gliddenhouse.com](http://www.gliddenhouse.com)

## Acknowledgments

This symposium will be supported by grants from industry. A complete listing of supporters will be provided in the syllabus materials distributed at the meeting. Acceptance of funding in support of this symposium does not constitute endorsement of any product or manufacturer.

## Disclosure Policy

The policy of the Case Western Reserve University School of Medicine CME Program (CWRU) 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. CWRU 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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The commitment to exceptional patient care begins with revolutionary discovery. University Hospitals Case Medical Center is the primary affiliate of Case Western Reserve University School of Medicine, a national leader in medical research and education and consistently ranked among the top research medical schools in the country by U.S. News & World Report. Through their faculty appointments at Case Western Reserve University School of Medicine, physicians at UH Case Medical Center are advancing medical care through innovative research and discovery that bring the latest treatment options to patients.





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Continuing Medical Education Program  
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