

Neurocritical Care 2009

A Global Conference of Adult and Pediatric Neurocritical Care

September 24-26, 2009
Cleveland, Ohio



All
Together
Now



CASE WESTERN RESERVE
UNIVERSITY
SCHOOL OF MEDICINE



University Hospitals
Case Medical Center
Neurological Institute



Rainbow Babies
& Children's Hospital

Thursday and Friday, September 24 & 25, 2009

7th Annual Cleveland Neurocritical Care and Stroke Conference

Saturday, September 26, 2009

3rd Annual Cleveland Vascular Neurology Boards Review Course

Saturday, September 26, 2009

2nd Annual CWRU Critical Care Bioinformatics Workshop

Saturday, September 26, 2009

1st Annual CWRU Transcranial Doppler Ultrasound Workshop

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

Presented by
University Hospitals Neurological Institute
University Hospitals Case Medical Center and
Case Western Reserve University School of Medicine

Introduction

The specialty of neurocritical care has evolved rapidly. Born in the 1960s as a collaborative effort among subspecialists caring for critically ill patients with neurologic illnesses, there are now more than 50 dedicated Neurological Intensive Care Units in 29 states. The same advances have occurred in pediatric critical care medicine. Dedicated units staffed by full-time intensivists improve care with reduced mortality and morbidity rates and shortened lengths of stay. Pediatric neurocritical care is an exciting new subspecialty that focuses on the broad spectrum of brain disease affecting infants and children.

This year for the first time, we are bringing together experts in adult and pediatric neurocritical care to review the latest information in neurocritical care and cerebrovascular disease. Our objective is to provide advancement of medical knowledge in a fresh “Rock and Roll theme” forum that will create a lively, interesting, and enjoyable experience.

For the Neurocritical Care and Stroke Conference and the Bioinformatics Workshop you have the option of participating on-site or via the internet.

Objectives

After attending this program participants will be able to:

- Apply best practices in epilepsy treatment by virtue of understanding the natural history of patients with refractory epilepsy and the outcomes of epilepsy surgery.
- Identify the latest treatment algorithms for status epilepticus, the risks and benefits of further treatment and the range of outcomes to be expected.
- Recognize the incidence, most common causes, best practices and outcomes of stroke in children.
- Appropriately diagnose and treat Guillain-Barré syndromes and other neuro-inflammatory diseases, and identify intensive care treatments.
- Understand the history and evolution of the definition of brain death and apply the current American Academy of Neurology guidelines for brain death.
- Optimally manage patients with intracranial atherosclerosis medically and recognize when to perform balloon angioplasty and stenting.
- Weigh the advantages and disadvantages of carotid endarterectomy versus stenting in order to make the best decision for their patients.
- Identify the underlying causes of hemorrhage growth and the risk, benefits and targets of blood pressure reduction.
- Recognize the range of surgical approaches for patients with intracerebral hemorrhage including open evacuation, minimally invasive evacuation and decompression alone.
- Understand the underlying pathophysiology of brain injury, the potential information multi-monitoring data can provide and when such information may be beneficial to treatment.

Continuing Education

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

Neurocritical Care and Stroke Conference:

The Case Western Reserve University School of Medicine designates this educational activity for a maximum of 14.0 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Boards Review, Bioinformatics, Transcranial Doppler:

The Case Western Reserve University School of Medicine designates each educational activity for a maximum of 4.0 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Who Should Attend

This symposium is designed for neuro-intensivists, neurologists, neurosurgeons, critical care physicians, internists, anesthesiologists and emergency medicine physicians. Nurses and other allied health professionals may also find this education of value.

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.

Faculty

Course Director: Michael De Georgia, MD

Anthony Furlan, MD

Warren Selman, MD

Special Guest Speakers:

Avroy Fanaroff, MD

Joseph Foley, MD

University Hospitals Case Medical Center/ Case Western Reserve University

Michael Anderson, MD

Keith Armitage, MD

Nicholas Bambakidis, MD

Arie Blitz, MD

John Chae, MD

Barbara Daly, RN, PhD

Vikram Dhawan, MD

Jerry Goldstone, MD

David Hart, MD

Allan Hoffer, MD

Daniel Hsu, MD

Frank Jacono, MD

Kenneth Loparo, PhD

Hans Lüders, MD, PhD

Edward Michelson, MD

David Preston, MD

Svetlana Pundik, MD

Martha Sajatovic, MD

Mark Scher, MD

Cathy Sila, MD

Sophia Sundararajan, MD, PhD

Robert Tarr, MD

Curtis Tatsuoka, PhD

Ghousia Wajida, MD

Christopher Wilson, PhD

Max Wiznitzer, MD

Guest Faculty

Thomas Bleck, MD

Rush University

Chicago, IL

Timothy Buchman, MD, PhD

Emory University

Atlanta, GA

Marc Chimowitz, MD

Medical College of South Carolina

Charleston, SC

Donna Lee Davis, CNRN

Cardinal Health

Dublin, OH

J. Claude Hemphill, MD

University of Southern California

San Francisco, CA

Carlos Isada, MD

Cleveland Clinic

Cleveland, OH

Stephan Mayer, MD

Columbia University

New York, NY

Lewis Morgenstern, MD

University of Michigan

Ann Arbor, MI

E. Steve Roach, MD

Ohio State University

Columbus, OH

Michael Schmidt, PhD

Columbia University

New York, NY

Mark Wainwright, MD, PhD

Northwestern University

Chicago, IL

Eelco Wijdicks, MD

Mayo Clinic

Rochester, MN

7th Annual Cleveland Neurology and Stroke Conference

Thursday September 24

- 7:30–8:00 AM Registration and Continental Breakfast
- 8:00–8:10 Welcome
Michael De Georgia, MD
- 8:10–9:00 **Maxeen Stone and John A. Flower Lecture**
Yesterday: The Birth of Neonatology and Brain Preservation
Avroy Fanaroff, MD

Session 1: Seizures

Moderator: Mark Scher, MD

- 9:00–9:20 **Born to be Wild: Seizures in Infants and Children**
Mark Scher, MD
- 9:20–9:40 **Revolution: Controlling Seizures with Epilepsy Surgery**
Hans Lüders, MD, PhD
- 9:40–10:00 **Riders on the Storm: Refractory Status Epilepticus**
Thomas Bleck, MD
- 10:00–10:20 Break

Session 2: Ischemic Stroke

Moderator: Max Wiznitzer, MD

- 10:20–10:40 **Sweet Child O'Mine: Causes and Outcome of Infant Stroke**
Max Wiznitzer, MD
- 10:40–11:00 **Teen Spirit: Evaluation and Treatment of Pediatric Stroke**
E. Steve Roach, MD

- 11:00–11:20 **Fixing a Hole: PFOs and Strokes in Adults**
Anthony Furlan, MD

- 11:20–Noon **Panel Discussion**

- Noon–1:30 PM Lunch

Session 3: Inflammatory Disease

Moderator: David Preston, MD

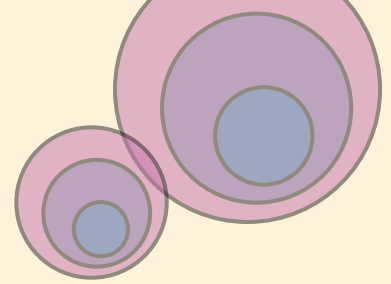
- 1:30–1:50 **Spinal Tap: Approach to Meningitis**
Keith Armitage, MD
- 1:50–2:10 **Dazed and Confused: Approach to Encephalitis**
Carlos Isada, MD
- 2:10–2:30 **More than a Feeling: Guillain-Barré Syndrome**
David Preston, MD
- 2:30–2:50 **Panel Discussion**
- 2:50–3:10 Break

Session 4: Critical Care

Moderator: Michael Anderson, MD

- 3:10–3:30 **Wipe Out: Advances in the Management of Traumatic Brain Injury**
Mark Wainwright, MD, PhD
- 3:30–3:50 **Stand By Me: Evidence for End of Life Care in the Unit**
Barbara Daly, RN, PhD
- 3:50–4:10 **Wish You Were Here: Brain Death**
Eelco Wijdevicks, MD
- 4:10–5:00 **Panel Discussion**

Procritical Care



Friday, September 25

7:30–8:00 AM Registration and
Continental Breakfast

8:00–8:10 Welcome
Anthony Furlan, MD

8:10–9:00 **Joseph M. Foley Lecture
In My Life**
Joseph M. Foley, MD

Session 1: Medical Management and Thrombolysis

Moderator: Anthony Furlan, MD

9:00–9:20 **I Heard it Through the
Grapevine: Clarifying
What “Best Medical
Management” Means
in 2009**
Marc Chimowitz, MD

9:20–9:40 **Does Anybody Really
Know What Time it Is?:
Thrombolysis Up to 4.5 hrs.**
Cathy Sila, MD

9:40–10:00 **Stayin’ Alive: Critical Care
Management of Ischemic
Stroke**
Michael De Georgia, MD

10:00–10:20 Break

Session 2: Surgical & Endovascular Intervention

Moderator: Sophia Sundararajan, MD, PhD

10:20–10:40 **Take It to the Limit:
Endovascular Intervention
for Intracranial Stenosis**
Robert Tarr, MD

10:40–11:00 **New Kid In Town:
Carotid Stenting vs.
Endarterectomy**
Jerry Goldstone, MD

11:00–11:20 **Back in the High Life:
Return of EC-IC Bypass for
Carotid Occlusion**
Warren Selman, MD

11:20–Noon **Panel Discussion**

Noon–1:30 PM Lunch

Session 3: Intracerebral Hemorrhage

Moderator: Allan Hoffer, MD

1:30–1:50 **Under Pressure:
Is Lower BP Better?**
Lewis Morganstern, MD

1:50–2:10 **Same Old Song and Dance:
To Evacuate or Not to
Evacuate?**
Nicholas Bambakidis, MD

2:10–2:30 **Don’t Stop Believin’: Any
Role for Factor VII Now?**
Stephan Mayer, MD

2:30–2:50 **Panel Discussion**

2:50–3:10 Break

Session 4: Hypothermia

Moderator: Michael De Georgia, MD

3:10–3:30 **Night Fever: Temperature
Regulation and Shivering**
Vikram Dhawan, MD

3:30–3:50 **Show Me the Way:
Methods of Cooling**
Arie Blitz, MD

3:50–4:10 **Cold As Ice: Hypothermia
for Cardiac Arrest**
Michael De Georgia, MD

4:10–4:30 **You Can’t Always Get What
You Want: Post-Cardiac
Arrest Syndrome**
Edward Michelson, MD

4:30–5:30 **Hands on Session
of Hypothermia**

3rd Annual Vascular Neurology Boards Review Course

Saturday, September 26

7:00–7:30 AM Registration and
Continental Breakfast

Causes of Stroke and Evaluation of Patients with Cerebrovascular Disease

- 7:30–7:50 **Vascular Anatomy Review**
Daniel Hsu, MD
- 7:50–8:10 **Common Causes of Stroke**
Svetlana Pundik, MD
- 8:10–8:30 **Rare Causes of Stroke**
Michael De Georgia, MD
- 8:30–8:50 **Causes of Hemorrhage**
Allan Hoffer, MD

Treatment of Patients with Stroke

- 8:50–9:20 **Prevention of Stroke**
Cathy Sila, MD
- 9:20–9:50 **Treatment of Stroke**
Anthony Furlan, MD
- 9:50–10:10 Break

Basic Science and Epidemiology

- 10:10–10:30 **Pathophysiology of Stroke**
Sophia Sundararajan, MD, PhD
- 10:30–10:50 **Stroke Outcomes**
Martha Sajatovic, MD

Clinical Features of Cerebrovascular Disease

- 10:50–11:10 **Spinal Cord Disease**
David Hart, MD

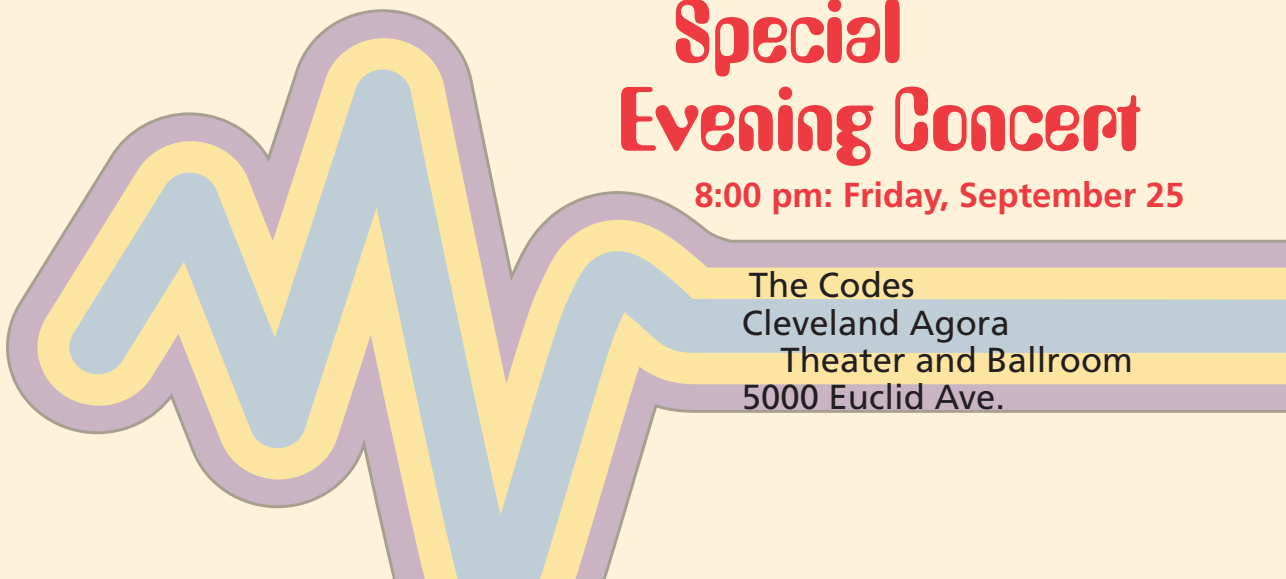
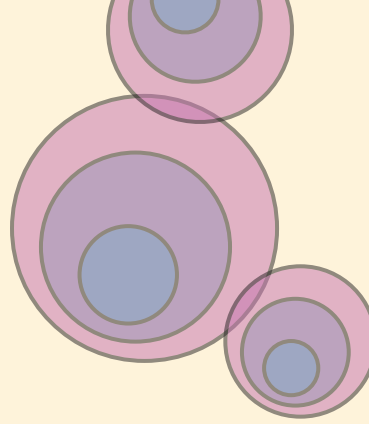
Recovery, Regenerative Approaches and Rehabilitation

- 11:10–11:30 **Rehabilitation Principles**
John Chae, MD
- 11:30–Noon **Ask the Experts**

Special Evening Concert

8:00 pm: Friday, September 25

The Codes
Cleveland Agora
Theater and Ballroom
5000 Euclid Ave.



2nd Annual CWRU Critical Care Bioinformatics Workshop

Saturday, September 26

7:00–7:30 AM	Registration and Continental Breakfast
7:30–8:30	Critical Care in the Digital Age <i>Timothy Buchman, MD, PhD</i>
8:30–8:50	Critical Care Bioinformatics at UCSF <i>J. Claude Hemphill, MD</i>
8:50–9:10	Critical Care Bioinformatics at Columbia-Presbyterian <i>Michael Schmidt, PhD</i>
9:10–9:30	Break

Critical Care Bioinformatics at Case Western Reserve University

9:30–10:00	Data Acquisition and Complex Systems Analysis <i>Kenneth Loparo, PhD</i>
10:00–10:30	Continuous Monitoring of Physiological Signals <i>Christopher Wilson, PhD</i>
10:30–10:50	Entropy Analysis in the ICU: From Bench to Bedside <i>Frank Jacono, MD</i>
10:50–11:10	Partially Ordered Classification Models in Critical Care <i>Curtis Tatsuoka, PhD</i>
11:10–Noon	Panel Discussion: Where to From Here? <i>Moderated by: Michael De Georgia, MD</i>

1st Annual CWRU Transcranial Doppler Ultrasound Workshop

Saturday, September 26

7:00–7:30 AM	Registration and Continental Breakfast
7:30–8:00	Physiology <i>Donna Lee Davis, CNRN</i>
8:00–8:20	Subarachnoid Hemorrhage <i>Ghousia Wajida, MD</i>
8:20–8:40	ICP and Brain Death <i>Michael De Georgia, MD</i>
8:40–9:10	PFOs and Shunts <i>Svetlana Pundik, MD</i>
9:10–9:30	Break
9:30–10:00	Intracranial Stenosis <i>Cathy Sila, MD</i>
10:00–10:20	Cerebrovascular Reactivity <i>Cathy Sila, MD</i>
10:20–10:50	Pediatric TCD <i>Donna Lee Davis, CNRN</i>
10:50–11:20	Documentation, Coding, Billing <i>Donna Lee Davis, CNRN</i>
11:20–Noon	Panel Discussion

General Information

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 Cornell/Mayfield Visitor Parking Garage, accessible from Cornell or Mayfield Road. Exit the garage at ground level and proceed left on Cornell. You are responsible for your own parking charges.

Accommodations

A block of rooms has been reserved at the Glidden House Hotel, 1901 Ford Drive, at the rate of \$139 single/double (plus tax) for the nights of Wednesday through Friday, September 23-26, 2009. Our room block is limited and expires August 23, 2009. Make your reservation by contacting the hotel at 216-231-8900 or 866-812-4537. Identify yourself as being with the Case Western Reserve University CME group. You can also make your reservation online at www.gliddenhouse.com. Enter group code 20090600052. The hotel is approximately one-half mile from the Wolstein Research Building. Shuttle bus service will be provided in the morning and after the conference each day.

For information on other lodging options call the CWRU CME Program at 216-983-1239 or visit <http://casemed.case.edu/cme>.

Registration Information

On-site conference tuition includes all educational sessions, materials, continental breakfast, and refreshments daily, and a concert featuring The Codes on Friday night.

Persons participating via the internet will be emailed a pdf of the course syllabus and access instructions prior to the course.

Persons with special needs that require additional assistance should call the CME Program at (216) 983-1239 or (800) 274-8263 not less than two weeks prior to the start of the symposium.

Minimum System Requirements

to Participate in Web Symposium:

PC-based attendees: Windows® 2000, XP Home, XP Pro, 2003 Server, Vista with speakers, Macintosh® –based: Mac OS®, X10.4 (Tiger®) or newer with speakers

Internet Explorer 6.0 or greater, Safari 3.0 or greater, or Firefox 2.0 or greater, Adobe Flash Player 8.0 or greater

For optimal viewing/participating experience participants should have a minimum 1 Mb/s download speed; 384 KB/s upload speed

Late Registration and Cancellation Policy

After September 10, 2009, please register by calling the CME Program at (216) 983-1239 or (800) 274-8263.

Neurocritical Care and Stroke Conference:

Full refunds will be made for cancellations on or prior to September 10 only. Cancellations after September 10 but prior to September 17 require a \$75.00 administrative fee (on-site participants) or a \$35.00 administrative fee (internet participants). No refunds will be made after September 17.

Boards Review, Bioinformatics, Transcranial Doppler Ultrasound:

Full refunds will be made for cancellations on or prior to September 10 only. Cancellations after September 10 but prior to September 17 require a \$50.00 administrative fee (on-site participants) or a \$25.00 administrative fee (internet participants). No refunds will be made after September 17.

Acknowledgments

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

Registration Form **Neurocritical Care 2009: All Together Now**

(Please Print)

First Name: _____

Last Name: _____

Degree(s): _____

Last 4 Digits of Social Security No.: _____

Business Phone: _____

Street Address: _____

City: _____ State: _____ Zip: _____

Email: _____

Register Online

Visit <http://casemed.case.edu/cme> and pay by credit card.

Register by Mail

Complete this registration form with your check or credit card number and mail to:

Registrar, CME Program
Case Western Reserve University
10524 Euclid Avenue
Cleveland, OH 44106-6026

Register by Telephone or Fax

Call (216) 983-1239 or (800) 274-8263 to register or complete this registration form with your credit card number and fax to (216) 844-8133

After September 10, 2009, register by calling the Case Western Reserve University CME Program at (216) 983-1239 or (800) 274-8263.

September 24–25

7th Annual Cleveland Stroke Symposium

Physician Fee \$350 (*Attend*) or \$125 (*Internet*)
Nurse/Allied Health Fee \$250 (*Attend*) or \$100 (*Internet*)
Resident/Fellow Fee \$175 (*Attend*) or \$75 (*Internet*)

September 26

(Please select Review Course or only one Workshop)

Vascular Neurology Boards Review Course

Physician Fee \$125 (*Attend*)
Nurse/Allied Health Fee \$125 (*Attend*)
Resident/Fellow Fee \$125 (*Attend*)

Critical Care Bioinformatics Workshop

Physician Fee \$125 (*Attend*) or \$75 (*Internet*)
Nurse/Allied Health Fee \$100 (*Attend*) or \$50 (*Internet*)
Resident/Fellow Fee \$75 (*Attend*) or \$25 (*Internet*)

Transcranial Doppler Ultrasound Workshop

Physician Fee \$125 (*Attend*)
Nurse/Allied Health Fee \$100 (*Attend*)
Resident/Fellow Fee \$75 (*Attend*)

TOTAL AMOUNT ENCLOSED OR TO BE CHARGED: \$ _____

Enclosed is my check payable to:
Case Western Reserve University

Charge my: Visa MasterCard Discover

Credit Card No.: _____

Expiration Date: _____

Signature: _____ Date: _____



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Continuing Medical Education Program
10524 Euclid Avenue
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