

This symposium will focus on established and new applications and techniques of cerebrovascular ultrasound for healthcare professionals of patients with or at risk for cerebrovascular disease and stroke. Participants will learn relative neuroanatomy and pathology along with the basic skills for performing and interpreting transcranial Doppler and Imaging studies through didactic and practical sessions. Improving the assessment, treatment, and management of stroke patients requires a multidisciplinary approach involving clinicians across several specialties, emergency medical systems and hospital administrations that develop stroke centers with certification and specialization. The goal of this meeting is to bring experts in diagnostic testing, clinical care and systems development together.

Stroke is the third leading cause of death in the United States with 700,000 people suffering a stroke each year. Stroke remains the number one cause of adult disability. Prompt and accurate diagnosis in this population is of great importance in order to rapidly implement the most appropriate therapies. In acute stroke the lapse of time becomes even more critical as the window of opportunity to administer lytic agents is narrow. Clinicians caring for this population need updates on the latest diagnostic, pharmacologic, surgical and endovascular techniques used in diagnosing and treating stroke. This course will provide these clinical updates along with the opportunity to have in-depth dialogue with leaders in this field and active participation in clinical case study reviews.

Neurovascular ultrasound is a subspecialty of diagnostic vascular ultrasound and requires focused training that is difficult to obtain. The breakout sessions on Transcranial Doppler and Advanced Transcranial Doppler will offer the theoretical and technological training for sonographers performing exams. Interactive case studies following didactic theoretical sessions will provide interpreting physicians with mentored experience in interpretation of complex cases from a faculty of experts.

Hospital Administrators are increasingly seeking knowledge in stroke care management and to advance relationships with major stroke centers. The stroke care management breakout sessions will provide an opportunity to share expertise and explain the cost of care in terms of stroke.

This conference is intended for neurologists, neurosurgeons, neuroradiologists, cardiologists, vascular surgeons, vascular technologists, neurodiagnostic technologists, emergency physicians, nurses, EMS medics and EMS dispatch coordinators with an interest in stroke care, and hospital administrators who are interested in stroke care center certification.

Tentative Agenda:

General Session

Track I: Basic Transcranial Doppler (TCD) & TCD Imaging

Track II: Advanced Transcranial Doppler & TCD Imaging

Track III: Stroke Care Management

Friday June 20, 2008

7:00 am *Registration/Continental Breakfast*

7:45 am *Introduction and Welcome*
William Likosky MD

8:00 am *Keynote Address- Stroke priorities for the 21st Century*
Helmi Lutsep MD

- 8:30 am *New Research Implications for Prevention and Treatment of Stroke*
Damir Janigro PhD
- 9:00 am *Neurosonology Research and Clinical Implementation*
Andrei Alexandrov MD
- 9:30 am *Breakout Session Instructions*
- 9:40 am *Break*

General Session

- 10:00 am *Diagnostic Imaging of Stroke in the Acute Setting – Interactive Session on the use of CT/MR & Ultrasound*
Session Chair: Andrei Alexandrov MD
- Advanced CT/MR in the Initial Evaluation of Stroke*
Bart Keogh MD
- 10:20 am *Fast Track Carotid Duplex & TCD- Quick Acquisition of Useful Diagnostic Information for Acute Stroke*
Andrei Alexandrov MD
- 10:40 am *Provocative Case Studies*
Panel: Andrei Alexandrov MD, Bart Keogh MD, Anne Alexandrov PhD, RN, CCRN
- Acute Ischemic Stroke Treatment – Interactive Session on Available Therapies*
Session Chair: Andrei Alexandrov MD
- 11:00 am *Guidelines for the use of IV Lytics*
Todd Czartoski MD
- 11:20 am *Rescue Therapy, IA Lytics and the Merci Device*
Philip Vogelzang MD
- 11:40 am *Complex Case Studies*
Panel: Andrei Alexandrov MD, Anne Alexandrov PhD, RN, CCRN, Todd Czartoski MD, Bart Keogh MD, Philip Vogelzang MD
- 12:30 *Lunch with the Experts*

Track I- Basic Transcranial Doppler (TCD) & TCD Imaging

- 10:00 am *Instrumentation – Tools of the Trade*
Leni Karr BS, RVT
- 10:30 am *Cerebrovascular Arterial Anatomy*
Donalee Davis CNRN
- 11:00 am *TCD Technique – Non-Imaging – Tricks, Pearls & Pitfalls*
Donalee Davis CNRN
- 11:45 am *TCD/Imaging Technique – Orientation, Landmarks & Skill Development*
Leni Karr BS, RVT
- 12:30 pm *Lunch with the Experts*

General Session

- 1:30 pm *MRI and the Vulnerable Carotid Plaque*
Tom Hatsukami MD
- 1:50 pm *Ultrasound and the Vulnerable Carotid Plaque*
Kirk Beach PhD, Dan Leotta PhD, Jeanie Primozich BS, RVT
- 2:10 pm *Brain Embolism Monitoring with TCD*
Viken Babikian MD
- Emergent Treatments for Intracranial & Subarachnoid Hemorrhage- Panel on
Surgical versus Non-Surgical Management*
Session Chair: David Newell MD
- 2:30 pm *Guidelines for Medical Management of ICH*
Aaron Heide MD
- 2:50 pm *Surgical Approaches to ICH*
Marc Mayberg MD
- 3:10 pm *Interactive Case Studies*
Aaron Heide MD, David Newell MD, Marc Mayberg MD
- 3:30 pm *Surgical Approaches to SAH and Monitoring in the ICU*
David Newell MD
- 3:50 pm *Endovascular Treatment of Aneurysms – Coils & Stents*
Joe Eskridge MD
- 4:10 pm *Interactive Case Studies*
Joe Eskridge MD, David Newell MD

Track I- Basic Transcranial Doppler and Imaging

- 2:30 pm *Guided Hands on TCD & TCD/Imaging Instruction with Normal Models*
*Krislyn Barnhart RVT, Jim Brown RVT, Donalee Davis CNRN, Britta Fehst RVT, Leni
Karr RVT, John White RVT*

Track II- Advanced Transcranial Doppler and Monitoring

- 2:30 pm *Correlative Neuroanatomy, Pathology (Brain Cutting)*
Barbara Otto MSN, RN, CNRN, OCN, Steve Ronstad MD
- 3:30 pm *Hemodynamics, Normal and Pathological Systemic, Waveform Recognition*
Anne Alexandrov PhD, RN, CCRN
- 4:00 pm *Diagnosing Cerebral Arterial Occlusion with TCD*
Andrei Alexandrov MD
- 4:30 pm *Reception*
- 6:30 pm *Faculty Dinner*

Saturday June 21, 2008

7:00 am *Registration & Breakfast*

7:45 am *Welcome*
William Likosky MD

General Session

8:00 am *Stroke Systems of Care – Access for Everyone*
William Likosky MD

8:30 am *Developing Systems of Stroke Care for Washington State*
Washington State DOH Representative

9:00 am *Differentiating a Primary Stroke Center from a Comprehensive Stroke Center*
William Likosky MD

9:30 am *Telemedicine as a Tool to Enhance Patient Care*
Tammy Cress RN, MSN, FAHA

10:00 am *Break*

10:30 *Assuring Guideline Care at any Medical Center*
Sherene Schlegel RN, FAHA

11:00 am *Panel Discussion*

12:00 pm *Lunch*

1:00 pm *The Swedish Telestroke Network ***By Special Invitation***
William Likosky MD, Tammy Cress RN, MSN, FAHA, Sherene Schlegel RN, FAHA, Chad Gabelein RN, BSN
During this session, contracted facilities as well as facilities interested in developing a telestroke relationship, will have the opportunity to interact with the Swedish Telestroke Program and community peers with similar interests/needs of this sort of stroke relationship. For more information regarding registering for this session, please contact Tammy Cress at Tam.Cress@Swedish.org.

Track I- Basic Transcranial Doppler and Imaging

8:00 am *Applications & Basic Waveform Interpretation*
Leni Karr, RVT

9:00 am *Interpretation of Intracranial Stenosis & Occlusion*
Brenda Rinsky RDMS, RVT

10:00 *Break*

10:15 am *Interpretation of Collateral Circulation*
Donna Lee Davis CNRN

11:15 am *Interpretation: Case Studies – Stenosis, Collaterals & Steal Effects*
Donalee Davis CNRN, Leni Karr RVT, Brenda Rinsky RDMS, AART, John White RVT

12:00 pm *Lunch*

Track II: Advanced Transcranial Doppler & TCD Imaging

8:00 am *Patent Foramen Ovale – Anatomy, Pathology, Diagnosis and Treatment Strategy*
Paul Huang MD

8:45 am *TCD Bubble Study for Patent Foramen Ovale – Technique, Protocol and Interpretation with Grading of PFO*
Ajay Zachariah BS, RVT, RDCS, RDMS

9:30 am *Break*

9:45 am *Diagnosis of high grade symptomatic Internal Carotid Artery Disease by Duplex-Relationship to Intracranial Collateral Blood Flows*
Reinhard Volkmann MD, PhD

10:15 am *TCD Monitoring in the Surgical and Endovascular Environments*
Viken Babikian MD

10:45 am *Microembolic Signals Using Power M-Mode Transcranial Doppler in Patients with High Grade Internal Carotid Artery Stenosis and Plaque Characteristics*
Reinhard Volkmann MD, PhD (colleague of)

11:15 am *Provocative Case Study Interpretation - Panel*
Reinhard Volkmann MD, PhD & Viken Babikian MD

12:00 pm *Lunch*

Track I- Basic Transcranial Doppler and Imaging

1:00 pm *Instructed Hands-on Practice*
Station 1. Diagnostic Techniques – TCD & TCD/Imaging
Jim Brown RVT, Britta Fehst RVT, Leni Karr RVT, John White RVT

Station 2. Monitoring Techniques - TCD
Donalee Davis CNRN, Krislyn Barnhart RVT

Track II: Advanced Transcranial Doppler & TCD Imaging

1:00 pm *The Evolving Role of TCD*
Viken Babikian MD

1:30 pm *Vasomotor Reactivity Testing – Theory, Techniques & Applications*
James Halsey MD

2:00 pm *Station 1- Demonstration of Combined TCD & Echocardiography testing for PFO*
Meryl Harley RVT, Josh Renz RVT, Kamal Mangat RDCS

Station 2- Demonstration of Vasomotor Reactivity Testing – CO₂ Challenge and Breath Holding Techniques
Colleen Douville RVT, James Halsey MD, Brenda Rinsky RDMS, AART,

3:00 pm. *Laboratory Management & Logistics – Reimbursements and Accreditation*
Ajay Zachariah BS, RVT, RDCS, RDMS

4 p.m. *Adjourn*