Sixth Annual
Cerebrovascular Symposium
Practical Aspects of Stroke and Cerebrovascular Care

Thursday and Friday,
May 17-18, 2012

Swedish Education and Conference Center
Swedish Medical Center/Cherry Hill
500 17th Avenue
Seattle, Washington
Intended Audience
This symposium is intended for neurologists, neurosurgeons, neuroradiologists, vascular surgeons, emergency physicians, nurse practitioners, physician assistants, nurses and allied health professionals who are closely involved in the management of patients with cerebrovascular disease and have a specific focus on comprehensive stroke.

Course Description
This course will provide up-to-date and practical clinical information on the diagnosis, treatment and management of stroke and cerebrovascular disease. Faculty from a multidisciplinary team of neurovascular specialists will provide an update on advances in the field from the perspectives of stroke neurology, neuroradiology, interventional radiology, neurosurgery, cardiology, teleneurology and nursing. Each afternoon will consist of hands-on demonstrations on vascular brain anatomy, carotid artery surgery and endovascular procedures using a simulation system.

Needs Statement
With ongoing, rapid advancements in the management of cerebrovascular disease, clinicians and hospitals need to quickly adapt their practices. This symposium provides information that will help in the development of comprehensive stroke centers of excellence and will give providers updated data to apply in their practices. Participants will be presented with the latest findings in stroke care, including endovascular treatments, trends in neurocritical care, analysis of complex case studies and the usefulness of perfusion diffusion and other imaging modalities. Various treatment options will be explored and case discussions will be used to determine which option is best for each case. This course meets regulatory education requirements set by both the Joint Commission Primary Stroke Center and the Comprehensive Stroke Centers.

Course Objectives
At the conclusion of this symposium, the participant will provide better patient care through an increased ability to:

- Describe the perfusion imaging technique and review results of recent studies of penumbral imaging
- Review updated recommendations of care for inpatient stroke cases and discuss imaging, risks and prediction of post-stroke dementia
- Name the major brain arterial collaterals, describe the major differences of pial and communicating collaterals and review how the brain maintains its perfusion during a large vessel occlusion
- Discuss how imaging techniques might broaden and assist with patient selection for acute stroke therapies and describe stroke therapies under investigation and potential future approaches to acute stroke treatment
- Review challenging cases and outline various options for treatment
- Outline how to use advanced imaging in hyperacute stroke, describe the value of interventional approaches in hyperacute stroke and evaluate cerebral ischemia in the clinic setting
- Describe the risks of stroke in atrial fibrillation, discuss the pharmacology of direct thrombin and Xa inhibitors and review how to manage the bleeding risks of these agents
- Review the normal vascular anatomy of the brain including common variants and describe the common pathological conditions affecting brain vasculature
- Describe techniques for carotid endarterectomy dissection and explain potential outcomes
- Review the interaction between stiffness of both the wire and the catheter, define the purpose of guiding catheters and review the “Russian Doll” technique when performing aneurysm coiling
- Interpret perfusion-weighted and CT Perfusion (CTP) images and utilize CTP and MRI to guide treatment decisions
- Explain the fundamental principles, history and brain applications of focused ultrasound (FUS) and discuss current and future applications of FUS
- List techniques for reducing the risk of vasospasm after subarachnoid hemorrhage (SAH)
- Discuss the potential uses and limitations of MR guided Focused Ultrasound Surgery in the treatment of intracerebral hemorrhage (ICH)
- Review the development of the need for Neurocritical Care Units and list the benefits of a neurointensivist and a neurocritical care physician
- Outline how Transcranial Doppler (TCD) can detect, quantify and localize emboli in cerebral vessels and describe the clinical applications of the technology
- Explain new treatments for intracranial hemorrhage
- Define neurocritical care as a specialty, discuss recent developments in the care of subarachnoid hemorrhage and review monitoring modalities in the neurocritical care unit
- Explain TCD monitoring and discuss medical management of subarachnoid hemorrhage
- Identify and explain surgical techniques for treatment of ICH
- Name the various ways dural arteriovenous fistulas (DAVs) can present, describe the predominant difference between dural and pial arteriovenous malformations (AVMs) and review how DAVFs can affect the cortical venous system
- Provide an in-depth overview of Moyamoya Disease and illustrate surgical repair techniques
Thursday, May 17, 2012

7:15 a.m.  Registration and Continental Breakfast
7:45 a.m.  Welcome and Introductions

Session I: Evaluation
8 a.m.  CT and MR Perfusion in Acute Stroke
Maarten G. Lansberg, M.D., Ph.D.
9 a.m.  Medical Care: Inpatient Stroke
Theodore J. Lowenkopf, M.D.
10 a.m.  Break

Session II: Intervention
10:15 a.m. Collaterals in Stroke Therapy: The “Time = Brain” Continuum
Yince Loh, M.D.
11:15 a.m. Keynote: Emergent Evaluation and Therapy of Stroke
Helmi L. Lutsep, M.D.
Noon  Q & A Session
Moderator: William H. Likosky, M.D.
Panel: Maarten G. Lansberg, M.D., Ph.D.; Yince Loh, M.D.; Helmi L. Lutsep, M.D., FAHA
12:30 p.m. Lunch (provided)

Session III: Medical Management
1:30 p.m. Medical Management: Challenging Cases
Todd J. Czartoski, M.D.; Theodore J. Lowenkopf, M.D.
2 p.m. Stroke Prevention in Atrial Fibrillation
R. Jeffrey Westcott, M.D.
2:30 p.m. Break

The Hands-on Brain Lab and Didactic Session will be repeated each day, so that all attendees will have the opportunity to attend both options.

Session IV: Option 1: Hands-on Brain Lab
2:45 p.m. Vascular Neuroanatomy
J. Matt Lacy, M.D.
3:20 p.m. Carotid Endarterectomy Demonstration
David W. Newell, M.D.
3:55 p.m. Simulator Training in Aneurysm Coiling
Yince Loh, M.D.

Session IV: Option 2: Didactic Session
2:45 p.m. Acute Intervention Example
Todd J. Czartoski, M.D.; Joseph M. Eskridge, M.D.; Bart P. Keogh, M.D., Ph.D.; Yince Loh, M.D.
3:35 p.m. How to Use CTP and MR Perfusion to Guide Patient Care
Maarten G. Lansberg, M.D., Ph.D.
4:30 p.m. Break

Seventh Annual Merrill P. Spencer, M.D. Endowed Lectureship
4:45 p.m. Reception in Honor of Neal F. Kassell, M.D.
James Tower Lobby
5:55 p.m. Welcome and Introduction
David W. Newell, M.D.
6 p.m. Transcranial Ultrasound Treatment Applications
Neal F. Kassell, M.D.
7 p.m. Adjourn

Friday, May 18, 2012

7:30 a.m. Continental Breakfast
7:55 a.m. Welcome and Introductions

Session V: Neurocritical Care and Vascular Lesions
8 a.m. Vasospasm after Subarachnoid Hemorrhage (SAH)
Neal F. Kassell, M.D.
8:45 a.m. ICH Clot Lysis Using MR-Guided Focused Ultrasound
Stephen J. Monteith, M.D
9:15 a.m. Overview of Neurocritical Care
Madeleine C. Geraghty, M.D. and Arthur Lam, M.D.
9:45 a.m. Practical Aspects of Angioplasty for Vasospasm
Joseph M. Eskridge, M.D.
10:15 a.m. Break
10:45 a.m. Innovations: Treatment of Arteriovenous Malformation (AVM)
David W. Newell, M.D.
11:30 a.m. The Many Faces of the Dural Arteriovenous Fistula (DAVF)
Yince Loh, M.D.
Noon Moyamoya Disease
Emun Abdu, M.D.
12:30 p.m. Lunch (provided)

The Hands-on Brain Lab and Didactic Session will be repeated each day, so that all attendees will have the opportunity to attend both options.

Session VI: Option 1: Hands-on Brain Lab
1:30 p.m. Vascular Neuroanatomy
J. Matt Lacy, M.D.
2:10 p.m. Carotid Endarterectomy Demonstration
David W. Newell, M.D.
2:50 p.m. Simulator Training in Aneurysm Coiling
Yince Loh, M.D.

Session VI: Option 2: Didactic Session
1:30 p.m. Acute Intervention Example
Todd J. Czartoski, M.D.; Joseph M. Eskridge, M.D.; Bart P. Keogh, M.D., Ph.D.; Yince Loh, M.D.
2:30 p.m. How to Use CTP and MR Perfusion to Guide Patient Care
Maarten G. Lansberg, M.D., Ph.D.
3:30 p.m. Adjourn
About The Merrill P. Spencer, M.D. Endowed Lectureship

The Merrill P. Spencer, M.D. Endowed Lectureship was established in 2006 to honor the memory of Dr. Spencer who enjoyed a long and distinguished career as a physician, professor, researcher and innovator. Dr. Spencer earned an international reputation for his groundbreaking work with Doppler ultrasound technology and was a pioneer in stroke prevention. This lectureship, established by an initial gift from The Institute of Applied Physiology and Medicine, founded by Dr. Spencer in 1972, honors his belief in the importance of always searching for new answers and sharing those answers with others through continuing programs of medical education.

The Merrill P. Spencer, M.D. Endowed Lectureship is presented annually at the Cerebrovascular Symposium. This year, we are pleased to welcome Neal F. Kassell, M.D., a notable professor in the Department of Neurosurgery at the University of Virginia. Dr. Kassell is a member of numerous medical societies in the United States and abroad. He has served on many standing and ad hoc committees of the National Institutes of Health and in an editorial capacity for a variety of academic journals. He is currently a member of the editorial boards of Neurosurgery and Stroke.

Dr. Kassell has an active clinical practice specializing in patients with cerebrovascular disease, including aneurysms, arteriovenous malformations and benign basal tumors. His research interests focus on intracranial aneurysms, as well as computing and information technology and have resulted in more than 450 publications. We are honored that he will join us to present this distinguished lecture.

Planning Committee

William Likosky, M.D., Course Co-Chair
David W. Newell, M.D., Course Co-Chair
Colleen Douville, BA, RVT
Pam Ehrbar, BA
Laura Jacob, MEd
Yince Loh, M.D.
Amer Malik, M.D., MBA
Jessica Martinson, MS
Robin Olson, R.N.
Sherene Schlegel, R.N., BSN, FAHA

Accreditation with Commendation

Swedish Medical Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

AMA PRA Category 1 Credits™

Swedish Medical Center designates this live activity for a maximum of 14 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nursing CE Contact Hours

Clinical Education and Practice, Swedish Medical Center is an approved provider of continuing nursing education by the Washington State Nurses Association Continuing Education Approval & Recognition Program (CEARP), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Clinical Education and Practice will provide 12.75 contact hours for this activity. For more information about nursing contact hours, please contact vicki.enslow@swedish.org.

Acknowledgments

This symposium is financially supported in part by educational grants in accordance with ACCME's Standards for Commercial Support. At the time of this printing, a complete listing of commercial supporters was not available. Appropriate acknowledgment will be given to all supporters at the time of the symposium.

Location

Swedish Medical Center/Cherry Hill is located at 500 17th Avenue in Seattle, Washington. The conference will be held in the Swedish Education and Conference Center on the first floor of the James Tower. Parking is available in the garage on 16th Avenue between Cherry and Jefferson. From I-5 (northbound and southbound), take the James Street exit. Travel east on James Street. James will become Cherry Street. Turn right (south) on 16th Avenue. Turn right into the main garage entrance.
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Faculty

Emun Abdu, M.D.
Cerebrovascular Surgical Fellow
Swedish Neuroscience Institute

Todd J. Czartoski, M.D.
Associate Director of Neurology
Medical Director, Hospital Neurology
Director of Quality and Outcomes
Swedish Neuroscience Institute

Joseph M. Eskridge, M.D.
NeuroInterventional Radiologist
Swedish Neuroscience Institute

Madeleine C. Geraghty, M.D.
Medical Director
Primary Stroke Center
Providence Sacred Heart

Neal F. Kassell, M.D.
Professor of Neurosurgery
University of Virginia School of Medicine

Bart P. Keogh, M.D., Ph.D.
Medical Director, Radiology
Swedish Medical Center

J. Matt Lacy, M.D.
Acting Instructor
Departments of Medicine and Pathology
University of Washington School of Medicine

Arthur Lam, M.D.
Director of Neuroanesthesia and Neurocritical Care
Swedish Neuroscience Institute

Maarten G. Lansber, M.D., Ph.D.
Assistant Professor
Neurology and Neurological Sciences
Stanford University School of Medicine

William H. Likosky, M.D.
Medical Director
Stroke and Telestroke
Swedish Neuroscience Institute

Yince Loh, M.D.
Associate Professor of Neurology, Neurosurgery and Radiology
Uniformed Service University
University of California Los Angeles
NeuroInterventional Radiologist
Swedish Medical Center

Theodore J. Lowenkopf, M.D.
Medical Director
Providence Stroke Center

Helmi L. Lutsep, M.D., FAHA
Professor and Vice Chair, Department of Neurology
Oregon Health and Science University
Associate Director
Oregon Stroke Center

Stephen J. Monteith, M.D.
Chief Neurosurgery Resident
University of Virginia School of Medicine

David W. Newell, M.D.
Chief of Neuroscience
Cerebrovascular Neurosurgeon
Swedish Neuroscience Institute

R. Jeffrey Westcott, M.D.
Medical Director, Cardiac Catheterization Lab
Swedish Heart and Vascular Institute
## Registration Information:
Preregistration is required as space is limited. Participants who register by the "Advance Registration" deadline will receive a confirmation postcard after Monday, May 7, 2012. Registrations will only be processed when accompanied by full payment.

### Cancellation:
To receive a refund, notice of cancellation must be received no later than Friday, May 11, 2012.

**If using the registration form, please mail or fax it to:**
Continuing Medical Education
Swedish Medical Center/Cherry Hill
500 17th Avenue, Seattle, WA 98122
Fax: 206-320-7462

Please note: No registrations are accepted by phone or e-mail.

If you have special needs, please contact the CME office at 206-386-2755.

Interdepartmental Transfer Request enclosed or faxed to 206-320-7462.

## Registration Fees: Please check one of the following:

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Yes, I plan to attend the Merrill P. Spencer Reception and Lecture (no charge)

### Payment:

- [ ] Check enclosed, payable to: Swedish CME
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Signature_________________________ Expiration date_____________________

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### Registration Form

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