Fifth Annual
Cerebrovascular Symposium
New Therapeutics for Today’s Patient

Thursday and Friday,
May 12-13, 2011
Swedish Education and Conference Center
Swedish Medical Center/Cherry Hill
500 17th Avenue
Seattle, Washington

Session I Hyperacute Stroke
Session II Interventional Methods for Stroke Prevention
Session III The Surgeon and Cerebrovascular Disease
Session IV Unpeeling the Onion: Complications of Stroke

Merrill P. Spencer, M.D. Endowed Lecture
Dear Colleagues,

Welcome to the Fifth Annual Cerebrovascular Symposium at Swedish Neuroscience Institute.

Thought leaders from around the world will join their colleagues from the Swedish Neuroscience Institute as they focus on recent advances in the management of cerebrovascular disease and stroke. Treatment of hyperacute stroke, interventional and surgical methods for treating stroke, as well as challenging case discussions and telemedicine demonstrations are highlights of this year’s program. This interdisciplinary course is highly focused and will use case studies and panel discussions to foster a fresh and lively exchange of ideas.

The Merrill P. Spencer, M.D. Endowed Lecture is presented annually at the Cerebrovascular Disease Symposium. This year, we are pleased to welcome Dr. Hugh Markus, Professor of Neurology at St. George’s University of London. Dr. Markus’ main clinical and research interests are in stroke, and his research interests include applying imaging and molecular genetic techniques to investigate the pathogenesis of stroke and to develop new treatment approaches. We are honored that he will join us to present this distinguished lecture.

Physicians, physician assistants, nurse practitioners, nurses and other health-care professionals who care for patients with cerebrovascular disease and stroke will find this symposium to be an exceptional educational experience. We’ll see you in Seattle!

William Likosky, M.D., FAHA, FAAN
David Newell, M.D.
Colleen Douville, B.A., R.V.T.
Sherene Schlegel, R.N., B.S.N., FAHA

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. Merrill P. 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.

Intended Audience
The intended audience for this conference includes neurologists, neurosurgeons, neuroradiologists, vascular surgeons, emergency physicians, nurse practitioners, physician assistants, vascular sonographers and nurses who are closely involved in the treatment of patients with cerebrovascular disease.

Course Description
This course will update health-care professionals on the latest developments in the treatment of cerebrovascular disease and stroke, a disease that is taking on increased significance as the U.S. population ages. Attendees will receive up-to-date and practical clinical information on the diagnosis, treatment and management of patients with cerebrovascular disease. Faculty from a multidisciplinary team of neurovascular specialists will provide updates on technological advances in the field from the perspectives of stroke neurology, neuroradiology, interventional radiology, neurosurgery, cardiology, teleneurology and nursing.

Needs Statement
Clinicians today are faced with a rapidly growing population of patients with both acute and chronic cerebrovascular disease. Successful treatment requires complex strategies, and rapid advances in technology require that clinicians in the field receive frequent updates on research findings and treatment options in order to provide the most informed and evidence-based care for patients. This course will provide attendees with new information for diagnosing and treating cerebrovascular disease.

For Further Information:
Phone: 206-386-2755
Fax: 206-320-7462
E-mail: CME@swedish.org
Web: www.swedish.org/cme
## Agenda

### Thursday, May 12, 2011

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<td>Welcome and Introductions</td>
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<td>8 a.m.</td>
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<td>8 a.m.</td>
<td><strong>Keynote Presentation</strong></td>
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<td></td>
<td><em>Stroke: The Next Five Years</em></td>
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<td></td>
<td>Lawrence R. Wechsler, M.D.</td>
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<tr>
<td>9 a.m.</td>
<td><strong>Intracerebral Hemorrhage and Anticoagulants/Antithrombotics: What You Need to Know</strong></td>
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<td>Lori Heller, M.D.</td>
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<td>9:30 a.m.</td>
<td><strong>DIAS Study</strong></td>
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<td>William Likosky, M.D., FAHA, FAAN</td>
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<tr>
<td>10 a.m.</td>
<td><strong>Break</strong></td>
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<td><strong>Update on Sonothrombolysis</strong></td>
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<td>Tudor G. Jovin, M.D.</td>
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<td>11 a.m.</td>
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<td>11:45 a.m.</td>
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<td><strong>Lunch (provided)</strong></td>
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<td><strong>Session II: Interventional Methods for Stroke Prevention</strong></td>
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<td>1 p.m.</td>
<td><strong>Management of Cardioembolic Stroke</strong></td>
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<td>Mark Reisman, M.D., FACC</td>
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<tr>
<td>1:30 p.m.</td>
<td><strong>Selecting Patients with Asymptomatic Carotid Stenosis for Operation: The ACES Study</strong></td>
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<td>Hugh Markus, B.M., B.Ch., D.M., FRCP</td>
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<tr>
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<td><strong>Carotid Endarterectomy</strong></td>
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<td>David W. Newell, M.D.</td>
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<td>2:30 p.m.</td>
<td><strong>Tandem Occlusion</strong></td>
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<td>Amer Malik, M.D., M.B.A.</td>
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<tr>
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<td><strong>Break</strong></td>
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<td>3:15 p.m.</td>
<td><strong>Carotid Stents and CREST</strong></td>
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<td>Tudor G. Jovin, M.D.</td>
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<td>3:45 p.m.</td>
<td><strong>Stem Cell Treatment in Stroke</strong></td>
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<td>Lawrence R. Wechsler, M.D.</td>
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<tr>
<td>4:15 p.m.</td>
<td><strong>Case Studies</strong></td>
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<td><strong>Break</strong></td>
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**Featured Address:**
*The Merrill P. Spencer, M.D. Endowed Lecture*

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<tr>
<td>5 p.m.</td>
<td>Reception in honor of Dr. Hugh Markus, B.M., B.Ch., D.M., FRCP</td>
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<td>Merrill P. Spencer, M.D. Lecturer</td>
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<td>James Tower Lobby</td>
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<tr>
<td>6 p.m.</td>
<td><strong>Emboli sm and Stroke</strong></td>
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<td>Hugh Markus, B.M., B.Ch., D.M., FRCP</td>
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<td>8 a.m.</td>
<td><strong>Hemorrhagic Stroke and CLEAR III</strong></td>
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<td>David W. Newell, M.D.</td>
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<td>8:30 a.m.</td>
<td><strong>Neuromonitoring in the Neurocritical Care Unit</strong></td>
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<td>Arthur M. Lam, M.D., FRCP</td>
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<td>9 a.m.</td>
<td><strong>Arteriovenous Malformations</strong></td>
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<td>David W. Newell, M.D.</td>
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<td>9:30 a.m.</td>
<td><strong>The Multidisciplinary Approach to Brain Arteriovenous Malformations</strong></td>
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<td>Yince Loh, M.D.</td>
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<td>10:15 a.m.</td>
<td><strong>Update in Care of the Intracerebral Hemorrhage Patient — Changes in Practice: 2010 ASA Guidelines</strong></td>
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<td>Michael Fruin, R.N., M.S.N., ARNP, FAHA</td>
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<td>10:45 a.m.</td>
<td><strong>Palliative Care and Transitions of Care</strong></td>
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<td>Janice M. Connolly, M.D., F.H.M., FACP</td>
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<td>11:05 a.m.</td>
<td><strong>Case Presentation: A Poor Outcome</strong></td>
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<td>Jordan Reichman, M.D.</td>
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<td><strong>A Challenging Case: The Dilemma of Prognostication</strong></td>
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<td>Sheila Smith, M.D.</td>
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<td>3:15 p.m.</td>
<td><strong>Dementia and Cognitive Issues in Stroke</strong></td>
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<td>Tom Kushner, D.O.</td>
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<td>3:45 p.m.</td>
<td><strong>Extending Stroke Care Beyond the Walls of the Institution</strong></td>
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<td>4:15 p.m.</td>
<td><strong>Telemedicine: Possibilities, Opportunities and Realities</strong></td>
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Course Objectives
At the conclusion of this course, participants will provide better patient care through an increased ability to:

Session I: Hyperacute Stroke
• Discuss anticoagulation and antithrombotic treatment options for patients with intracranial hemorrhage and risks and benefits of transfusions
• Recognize differences in clot-dissolving medications and the role imaging plays
• Define indications for thrombolysis in stroke
• Explain treatment of stroke patients with possible central nervous system infections

Session II: Interventional Methods for Stroke Prevention
• Identify causes and management of cardioembolic stroke
• List indications, techniques and outcomes for carotid endarterectomy
• Explain microemboli in carotid stenosis
• Analyze endovascular therapy of tandem occlusions
• Review interventional approaches and explain stem cell care for stroke patients

Merrill P. Spencer, M.D. Endowed Lecture
• Explain how imaging can detect, quantify and localize emboli in cerebral vessels and describe the clinical applications of the technology

Session III: The Surgeon and Cerebrovascular Disease
• Identify signs and symptoms of hemorrhagic stroke
• Explain new treatments for intracranial hemorrhage
• Review monitoring modalities in the Neurocritical Care Unit
• Explain surgical procedures for arteriovenous malformations (AVM)
• Describe aspects of angioarchitecture and embolic agents related to brain AVM treatment

Session IV: Unpeeling the Onion: Complications of Stroke
• Describe updated recommendations of care for patients with intracerebral hemorrhage
• Recall challenges with end-of-life care decisions
• Discuss imaging, risks and prediction of post-stroke dementia
• Review considerations for sleep apnea in the development of cerebrovascular disease
• Explain telemedicine and the use of remote conference technology in neurology

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 14.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nursing Contact Hours
Contact hours for this continuing nursing education activity has been submitted to Swedish Medical Center, an approved provider of continuing education by the Washington State Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation. Contact Vicki Enslow at Swedish Medical Center for more information about contact hours at 206-320-2711.

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/Parking/Directions
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.

Planning Committee
William Likosky, M.D., FAHA, FAAN, Co-Chair
David W. Newell, M.D., Co-Chair
Colleen Douville, B.A., R.V.T., Co-Chair
Sherene Schiegel, R.N., B.S.N., FAHA, Co-Chair
Pam Ehrbar, B.A., CME Specialist
Michael Fruin, R.N., M.S.N., ARNP, FAHA
Amer Malik, M.D., M.B.A.
Jessica Martinson, MS, CME Manager
Robin Olson, R.N.
Fifth Annual
Cerebrovascular Symposium
New Therapeutics for Today’s Patient

Faculty

Andrei V. Alexandrov, M.D.
Director, Division of Cerebrovascular Disease
Director, UAB Comprehensive Stroke Research Center
University of Alabama
Birmingham, Alabama

Janice M. Connolly, M.D., F.H.M., FACP
Medical Director, Palliative Care Consult Team, Swedish Medical Group
Clinical Instructor, University of Washington
Seattle, Washington

Tammy L. Cress, R.N., M.S.N.
Director of Telehealth
Swedish Health Services
Seattle, Washington

Todd Czartoski, M.D.
Medical Director, Inpatient Neurology
Director, Quality and Outcomes
Swedish Neuroscience Institute
Seattle, Washington

Lina Fine, M.D., M.Phil.
Neurologist, Sleep Medicine Specialists
Swedish Medical Group
Seattle, Washington

Michael Fruin, R.N., M.S.N., ARNP, FAHA
Nurse Practitioner-Coordinator, Cerebrovascular Surgery Program
Swedish Neuroscience Institute
Clinical Adjunct Faculty
University of Washington
Seattle, Washington

Lori Heller, M.D.
Medical Director, Swedish Blood Management
Anesthesiologist, Swedish Heart and Vascular Institute
Clinical Instructor, University of Washington
Seattle, Washington

Tudor G. Jovin, M.D.
Associate Professor of Neurology and Neurosurgery
Director, UPMC Stroke Institute
Co-Director, UPMC Center for Neuroendovascular Therapy
University of Pittsburgh Medical Center (UPMC)
Pittsburgh, Pennsylvania

Tom Kushner, D.O.
Neurologist
Swedish Neuroscience Institute
Seattle, Washington

Arthur M. Lam, M.D., FRCPC
Medical Director, Neuroanesthesia and Neurocritical Care
Swedish Neuroscience Institute
Seattle, Washington

William Likosky, M.D., FAHA, FAAN
Medical Director, Stroke and Telestroke
Swedish Neuroscience Institute
Seattle, Washington

Yince Loh, M.D.
Assistant Professor, UCLA, Uniformed Services University
Interventional Neuroradiologist
Swedish Neuroscience Institute
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Neurohospitalist and Vascular Neurologist
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London, England

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Co-Executive Director
Swedish Neuroscience Institute
Seattle, Washington

Jordan Reichman, M.D.
Neurologist
Swedish Edmonds
Edmonds, Washington

Mark Reisman, M.D., FACC
Chief Scientific Officer, Swedish Medical Center
Director, Cardiovascular Research and Education
Director, Cardiac Catheterization Laboratory
Swedish Heart and Vascular Institute
Swedish Medical Group
Seattle, Washington

Sherene Schlegel, R.N., BSN, FAHA
Stroke/Telestroke Program Manager
Swedish Neuroscience Institute
Seattle, Washington

Sheila Smith, M.D.
Neurohospitalist
Swedish Neuroscience Institute
Seattle, Washington

Lawrence R. Wechsler, M.D.
Professor and Chair
Department of Neurology
University of Pittsburgh School of Medicine
Pittsburgh, Pennsylvania
Fifth Annual Cerebrovascular Symposium:
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Please print or type information

NAME

TITLE/CREDENTIALS

ADDRESS

CITY/STATE/ZIP

PHONE

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E-MAIL

SPECIALTY

Registration Fees: Please check one of the following:

Advance Registration After May 2
Physicians $370 $400
Non-Physicians $185 $215
Residents and Fellows No charge
Students No Charge

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

Payment:
☐ Check enclosed, payable to: Swedish CME
☐ Credit card #_____________________________________________________

☐ VISA ☐ MasterCard ☐ Discover ☐ AMEX

Signature____________________________ Expiration date_________________

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 2, 2011. 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 6, 2011.

If using the registration form, please mail or fax it to:
Continuing Medical Education
Swedish Medical Center/Cherry Hill
500 17th Avenue, Suite 303
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.

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