The UCLA Stroke Center and Neurovascular Program present the

XVIIth ANNUAL

BRAIN ATTACK!

A State-of-the-Art Symposium on Stroke Management

Saturday, May 5, 2012

Beverly Hills Hotel
9641 Sunset Boulevard, Beverly Hills, CA 90210

UCLA Faculty Course Directors:

Bruce Dobkin, MD
Director, Neurological Rehabilitation and Research Program, Department of Neurology

Neil Martin, MD
Chair, Department of Neurosurgery

Jeffrey Saver, MD
Director, Stroke Neurology, Department of Neurology

Sid Starkman, MD
Director, Emergency Neurology, Departments of Emergency Medicine and Neurology

Paul Vespa, MD
Director, Neurocritical Care, Departments of Neurosurgery and Neurology

Fernando Viñuela, MD
Director, Division of Interventional Neuroradiology

Sponsored by:

In association with:
Saturday, May 5, 2012

7:30  Registration and Continental Breakfast
8:00  Welcome to UCLA Brain Attack! ’12 Symposium  
      John Mazziotta, MD, PhD

STROKE PREVENTION
8:10  Next Steps in Transient Ischemic Attack  
      David Liebeskind, MD
8:40  Atrial Fibrillation and Stroke: New Drugs  
      Victor Marder, MD
9:10  Update on Carotid Artery Stenting  
      Sachin Rastogi, MD
9:40  Imaging Appropriate for Stroke Prevention  
      Noriko Salamon, MD, PhD
10:10 Break

ISCHEMIC STROKE
10:30 Innovative Surgical Treatment for Brain Ischemia  
      Nestor Gonzalez, MD
11:00 Opening More Arteries with Drugs and Devices  
      Reza Jahan, MD

NEUROCRITICAL CARE
11:30 Hypothermia After Cardiac Arrest  
      Paul Vespa, MD
12:00 Lunch

TELESTROKE
1:00  Telestroke: Practical Aspects  
      Latisha Ali, MD

HEMORRHAGIC STROKE
1:30 Flow Diverters and Advances in Cerebral Aneurysm Treatments  
      Satoshi Tateshima, MD, PhD
2:00 Innovative Management of Intracerebral Hemorrhage:  
      Update on NIH Multicenter MISTIE and ICES Trials  
      Neil Martin, MD
2:30 Break

NEUROREHABILITATION
2:50 Cells, Bells and Whistles for Stroke Rehabilitation  
      Bruce Dobkin, MD

STROKE FUNDAMENTALS
3:20 Ischemic Stroke Etiology  
      Lucas Restrepo, MD

STROKE SYSTEMS
3:50 Primary and Comprehensive Stroke Centers:  
      The Revolution Will Be Regionalized  
      Jeffrey Saver, MD
4:20 Closing Remarks  
      Marshall Morgan, MD
COURSE OBJECTIVES

At the conclusion of this program participants should be able to:

- Describe recent developments in stroke prevention strategies
- Discuss standard and new treatment options for cerebrovascular diseases
- Understand the significance of primary and secondary stroke center designations

TARGET AUDIENCE

Neurologists, Neurosurgeons, Interventional Neuroradiologists, Emergency Physicians, Family Practice Physicians, Internists, and other health care professionals who want to enhance their knowledge of the management of patients with cerebrovascular diseases.

UCLA FACULTY

Latisha Katie Ali, MD  
Assistant Clinical Professor of Neurology  
Director, UCLA TeleStroke Program

Bruce H. Dobkin, MD  
Professor of Neurology  
Director, Neurologic Rehabilitation and Research Program

Nestor R. Gonzalez, MD  
Assistant Professor of Neurosurgery and Radiology  
Ruth and Raymond Stotter Endowed Chair in Neurosurgery  
Director of Education, Interventional Neuroradiology

Reza Jahan, MD  
Associate Professor  
Division of Interventional Neuroradiology

David S. Liebeskind, MD  
Professor  
Neurology Director, Stroke Imaging  
Director, UCLA Vascular Neurology Residency Program  
Associate Neurology Director, UCLA Stroke Center

Victor Marder, MD  
Professor of Medicine  
Division of Hematology/Medical Oncology

Neil Martin, MD  
Professor  
Chair, Department of Neurosurgery

John C. Mazziotta, MD, PhD  
Chair, Department of Neurology  
Associate Vice Chancellor, Health Sciences

Marshall T. Morgan, MD  
Clinical Professor of Medicine  
Director, Emergency Medicine Center

Sachin Rastogi, MD  
Assistant Professor  
Division of Interventional Neuroradiology

Lucas Restrepo, MD  
Clinical Assistant Professor of Neurology

Noriko Salamon, MD, PhD  
Associate Professor of Radiology  
Director of Neuroradiology Fellowship Program

Jeffrey Saver, MD  
Professor of Neurology  
Director of Stroke Neurology  
Director of UCLA Stroke Unit

Satoshi Tateshima, MD, PhD  
Associate Clinical Professor  
Division of Interventional Neuroradiology

Paul Vespa, MD  
Professor of Neurosurgery and Neurology  
Director, Neurocritical Care
**ISCHEMIC STROKE:**

**Thrombolysis and Emergency Treatment, Prevention and Rehabilitation**

The UCLA Stroke Center presents its annual Brain Attack symposium to review the practical, clinical aspects of stroke prevention, diagnosis, and treatment. The course will cover stroke risk factors, diagnostic testing, and medical and interventional therapy.

Intravenous tPA is currently the only approved therapy for treatment of acute ischemic stroke. The results of recent studies suggest that neurointerventional techniques of intra-arterial mechanical and/or pharmacologic thrombolysis can be beneficial up to 8 hours after symptom onset in most patients, and beyond 8 hours in select patients. A highly coordinated team approach is required to provide these treatments safely and effectively.

Neuroimaging techniques are playing an increasingly important role in the evaluation of stroke patients. Faculty will provide an in-depth discussion of innovative MR and CT techniques.

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**Acute Treatment:** For patients with new onset stroke symptoms, a “Brain Attack” rapid care program provides:
- immediate evaluation by emergency physicians and neurologists
- CT / MRI scan within minutes of emergency department arrival
- prompt neurovascular intensive/intermediate level care
- trials of novel therapies for ischemic and hemorrhagic stroke, and acute interventional and surgical therapies.

**Stroke in Children and Young Adults:** Experts in pediatric neurology, neurosurgery, interventional and diagnostic neuroradiology and stroke neurology work together at the UCLA Stroke Center to provide comprehensive evaluation and treatment for pediatric and young adult patients with cerebrovascular disorders including moyamoya syndrome, sickle cell anemia, hyper-coagulable states, cardioembolic stroke, arteriovenous malformations and aneurysms.

**Prevention:** The Stroke Clinic provides comprehensive evaluation and treatment recommendations for individuals at increased risk for ischemic and hemorrhagic stroke, including those with atrial fibrillation, carotid artery stenosis, transient ischemic attacks and newly diagnosed unruptured aneurysms or vascular malformations.

**Carotid Endarterectomy:** Microneurosurgical endarterectomy, with intraoperative brain monitoring, is available for asymptomatic and symptomatic carotid artery stenosis.

**Cerebral and Carotid Angioplasty:** UCLA provides angioplasty for selected patients with intracranial and extracranial carotid or vertebrobasilar stenoses.

**Thrombolysis:** For patients eligible to receive intravenous tPA, thrombolysis is rapidly administered. In addition, interventional neuroradiological teams are available around the clock to deliver, for selected patients, endovascular or intra-arterial pharmacologic and mechanical thrombolysis.

**NIH Studies:** The UCLA Stroke Center is an NIH-designated Specialized Program of Translational Research in Acute Stroke (SPOTRIAS), one of only eight such designated Centers in the country. NIH-funded trials for which UCLA is currently recruiting patients include: keyhole neuroendoscopic surgery in intracerebral hemorrhage (ICES), mechanical embolectomy in acute stroke (MR RESCUE), paramedic-initiated magnesium neuroprotection for acute stroke (FAST-MAG), and IV t-PA compared to IV t-PA plus IA therapy (IMS III).

**Rehabilitation:** The inpatient Neurologic Rehabilitation and Research Unit and complementary outpatient rehabilitation facilities provide state-of-the-art care to maximize recovery for patients with stroke.

**UCLA Stroke Hotline for Acute Cases:** 1-877-DrStroke (1-877-377-8765)
**Stroke Neurology:** jsvaer@ucla.edu or 310-825-5482
**Vascular Neurology:** Neil Martin, M.D., Nestor Gonzalez, M.D. 310-825-5111
**Inpatient Rehabilitation and Research Unit:** 310-794-6556
**Neurosurgery Clinic:** 310-794-1572 (outpatient)
**Emergency Neurology:** starkman@ucla.edu or 310-794-0594

**UCLA Stroke Center:** www.stroke.ucla.edu
**UCLA Stroke Protect:** www.strokeprotect.mednet.ucla.edu
**UCLA Telestroke:** www.telestroke.ucla.edu
Atherosclerosis, Aneurysms, and Cerebrovascular Malformations

Tremendous strides have been made in the management of complex vascular lesions of the brain and spinal cord. This symposium will provide a review of the basic principles of clinical and radiologic management of carotid and intracranial stenoses, subarachnoid hemorrhage and aneurysms, and vascular malformations. Developments in microsurgical and endovascular techniques as well as critical care neurology will be discussed.

The UCLA Neurovascular Program

The UCLA Neurovascular Program has developed management protocols for the diagnosis and treatment of cerebrovascular disorders which incorporate recent developments in stroke neurology, microneurosurgery, diagnostic and interventional neuroradiology, stereotactic radiosurgery, neuroanesthesiology, and critical care. The members of the UCLA Neurovascular team have worked cooperatively since 1986 with all of the management components available on-site at UCLA, allowing for efficient coordination of the various techniques.

Neurovascular Disorders Treated at UCLA:

Intracranial Aneurysms
Ruptured intracranial aneurysms may be treated either surgically or by endovascular technique. Postoperatively, transcranial Doppler and cerebral blood flow studies are available to assess for the development of vasospasm. Severe, medically refractory vasospasm is treated using balloon dilation angioplasty and/or pharmacologic intra-arterial infusion, performed by the interventional neuroradiology team. Giant and complex aneurysms often require combined treatment using endovascular techniques in conjunction with extracranial-intracranial arterial bypass, or surgery under hypothermic circulatory arrest.

Arteriovenous Malformations (AVMs)
The Neurovascular Program has extensive experience in the management of large AVMs in children and adults, which are generally treated with embolization followed by microneurosurgical resection. Functional brain mapping for surgical planning is a critical component of management of AVMs. Deep and critically located AVMs are treated with stereotactic radiosurgery which is combined with embolization in larger lesions. Dural arteriovenous malformations are usually treated definitively by embolization alone, but in some complex cases, surgery or combined techniques are necessary. Spinal AVMs are treated by microsurgical excision, endovascular therapy, or most commonly, a combination of the two techniques.

Cavernous Angiomas of the Brain, Brain Stem and Spinal Cord
Cavernous angiomas are generally treated by microsurgical excision when they have caused significant symptoms. Lesions of the brain stem and spinal cord can now be treated successfully using microneurosurgical techniques, usually in combination with intraoperative electrophysiologic monitoring.

Vein of Galen Malformations
Transarterial and transvenous endovascular approaches are employed to reduce flow through the fistula, combined in some cases with neurosurgical treatment.

Intracranial Arterial Stenosis
Stroke due to narrowing of the brain arteries carries one of the highest rates of recurrent stroke, as much as 25 percent. Treatment of narrowing of the intracranial arteries is performed by a multidisciplinary team of experts in both medical management and novel endovascular and surgical revascularization techniques, including angioplasty, stenting, bypass, and indirect revascularization surgeries.

UCLA Medical Center Facilities:

Stroke Unit
UCLA’s Acute Stroke Unit, one of the first in the nation, offers comprehensive, cutting edge acute inpatient care for patients suffering from cerebral infarction, hemorrhage or other cerebrovascular diseases.

UCLA Neurocritical Care
The UCLA Neurocritical Care program is an internationally acclaimed center of excellence in patient care, training, and research. The 24-bed Singleton Neuro-ICU features numerous state-of-the-art technologies including continuous EEG monitoring, cerebral microdialysis, brain oximetry, transcranial doppler, the world’s first ICU Robot (InTouch Health), and a comprehensive ICU Supercomputing System.

Neurologic Rehabilitation and Research Unit
The NRRU provides acute rehabilitation during the initial time of complex medical and neurological recovery post-stroke with the goal of reducing the impairments and disability associated with stroke and maximizing recovery.

UCLA Clinical Image Processing Laboratory
The laboratory is equipped with a full spectrum of 3D, image fusion, and post-processing software for cerebrovascular structural and perfusion study analysis.

Neurosurgical Operating Rooms
The neurosurgical operating rooms at UCLA, which accommodate more than 1,200 cases annually, include video systems for viewing microsurgical procedures, electrophysiologic equipment for brain monitoring, intraoperative angiography, and a frameless stereotactic imaging workstation (BrainLAB).

UCLA Cerebral Blood Flow Laboratory (Clinical)
This facility provides comprehensive transcranial Doppler evaluations and cerebral blood flow testing on inpatients and outpatients.

Interventional Neuroradiology Suites
The interventional angiography suites are equipped with the latest digital equipment, including 3-D rotational angiography designated for the performance of endovascular procedures. More than 400 such procedures are performed annually at UCLA.

Stereotactic Radiosurgery
The stereotactic radiosurgery section at UCLA utilizes state-of-the-art instrumentation for the treatment of vascular malformations of the brain. This multidisciplinary effort of neurosurgeons, physicists, radiologists, and radiation oncologists is planned on a three-dimensional and multiplanar computerized model using high resolution brain mapping imaging techniques.

UCLA Stroke Center website http://www.stroke.ucla.edu
Vascular Neurosurgery 310-825-5482
Stroke Neurology 310-794-6379
Interventional Neuroradiology 310-267-8761 or 310-267-8762
Neurocritical Care 310-267-9448
Selected Advances in Stroke Care and Research from the UCLA Stroke Center

- **First device therapy for acute ischemic stroke**
  - MERCI Retriever
  - Invented at UCLA

- **Leading device therapies for cerebral aneurysms**
  - Guglielmi detachable coil, Matrix coil
  - Invented at UCLA

- **Leading catheter therapy for intracranial arteriovenous malformations and fistulae**
  - Onyx as liquid embolic agent for intracranial arteriovenous malformations and fistulae
  - Developed at UCLA

- **First MRI demonstration of successful reversal of advanced stroke injury in humans**

- **First validated instrument for paramedic recognition of stroke**
  - Los Angeles Prehospital Stroke Screen (LAPSS)

- **First prehospital neuroprotective treatment of stroke trial**
  - Field Administration of Stroke Therapy - Magnesium (FAST-MAG)

- **First stroke device studied utilizing FDA approved exception from informed consent under emergency circumstances**

- **First multi-center trial of body weight-supported treadmill training and drug therapies for stroke**

- **First clinical cellphone PACS system for remote review of CT and MRI scans in acute stroke**
  - Developed at UCLA

- **First US multicenter trial of endoscopic treatment for acute intracerebral hemorrhage**

- **First routine use of intraoperative digital subtraction angiography for evaluation after surgical aneurysm and AVM treatment**

- **First Neuro ICU-adjacent comprehensive stroke imaging center with CT, PET, 3T MRI**

- **First ICU and ED robot for remote monitoring of stroke patients**

- **First cerebral blood flow laboratory to use bedside xenon CBF studies and TCD for stroke critical care and research**

- **First clinical information system with acute stroke management dashboard**

- **First to deploy write-once, write-everywhere stroke note for clinical documentation and automated quality and research database completion**

- **First systematic secondary prevention program for cerebral atherosclerosis**
  - Preventing Recurrence of Thrombo-embolic Events through Co-ordinated Treatment (Stroke PROTECT Program)

- **First accredited undergraduate program for Student Stroke Research**
  - UCLA Student Stroke Team

- **First accredited undergraduate program for Stroke Community Education and Research**
  - UCLA Stroke Force

- **First confirmation that stroke diagnosis in the field by paramedics and neurologists by cell phone is highly accurate**
  - Field Administration of Stroke Therapy - Magnesium (FAST-MAG)

- **First validation of wearable, remote wireless health monitoring for stroke**
  - Developed by UCLA Wireless Health Institute faculty and students
**ENROLLMENT** - *Extremely Limited.*

**EARLY ENROLLMENT IS ADVISED**

We accept MasterCard, Visa, or Discover.

**By Phone:** Call (310) 794-2620.

**TUITION**

Includes course registration, syllabus, continental breakfast, break refreshments, and lunch.

- $170 Early Enrollment
- $195 (After April 19th)
- $130 UC Faculty/Staff
- Free FAST-MAG Physician Investigators (Tuition is covered by FAST-MAG Grant.)

**LOCATION**

**Beverly Hills Hotel**

9641 Sunset Boulevard

Beverly Hills, CA 90210

*(see next page for map and directions)*

**PARKING**

*Valet Parking is $14 for the event.*

**ACCOMMODATIONS**

Reservations at the Beverly Hills Hotel are subject to availability. Early reservations are suggested.

Mention the *UCLA Brain Attack! ‘12 Symposium* to inquire about the availability of a special conference rate.

For reservations, please call the Beverly Hills Hotel directly: **310-276-2251.**

**ACCREDITATION**

The Office of Continuing Medical Education, David Geffen School of Medicine at UCLA is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Office of Continuing Medical Education, David Geffen School of Medicine at UCLA designates this live activity for a maximum of 6.5 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

**Disclosure**

The FDA has issued a concept paper which classifies commercial support of scientific and educational programs as promotional unless it can be affirmed that the program is "truly independent" and free of commercial influence. In addition to independence, the FDA requires that non-promotional, commercially supported education be objective, balanced, and scientifically rigorous. The policy further states that all potential conflicts of interest of the CME staff and faculty be fully disclosed to the program’s participants. In addition, Accreditation Council for Continuing Medical Education policy now mandates that the provider adequately manages all identified potential conflicts of interest prior to the program. We, at UCLA fully endorse the letter and spirit of these concepts.

**Refunds**

Cancellations must be received in writing by April 19, 2012, and will be subject to a $50 processing fee. No refunds will be given after that date. If, for any reason, the course must be canceled, discontinued, or rescheduled by the Office of Continuing Medical Education, a full refund will be provided. You may fax your refund request to 310-794-2624.

**FOR ADDITIONAL INFORMATION**

Contact the Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Brain Attack! ‘12, 10920 Wilshire Blvd, Suite 1060, Los Angeles, CA 90024-6512

Telephone: 310-794-2620

E-Mail: eayala@mednet.ucla.edu
Located on world-famous Sunset Boulevard, on 12 acres in the center of Beverly Hills, The Beverly Hills Hotel is surrounded by lush tropical gardens, exotic flowers, and private walkways, which offer privacy and tranquility in a true residential setting.

**DIRECTIONS**

**From Los Angeles International Airport (LAX)**
- Travel east on Century Boulevard to the 405 N
- Take the 405 North to Sunset Boulevard
- Exit at Sunset Boulevard
- Turn right, traveling east for four miles
- The Beverly Hills Hotel is on the left
- Turn left at Crescent Drive into the driveway

**PARKING**

Valet Parking is $14 for the event.