

*Live Interventional Neuroradiology Conference*



*linchouston.com*

DECEMBER 5-8  
HOUSTON, TEXAS  
2011

*a mixture of didactic lectures, live case  
transmission and interactive discussions  
between world-renowned faculty*

DECEMBER 5-8  
HOUSTON, TEXAS  
2011



## TABLE OF CONTENTS

Conference Information.....	4
LINC Houston.....	5
Program.....	9
Sunday, December 4, 2011.....	10
Monday, December 5, 2011.....	10
Tuesday, December 6, 2011.....	11
Wednesday, December 7, 2011.....	13
Thursday, December 8, 2011.....	14
Registration & Travel .....	16
Registration.....	17
Travel.....	18
Accommodations.....	19

# 2011 CONFERENCE INFORMATION

*Hilton Americas*  
HOUSTON, TEXAS

## OVERVIEW AND TARGET AUDIENCE

LINC Houston is dedicated to improving the understanding and management of cerebrovascular disease among neurologists, neurosurgeons, radiologists and cardiologists. This conference uses a mixture of didactic lectures, live case transmission and interactive discussions between world-renowned faculty. LINC Houston sessions are designed to familiarize the audience with the indications and treatment of various neurovascular disorders.

Conference highlights include the most recent therapeutic advances in the endovascular, medical and neurosurgical management of strokes, both hemorrhagic and ischemic. Additional highlights include lectures and demonstrations on the safe use of endovascular devices and the proper indications for use. Faculty will present topics ranging from recent scientific and engineering discoveries to data from clinical studies that will help conference attendees better understand the disease process and available therapeutic options.

## LEARNING OBJECTIVES

*At the conclusion of the activity, participants should be able to:*

Identify indications and treatments for various neurovascular disorders.

Discuss, explain, and demonstrate the practical and safe use of endovascular devices and proper indications for their use.

Evaluate recent scientific and engineering discoveries and clinical studies, recognize the disease process and list various therapeutic options that are available.

Describe the indications of treatment for intracranial aneurysms, intracranial pial, and dural AVMs and balance the beneficial outcomes from treatment procedures, endovascular or surgical, against the natural history of the disease.

## EDUCATIONAL METHODS

- Lectures
- Live Case Transmissions
- Audiovisual Presentations
- Question and Answer Sessions
- Round Table Discussions

## SPECIAL ASSISTANCE

LINC Houston wishes to ensure that no individual with a disability is excluded, denied services, segregated or otherwise treated differently from other individuals because of the absence of auxiliary aids or services identified in the Americans with Disabilities Act. Please contact us at 281-858-7779 or Shellie@linchouston.com to notify us of your needs.

## OFFICIAL LANGUAGE

The official language of the course is English.

## ACCREDITATION STATEMENT

Texas Heart Institute at St. Luke's Episcopal Hospital is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

## DESIGNATION STATEMENT

Texas Heart Institute at St. Luke's Episcopal Hospital designates this live activity for a maximum of 26 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## DISCLOSURES

In accordance with the Standards for Commercial Support established by the Accreditation Council for Continuing Medical Education (ACCME), anyone in a position to control the content of the educational activity (speakers, paper presenters/authors, co-authors, staff, and the significant others of those mentioned), are required to disclose any relationship they have with commercial interests which may be related to the content of their lecture. Failure or refusal to disclose or the inability to satisfactorily resolve the identified conflict may result in the withdrawal of the invitation to participate in any Texas Heart Institute at St. Luke's Episcopal Hospital education activities. The ACCME defines "relevant financial relationships" as financial relationships in any amount occurring within the past 12 months that create a conflict of interest. The ACCME defines a "commercial interest" as any entity producing marketing, re-selling, or distributing healthcare goods or services consumed by, or used on, patients. Disclosures will be published in the meeting program/handouts.

# LINC HOUSTON FACULTY

## *Program Director*

MICHEL E. MAWAD, M.D.

## *Course Directors*

SARUHAN CEKIRGE, M.D.  
L. NELSON HOPKINS, M.D.  
PEDRO LYLYK, M.D.  
JACQUES MORET, M.D.  
NOBUYKI SAKAI, M.D.  
ROBERT SPETZLER, M.D.

## LINC HOUSTON SCIENTIFIC COMMITTEE

Michel Mawad, M.D.  
Liang-Der Jou, Ph.D.  
Hesham Morsi, M.D.

Hashem Shaltoni, M.D.  
Charles Strother, M.D.

## LINC FACULTY

### *Alejandro Berenstein, M.D.*

Professor of Radiology, Neurology and Neurosurgery  
Institute for Neurology & Neurosurgery  
Albert Einstein College of Medicine  
New York, New York

### *Juan Cebal, Ph.D.*

Associate Professor  
Department of Computational and Data Sciences  
George Mason University  
Fairfax, Virginia

### *Saruhan Cekirge, M.D.*

Professor of Interventional Radiology  
Department of Radiology  
Hacettepe University Hospitals  
Ankara, Turkey

### *Rene Chapot, M.D., Ph.D.*

Professor and Head  
Department of Neuroradiology  
Alfried Krupp Hospital  
Essen, Germany

### *Marc Chimowitz, M.D.*

Professor of Neurology  
Department of Neurosciences  
Medical University of South Carolina  
Charleston, South Carolina

### *In Sup Choi, M.D.*

Professor of Radiology  
Department of Interventional Neuroradiology  
Lahey Clinic Medical Center  
Tufts University School of Medicine  
Burlington, Massachusetts

### *Edward Duckworth, M.D.*

Assistant Professor  
Neurosurgery  
Baylor College of Medicine  
Houston, Texas

### *Y. Pierre Gobin, M.D.*

Professor of Radiology, Neurosurgery and Neurology  
Department of Radiology  
Weill Medical College of Cornell University  
New York, New York

**L. Nelson Hopkins, M.D.**

Professor & Chairman of Neurosurgery  
Department of Neurosurgery  
University at Buffalo, State University of New York  
Buffalo, New York

**Liang-Der Jou, Ph.D.**

Assistant Professor  
Department of Radiology  
Baylor College of Medicine  
Houston, Texas

**Naci Kocer, M.D.**

Professor of Radiology and Neuroradiology  
Cerrahpasa Medical School  
Istanbul, Turkey

**Zvonimir Krajcer, M.D.**

Program Director of Peripheral Vascular Interventions  
Texas Heart Institute at St. Luke's Episcopal Hospital  
Houston, Texas

**Elad Levy, M.D.**

Associate Professor of Neurosurgery and Radiology  
Department of Neurosurgery  
University at Buffalo Neurosurgery  
State University of New York  
Buffalo, New York

**Jianmin Liu, M.D.**

Professor of Neurology  
Director of Neurosurgery Center  
Shanghai Hospital  
Shanghai, China

**Pedro Lylyk, M.D.**

Professor and Chairman  
International Center for Endovascular Training  
Comprehensive Stroke Center  
Eneri and Clínica la Sagrada Familia  
UBA - USAL - UCES  
Buenos Aires, Argentina

**Michel E. Mawad, M.D.**

Professor and Chair of Radiology  
Professor of Neurosurgery, Neurology  
& Ophthalmology  
Department of Radiology  
Baylor College of Medicine  
Houston, Texas

**Cameron McDougall, M.D.**

Chief of Endovascular Neurosurgery  
Barrow Neurological Institute  
Phoenix, Arizona

**Philippe Mercier, M.D.**

**Jacques Moret, M.D.**

Professor of Radiology  
Fondation Ophthalmologique A. de Rothschild  
Paris, France

**Hesham Morsi, M.D.**

Assistant Professor of Radiology  
Department of Radiology  
Baylor College of Medicine  
Houston, Texas

**Peter K. Nelson, M.D.**

Associate Professor  
Radiology and Neurosurgery  
New York University  
New York, New York

**Isil Saatci, M.D.**

Hacettepe University Hospitals  
Ankara, Turkey

**Nobuyuki Sakai, M.D.**

Director of Neurosurgery and KCGH Stroke Center  
Kobe City Medical Center General Hospital  
Kobe, Japan

## LINC FACULTY (Cont.)

### Hashem Shaltoni, M.D.

Assistant Professor of Radiology  
Baylor College of Medicine  
Houston, Texas

### Adnan Siddiqui, M.D.

Associate Professor of Neurosurgery and Radiology  
University at Buffalo Neurosurgery  
State University of New York  
Buffalo, New York

### Robert Spetzler, M.D.

Director  
Chairman, Neurological Surgery  
Barrow Neurological Institute  
Phoenix, Arizona

### Neil Strickman, M.D.

Co-Director of the Peripheral Vascular  
Interventional Program  
Texas Heart Institute at St. Luke's Episcopal Hospital  
Houston, Texas

### Charles Strother, M.D.

Professor Emeritus  
Department of Radiology  
University of Wisconsin School of Medicine  
Madison, Wisconsin

### Jose Suarez, M.D.

Associate Professor  
Department of Neurology  
Baylor College of Medicine  
Houston, Texas

### Karel terBrugge, M.D.

Professor of Radiology and Surgery  
University of Toronto  
Ontario, Canada

### Ajay Wakhloo, M.D.

Professor of Radiology,  
Surgery, and Neurology  
Department of Radiology  
University of Massachusetts  
Worcester, Massachusetts

LINC HOUSTON PROGRAM

2011

# LINC HOUSTON 2011 PROGRAM

SUNDAY | DECEMBER 4, 2011

5:00 PM – 8:00 PM

Early Registration

MONDAY | DECEMBER 5, 2011

7:30 AM – 5:00 PM

Registration

7:30 AM- 8:30 AM

Breakfast and Exhibits

8:30 AM- 9:00 AM

Opening Remarks

9:00 AM – 10:30 AM

**LIVE CASE TRANSMISSION** | Kobe, Japan  
Nobuyuki Sakai, M.D.  
Moderators: Alejandro Berenstein, M.D.  
In Sup Choi, M.D.

10:30 AM – 11:00 AM

Coffee Break and Exhibits

11:00 AM – 12:30 PM

**LIVE CASE TRANSMISSION** | Houston, Texas  
Michel Mawad, M.D., Hesham Morsi M.D., Hashem Shaltoni, M.D.  
Moderators: Alejandro Berenstein, M.D.  
In Sup Choi, M.D.

12:30 PM – 1:00 PM

Lunch Break and Exhibits

1:00 PM – 2:00 PM

ev3 Neurovascular/Covidien Lunch Industry Symposium

2:00 PM – 3:00 PM

**LIVE CASE TRANSMISSION** | Houston, Texas  
Michel Mawad, M.D., Hesham Morsi M.D., Hashem Shaltoni, M.D.  
Moderator: Jacques Moret, M.D.

3:00 PM – 3:15 PM

Coffee Break and Exhibits

MODULE I:

**FLOW DIVERSION SYMPOSIUM**  
Moderator: Peter Nelson, M.D.

3:15 PM - 3:35 PM

Flow Diversion from Concept to Clinical Practice  
Ajay Wakhloo, M.D.

# LINC HOUSTON 2011 PROGRAM

MONDAY | DECEMBER 5, 2011

- 3:35 PM - 3:55 PM *Hemodynamics of Flow Diversion*  
Juan Cebral, Ph.D.
- 3:55 PM - 4:15 PM *Flow Diversion in Small Aneurysms*  
Saruhan Cekirge, M.D.
- 4:15 PM - 4:35 PM *Flow Diversion in Giant Aneurysms*  
Pedro Lylyk, M.D.
- 4:35 PM - 4:55 PM *Clinical Experience with Different Flow Diverters*  
Rene Chapot, M.D., Ph.D.
- 4:55 PM - 5:15 PM *Flow Assessment during Endovascular Treatment of Cerebral Aneurysms*  
Jacques Moret, M.D.
- 5:15 PM - 6:00 PM *Round Table Discussion*  
Moderator: Michel Mawad, M.D., Jacques Moret, M.D.  
Panel: Ajay Wakhloo, M.D., Juan Cebral, M.D.,  
Saruhan Cekirge, M.D., Rene Chapot, M.D.,  
Pedro Lylyk, M.D.
- 6:30 PM - 9:00 PM *Welcome Reception - Hilton Americas*

TUESDAY | DECEMBER 6, 2011

- 7:30 AM - 5:00 PM Registration
- 8:00 AM - 9:00 AM *MicroVention, Inc. Breakfast Industry Symposium*
- 9:00 AM - 10:30 AM *LIVE CASE TRANSMISSION | Ankara, Turkey*  
Isil Saatci, M.D.  
Moderators: Charles Strother, M.D.  
Karel terBrugge, M.D.
- 10:30 AM - 11:00 AM *Coffee Break and Exhibits*

# LINC HOUSTON 2011 PROGRAM

TUESDAY | DECEMBER 6, 2011

11:00 AM – 12:30 PM

**LIVE CASE TRANSMISSION** | Houston, Texas

Michel Mawad, M.D., Hesham Morsi, M.D.,  
Hashem Shaltoni, M.D

Moderators: Charles Strother, M.D.  
Karel terBrugge, M.D.

12:30 PM – 1:00 PM

**Lunch Break and Exhibits**

1:00 PM – 2:00 PM

**Stryker Lunch Industry Symposium**

2:00 PM – 3:00 PM

**LIVE CASE TRANSMISSION** | Buffalo, New York

L. Nelson Hopkins, M.D., Elad Levy, M.D., Adnan Siddiqui, M.D.

Moderators: Michel Mawad, M.D.  
Hashem Shaltoni, M.D

3:00 PM – 3:30 PM

**Coffee Break and Exhibits**

## MODULE II:

**ACUTE STROKE SYMPOSIUM**

Moderator: Hesham Morsi, M.D.

3:30 PM - 3:50 PM

**Stentriever in Acute Stroke**

Rene Chapot, M.D., Ph.D.

3:50 PM - 4:10 PM

**Other Clot Retrievers in Acute Stroke**

Y Pierre Gobin, M.D.

4:10 PM - 4:30 PM

**Brain Protection in Stroke**

Jose Suarez, M.D.

4:30 PM – 4:50 PM

**Novel Imaging Techniques in Acute Stroke**

Charles Strother, M.D.

4:50 PM – 5:30 PM

**Round Table Discussion**

Moderators: Michel Mawad, M.D., Jacques Moret, M.D.

Panel: Charles Strother, M.D., Jose Suarez, M.D.,

Y Pierre Gobin, M.D., Rene Chapal, M.D.

7:00 PM – 10:00 PM

**Texas Reception – Live at Bayou Place**

# LINC HOUSTON 2011 PROGRAM

WEDNESDAY | DECEMBER 7, 2011

7:30 AM – 5:00 PM

Registration

8:00 AM- 9:00 AM

Siemens Medical Solutions Breakfast Industry Symposium

9:00 AM – 10:30 AM

**LIVE CASE TRANSMISSION** | Buenos Aires, Argentina

Pedro Lylyk, M.D.

Moderators: Saruhan Cekirge, M.D.

Ajay Wakhloo, M.D.

10:30 AM – 11:00 AM

Coffee Break and Exhibits

11:00 AM – 12:30 PM

**LIVE CASE TRANSMISSION** | Houston, Texas

Moderators: Naci Kocer, M.D.

Nobuki Sakai, M.D.

12:30 PM – 1:00 PM

Lunch Break and Exhibits

1:00 PM – 2:00 PM

Codman Lunch Industry Symposium

2:00 PM – 3:00 PM

**LIVE CASE TRANSMISSION** | Phoenix, Arizona

Cameron McDougall, M.D.

Moderator: Edward Duckworth, M.D.

3:00 PM – 3:30 PM

Coffee Break and Exhibits

## MODULE III:

**CEREBROVASCULAR ANTHROSCLEROSIS  
SYMPOSIUM**

Moderator: Jose Suarez, M.D.

3:30 PM - 3:50 PM

Results for SAMMPRIS Trial

Marc Chimowitz, M.D.

3:50 PM - 4:10 PM

Stenting for Extracranial Atherosclerotic Disease:  
Where do we stand?

L. Nelson Hopkins, M.D.

# LINC HOUSTON 2011 PROGRAM

WEDNESDAY | DECEMBER 7, 2011 (cont.)

4:10 PM - 4:30 PM

Distal Filters versus Flow Reversal

Zvonimir Krajcer, M.D.

4:30 PM – 4:50 PM

Optimal Antiplatelet Therapy in Atherosclerotic Disease

Lucie Thibault, Pharm D.

4:50 PM – 5:30 PM

Round Table Discussion

Moderator: Neil Strickman, M.D.

Panel: Lucie Thibault, Pharm D.,

Zvonimir Krajcer, M.D.,

L. Nelson Hopkins, M.D.,

Marc Chimowitz, M.D.

THURSDAY | DECEMBER 8, 2011

## EMBRYOLOGY AND ANATOMY OF NEUROVASCULAR SYSTEM Angiographic and Surgical Correlation

8:00 AM- 8:30 AM

Development of the Internal Carotid Artery

In Sup Choi, M.D.

8:30 AM – 9:00 AM

Embryology, Arteries of Cavernous Sinus  
and Ophthalmic Artery

In Sup Choi, M.D.

9:00 AM – 9:30 AM

\*Surgical Anatomy of Cavernous Sinus and its Arteries

Philippe Mercier, M.D., Ph.D.

9:30 AM – 9:50 AM

Coffee Break and Exhibits

9:50 AM – 10:20 AM

Anterior Choroidal and Posterior Cerebral Arteries

Karel terBrugge, M.D.

10:20 AM – 10:50 AM

Angio Anatomy of Circle of Willis  
and Upper Basilar Artery

Karel terBrugge, M.D.

# LINC HOUSTON 2011 PROGRAM

THURSDAY | DECEMBER 8, 2011

10:50 AM – 11:20 AM	*Surgical Anatomy of Circle of Willis and Upper Basilar Artery Philippe Mercier, M.D., Ph.D.
11:20 AM – 11:40 AM	Angio Anatomy of Anterior and Middle Cerebral Arteries In Sup Choi, M.D.
11:40 AM – 12:10 PM	*Surgical Anatomy of Anterior and Middle Cerebral Arteries Philippe Mercier, M.D., Ph.D.
12:10 PM – 1:00 PM	Lunch Break and Exhibits
1:00 PM – 1:30 PM	Embryology and Angio Anatomy of Vertebrobasilar System In Sup Choi, M.D.
1:30 PM – 2:00 PM	*Surgical Anatomy of Vertebrobasilar Junction Philippe Mercier, M.D., Ph.D.
2:00 PM – 2:30 PM	Angio Anatomy of Spine and Spinal Cord Alejandro Berenstein, M.D.
2:30 PM – 3:00 PM	Microscopic Anatomy of Spinal Cord Philippe Mercier, M.D., Ph.D.
3:00 PM – 3:20 PM	Coffee Break and Exhibits
3:20 PM – 3:50 PM	External Carotid Artery, Embryology and Dangerous Anastomoses In Sup Choi, M.D.
3:50 PM – 4:20 PM	Cerebral Venous Systems and Dural Sinuses Karel terBrugge, M.D.
4:20 PM – 4:50 PM	*Anatomy of Venous Circle of Willis Philippe Mercier, M.D., Ph.D.
4:50 PM – 5:30 PM	Closing Remarks

\*Indicates 3D lecture

2011

REGISTRATION & TRAVEL ACCOMMODATIONS

# REGISTRATION INFORMATION

## 2011 Registration Fees LINC HOUSTON

	Early Bird**	Regular
Physician Registration	\$1,200	\$1,400
Allied Health	\$700	\$800
Fellows, Residents, Graduate Students*	\$600	\$700
Industry Professional	\$1,200	\$1,400

\*An attendee who is currently enrolled in a medical training program or graduate school. Documentation from fellowship director is required. Following your registration, fax or email documentation to the conference registrar.

\*\*Early Bird cut-off is November 11, 2011.

Registration fees include admission to all LINC Houston sessions, access to the exhibit hall, all meal functions at the hotel, and evening social events.

Registration fees must be paid in U.S. dollars. American Express, MasterCard and Visa are accepted. Registration will not be processed without check or credit card information. Confirmations will be e-mailed to registrants.

For more information, contact Shellie Stocks at 281-858-7779 or Shellie@linchouston.com.

Register online for LINC Houston at [www.linchouston.com](http://www.linchouston.com)

## SUBSTITUTION, REFUND, AND CANCELLATION POLICY

Cancellations received in writing by November 1, 2011 will be refunded less a \$150 administrative fee. No refunds will be given after November 1, 2011 for any reason. Refunds or credits will not be given for failure to attend, late arrival, unattended events or early departure.

LINC Houston reserves the right to cancel activities if extenuating circumstances, including, but not limited to, civil disturbance, earthquake, electrical outage, explosion, fire, freight embargo, strike or labor unrest, flood, hurricane, tornado, or other acts of God, an act of war, terrorism, or the act of any government (de facto or de jure), or any government agency or official make it necessary. Registrants will be notified at the contact number and email indicated on their registration form, followed by written notification. In these circumstances, the registrant expressly agrees to waive any claim that he, she, or it may have against LINC Houston for damages or compensation, including, but not limited to, fees for registration, housing, airfare, and/or incidental charges.

## TRAVEL INFORMATION

### *Air and Ground Information*

HOUSTON, TEXAS

There are two local airports that serve Houston, George Bush Houston Intercontinental (IAH) and William P. Hobby Airport (HOU).

#### GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH):

*IAH is 25 miles from the Hilton. Approximate drive time is 30 minutes.*

Driving Directions: Exit Bush Airport and follow the directional signs to the 1-45/Beltway 8 Exit. Proceed onto Beltway 8 West, then exit onto I-45 South. Follow I-45 South to downtown. Exit McKinney St. and follow McKinney St. to La Branch. Turn right on La Branch. Go down 2 blocks to Dallas and turn left on Dallas. Go down 2 blocks and the hotel will be on the right.

*Approximate cab fare from IAH: \$35 - \$45*

#### WILLIAM P. HOBBY AIRPORT (HOU):

*Hobby is 12 miles from the Hilton. Approximate drive time is 20 minutes.*

Driving: Exit Hobby Airport and follow the directional signs to I-45 North. Take 45 North to the downtown destinations/Scott Street split. Follow the split to the Pease Street exit and continue down to Austin St. Turn right on Austin and continue to Dallas St. Turn right onto Dallas St. and go down 3 blocks and the hotel will be on the right.

*Approximate cab fare from Hobby: \$15 - \$20*

**CAR RENTALS:** Call individual companies for more information.

Advantage	800.777.5500	281.540.1700
Alamo	800.327.9633	281.590.5100
Avis	800.331.1212	281.443.5800
Budget – Dollar	800.527.0700	281.449.0145
Enterprise	800.325.8007	
Hertz	800.654.3131	281.443.0800
National	800.328.4567	281.209.4900
Thrifty	800.367.2277	281.442.5000

## 2011 ACCOMMODATIONS

### *Hilton Americas-Houston*

1600 LAMAR  
HOUSTON, TEXAS  
MAIN LINE: 1.713.739.8000  
FAX: 1.713.739.8007

### ROOM RATE

The special conference hotel room rate is \$169.00/night.

Mention LINC Houston when making your reservation to receive the discounted rate; discount rate expires November 1, 2011. Book your rooms early as we anticipate selling out in advance.

To learn more about accommodations and online booking go to [www.linchouston.com](http://www.linchouston.com).

LINC Houston Hotel Policy: All hotel reservations will include a first night non-refundable deposit, equal to the room rate at the conference hotel. Upon check-in, this deposit will go toward your hotel stay.

### ABOUT THE HOST HOTEL

#### HILTON AMERICAS-HOUSTON HOTEL GUESTROOM FEATURES

The AAA four-star Hilton Americas Hotel will be the host hotel for LINC Houston. Located in the heart of downtown Houston, Hilton Americas-Houston hotel, the city's largest hotel, offers guests the unbeatable combination of the best location in the city of Houston plus quick and easy access to many restaurants and venues. At this 24-story, state-of-the-art hotel you'll find all the luxuries of home, yet all the amenities you need when traveling.



*Baylor College of Medicine*  
Department of Radiology  
One Baylor Plaza – BCM 360  
Houston, TX 77030

*linchouston.com*

HOUSTON, TEXAS  
DECEMBER 5-8  
2011

  
TEXAS HEART INSTITUTE®  
at St. Luke's Episcopal Hospital

 ST. LUKE'S® Neuroscience Center

BCM Neurovascular