

# Neuro-Interventional Tutorial

September 29, 2017

UCSF China Basin  
Research Center

CME Credits: 8.5

# Stroke and Aneurysm Update September 30, 2017

Marriott Union Square  
San Francisco

CME Credits: 7.0



# Neuro-Interventional Tutorial

September 29, 2017

UCSF China Basin Center - San Francisco, CA

**UCSF** Department of Radiology  
and Biomedical Imaging  
<https://radiology.ucsf.edu/cme>

## Course Outline and Objectives

The primary purpose of this course is to enable subspecialty interventional neuroradiologists, neurosurgeons, and neurologists to improve imaging interpretation of the brain, spine and vascular systems. This will be achieved by providing an updated review of evidence-based practice, with particular emphasis on neurovascular diseases, such as aneurysms, arteriovenous fistulas, arteriovenous malformations, acute ischemic stroke, and atherosclerosis; as well as novel and emerging technologies, such as physiologic imaging, advanced angiography, and state-of-the-art interventional devices.

The tutorial is a method of transferring knowledge and may be used as a part of learning. More interactive and specific than a book or a lecture; a tutorial seeks to teach by example and supply the information to complete a certain task. Special emphasis will be placed on using case presentations to develop accurate differential diagnoses and suggest appropriate clinical management. There will also be a hands-on opportunity with current neurovascular devices and embolics on flow models.

*Earn Self-Assessment (SAM) Credit* This course will offer 0.75 Self-Assessment credits as indicated on the schedule.

As of January 1, 2013, updated MOC Part 2 requirements: 75 CME credits every three years, at least 25 of which must be self-assessment activities (SA-CME, which includes SAMs). For more information: [www.theabr.org/moc-dr-comp2](http://www.theabr.org/moc-dr-comp2).

At the completion of this course, the attendee should be able to:

1. Improve interpretation of neurovascular imaging studies;
2. Recognize the indications for and limitations of CT, MRI and digital subtraction angiography for stroke and intracranial hemorrhage imaging, and treatment guidance;
3. Differentiate between the various common and rare forms of adult and pediatric neurovascular disease;
4. Appropriately select and implement the use of coils, stents, flow diverters, liquid embolics, sclerosants and/or particulate embolics in the management of complex neurovascular disease;
5. Recommend appropriate management of complex neurovascular disease, with particular reference to the roles of endovascular evaluation and therapy.

## UCSF Faculty

**Steven W. Hetts, MD**

**Course Co-Chair**

Professor of Radiology  
Chief, Interventional Neuroradiology  
UCSF Mission Bay Hospitals  
Director, HHT Center of Excellence

**Adib Abl, MD**

Associate Professor of Neurosurgery  
Chief, Cerebrovascular Neurosurgery

**Matthew R. Amans, MD**

Assistant Professor of Radiology

**Daniel L. Cooke, MD**

Assistant Professor of Radiology  
Chief, Interventional Neuroradiology  
SFGH and VAMC

**Christopher F. Dowd, MD**

Professor of Radiology, Neurology,  
Neurosurgery and Anesthesia  
Co-Director, Birthmarks and  
Vascular Anomalies Clinic

**Van V. Halbach, MD**

Professor of Radiology, Neurology,  
Neurosurgery and Anesthesia  
Director, Interventional Neuroradiology  
Fellowship Program

**Randall T. Higashida, MD**

Professor of Radiology, Neurology,  
Neurosurgery and Anesthesia  
Chief, Interventional Neuroradiology

**Michael T. Lawton, MD**

Professor of Neurosurgery  
Chief, Cerebrovascular Surgery

## Registration

Pre-registration is required as enrollment in this course is limited to 24 registrants.

Tuition: \$ 750 (early registration savings of \$50 by August 4, 2017).

Registration can be made online, by phone or fax (see last page).

For general inquiries, send an email to: [cme@radiology.ucsf.edu](mailto:cme@radiology.ucsf.edu).

# Neuro-Interventional Tutorial

September 29, 2017

UCSF China Basin Center - San Francisco, CA

**UCSF** Department of Radiology  
and Biomedical Imaging  
<https://radiology.ucsf.edu/cme>



## Course Program

|          |  |                               |
|----------|--|-------------------------------|
| 7:00 am  | Registration and Continental Breakfast   |                               |
| 7:25     | Welcome and Introductions .....  | Daniel L. Cooke, MD           |
| 7:30     | Surgery for Complex Cerebral Aneurysms .....   | M. Lawton, MD / A. Abia, MD   |
| 8:15     | Endovascular Treatment of Aneurysms: .....<br>State-of-the-Art and the Future                    | V. Halbach, MD / D. Cooke, MD |
| 9:00     | Hands-On Lab: Coils, Embolic Agents, Stents, and Flow Diverters .....                            | Faculty                       |
| 9:30     | Recess   |                               |
| 9:45     | Endovascular Treatment of Aneurysms: .....<br>Flow Diverters and Parent Artery Sacrifice         | D. Cooke, MD / A. Abia, MD    |
| 10:30    | Current Imaging of Acute Ischemic Stroke .....   | Steven W. Hetts, MD           |
| 11:15    | Current Endovascular Treatment of Acute Ischemic Stroke .....<br>(Self-Assessment / SAM Lecture) | Steven W. Hetts, MD           |
| 12:00 pm | Hands-On Lab: Embolectomy Devices and Stroke Imaging .....                                       | Faculty                       |
| 12:45    | Lunch (provided)   |                               |
| 1:45     | Birthmarks and Vascular Anomalies .....  | Christopher F. Dowd, MD       |
| 2:30     | Pediatric Cerebrovascular Disease .....  | Steven W. Hetts, MD           |
| 3:15     | Pulsatile Tinnitus: Diagnosis and Management .....   | Matthew R. Amans, MD          |
| 3:45     | Recess   |                               |
| 4:00     | Dural Arteriovenous Fistulas: .....<br>Diagnosis and Management                                  | Van V. Halbach, MD            |
| 4:15     | Angioplasty and Stenting for Cervicocerebral Atherosclerosis .....                               | Randall T. Higashida, MD      |
| 5:15     | Questions and Discussion .....   | Faculty                       |
| 5:30     | Adjourn  |                               |

## Accreditation

The University of California, San Francisco School of Medicine (UCSF) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

UCSF designates this live activity for a maximum of **8.5 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This educational activity meets the requirement under California State Assembly Bill 1195, continuing education and cultural and linguistic competency.



# Stroke and Aneurysm Update

September 30, 2017

Marriott Union Square - San Francisco, CA

**UCSF** Department of Radiology  
and Biomedical Imaging  
<https://radiology.ucsf.edu/cme>

## Course Outline and Objectives

This course will provide a forum for existing best practices, guidelines, algorithms, and resources on the management of ischemic stroke, intracerebral hemorrhage, and subarachnoid hemorrhage to be appraised and discussed, as well as an opportunity to develop a plan for individual and team practice improvement.

Specifically, it will address new imaging techniques for cerebral ischemia, new therapeutic approaches to AVMs, imaging and hemodynamics in aneurysm formation, evidence-based stroke care including management of ischemic stroke, intracerebral hemorrhage, and subarachnoid hemorrhage, updates on treatment of TIA and minor stroke, critical care for complex neuro-vascular patients, surgical and endovascular treatments, and the future of stroke rehabilitation.

This course is designed for health care team professionals who often are the first to come in contact with patients with unknown neurological disorders; such as care providers from Primary Care, Emergency Medicine, Neurology, Radiology, Neurointerventional Radiology, Neurosurgery, and Nursing and Rehabilitation.

At the completion of this course, the attendee should be able to:

1. Apply current best practices for managing patients with complex cerebrovascular diseases such as ischemic stroke, intracerebral hemorrhage, subarachnoid hemorrhage, AVM and aneurysms;
2. Identify and evaluate key updates and advances in stroke, AVM, aneurysm treatment, prevention and recovery;
3. Define key challenges in optimizing care for complex cerebrovascular disease;
4. Develop and assess strategies to enhance individual and team collaboration for the clinical care of patients with ischemic stroke, subarachnoid hemorrhage, and intracerebral hemorrhage.

## Registration

Pre-registration is encouraged to ensure a space in this course.

Tuition: \$ 250 MD/DO; \$175 AHP.

Registration can be made online, by phone or fax (see last page).

For general inquiries, send an email to: [cme@radiology.ucsf.edu](mailto:cme@radiology.ucsf.edu).

## UCSF Faculty

**Steven W. Hetts, MD**

**Course Co-Chair**

Professor of Radiology  
Chief, Interventional Neuroradiology  
UCSF Mission Bay Hospitals  
Director, HHT Center of Excellence

**Anthony S. Kim, MD, MAS**

**Course Co-Chair**

Associate Professor of Neurology  
Medical Director, UCSF Stroke Center

**Michael T. Lawton, MD**

**Course Co-Chair**

Professor of Neurological Surgery  
Chief, Cerebrovascular Surgery

**Adib Abula, MD**

Associate Professor of Neurosurgery  
Chief, Cerebrovascular Neurosurgery

**Daniel L. Cooke, MD**

Assistant Professor of Radiology  
Chief, Interventional Neuroradiology  
SFGH and VAMC

**Heather Fullerton, MD, MAS**

Professor of Neurology  
Chief, Child Neurology

**Cathra Halabi, MD**

Clinical Fellow in Neurology

**J. Claude Hemphill III, MD, MAS**

Professor of Clinical Neurology  
and Neurological Surgery  
Co-Director, Brain & Spine Injury Center  
Director, Neurocritical Care, SFGH

**Karl Meisel, MD**

Assistant Professor of Neurology

**Bhavya Rehani, MD, MBBS**

Assistant Professor of Radiology

**Wade S. Smith, MD, PhD**

Professor of Neurology  
Chief, Neurovascular Service

**Hua Su, MD**

Professor of Anesthesia  
Associate Director, Center for  
Cerebrovascular Research

# Stroke and Aneurysm Update

September 30, 2017

Marriott Union Square - San Francisco, CA

**UCSF** Department of Radiology  
and Biomedical Imaging  
<https://radiology.ucsf.edu/cme>



## Course Program

|          |  |                             |
|----------|--|-----------------------------|
| 7:30 am  | Registration and continental breakfast                               |                             |
| 8:10     | Opening Remarks and Introductions .....                              | Anthony S. Kim, MD, MAS     |
| 8:15     | Course Pre-Test .....  | Anthony S. Kim, MD, MAS     |
| 8:25     | Current Imaging of Stroke .....                                      | Bhavya Rehani, MD           |
| 8:50     | Endovascular Stroke Therapy for Large Vessel Stroke .....            | Wade S. Smith, MD, PhD      |
| 9:15     | Endovascular Treatment of Aneurysms and Vascular Malformations ..... | Steven W. Hetts, MD         |
| 9:40     | Questions and Discussion   |                             |
| 10:00    | Recess   |                             |
| 10:20    | Advanced Imaging and Radiogenomics of Neurovascular Diseases .....   | Daniel L. Cooke, MD         |
| 10:45    | Intracranial Hemorrhage.....   | Claude Hemphill, MD, MAS    |
| 11:10    | Current State of AVM Surgery .....                                   | M. Lawton, MD / A. Abia, MD |
| 11:45    | Updates on Brain AVM Therapeutic Development .....                   | Hua Su, MD                  |
| 12:00 pm | Questions and Discussion   |                             |
| 12:20    | Lunch (provided)   |                             |
| 1:35     | Update on TIA Management and Secondary Stroke Prevention .....       | Karl Meisel, MD             |
| 2:00     | Pediatric Neuroangiography .....                                     | Steven W. Hetts, MD         |
| 2:25     | Update on Aneurysm and Subarachnoid Hemorrhage .....                 | Anthony S. Kim, MD, MAS     |
| 2:50     | Questions and Discussion   |                             |
| 3:10     | Recess   |                             |
| 3:30     | Recent Advances in Pediatric Stroke .....                            | Heather Fullerton, MD, MAS  |
| 3:55     | What is Recovery? .....  | Cathra Halabi, MD           |
| 4:20     | Questions and Discussion .....                                       | Anthony S. Kim, MD, MAS     |
| 4:35     | Course Post-Test.....  | Anthony S. Kim, MD, MAS     |
| 5:10     | Adjourn  |                             |

## Accreditation

*The University of California, San Francisco School of Medicine (UCSF) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.*

UCSF designates this live activity for a maximum of **7.0 AMA PRA Category 1 Credits™**

Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Physician Assistants (PA): the AAPA accepts **AMA PRA Category 1 Credit™**.

Nurses: for the purpose of recertification, the American Nurses Credentialing Center accepts **AMA PRA Category 1 Credit™** issued by organizations accredited by the ACCME.

*This educational activity meets the requirement under California State Assembly Bill 1195, continuing education and cultural and linguistic competency.*

# Neuro-Interventional / Stroke & Aneurysm

September 29-30, 2017  
San Francisco, California

UCSF Department of Radiology  
and Biomedical Imaging  
<https://radiology.ucsf.edu/cme>

## Air Travel [https://radiology.ucsf.edu/cme/sf\\_travel](https://radiology.ucsf.edu/cme/sf_travel)

UCSF Radiology has negotiated special fares with United and Delta Airlines for radiology course attendees. To find the lowest fares and to help UCSF meet its contractual obligations, please book with the airlines directly using the codes below:

| Airline | Online / Booking Code  | Toll-free                                    |
|---------|--|--|
| United  | <a href="http://tinyurl.com/www-united-com-book">http://tinyurl.com/www-united-com-book</a><br>2017 code: ZWZB714473 | 800-426-1122<br>(\$25 booking fee via phone) |
| Delta   | <a href="http://tinyurl.com/www-delta-com-book">http://tinyurl.com/www-delta-com-book</a><br>2017 Code: NMNKQ        | 800-328-1111<br>(\$25 booking fee via phone) |

Flights can be arranged through either San Francisco (SFO) or Oakland (OAK) airports.

BART subway service, shuttle vans and taxis are available from both airports to downtown San Francisco.

SFO: [www.flysfo.com](http://www.flysfo.com)

BART (Bay Area Rapid Transit): [www.bart.gov](http://www.bart.gov)

OAK: [www.oaklandairport.com](http://www.oaklandairport.com)

SF MUNICIPAL Railway: [www.sfmta.com](http://www.sfmta.com)

## Car Rental

[www.Hertz.com](http://www.Hertz.com)

2017 CV#: 01SY0263

800-654-2240

A rental car is not necessary (or recommended) for your stay; however, for those interested in possible side-trips, arrangements have been made with Hertz Car Rental for special rates one week before and after this meeting. Book online or by phone using the number and discount code listed above.

## Accommodations

<https://radiology.ucsf.edu/cme/ucsf-neuro-interventional-2017-sanfrancisco>

<https://radiology.ucsf.edu/cme/ucsf-stroke-aneurysm-2017-sanfrancisco>

For detailed information on hotels and rates in the Union Square / Market Street area just north of China Basin, visit the course webpage link listed above.

Please make your reservation early, as hotel rooms in San Francisco are at a premium. These hotels are a 20-25 minute walk from the China Basin Research Center, and are easily accessible by streetcar, taxi or walking.

The China Basin Research Center is next to AT&T Park / Giants Stadium.

## Getting to the Neuro-IR Course

For details on SF city transportation routes and fares, visit: [www.sfmta.com](http://www.sfmta.com)

For China Basin maps/directions: <https://radiology.ucsf.edu/coations/china-basin>

*Note: the CB free parking listed is not for course attendees, it is for patients only.*

The workshop is held at the UCSF China Basin Research Center at 185 Berry Street (at Fourth Street), Lobby 6, Third Floor. The Center is located on the southeast side of the city, next to the baseball stadium, and one block from the CalTrain station.

**Attendees staying at one of the downtown hotels** should note that the China Basin Center is approximately a 20 minute walk from Market Street, and is on the N-Judah streetcar line, which is accessible from any of the four underground Market Street Muni stations. The N-Judah stops one short block from the China Basin Center.

**For those local to the bay area** who will be taking BART, the Montgomery and Powell stations are closest. For those who will be driving, the entrance to Lobby 6 of China Basin Center is at the corner of Fourth and Berry Streets. Stockton Street (downtown SF) travels one-way south, and becomes Fourth Street after crossing Market.

24 Hour Parking:

Beacon 415-546-7755 - Safeway parking lot, 4th & Townsend Streets

IMpark 415-227-0114 - Giants Stadium parking, 3rd & Channel Streets

## Getting to the Stroke & Aneurysm Course

Marriott SF Union Square,  
480 Sutter Street at Powell

The course is held at the Marriott Union Square, which is two blocks from Union Square plaza, and four blocks from the Powell underground transit station on Market Street. The Powell transit station connects to BART to both SFO and OAK airports, as well as the city MUNI transit system:

[https://radiology.ucsf.edu/cme/sf\\_travel](https://radiology.ucsf.edu/cme/sf_travel)

The **SF Giants** have baseball home-games this weekend, and the Giants Stadium is next to the UCSF China Basin Research Center.

For schedule and ticket information, go to: [sanfrancisco.giants.mlb.com](http://sanfrancisco.giants.mlb.com)

# Neuro-Interventional / Stroke & Aneurysm

September 29-30, 2017  
San Francisco, California

UCSF Department of Radiology  
and Biomedical Imaging  
<https://radiology.ucsf.edu/cme>

## REGISTRATION

### NEURO-INTERVENTIONAL TUTORIAL / STROKE & ANEURYSM UPDATE

UCSF China Basin Research Center - San Francisco, California

Three easy ways to register:

1. Online at <http://meded.ucsf.edu/cme>
2. Phone using Visa, Amex or MC. Call 415-476-5808, 8:30 am - 4:00 pm (Pacific Time)
3. Fax this form to 415-502-1795

### REGISTRANT INFORMATION (PLEASE PRINT)

Name \_\_\_\_\_  
First Last Degree

Address \_\_\_\_\_

Tel \_\_\_\_\_ Fax \_\_\_\_\_  
Area Code Area Code

E-mail \_\_\_\_\_

☐ Please add me to your priority email list.

Month/Date of Birth for record verification: \_\_\_\_\_ / \_\_\_\_\_ / X X  
month date

**You must register for BOTH courses SEPARATELY:**

#### NEUROINTERVENTIONAL TUTORIAL

September 29, 2017 / Friday (RAD18 A08)

By 8/4/17 After 8/4/17

☐ \$ 700 ☐ \$ 750 Physician MD / DO / PhD

Attendance is limited to 20 persons.

Cancellation A refund of the enrollment fee, less \$100, will be made upon receipt of a written request only (fax or email) by Friday, September 1, 2017. No refunds will be made after this date.

#### STROKE & ANEURYSM UPDATE

September 30, 2017 / Saturday (RAD18 B08)

☐ \$ 250 Physician - MD / DO

☐ \$ 175 AHP - PA / RN / NP / LPN

Cancellation A refund of the enrollment fee, less \$50, will be made upon receipt of a written request only (fax or email) by Friday, September 1, 2017. No refunds will be made after this date.

### METHOD OF PAYMENT

☐ Check enclosed, payable to UC Regents OR

Please charge my: ☐ Visa ☐ Mastercard ☐ American Express

Card No. \_\_\_\_\_

Exp. Date \_\_\_\_\_ Signature \_\_\_\_\_

Payment may be made by credit card or by check or money order drawn on a U.S. bank in U.S. currency. We regret that we cannot accept checks drawn on foreign banks. Enrollment Confirmation will be mailed to you within two weeks of receipt of the application.