

# Neuro and Musculoskeletal Imaging

February 12-17, 2017

Fairmont Orchid Resort & Spa  
Kohala Coast, Big Island of Hawaii

CME Credits: 23.25

Self-Assessment Credits: 21.75



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



## Course Outline

This course will present a comprehensive state-of-the-art update on clinically relevant topics in neuroradiology and musculoskeletal imaging, including a discussion of optimized protocols with 1.5T and 3T MR units.

Neuroradiology topics to be addressed include updated strategies for imaging of the peripheral nervous system, stroke and other neurologic emergencies, and routine head & neck abnormalities.

Musculoskeletal imaging will include discussions of new metal reduction sequences for MRI, and diagnostic approaches to wrist pain.

## Self-Assessment

This course will offer 21.75 Self-Assessment credits: 11.0 in Musculoskeletal and 10.75 in Neuro.

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)

## Course Objectives

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

1. Apply their acquired knowledge to improve imaging protocols for brain, head & neck, spine, nerve and musculoskeletal CT/MR imaging;
2. Recognize specific imaging features of infection and tumors in the head, neck, spine and peripheral nerves;
3. Distinguish between normal anatomy, common anatomic variants and pathological disorders related to MRI of the major musculoskeletal joints, brain, head, neck and spine;
4. Recognize internal derangement appearances of the knee, shoulder, elbow, wrist, hip, knee, and foot;
5. Implement newer MR sequences such as 3D volumetric imaging and metal suppression techniques;
6. Update knowledge about MR arthrographic technique and findings;
7. Sharpen evaluation of muscle and tendon abnormalities;
8. Identify important imaging characteristics of bone tumors;
9. Realize various abnormalities that simulate musculoskeletal tumors;
10. Appreciate advances in stroke management and their impact on imaging; and
11. Develop strategies for evaluating common and uncommon abnormalities in the neck and spine

## UCSF Faculty

**Christopher P. Hess, MD, PhD**

**Course Co-Chair**

Professor of Radiology and Neurology  
Chief, Neuroradiology

**Lynne S. Steinbach, MD**

**Course Co-Chair**

Professor of Radiology and Orthopaedics

**Matthew D. Bucknor, MD**

Assistant Professor of Clinical Radiology

**Christine M. Glastonbury, MBBS**

Professor of Clinical Radiology, and of  
Otolaryngology and Radiation Oncology

**Vinil N. Shah, MD**

Assistant Professor of Radiology

## Guest Faculty

**Robert D. Boutin, MD**

Professor of Clinical Radiology  
University of California Davis  
School of Medicine

## Registration

<https://www.cme.ucsf.edu>

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

Pre-register by December 16, 2016 and save \$75 on your enrollment fee.

**Tuition** \$1,200 for all medical professionals; registration discounts are available for qualifying attendees, please review the registration form on the last page.

### **On-site Registration**

Sunday, February 12, 2017 at 7:00 am  
The Fairmont Orchid Resort  
1 North Kanikku Drive, Kamuela

**Syllabus** An electronic syllabus and paper notebook will be provided onsite. You must provide an email address with your registration to receive advance syllabus information, which will be distributed electronically.

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## Course Program page 1 of 2

### Sunday, February 12, 2017

- 7:00 am Registration and Continental Breakfast
- 7:25 Welcome and Introductions
- 7:30 Knee Menisci: Pearls & Pitfalls <sup>SA</sup>
- 8:15 Anterior Cruciate Ligament Reconstruction <sup>SA</sup>
- 9:00 Knee: MRI Case-based Review <sup>SA</sup>
- 9:45 Recess
- 10:00 MR Arthrography <sup>SA</sup>
- 10:45 Orthopedic Interposition Injuries <sup>SA</sup>
- 11:05 Radiographic Evaluation of Femoroacetabular Impingement <sup>SA</sup>
- 11:30 Pre and Post -Op Hip: MRI Case-based Review <sup>SA</sup>
- 12:15 pm Questions and Discussion
- 12:30 Adjourn

Lynne S. Steinbach, MD  
Matthew D. Bucknor, MD  
Robert D. Boutin, MD

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### Monday, February 13, 2017

- 7:00 am Continental Breakfast
- 7:30 MRI of Shoulder Instability <sup>SA</sup>
- 8:15 MRI of the Rotator Cuff <sup>SA</sup>
- 9:00 Elbow Injuries in Athletes <sup>SA</sup>
- 9:45 Recess
- 10:00 Wrist & Hand: MRI Case-based Review <sup>SA</sup>
- 10:45 MRI of the Foot <sup>SA</sup>
- 11:30 Two Other Diagnostic Challenges in the Foot & Ankle <sup>SA</sup>
- 12:15 pm Questions and Discussion
- 12:30 Adjourn

Lynne S. Steinbach, MD  
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Matthew D. Bucknor, MD

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### Tuesday, February 14, 2017

- 7:00 am Continental Breakfast
- 7:30 Imaging of Bone Tumors: Helpful Tips <sup>SA</sup>
- 8:15 Musculoskeletal Pseudo-Tumors <sup>SA</sup>
- 9:00 Muscle & Tendon: Case-based Review <sup>SA</sup>
- 9:45 Recess
- 10:00 CNS Infection: the Bug Parade <sup>SA</sup>
- 10:45 Spine Infection: from Aureus to Zika <sup>SA</sup>
- 11:30 Sinonasal Inflammation <sup>SA</sup>
- 12:15 pm Questions & Discussion
- 12:30 Adjourn

Matthew D. Bucknor, MD  
Lynne S. Steinbach, MD  
Robert D. Boutin, MD

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Vinil N. Shah, MD  
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### Wednesday, February 15, 2017

No formal program.



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## Course Program page 2 of 2

### Thursday, February 16, 2017

- 7:00 am Continental Breakfast
- 7:30 Current Concepts in Stroke Imaging <sup>SA</sup>
- 8:15 Pearls in Head & Neck Imaging <sup>SA</sup>
- 9:00 Imaging Evaluation of Sciatic Neuropathy <sup>SA</sup>
- 9:45 Recess
- 10:00 Practical Brachial Plexus MRI <sup>SA</sup>
- 10:30 Imaging Approach to the Neck Mass <sup>SA</sup>
- 11:15 Sella & Central Skull Base <sup>SA</sup>
- 12:00 pm Questions & Discussion
- 12:15 Adjourn

Christopher P. Hess, MD, PhD  
Christine M. Glastonbury, MBBS  
Vinil N. Shah, MD

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Christine M. Glastonbury, MBBS  
Christopher P. Hess, MD, PhD

### Friday, February 17, 2017

- 7:00 am Continental Breakfast
- 7:30 Value-based Imaging in the Degenerative Spine <sup>SA</sup>
- 8:15 Expert Neuroanatomy in 30 Minutes or Less <sup>SA</sup>
- 8:45 Understanding the Brainstem: the Rule of 4's <sup>SA</sup>
- 9:15 Imaging of Cranial Neuropathy: CN1-6 <sup>SA</sup>
- 9:45 Recess
- 10:00 Imaging of Cranial Neuropathy: CN7-12 <sup>SA</sup>
- 10:30 CNS Emergencies <sup>SA</sup>
- 11:00 How to Handle Cervical Lymph Nodes <sup>SA</sup>
- 11:30 CSF Hypotension: Find and Treat the Leak <sup>SA</sup>
- 12:00 pm Questions & Discussion
- 12:15 Adjourn

Vinil N. Shah, MD  
Christopher P. Hess, MD, PhD  
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## 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 **23.25 AMA PRA Category 1 Credits.**<sup>™</sup>

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

The total credits are inclusive of 3.5 in CT and 18.5 in MRI.

This live activity also qualifies for credit for physician assistants (PA) and registered nurses (RN).

Please check with your state licensing board to ensure compliance.

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

<sup>SA</sup> These lectures will include Self-Assessment Credit (SA-CME).

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## The Fairmont Orchid [www.fairmont.com/orchid](http://www.fairmont.com/orchid)

Tel: 800-845-9905 / 808-885-2000 / 1 N. Kaniku Drive, Kohala Coast, Hawaii

Online <https://resweb.passkey.com/go/ucsfneuro2017> -- Reservation deadline: January 12, 2017.

Join the Fairmont President's Club (free) prior to arrival to receive complimentary in-room internet during your stay (\$15 per day). Log onto: [www.fairmont.com/fpc](http://www.fairmont.com/fpc)

When making your accommodation decisions, please take into consideration that staying at the host hotel helps UCSF meet its contractual obligations and keeps registration fees reasonable.

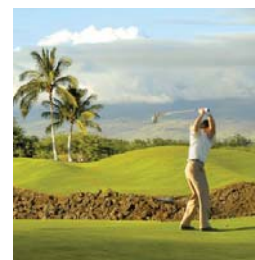
There is no additional resort fee! Note that availability of ocean view rooms and suites are limited.

Single/Double Fairmont Room	\$339	Garden View Executive Suite	\$650
Partial Ocean View	\$385	Ocean View Executive Suite	\$755
Guaranteed Ocean View	\$409	Ocean Front Suite	\$917

Make your reservation early as rooms will likely sell-out before the cut-off date, you must mention the UCSF meeting to receive the rates listed above. Reservation requests made after these deadlines will be extended at the conference rates on a space-available basis only. A credit card number is required to guarantee your reservation.

Rates exclude state hotel room tax of 13.416% (subject to change). Reservations cancelled at least 30 days prior to arrival will incur no cancellation charges; between 29 and 3 days prior to arrival will be charged a two-nights stay (plus taxes); less than 72 hours prior to arrival and no-shows will be charged five-nights stay (plus taxes).

There is no additional charge for children under the age of 18 who share with their parents. The maximum number of persons per room is 3 adults or 2 adults with 2 children. Third adult charge is \$75 per night. Daily parking rates for 2016 are \$17 for self parking, \$22 for valet (rates subject to change for 2017).



## Resort Highlights

- 36-hole Francis H. Brown coastal golf course
- Spa Without Walls with oceanside cabanas and massage services
- indoor spa treatments and sauna
- 24/7 fitness center access
- children's dining menus; and full- & half- day activity programs
- plexiplave tennis courts

At the Orchid, an ambience of comfort and luxury has been adapted to the natural surroundings and beauty of the island. Among the many resort features that guests can enjoy are plexipave tennis courts (including a stadium court); a ten-thousand square-foot freshwater swimming pool and surrounding whirlpools; and a protected white sand lagoon. Activities include creative wellness programs, basketball, poolside ping-pong, beach volleyball, and other water activities including outrigger canoes.

Guests may start off their mornings with a tennis clinic, power walk and stretch, low-impact aerobic conditioning, or even a snorkel cruise. The 36-hole Francis H. I'i Brown Golf Course is both challenging and spectacular, as it runs along ancient lava flows, native landmarks and the ocean coastline. The Spa Without Walls offers a variety of spa and massage treatments in private, ocean-side cabanas. The Fitness Center is accessible 24/7.

The Orchid's Keiki Aloha (children's program) utilizes the hotel's oceanside location and enables its young guests to learn more about Hawaii and share in the aloha spirit. Children ages five through twelve (who are staying with their parents at the hotel) can participate in a wide range of complimentary activities, including Hawaiian storytelling, hula lessons, coconut-leaf weaving and other island arts & crafts. Prices vary with half-day or full-day programs. The resort also offers a children's menu (ages twelve and under) in all dining rooms.



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## Air Travel

UCSF Radiology has negotiated group discounts with Delta, United and Hawaiian Airlines for radiology course attendees. Book online to avoid additional booking fees. Kona airport code = KOA.

Airline	Promo Code	Toll-Free (add'l booking fee)
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<b>Delta</b>	NMKNQ	800-328-1111
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<http://tinyurl.com/www-delta-com-book>

<b>United</b>	ZWZB714473	800-426-1122
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<http://tinyurl.com/www-united-com-book>

<b>Hawaiian</b>	AMUCSFRPE	800-367-5320
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<http://tinyurl.com/www-hawaiianairlines-com-pref>

## Car Rental

[www.hertz.com](http://www.hertz.com) / CV# 01SY0263 / 800-654-2240

Arrangements have been made with **Hertz** Car Rental for special rates during this UCSF meeting, as well as one week before and after this meeting, on all of the Hawaiian Islands. Reservations at the group rate can be made by using the CV number listed above.

## The Big Island of Hawaii

The Big Island is the birthplace of King Kamehameha 1, the leader who united all of the Hawaiian islands by 1810. The Big Island is the anchor of the island chain and home of Madame Pele, the fire goddess of volcanoes; therefore the color ascribed to the Big Island is red. The Island of Hawaii is the largest and youngest island in the Hawaiian chain, and with the current volcanic activity, the Big Island is still growing.

The sunny and dry west side of the island is referred to as Kona, and the transformation of its shoreline by volcanic eruptions just two-hundred years ago is still evident. The misty east side of the island is referred to as Hilo -- which is a prime growing area for flowers, plants and vegetation, includes many waterfalls, and is home to Hawaii Volcanoes National Park.

The Big Island has one of the world's most active volcanoes (Kilauea), the tallest sea mountain in the world at more than 33,000 feet (Mauna Kea), and the most massive mountain in the world (Mauna Loa). Hawaii's varying and dramatic climate zones generate a world of environments on one island, including lush rain forests, volcanic deserts, snow-capped mountaintops and beautiful black sand beaches.



## Activities and Tours

[www.gohawaii.com/big-island](http://www.gohawaii.com/big-island)

- Circle the Big Island Tour
- Volcanoes National Park (Kilauea)
- Place of Refuge National Park
- Mauna Kea Summit and Observatory
- Snorkel and Scuba Excursions
- Manta Ray Snorkel (nighttime)
- Catamarans and Sunset Sailing
- Luau Dinner Buffet and Hula/Fire-knife Show
- Waterfall, Valley and Beach Tours
- Kayak "Flumin' the Ditch" excursion
- Helicopter Tours
- Horse Back Riding
- Whale Watch
- Submarine Tours
- Jeep / ATV Tours
- Coffee Plantations



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## REGISTRATION

### NEURO & MUSCULOSKELETAL IMAGING (RAD17 022)

February 12-17, 2017 / Fairmont Orchid, Kona

Early Enrollment Deadline: Friday, December 16, 2016

Four easy ways to register:

1. Mail this form to UCSF Office of CME, PO Box 45368, San Francisco, CA 94145-0368
2. Phone using Visa, Amex or Mastercard. 415-476-5808, 8:30 am - 4:00 pm (Pacific Time)
3. Online at <http://meded.ucsf.edu/cme>
4. Fax this form to 415-502-1795

### REGISTRANT INFORMATION (PLEASE PRINT)

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

Address \_\_\_\_\_  
\_\_\_\_\_

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

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

You must provide your email address to receive advance syllabus information.

Paper copies will not be provided on site.

Would you like to receive general UCSF Radiology CME email notices? ☐ Yes ☐ No

Month / Day of Birth for record verification: \_\_\_\_\_ / \_\_\_\_\_ / XXXX  
month day year

### COURSE REGISTRATION

By 12/16/16 After 12/16/16 Loyalty Discount applies only to live courses attended (not home-study)

- |                               |                               |                              |                                       |
|-------------------------------|-------------------------------|------------------------------|---------------------------------------|
| <input type="radio"/> \$1,125 | <input type="radio"/> \$1,200 | Standard Registration        | no UCSF Rad paid course 2016 cal year |
| <input type="radio"/> \$1,005 | <input type="radio"/> \$1,080 | Silver Status 10% discount   | 1 UCSF Rad paid course 2016 cal year  |
| <input type="radio"/> \$ 885  | <input type="radio"/> \$ 960  | Gold Status 20% discount     | 2 UCSF Rad paid courses 2016 cal year |
| <input type="radio"/> \$ 765  | <input type="radio"/> \$ 840  | Platinum Status 30% discount | 3 UCSF Rad paid courses 2016 cal year |

### METHOD OF PAYMENT

☐ Visa ☐ Mastercard ☐ American Express ☐ Check, payable to UC Regents.

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. In the unlikely event that the program is cancelled, UCSF Radiology will refund the registration fee in full, but cannot be responsible for any hotel or travel costs.

**Cancellation** A refund of the enrollment fee, less \$75, will be made upon receipt of a written request only by Friday, January 27, 2017. No refunds will be made after this date.