



Penn Medicine
Department of Radiology



AROUND THE CLOCK IMAGING

Jointly provided by Postgraduate Institute for Medicine and Penn Medicine Department of Radiology.



CREDITS
27.5 | 24
CME | SAM

JULY 29-AUGUST 2

Fairmont Pacific Rim

Vancouver, British Columbia, Canada

2019



AROUND THE CLOCK IMAGING

OVERVIEW

Join Penn Radiology at the Fairmont Pacific Rim in beautiful, family friendly Vancouver, British Columbia. This course will focus on practical information to build interpretative skills that allow the generation of succinct differential diagnostic considerations, appropriate reports and recommendations to our clinical colleagues and patients. It will cover timely, common topics in brain, head & neck, spine/MSK and chest/cardiac that we see around-the-clock. From arrival to our daily work places, to attending a broad spectrum of multidisciplinary clinical conferences, to our shifts after hours — you will be steady and ready! Image interpretation, modality advances, and protocol selection will be emphasized in a series of didactic presentations and interactive case-based sessions. Self-Assessment Modules (SAMS) qualified by the ABR will be offered daily. And...explore the outdoors, have steak on the lake, or run in the sun for fun.

TARGET AUDIENCE

This CME activity is designed to educate academic and private practice neuroradiologists, musculoskeletal radiologists, cardio-thoracic radiologists, fellows, and residents. Related health care professionals that might be interested in this course include neurologists, ER physicians, related surgical specialists, and radiology technologists.

COURSE OBJECTIVES

Upon completion of this activity, participants should be able to:

- ☐ Discuss the MR and CT appearance of abnormalities in the brain, spine, neck, and joints
- ☐ Identify arterial and venous cerebral infarction
- ☐ Identify and describe the imaging appearance of pathology affecting the paranasal sinuses, aerodigestive tract, sellar and parasellar region
- ☐ Effectively utilize US and CT in the evaluation of the thyroid nodules
- ☐ Apply updated guidelines for recommending fine-needle aspiration, molecular testing and follow up imaging of thyroid nodules
- ☐ Describe the normal and abnormal MR appearance of shoulder, elbow, spine and skeletal muscle pathology and injuries
- ☐ Effectively utilize CT in lung cancer screening
- ☐ Use the LungRads reporting system for nodules detected on lung cancer screening
- ☐ Describe the specific characteristics of pleural disease and focal pulmonary lesions
- ☐ Identify and discuss common radiologic misses and interpretative errors



SPEAKERS

PERELMAN SCHOOL OF MEDICINE AT THE UNIVERSITY OF PENNSYLVANIA

Laurie A. Loevner, MD COURSE DIRECTOR

Professor of Radiology, Neurosurgery,
Otorhinolaryngology, & Ophthalmology
Chief, Division of Neuroradiology

Viviane Khoury, MD

Assistant Professor of Radiology
Division of Musculoskeletal Imaging

Suyash Mohan, MD

Associate Professor of Radiology
Director, Neuroradiology Clinical Research Division
Division of Neuroradiology

Jae W. Song, MD, MS

Assistant Professor of Radiology
Division of Neuroradiology

GUEST SPEAKERS

Christine B. Chung, MD

Professor of Radiology
Director, UC San Diego MSK Imaging
Research Group
University of California, San Diego

Ella A. Kazerooni, MD, MS

Professor of Radiology
Service Chief, Diagnostic Radiology
Director, Cardiothoracic Radiology
University of Michigan (Ann Arbor, MI)

► DISCLOSURE OF CONFLICTS OF INTEREST

Postgraduate Institute for Medicine (PIM) requires instructors, planners, managers and other individuals who are in a position to control the content of this activity to disclose any real or apparent conflict of interest (COI) they may have as related to the content of this activity. All identified COI are thoroughly vetted and resolved according to PIM policy. The existence or absence of COI for everyone in a position to control content will be disclosed to participants prior to the start of each activity.

► DISCLOSURE OF UNLABELED USE

This educational activity may contain discussion of published and/or investigational uses of agents that are not indicated by the FDA. The planners of this activity do not recommend the use of any agent outside of the labeled indications.

The opinions expressed in the educational activity are those of the faculty and do not necessarily represent the views of the planners. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications, and warnings.

► DISCLAIMER

Participants have an implied responsibility to use the newly acquired information to enhance patient outcomes and their own professional development. The information presented in this activity is not meant to serve as a guideline for patient management. Any procedures, medications, or other courses of diagnosis or treatment discussed or suggested in this activity should not be used by clinicians without evaluation of their patient's conditions and possible contraindications and/or dangers in use, review of any applicable manufacturer's product information, and comparison with recommendations of other authorities.

► AMERICANS WITH DISABILITIES ACT

Event staff will be glad to assist you with any special needs (ie, physical, dietary, etc). Please contact Angela Scott at least two weeks prior to the live event at 215-662-6982 or via email at cme@rad.upenn.edu.

► MEETING MATERIALS – ALL ON OUR APP!

A link to download the lecture slides will be sent to registered participants in the week leading up to the course. Participants are encouraged to download the PDFs to their phone, tablet or laptop prior to arrival. A paper syllabus will not be available.

All other course materials are provided via our meeting app including:

- the course agenda
- live Q&A
- SAM credits with instant feedback and references
- information about the meeting location, nearby activities and dining options

SCHEDULE

MONDAY JULY 29

6:45a Continental Breakfast

RISE AND SHINE

7:20 Opening Remarks

7:35 Pain in the Brain: Audience Interactive Case-Based: After Hour Misses and Interpretative Errors
Suyash Mohan, MD

8:15 Intracranial Venous Thrombosis
Jae W. Song, MD

ALL IN A DAY'S WORK

8:45 Maxillofacial and Orbital Trauma: Practical Tips
Suyash Mohan, MD

9:15 Imaging Proptosis with an Emphasis on Neoplasia
Laurie A. Loevner, MD

9:45 Questions and Answers

10:00 BREAK

10:20 Vascular Malformations of the Brain and Spine
Jae W. Song, MD

CNS TUMOR BOARD

11:00 An Algorithmic Approach to Adult Brain Tumors
Suyash Mohan, MD

11:30 Spinal Neoplasia
Jae W. Song, MD

12:00 Next Generation Neuro-Oncologic Imaging: Radiogenomics and Biomarkers
Suyash Mohan, MD

12:30 Adjourn

TUESDAY JULY 30

7:00a Continental Breakfast

RISE AND SHINE

7:30 Opening Remarks

7:35 Spine-So-Fine: Audience Interactive Case-Based: After Hour Misses and Interpretative Errors
Jae W. Song, MD

8:15 A Stack of Bones: Spine Infection and Inflammation
Laurie A. Loevner, MD

ALL IN A DAY'S WORK

8:45 Brain Infection and Inflammation
Suyash Mohan, MD

9:15 Spine Trauma Without the Drama
Jae W. Song, MD

9:45 Questions and Answers

10:00 BREAK

10:20 Acute and Deep Space Infections of the Neck
Suyash Mohan, MD

11:00 Pleural Disease
Ella A. Kazerooni, MD

TUMOR BOARD

11:30 Thyroid Nodules and Nodules that are Cancer
Laurie A. Loevner, MD

12:00 Thoracic Cardiovascular Tumors
Ella A. Kazerooni, MD

12:30 LUNCH ON YOUR OWN

EMERGENCIES AND URGENCIES

1:30 Acute Thoracic Aortic Syndromes
Ella A. Kazerooni, MD

2:00 Patterns of Acute Arterial Stroke
Jae W. Song, MD

STATE-OF-THE-ART

2:30 Arterial Wall MR Imaging: Patterns of Vasculitis
Jae W. Song, MD

LIVER ROUNDS

3:00 WINE and CHEESE!

3:20 Unknown and Interesting Cases* Provided by Attendees over Wine and Cheese. Wine should make them fine!

4:00 Adjourn

**Each submitted case should be a maximum of five .ppt slides.
#1-Include history & other pertinent information
#2-4 - Up to (3) slides with images
#5 - include your differential diagnosis and if the answer is known, include the final diagnosis.*

Upload the file as soon as possible and no later than 5/15/19.

<https://www.bightail.com/lu/RadiologyCME>

WEDNESDAY JULY 31

7:00a Continental Breakfast

RISE AND SHINE

7:30 Opening Remarks

7:35 Chest at its Best: Audience Interactive Case-Based: After Hour Misses and Interpretative Errors
Ella A. Kazerooni, MD

8:15 Over-diagnosis and Radiologists: Harm in the Pursuit of Health
Suyash Mohan, MD

ALL IN A DAY'S WORK

8:45 New ACR Thoracic Incidental Findings Management Recommendations
Ella A. Kazerooni, MD

9:15 PET-CT in Head and Neck Cancer: Pearls and Pitfalls
Laurie A. Loevner, MD

9:45 Questions and Answers

10:00 BREAK

10:20 Management of Indeterminate Solitary Pulmonary Nodules
Ella A. Kazerooni, MD

TUMOR BOARD

11:00 Laryngeal Cancer: Patterns of Spread and Surgical Landmarks
Laurie A. Loevner, MD

11:30 LungRADS in the Reporting and Management of Lung Cancer Screening CT
Ella A. Kazerooni, MD

12:00 EBV Associated Tumors of the Head and Neck: Nasopharyngeal Cancer and Lymphoma
Laurie A. Loevner, MD

12:30 Adjourn

THURSDAY AUGUST 1

7:00a Continental Breakfast

RISE AND SHINE

7:30 Opening Remarks

7:35 Neck's a Wreck: Audience Interactive Case-Based: After Hour Misses and Interpretative Errors
Laurie A. Loevner, MD

8:00 Radiologist Well-Being (Burn Out!)
Ella A. Kazerooni, MD

ALL IN A DAY'S WORK

- 8:30 Shoulder MRI – Rotator Cuff and Complexities
Christine B. Chung, MD
- 9:00 MR Imaging of the Elbow: Ligaments and Tendons
Viviane Khoury, MD
- 9:30 MR Overuse Syndromes of the Wrist
Christina B. Chung, MD
- 10:00 Questions and Answers
- 10:15 BREAK
- 10:30 Case-Based: Meet Aunt Minnie's of the Upper Extremity
Viviane Khoury, MD
- 11:00 The Strange-Looking Fracture: Pathologic, Insufficiency, and Fatigue Injuries
Viviane Khoury, MD

TUMOR BOARD

- 11:30 Sellar and Parasellar Pathology: Pearls and Pitfalls for the Clinician
Laurie A. Loevner, MD
- 12:00 Imaging Sinonasal Tumors with an Emphasis on Resectability
Laurie A. Loevner, MD
- 12:30 LUNCH ON YOUR OWN

EMERGENCIES AND URGENCIES

- 1:30 Coronary CTA in the Emergency Room
Ella A. Kazerooni, MD
- 2:00 Imaging for Pulmonary Embolism 2019
Ella A. Kazerooni, MD

STATE-OF-THE-ART

- 2:30 Robotic Surgery of the Neck: What the Radiologist Needs to Know about the Cutting Edge
Laurie A. Loevner, MD

LIVER ROUNDS

- 3:00 WINE and CHEESE!
- 3:20 Unknown and Interesting Cases* Provided by Attendees over Wine and Cheese. Wine should make them fine!
- 4:00 Adjourn

FRIDAY AUGUST 2

7:00a Continental Breakfast

RISE AND SHINE

- 7:30 Opening Remarks
- 7:35 Bones and Groans: Audience Interactive Case-Based: After Hour Misses and Interpretative Errors
Christine B. Chung, MD
- 8:15 Degenerative Lesions of the Spine and their Differential Diagnosis
Viviane Khoury, MD

ALL IN A DAY'S WORK

- 8:45 Meniscus-the Basics and Beyond
Christine B. Chung, MD
- 9:15 Diagnosing Musculoskeletal Infections with Confidence
Viviane Khoury, MD
- 9:45 Questions and Answers
- 10:00 BREAK
- 10:20 Synovial Inflammatory Processes – Generating a Differential
Christine B. Chung, MD
- 11:00 MRI of Skeletal Muscle: Acute and Chronic Sports Injuries
Viviane Khoury, MD
- 11:30 First Bite: MRI of the TMJ
Laurie A. Loevner, MD

TUMOR BOARD

- 12:00 Soft Tissue Lesions with an Emphasis on the Hip
Christine B. Chung, MD
- 12:30 Questions and Answers
- 12:45 Adjourn

ACCREDITATION STATEMENT



JOINTLY ACCREDITED PROVIDER
INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, this activity has been planned and implemented by the Postgraduate Institute for Medicine and Penn Medicine Department of Radiology. Postgraduate Institute for Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

PHYSICIAN CONTINUING MEDICAL EDUCATION

The Postgraduate Institute for Medicine designates this live activity for a maximum of **27.5 AMA PRA Category 1 Credit(s)™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The total hours covered in each modality include:

CT: 21.75 | MR: 23.0 | PET: 4.25 | Angio: 0.5 | US: 0.5

CME CERTIFICATES

At the conclusion of this activity, registered participants will receive an email with a link to complete an online evaluation and print their CME certificate.

SELF-ASSESSMENT MODULES (SAMS)

Participants will have an opportunity to earn 24 Self-Assessment credits (SAM). These modules meet the ABR's criteria for a self-assessment activity in the maintenance of certification (MOC) program. All SAM modules are administered through the course meeting app with instant feedback and references provided. A certificate with the number of SAM credits earned is emailed within two weeks of the course completion.





ACCOMMODATIONS



FAIRMONT PACIFIC RIM

pacificrim@fairmont.com

1038 Canada Place
Vancouver, British Columbia
V6C 0B9
Canada

HOTEL DIRECT: 1-604-695-5300
TOLL-FREE: 1-877-900-5350

CUT-OFF DATE:

July 2, 2019 at 5 PM

CHECK IN: 3:00 PM

CHECK OUT: 12:00 PM

HOTEL ROOM RESERVATIONS:

<https://book.passkey.com/event/48962333/owner/575291/home>

The 2018 CAA/AAA Five-Diamond award-winning Fairmont Pacific Rim is located in the heart of the financial district and central to so many attractions. Guests will enjoy sweeping views of Coal Harbour and the North Shore Mountains from guest rooms and the hotel's roof deck.

The Fairmont Pacific Rim is the first hotel in Canada to provide iPad2 devices with interactive Customer Experience technology in all guest rooms allowing guests to make spa reservations, order in-room dining, access to guestroom controls and more. Guests can download the PressReader app which provides over 3,000 newspapers and magazines.

Fairmont City View..... \$359 (CAD)

(approximately \$271 USD)

Deluxe Partial Harbour View \$399 (CAD)

(approximately \$300 USD)

The guestroom rates listed above are per room, per night and subject to provincial, local and federal taxes. The current municipal hotel tax is 11%, the Goods and Services tax is 5%, and Destination Marketing Fee is 1.5%. The hotel will honor our group rates three days before and after our meeting dates based on availability at the time of reservation. The block cut-off is **07/02/2019**, but may fill sooner.

In addition to our contracted block, the hotel is offering group rates for other room types on the booking website. These rates are not guaranteed and subject to change based on availability at the time of booking.

Room rate includes:

- Complimentary 24-hour access to the hotel's fitness center
- Complimentary car service within the downtown core (based on availability)
- Twice daily housekeeping service, including evening refresh and turndown service with complimentary filtered water
- Complimentary wired and wireless high-speed internet access in guest rooms

Cancellation Policy: To avoid penalty, reservations must be canceled at least 72 hours prior to check-in. Cancellations less than 72 hours in advance will be charged one night's room and tax.

TRAVEL INFORMATION

The closest airport to our location is Vancouver International Airport (YVR). The airport is located about nine miles (30-minute drive) from the hotel.

Vancouver's SkyTrain offers convenient service from the airport to downtown. Passengers board the Canada Line between the International and Domestic Terminals. The line runs every 6-8 minutes during peak hours and arrives in downtown Vancouver in under 30 minutes. The hotel is a short ½ km walk from Waterfront Station to the Fairmont Pacific Rim.

CAR RENTAL

Budget: 800-218-7992 or
www. Budget.com / BCD#: U306158

Discounted rates are available with Budget Car Rental during this Penn Radiology meeting. Enter the BCD code when making your registration.

THINGS TO DO IN VANCOUVER

Only one mile from the hotel is Stanley Park, one of North America's largest urban parks, covering 1,000 acres and conveniently located along the city's iconic Seawall. The park is perfect for both families and adults looking for great day-time activities including cycling, tennis, hiking, walking trails and visiting the aquarium. On Tuesday nights in the summer, the park transforms into an outdoor cinema.

Other attractions include Vancouver's Gastown (the oldest part of the city), Flyover Canada, walking the Capilano Suspension Bridge, taking in the views at Queen Elizabeth Park, and the Van Dusen Botanical Gardens. For more information about these activities and additional suggested activities to do during your trip to Vancouver, visit <https://www.tourismvancouver.com/>

QUESTIONS?

Call: 215-662-6982
Email: cme@rad.upenn.edu

COURSE CANCELLATION POLICY & TUITION REFUNDS

A full refund for the enrollment fee, less a \$100 administrative cost will be made upon receipt of a written request (via fax or email) if received by 5:00 pm on Monday, July 15, 2019. Refunds will not be made after this date. Penn Medicine's Department of Radiology reserves the right to cancel or postpone any activity due to unforeseen circumstances. In the unlikely event of cancellation or postponement, Penn Radiology will refund registration fees but will not be responsible for related costs or expenses to participants, including cancellation fees assessed by airlines, travel agencies and hotels.



Event Highlight: Honda Celebration of Light Fireworks Show

We are in town for one of Vancouver's biggest events of the year, the Honda Celebration of Light fireworks show! Each year, fireworks light up the night sky over English Bay with crowds of over 500,000 flocking to the beach or going out on boats in the harbor to watch this amazing display set to music. Dates for this year's show are: Saturday, July 27th, Wednesday, July 31st, and Saturday, August 3rd. Fireworks typically do not go off until 10 PM since darkness comes later at this time of the year. Tickets are available for purchase at hondacelebrationoflight.com

REGISTRATION

EARLY ENROLLMENT DEADLINE:
JUNE 3, 2019 (11:59PM)

To register for this conference:

► **ONLINE:** Visit PennMedicine.org/RadiologyCME (Visa, Mastercard, Amex or Discover accepted)

► **MAIL:** Checks (US dollars only drawn on a US bank) payable to **Penn Radiology**
ADDRESS: Penn Radiology CME
3400 Spruce Street / 1 Silverstein / Suite 130
Philadelphia, PA 19104-4238

Telephone and fax registrations are discouraged.

Upon receipt of payment, an email confirmation is sent. Be sure to include your preferred email address when registering. This address is used for course correspondence including password instructions to download the meeting app. The app is used for administering SAMs.

Name: _____

Affiliation: _____

Address: _____

City, State, Zip: _____

☐ This is my home address

☐ This is my business address

Phone: _____ Fax: _____

Email: _____

(course confirmation is sent by email only)

CONFERENCE FEES (Fees listed in USD)

By 11:59 PM 6/3/19 After 12:01 AM 6/3/19

☐ Physician Rate	\$985.00	\$1,085.00
☐ Special Rate*	\$850.00	\$950.00
☐ Residents/Fellows**	\$650.00	\$750.00

*The Special Rate is available to Penn Medical Alumni, VA/ Active Military, Retired, Penn Medicine Network Providers or Physicians Outside the U.S.

**With a status verification letter

► LOYALTY REWARD

A \$100 discount off the Physician fee is available to anyone who attended a UPENN Radiology CME course in 2018 and paid the full Physician Rate. To obtain this discount enter **RETURN2018** (case sensitive) when prompted for the CME code. (Registrations will be verified.) Discounts may not be combined and only one code per registration may be used.

PENN RADIOLOGY CME

2019

- ▶ **MARCH 25-28**
Radiology After Hours: Acute Diagnoses on Evenings and Weekends
Atlantis Paradise Island Resort
Nassau, Bahamas
- ▶ **JULY 8-12**
41st Annual Diagnostic Imaging: On Cape Cod
Chatham Bars Inn
Chatham, Massachusetts
- ▶ **JULY 29-AUGUST 2**
Around the Clock Imaging
Fairmont Pacific Rim
Vancouver, British Columbia, Canada
- ▶ **SEPTEMBER 7-10**
Diagnosis in the Neuraxis: Comprehensive Clinical Review of Neuroradiology
Perelman Center for Advanced Medicine
Philadelphia, PA
- ▶ **OCTOBER 14-17**
Oncologic Imaging: What the Radiologist Needs to Know
Hamilton Princess & Beach Club
Hamilton, Bermuda

2020

- ▶ **JANUARY 5-10**
Breast Imaging at the Beach
Andaz Costa Rica Resort at Peninsula Papagayo
Guanacaste, Costa Rica
- ▶ **FEBRUARY 16-18**
Innovations in Breast Cancer Diagnosis & Treatment
Tel Aviv, Israel
- ▶ **MARCH 23-27**
Pearls, Pitfalls & Protocols: Spring Imaging Update
Disney's Grand Floridian Resort & Spa
Lake Buena Vista, Florida
- ▶ **JULY 6-10**
Diagnostic Imaging: Back to the Vineyard
The Harbor View Hotel
Edgartown, Massachusetts
- ▶ **SEPTEMBER 18-21**
Diagnosis in the Neuraxis: Comprehensive Clinical Review of Neuroradiology
Perelman Center for Advanced Medicine
Philadelphia, PA

 @PennRadiology
 pennradiologycme



Penn Medicine
Department of Radiology

Continuing Medical Education
3400 Spruce Street, 1 Silverstein
Philadelphia, PA 19104-4238

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Bellmawr, NJ 08031

Bookmark this site—PennMedicine.org/RadiologyCME Questions: 215-662-6982 | cme@rad.upenn.edu

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