AROUND THE CLOCK IMAGING

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

JULY 29-AUGUST 2
Fairmont Pacific Rim
Vancouver, British Columbia, Canada

CREDITS
27.5 CME 24 SAM

2019
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.

**OVERVIEW**

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.

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

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.
## 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.hightail.com/u/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. Loewner, MD*

12:00 Imaging Sinonasal Tumors with an Emphasis on Resectability  
*Laurie A. Loewner, 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. Loewner, 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

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**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  
*Viviane Khoury, 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. Loewner, 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

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**ACCREDITATION STATEMENT**

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.
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.

**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.
EARLY ENROLLMENT DEADLINE: JUNE 3, 2019 (11:59 pm)
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.

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

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/

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
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

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