



Penn Medicine



THE PEAKS AND VALLEYS OF CNS IMAGING

NEW



**SEPTEMBER 26-29**

Mirror Lake Inn  
Lake Placid, NY

**2024**



**Perelman School of Medicine  
at the University of Pennsylvania**

## OVERVIEW

Join Penn Neuroradiology at the charming Mirror Lake Inn at Lake Placid in the magic of the Adirondack Mountains during peak foliage season! The hotel is on Mirror Lake Drive, within walking distance of Main Street, with many restaurants, shops, and coffee cafes. Water activities, hikes, mountain climbs, biking, and many other outdoor activities await you!

This course will cover a spectrum of practical and more advanced brain, head & neck, and spine topics. The topics have been selected based on need-to-know subjects and to illustrate advances in neuroimaging. The focus will be on pattern recognition and interpretation of imaging findings that allow the generation of succinct differential diagnoses and reports that provide actionable information and recommendations for our clinical colleagues and patients. In a series of didactic presentations & case-based sessions, faculty will emphasize image interpretation, modality advances, and the integration of clinical information. Bring your family to rejuvenate in the fresh mountain air with Mother Nature all around you.

## TARGET AUDIENCE

This CME activity is designed to educate academic and private practice general radiologists, sub-specialized neuroradiologists, head & neck radiologists, and radiology fellows and residents. Related healthcare professionals interested in this course include oncologists, neurologists, related surgical specialists, and radiology technologists.

## COURSE OBJECTIVES

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

- Discuss MR and CT appearances of abnormalities in the brain, neck, spine, and vessels
- Assess acute, sub-acute, and more chronic conditions of the spine
- Identify and distinguish arterial and venous cerebral infarction
- Evaluate neoplasms of the CNS and aerodigestive tract
- Effectively utilize CT/MRI to evaluate brain pathology
- Identify and discuss common perceptual and interpretative errors in neuroradiology
- Discuss issues with image quality, value-based imaging, and innovation in our practices

## FACULTY

**Laurie A. Loevner, MD**

**COURSE DIRECTOR**

Professor of Radiology, Neurosurgery,  
ENT Surgery & Ophthalmology  
Chief, Division of Neuroradiology

**Suyash Mohan, MD**

Associate Professor of Radiology & Neurosurgery  
Division of Neuroradiology

**Vivek P. Patel, MD, PhD**

Assistant Professor of Clinical Radiology  
Division of Neuroradiology

## GUEST SPEAKER

**David M. Yousem, MD, MBA**

Professor of Neuroradiology  
Division of Neuroradiology  
Johns Hopkins University School of Medicine



# SCHEDULE

## THURSDAY, SEPTEMBER 26

6:45 Registration & Breakfast

### RISE AND SHINE!

7:25 Opening Remarks

7:30 Peer-Learning: Brain Pain: Neuroradiology Misses and Interpretative Errors  
Vivek P. Patel, MD, PhD

### ALL IN A DAY'S WORK!

8:10 An Algorithmic Approach to Intra-Axial Brain Tumors  
Suyash Mohan, MD

8:50 Imaging of Intraventricular and Extra-Axial Tumors  
Vivek P. Patel, MD, PhD

9:30 Imaging Proptosis with an Emphasis on Neoplasia  
Laurie A. Loevner, MD

10:10 Break with Q & A

10:40 Imaging Brain Tumors Post-Therapy  
Suyash Mohan, MD

11:20 Sellar and Parasellar Pathology: Pearls and Pitfalls for the Clinician  
Laurie A. Loevner, MD

### STATE-OF-THE-ART!

12:00 Using Electricity to Treat Malignant Gliomas  
Suyash Mohan, MD

12:30 Adjourn for the day

## FRIDAY, SEPTEMBER 27

6:50 Breakfast

### RISE AND SHINE!

7:25 Opening Remarks

7:30 Peer-Learning: Spine Refined - Neuroradiology Misses and Interpretative Errors  
Vivek P. Patel, MD, PhD

### ALL IN A DAY'S WORK!

8:10 Extramedullary Intradural & Intramedullary Spinal Lesions  
David M. Yousem, MD, MBA

8:50 A Stack of Bones: Spine Infection and Inflammation  
Laurie A. Loevner, MD

9:30 Vascular Lesions of the Spine  
David M. Yousem, MD, MBA

10:10 Break with Q & A

10:40 Common MRI Artifacts in Neuroimaging  
Vivek P. Patel, MD, PhD

### STATE-OF-THE-ART!

11:20 The Seven Habits of Highly Effective Neuroradiologists  
David M. Yousem, MD, MBA

12:00 Great Calls in Neuroradiology  
Vivek P. Patel, MD, PhD

12:30 Adjourn for the day

## SATURDAY, SEPTEMBER 28

6:50 Breakfast

### RISE AND SHINE!

7:25 Opening Remarks

7:30 Peer-Learning: Wrestle with Vessels: Neuroradiology Misses and Interpretative Errors  
Vivek P. Patel, MD, PhD

### ALL IN A DAY'S WORK!

8:10 Patterns of Acute Stroke  
Laurie A. Loevner, MD

8:50 Vascular Imaging in the ED: When to use MRA, CTA and DSA  
David M. Yousem, MD, MBA

9:30 Laryngeal Cancer: Patterns of Tumor Spread  
Laurie A. Loevner, MD

10:10 Break with Q & A

10:40 EBV Associated Tumors of the Head and Neck: Nasopharyngeal Cancer and Lymphoma  
Laurie A. Loevner, MD

11:20 Neurodegenerative Disorders in Adults  
David M. Yousem, MD, MBA

12:00 Great Calls in Neuroradiology!  
Vivek P. Patel, MD, PhD

12:30 Adjourn for the day

## SUNDAY, SEPTEMBER 29

7:00 Breakfast

### RISE AND SHINE!

7:25 Opening Remarks

7:30 Neck's a Wreck: Blind Spots in the Head & Neck  
Laurie A. Loevner, MD

### ALL IN A DAY'S WORK!

8:10 The ABCs of Arterial Spin Labeling (ALS)  
Vivek P. Patel, MD, PhD

8:50 Brain Infection and Inflammation  
Suyash Mohan, MD

9:30 Break with Q & A

10:00 Your Brain on Drugs: Neuroimaging of Toxic Encephalopathies  
Suyash Mohan, MD

10:40 One Bite at a Time: Imaging of the TMJ  
Laurie A. Loevner, MD

### STATE-OF-THE-ART!

11:20 Robotic Surgery in Head and Neck Cancer: What the Radiologist Needs to Know about the Cutting Edge  
Laurie A. Loevner, MD

12:00 Closing remarks and so long, but not farewell!

# ACCREDITATION STATEMENT



In support of improving patient care, Penn 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

Penn Medicine designates this live activity for a maximum of **19.5 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**ABR MAINTENANCE OF CERTIFICATION: 19.5 AMA PRA Category 1 Credits™.** These credits can be used toward ABR MOC Part 2 requirements. Attendees must submit a completed evaluation and claim their credits to receive their electronic certificate. The course evaluation must be submitted by Sunday, October 6, 2024, at 11:59 PM EST to earn CME.

### ▶ DISCLOSURE OF CONFLICTS OF INTEREST

The Perelman School of Medicine at Penn (Penn Medicine) requires instructors, planners, moderators, 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 with any ineligible companies as related to the content of this activity. All identified COI are mitigated and resolved according to Penn Medicine's policy. Penn Medicine is committed to providing its learners with high-quality activities and related materials that promote improvements or quality in healthcare and are not a specific proprietary business interest of an ineligible company (commercial interest).

### ▶ 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.

## CREDIT BREAKDOWN

**The total hours covered in each modality include:**

MR: 17.5 | CT: 16.75

**Daily Credits:**

Thurs: 5.0 | Fri: 5.0 | Sat: 5.0 | Sun: 4.5

### ▶ AMERICANS WITH DISABILITIES ACT

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

### ▶ MEETING MATERIALS

Access to a personalized virtual attendee portal is included with your registration fee. Course materials including an electronic syllabus will become available through the virtual attendee portal in the week leading up to the course. Participants can access the daily syllabus slides through the portal or download them directly to their laptop or tablet.

### ▶ COURSE CANCELLATION POLICY & TUITION REFUNDS

- All-inclusive & In-person Only: A **full refund for the course enrollment fee**, less a \$100 administrative fee, will be made if received by 5:00 p.m. on Friday, August 23, 2024.
- Live-Stream: A **full refund for the course enrollment fee**, less a \$35 administrative fee, may be made up to one week before the first day of the course.
- Additional Happy Hour Tickets purchased will be refunded in full, up to **two weeks prior** to the course start date.

Refund requests must be in writing and submitted via email. Refunds will not be made after the dates corresponding to your registration type.

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.

## QUESTIONS?

**Call: 215-662-6982 | Email: [cme@rad.upenn.edu](mailto:cme@rad.upenn.edu)**



# ACCOMMODATIONS

## MIRROR LAKE INN

<https://mirrorlakeinn.com>

**77 Mirror Lake Drive  
Lake Placid, NY 12946  
Local: (518)-523-2544  
Reservations: (518)-302-3030**

**CUT-OFF DATE: SEPTEMBER 3, 2024**

(unless our block fills sooner)

**CHECK IN: 4:00 PM | CHECK OUT: 11:00 AM**

Lake Placid’s famous Main Street is just a short walk from Mirror Lake Inn. This post-card-perfect village is lined with a wide range of boutiques, galleries, restaurants, quick treats, and more.

No trip to Lake Placid, a two-time host for the Winter Olympics, would be complete without a trip to the Lake Placid Olympic Museum. Immerse yourself in the history and excitement of the Winter Olympics.

Looking to explore the natural beauty of the Adirondacks from another viewpoint? With miles of marked hiking trails, rock climbing, road biking, kayaking, and more, outdoor enthusiasts will never be bored!

## ROOM BLOCK & DISCOUNTED RATES

We have negotiated a group rate for a limited block of Run of House rooms. Our guest block is limited to two sleeping rooms per paying registrant. Please ensure all reservations are in the name of the course attendee.

**Run of House . . . . . \$424/Night**

Rooms are subject to local, state, and federal taxes. The current guestroom tax rate is 13%. Use of the fitness center, sauna steam room, and spa showers are included. Bellman and housekeeping gratuities will be paid at the discretion of each attendee.

Guests may enjoy complimentary parking and discounted valet parking (\$35/night).

The hotel will honor our group rates three days before and after our group arrival and departure dates, subject to availability.

## HOTEL DEPOSIT AND CANCELLATION POLICY

All reservations must be guaranteed with the first night’s room and tax charged when booking. Cancellations made prior to 30 days of arrival date will not be penalized. **Within 30 days of the arrival date, guests will be charged for the entirety of their stay.**



# REGISTRATION

Visit [PennMedicine.org/RadiologyCME](https://PennMedicine.org/RadiologyCME) (Visa, Mastercard, Amex or Discover accepted.)

## ALL-INCLUSIVE REGISTRATION

Physicians (By 7/21/2024, 11:59 PM) .....\$1,275.00  
Physicians (After 7/22/2024, 12:01 AM). .....\$1,375.00

### INCLUDES:

- Course Tuition
- Electronic Syllabus
- Daily Live-Stream and On-Demand Access
- Daily Breakfast and Break Refreshments
- Access to On-Demand recordings for 30 days following the course
- Complimentary Welcome Happy Hour for course registrant and a guest
- CME certificate emailed upon completion of the course evaluation

## IN-PERSON ONLY REGISTRATION

Physicians (By 7/21/2024, 11:59 PM) ..... \$1,125.00  
Physicians (After 7/22/2024, 12:01 AM). ..... \$1,225.00

### INCLUDES:

- Course Tuition
- Electronic Syllabus
- Daily Breakfast and Break Refreshments
- Complimentary Welcome Happy Hour for course registrant and a guest
- CME certificate emailed upon completion of the course evaluation
- Access to on-demand recordings for 30 days following the course

The “All-Inclusive” and “In-Person” registrations include two tickets to a Welcome Happy Hour on Thursday, September 26th. The course registrant and one guest are invited to join us from 5:00 - 6:00 PM for a light reception before dinner. Fees apply for additional adults and children and may be purchased during the registration process.

*Additional HH Adult: \$60 | Additional HH Child (Ages 6-17): \$30  
No additional ticket is needed for children 5 & under*

*The daily breakfast and breaks on meeting days are for course registrants only.*

## VIRTUAL COURSE REGISTRATION

Physicians .....\$900.00

Can't join us in Lake Placid? With live streaming capabilities, you can join us virtually from any browser. Ask questions and learn with other physicians — almost as if you are in the room. Miss a morning lecture? The on-demand feature permits you to rewatch the live stream recording later in the day with fast-forward and pause features. You will have access to these recordings for 30 days once the course ends. Be sure to watch what you missed and claim your CME credits during the specified window!

### INCLUDES:

- Course Tuition
- Electronic Syllabus
- Daily Live-Stream Access and On-Demand Access
- Access to On-Demand recordings for 30 days following the course
- CME certificate emailed upon completion of the course evaluation

## ADDITIONAL DISCOUNTS

### CURRENT TRAINEES (with a letter of verification):

Use code **25NEUROTRAINEE** (case sensitive) when prompted at checkout for 25% off course fees. Please email [cme@rad.upenn.edu](mailto:cme@rad.upenn.edu) with your letter of verification

An additional 10% off the Full Course fee (In-Person or Virtual) is available to those in one of the categories below. Registrations will be verified. Please use code **PENN10** when prompted at checkout.

- Current Residents & Fellows (with a letter of verification)
- VA/DOD/Active Military
- International Registrants (living outside the USA)
- Retired Physicians

# PENN RADIOLOGY CME

### ▶ AUGUST 5-8, 2024\*

**44th Annual Diagnostic Imaging: Keys to Optimizing Radiology Interpretation**  
Harborside Hotel, Spa & Marina, Bar Harbor, Maine

### ▶ SEPTEMBER 26-29, 2024\*

**Neuroimaging in the Adirondacks: The Peaks and Valleys of CNS Imaging**  
Mirror Lake Inn Resort & Spa, Lake Placid, New York

### ▶ JANUARY 13-17, 2025\*

**Breast & Body Imaging at the Beach**  
Four Seasons Resort Costa Rica at Peninsula Papagayo, Guanacaste, Costa Rica

### ▶ FEBRUARY 18-22, 2025

**Slopeside Insights: Navigating Abdominal and Thoracic Imaging**  
The Grand Hyatt Vail, Vail, Colorado

### ▶ MARCH 17-21, 2025\*

**Pearls, Pitfalls & Protocols: Spring Imaging Update**  
Walt Disney World Swan Reserve, Lake Buena Vista, FL

\* In-Person and Live Streaming Opportunities

**MORE PROGRAMS WILL BE ADDED TO OUR WEBSITE!** Visit Penn Radiology's course calendar at [PennMedicine.org/RadiologyCME](https://PennMedicine.org/RadiologyCME)