



**Penn Medicine**

Continuing Medical and  
Interprofessional Education

The 21st Annual

# **PENN NEUROLOGY BOARD REVIEW 2024**

Available Online from June 1 – December 31, 2024

A CME-ACCREDITED COURSE

Course Director  
Raymond S. Price, MD

Co-Course Director  
Laura Stein, MD

In Conjunction with:  
Department of Neurology  
Perelman School of Medicine  
at the University of Pennsylvania

You may print the brochure and/or  
register for the course online.  
<https://upenn.cloud-cme.com/NBR2024>



## THE 21ST PENN NEUROLOGY BOARD REVIEW 2024

### Program Overview

This course is specifically designed for neurologists taking or retaking the Initial Certification Neurology Examination, the Initial Certification Neurology with Special Qualifications in Child Neurology Examination or the Recertification Examination.

### Target Audience

This course is designed for neurology residents, fellows, and practicing neurologists.

### Educational Goal

Upon completion of this activity, participants will be able to prepare for either the American Board of Neurology and Psychiatry (ABPN) Initial Certification Examination in Neurology, the Initial Certification Neurology with Special Qualifications in Child Neurology Examination, or the Recertification Examination.

### Accreditation



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.

### Designation of Credit

Penn Medicine designates this live activity for a maximum of 47.0 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Certificates and Transcripts:** After the conference has concluded, all participants will receive a follow-up email with instructions and a link. Once participants submit the request for credit, the earned credits will be available for viewing on a transcript and certificates will be available for printing at <https://upenn.cloud-cme.com>. Please note that the individual certificate will not be mailed.

### Hosting Institution

The *21st Penn Neurology Board Review 2024* is hosted by the Department of Neurology, University of Pennsylvania Health System. The department has a long tradition of excellence in the neurosciences and is internationally known for its strengths in many of the neurologic subspecialties. Other lecturers include those from the Departments of Psychiatry and Radiology.

### Benefits of Attendance

Our course will provide an excellent review of board exam and recertification topics and help the learner identify areas that require further study. The learner can then review and prepare further in these areas prior to taking the examination.

## Comments from past participants:

*"I have absolutely enjoyed my experience and learning thus far. I have been to other neurology reviews and board reviews and this, in many ways, tops all of them."*

*"The best review course for the neurology board exam."*

*"Please allow me to thank you and your staff for helping me pass the Neuro Boards. I personally feel that the course made a difference."*

## THE 21ST PENN NEUROLOGY BOARD REVIEW 2024

### Prerecorded Didactic Lectures Available June 1 – December 31, 2024

We understand that preparing for the boards means spending many hours studying and reviewing. In an effort to provide our attendees with the comprehensive review needed to study for the boards within their own busy schedule, about 50 hours of pre-recorded video lectures are included in the course registration fee and are available online from June 1 until December 31, 2024. In addition to 50 hours of didactic lectures, there are an additional 5 hours of pre-recorded case-based discussions with multiple choice questions with 5 answer choices just like the ABPN examination. Attendees will be able to use these case-based sessions to assess their knowledge and then listen to a discussion about the reasoning behind the correct and incorrect answers. This will allow our attendees to review and study the videos at their own pace. The full list of pre-recorded lectures is listed on the agenda.

### ADDITIONAL SELF STUDY OPTIONS

There is an option to purchase 800 additional questions for self study. 100 of these questions are received via email, or to your mobile device, three times per week beginning when you register until 12/31/24 to more continuously prepare you for the American Board of Psychiatry and Neurology Examination. Utilization of this technology has been shown to increase scores on National Board of Medicine examinations. For an additional fee, all preregistered, paid attendees can choose these options below:

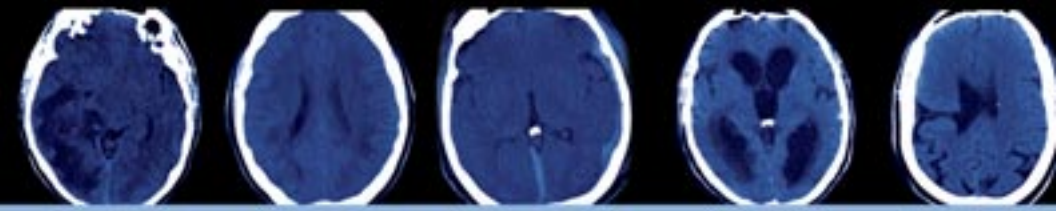
- **Option 1:** Mock Exam 2024 (300 questions)
- **Option 2:** Mock exam 2024, 4 board-style questions to your mobile device every other day, and 800 additional questions
- **Option 3:** Extended Access to materials. Access extended through February 7, 2025

**Please note: All materials will be made available to you electronically through your UPenn Cloud CME profile when you register for the board review and select this option.**

Once you register for the *21st Annual Neurology Board Review 2024* you will have immediate access to the prerecorded content and mock exams (if applicable).

### Limitations

It is impossible for us to cover all of the material necessary to answer every question on the board or recertification exams. Similarly, we cannot guarantee that enrolling in this course will result in passing the board or the recertification exams.



### Registration Fees

The registration fee for the *21st Penn Neurology Board Review 2024* are \$1,000 for physicians and \$800 for residents and fellows. Registration includes access to about 50 hours of pre-recorded lectures and presentation slides and 5 hours of pre-recorded case-based discussions with multiple choice questions through December 31, 2023.

The fee for those needing access to the pre-recorded presentations and Board-style questions through February 7, 2025 is an additional \$200.

The fee for the *Mock Exam* is \$750. You must register for the *2024 Board Review* in order to purchase the *Mock Exam*.

The Additional Study Option is \$850 and includes the *2024 Mock Exam*, four daily board-style review questions (100 total) sent by text or email and 700 additional questions with answers and references for self-study.

**How to Register Online** visit: <https://upenn.cloud-cme.com/NBR2024>

If you do not already have a UPenn Cloud CME profile, you will need to create one by visiting: <https://upenn.cloud-cme.com> and clicking "Sign-in" and sign-in using your email address and then selecting the "Don't have an account?" option.

Please be sure you do not already have an existing UPenn Cloud CME account before creating a new profile. All Penn Medicine employees, faculty and staff must sign-in using your UPenn ID.

If you are registering with a credit card, please register online at <https://upenn.cloud-cme.com/NBR24>. We cannot accept faxed or mailed registration forms with credit card information. To pay by check, complete the registration form and mail it in with your check. Please see the registration form for mailing information. Please note: mailed registrations can take up to 5-10 business days before they are received.

### Discount Policy

Individuals taking this 2024 course may take a future *Penn Neurology Board Review Course* and receive a discount of 25% off of the additional offerings (option 1, 2, 3) if they do not pass the 2024 board exam or 75% off of the additional offerings (option 1, 2, 3) if they do not pass the 2024 recertification exam. Proof of non-passing score and course registration will be required to be eligible for the discount.

### Cancellation and Refund Policy

Once registered and paid, attendees will receive access to content purchased. Therefore once you are enrolled, no refunds can be issued.



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Available Online from June 1 – December 31, 2024

## Pre-recorded Case-based learning

### Neuroanatomy Through Clinical Cases

*Raymond Price, MD*

- Neuroanatomy Application of Recorded Talks

### Neuro-ophthalmology Through Clinical Cases

*Ali Hamedani, MD*

- Afferent Neuro-ophthalmology Application of Recorded Talks
- Efferent Neuro-ophthalmology Application of Recorded Talks

### Neuropathology Through Clinical Cases

*Raymond Price, MD*

- Neuropathology Application of Recorded Talks

### Sleep Through Clinical Cases

*David Raizen, MD, PhD*

- Normal Sleep Physiology
- Sleep Disorders and Treatment

### Psychiatry and Substance Abuse Through Clinical Cases

*Robert M. Weinrieb, MD*

- Phenomena of withdrawal, tolerance, etc.
- Therapy-medication and psychological
- Personality-genetic and environmental influences
- Neurologic side effects of alcohol and substance abuse

### Neuro-Immunology Through Clinical Cases

*Dina Jacobs, MD*

- Molecular pathogenesis of multiple sclerosis
- Immunotherapy in multiple sclerosis

### Neuroimaging Through Clinical Cases

*John Woo, MD*

- MRI, MRA, and MRV (exclusive of material in Neurovascular section)
- CT scan
- Angiography (exclusive of material in Neurovascular section)

### Headache Through Clinical Cases

*Katherine Hamilton, MD*

- Migraine diagnosis and treatment (prophylactic and abortive)
- Other types (tension, cluster, chronic daily, medication overuse)

### Movement Disorders Through Clinical Cases

*Nabila Dahodwala, MD*

- Hyperkinetic disorders – including: tremor, tardive dyskinesia
- Hypokinetic disorders – Parkinson's disease, parkinsonism
- Movement Disorder Videos

### Neuro-Immunology Through Clinical Cases

*Dina Jacobs, MD*

- Molecular pathogenesis of multiple sclerosis
- Immunotherapy in multiple sclerosis

### Neuromuscular Diseases Through Clinical Cases

*Raymond Price, MD*

- Neuropathies
- Myopathies
- Disorders of neuromuscular transmission

### Epilepsy and EEG Through Clinical Cases

*Taneeta M. Ganguly, MD*

- Epileptic phenomena, pseudo-seizures
- Genetics of epilepsy
- Anticonvulsants

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## Prerecorded Didactics

Neuroanatomy

Neurochemistry

Neuroendocrinology

Neuropathology

Neurovascular

Neuro-ophthalmology

Neuromuscular

Neurophysiology

Neurogenetics

Neuroradiology

Neuro-oncology

Neuro-infectious

Metabolic Disorders

Phakomatoses

Development and Disorders of Childhood

Movement Disorders

Neuroimmunology/MS

Altered States of Consciousness

Neuropsychology

EEG/Epilepsy

Headache

Sleep

Psychiatry and Substance Abuse

Neurology and Systemic Disease

Cognitive

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## Topics Covered in Online Syllabus Without Talks

### Cerebrospinal Fluid

Normal CSF Constituents and Volume  
Ventricular System; CSF Pathways  
Pathologic CSF Patterns (Cellular,  
Chemical Enzymatic, Serologic)

### Physician-patient Relationship

Interview Techniques and  
Mental Status Testing  
Management of Difficult Patients  
Relationship with Other Professionals  
Particularly Common “Errors”  
Death and Dying,  
Normal Grief vs. Depression  
Role of Physician Attitudes in Therapy  
Therapy in Liaison Psychiatry  
Legal Responsibilities  
Factitious Phenomena  
Suicide

### Neuropharmacology

Antioxidants  
Autonomic Agents  
Neurologic Side Effects of Systemic Drugs

### Forensic Psychiatry and Neurology, Epidemiology, Transcultural Psychiatry, Public Mental Health, and Systems-based Practice

Forensic Psychiatry/Neurology  
Epidemiology  
Transcultural Psychiatry  
Community Psychiatry, Public Mental Health  
Systems-based Practice



**Unless otherwise indicated, the Course Director and Faculty are all part of the University of Pennsylvania Health System and Children's Hospital of Philadelphia, Philadelphia, PA**

**Course Director**

**Raymond S. Price, MD**

*Professor of Clinical Neurology*

*Director, Neurology Residency*

**Co-Course Director**

**Laura Stein, MD**

*Assistant Professor of Neurology*

**Faculty – Department of Neurology**

**Geoffrey K. Aguirre, MD, PhD**

*Professor of Neurology*

**Shawn J. Bird, MD**

*Professor of Neurology*

*Director, Electromyography Laboratory*

**Nabila Dahodwala, MD**

*Professor of Neurology*

**Marissa Digiovine, MD**

*Associate Professor of Neurology and Pediatrics*

**Lauren B. Elman, MD**

*Professor of Neurology*

**Taneeta M. Ganguly, MD**

*Assistant Professor of Clinical Neurology*

**Ali Hamedani, MD**

*Assistant Professor of Neurology*

**Katherine Hamilton, MD**

*Assistant Professor of Neurology*

*Medstar Georgetown University Hospital*

*Washington, DC*

**Dina A. Jacobs, MD**

*Associate Professor of Neurology*

*Associate Director, MS Center*

**Eric Lancaster, MD, PhD**

*Associate Professor of Neurology*

**Kathleen Lawler, DPhil, ABPP**

*Director of Neuropsychology*

**Grant Liu, MD**

*Professor of Neurology  
and Ophthalmology*

**Eric Marsh, MD, PhD**

*Associate Professor of Neurology  
and Pediatrics*

**Michael L. McGarvey, MD**

*Associate Professor of Neurology*

**Steven R. Messé, MD**

*Professor of Neurology*

**James Morley, MD, PhD**

*Assistant Professor of Neurology*

**John Pollard, MD**

*Adjunct Professor of Neurology*

**Amy A. Pruitt, MD**

*Professor of Neurology  
Director, General Neurology Division*

**David Raizen, MD, PhD**

*Associate Professor of Neurology*

**Faculty – Department of Psychiatry**

**Louis Littman, MD, PhD**

*Clinical Assistant Professor of Psychiatry*

**Robert M. Weinrieb, MD**

*Associate Professor of Psychiatry  
Chief Psychiatric Consultant,  
Liver Transplant Service  
Chief of Consultation Liaison Psychiatry*

**Faculty – Department of Radiology**

**John H. Woo, MD**

*Associate Professor of Radiology*

**Disclosures**

Penn Medicine, Office of Continuing Medical and Interprofessional Education, adheres to the *ACCME Standards for Integrity and Independence in Accredited Continuing Education*. Faculty disclosure information will be made available in the conference materials and syllabi. Faculty members are also expected to disclose to participants any discussions of off-label and/or investigational uses of pharmaceutical products or devices within their presentations.

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You may register by credit card or check online at:

<https://upenn.cloud-cme.com/NBR2024>

Questions? Contact us at:

Phone: 215-898-6400 or 215-898-8005 • [penncme@pennmedicine.upenn.edu](mailto:penncme@pennmedicine.upenn.edu)

**Please note we are unable to accept faxed or mailed registration forms with credit card payment.**

Please print or type

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Name (First)

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(Last)

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Academic Degree

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Medical Specialty

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Fax

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E-mail

**Registration Fees** (pre-payment is required to be officially registered)

\$1,000 for practicing physicians

\$800 for residents and fellows

**Optional Purchases:**

(Must register and pay for course in order to purchase any additional options)

**Option 1: Mock Exam**

\$750

**Option 2: Mock exam, 4 board-style questions every other day, and 800 additional questions**

\$850

**Option 3: Extended Access to the Pre-recorded and Board-Style Questions**

\$200 for access through February 7, 2025

Please total registration payment and optional purchases

Total: \$ \_\_\_\_\_

**Payment Method**

- If you are paying by check or credit card, register online at <https://upenn.cloud-cme.com/NBR2024>
- If you are paying by check, you may mail your completed registration form and check made payable to **The Trustees of the University of Pennsylvania/CME to:** Conference Manager, Office of Continuing Medical & Interprofessional Education, Academic Programs, Penn Medicine, JMEC, SPE, 6th floor 3400 Civic Center Blvd, Bldg. 421, Philadelphia, PA 19104-5162