



Penn Medicine
Continuing Medical and
Interprofessional Education

The 22nd Annual

PENN NEUROLOGY BOARD REVIEW 2025

Available Online from June 9 – December 31, 2025

A CME-ACCREDITED COURSE

Course Director
Laura Stein, MD

Co-Course Director
Raymond S. Price, MD

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

Register for the course online at
<https://upenn.cloud-cme.com/NBR2025>



THE 22ND PENN NEUROLOGY BOARD REVIEW 2025

Program Overview

The list of course topics and subtopics was adapted from the ABPN's description of the board and recertification examinations. The time allotted for each topic is based upon the approximate distribution of the subject matter as given by the ABPN. Our course will provide an excellent review of board exam and recertification topics primarily through case-based learning 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.

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.

Learning Objectives

At the conclusion of this educational activity, the participant should be able to:

- Prepare for either the American Board of Neurology and Psychiatry (ABPN) Board Examination in Neurology or the Recertification Examination.
- Discuss topics in neurology basic science, including neuroanatomy, neuropathology and neurochemistry.
- Discuss common and new topics in clinical adult neurology, including neurovascular, movement disorders, sleep, headache, epilepsy, neuromuscular, neuro-immunology, neuro-infectious disease and behavioral neurology
- Review the diagnostic criteria for chronic migraine and the available treatments
- Review the diagnostic criteria for relapsing remitting and primary progressive multiple sclerosis and the available treatments

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.

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."

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.

Hosting Institution

The *Penn Neurology Board Review* 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.

THE PENN NEUROLOGY BOARD REVIEW

Prerecorded Didactic Lectures Available June 9 – December 31, 2025

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 47 hours of pre-recorded video lectures are included in the course registration fee and are available online from June 1 until December 31, 2025. In addition to 47 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 12/31/25 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:

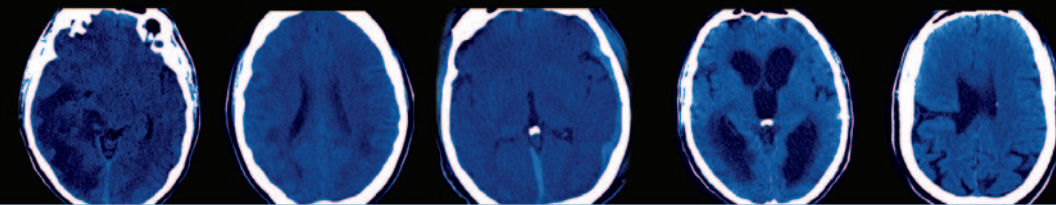
- **Option 1:** Mock Exam 2025 (300 questions)
- **Option 2:** Mock exam 2025, plus 800 more questions that includes 4 board-style questions to your mobile device every other day, and additional mock exam style questions.
- **Option 3:** Extended Access to materials. Access extended through February 6, 2026

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 *Annual Neurology Board Review* 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.



Register Online at: <https://upenn.cloud-cme.com/NBR2025>

Registration Fees

The registration fee for the *Penn Neurology Board Review* are \$1,200 for physicians and \$600 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, 2026.

Option 1: The fee for the *Mock Exam* is \$800. You must register for the 2025 *Board Review* in order to purchase the *Mock Exam*.

Option 2: The Additional Study Option is \$900 and includes the 2025 *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.

Option 3: The fee for those needing access to the pre-recorded presentations and Board-style questions through February 6, 2026 is an additional \$200.

Need to Register by Mail?

Please note: mailed registrations may take more than 5-10 business days before they are received because we continue to experience longer delays in receiving mail. We encourage all attendees to register online. See the registration form for mailing instructions. All registrations will be confirmed by email as long as your registration is received before February 6, 2026.

Be sure to check your spam box for emails regarding this conference.

Discount Policy

Individuals taking this 2025 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 you do not pass the 2025 board exam or 75% off of the additional offerings (option 1, 2, 3) if you do not pass the 2025 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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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

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

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

States and Disorders of Consciousness

Brain Death/Death by Neurologic Criteria

Neuropsychology

EEG/Epilepsy

Headache

Sleep

Psychiatry and Substance Abuse

Neurology and Systemic Disease

Cognitive

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

Laura Stein, MD

Director, Neurology Residency

Associate Professor of Neurology

Director, Neurology Residency

Course Co-Director

Raymond S. Price, MD

Professor of Clinical Neurology

Chief of Neurology, Pennsylvania Hospital

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

David Fischer, MD

Assistant 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

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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
Associate 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
Professor of Neurology

Faculty – Department of Psychiatry

Robert M. Weinrieb, MD
*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.

Nondiscrimination Statement The University of Pennsylvania values diversity and seeks talented students, faculty, and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, gender identity, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic, or other University administered programs or employment. Questions or complaints regarding this policy should be directed to Executive Director, Office of Affirmative Action and Equal Opportunity Programs, 3600 Chestnut Street, Sansom Place East Suite 228, Philadelphia PA 19104-6106 or 215-898-6993 (Voice) or 215-898-7803 (TDD). www.upenn.edu/affirm-action.

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You may register by credit card or check online at:

<https://upenn.cloud-cme.com/NBR2025>

Questions? Contact us at:

Phone: 215-898-6400 or 215-898-8005 • pennncme@pennmedicine.upenn.edu

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

Please print or type

Name (First)

(Last)

Academic Degree

Medical Specialty

Affiliation (Hospital, Office, or Company)

Address (☐ Affiliation or ☐ Home)

City

State

Zip

Phone

Fax

E-mail

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

☐ \$1,200 for practicing physicians

☐ \$600 for residents and fellows

Optional Purchases:

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

Option 1: Mock Exam

☐ \$800

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

☐ \$900

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

☐ \$200 for access through February 6, 2026

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/NBR2025>
- 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