



2023 Ohio State Neurology Update

A comprehensive review for clinicians

January 21



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER

COURSE DESCRIPTION

This CME-accredited symposium will provide information on latest diagnostic guidelines and clinical management approaches for a range of common neurological diseases and conditions, including headache, memory disorders, Parkinson's disease, neuropathy, multiple sclerosis (MS) and epilepsy. Each talk will be given by a nationally recognized specialist in the field. Cutting-edge developments in holistic, multidisciplinary care will be discussed, with a focus on innovative, customized and multidisciplinary symptom management clinics. A panel of experts will review ongoing and upcoming clinical trials and studies of novel disease-modifying agents for individuals with migraines, MS, neuromuscular disorders, seizures, Parkinson's disease and Alzheimer's disease and other forms of dementia.

LEARNING OBJECTIVES

At the conclusion of this activity, learners will:

1. Understand the new pharmacologic and neuromodulation treatments there are for migraine abortive and preventive treatments.
2. Know the alternative and complementary treatments for migraine, cluster headaches and other trigeminal autonomic cephalgias.
3. Know how to approach patients with cognitive disorders, the diagnosis of common dementia conditions and new treatments for Alzheimer's and Lewy body disorders.
4. Know the diagnostic approach to the patient with neuropathic symptoms and be able to identify red flags suggesting alternate diagnoses and treatable neuropathies.
5. Understand the common clinical presentation of multiple sclerosis and other CNS demyelinating disorders, as well as know the upcoming treatments currently in clinical trials for multiple sclerosis.
6. Recognize diagnostic and therapeutic developments in the management of epilepsy, as well as understand the advancement in seizure rescue medication and monitoring devices.
7. Understand the details of epilepsy surgery evaluation and minimally invasive epilepsy surgery techniques.
8. Discuss the concept and benefits of multidisciplinary and subspecialty clinics, review the specialty clinics offered at The Ohio State Wexner Medical Center, and understand the roles of ancillary services within the Neurology Specialty Clinics.
9. Discuss management treatment with carbidopa/levodopa, learn medication options for motor fluctuations, learn two reasons to refer for possible deep brain stimulation, and learn medication options for behavioral symptoms in Parkinson's disease.

ACCREDITATION STATEMENT

The Ohio State University Center for Continuing Medical Education (CCME) is accredited by the Accreditation Council for Continuing Medical Education (ACCME®) to provide continuing medical education for physicians.

AGENDA DISCLAIMER

The Ohio State CCME presents this activity for educational purposes only. Participants are expected to utilize their own expertise and judgment while engaged in the practice of medicine. The content of the presentations is provided solely by presenters who have been selected for recognized expertise in their field.

No further reproduction or distribution is permitted by electronic transmission or any other means. The presentations at this conference are the intellectual property of the presenters and require their permission for further use.

AMA CREDIT DESIGNATION STATEMENT

The Ohio State University Center for Continuing Medical Education designates this symposium for a maximum of 6.25 AMA PRA Category 1 Credit(s)[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

DISCLOSURE STATEMENT

As a provider of AMA PRA Category 1 Continuing Medical Education, it is the policy of CCME to adhere to the ACCME® Standards for Commercial Support to avoid any conflict of interest and/or commercial bias and must ensure balance, independence, objectivity and scientific rigor in all its sponsored educational activities. All individuals who are in a position to control content of an educational activity, including presenters, panel members and moderators, must disclose any relevant financial relationships that create a conflict of interest.

Nothing in this program is intended to imply that any off-label or unapproved product use discussed is reimbursed by any government or private payor or that submission of a claim for such use is proper. Disclosure information will be provided in the course syllabus.

The design and production of the conference is the sole responsibility of the Department of Neurology and the Ohio State College of Medicine.

2023 Course Agenda



- 8 a.m. Registration and continental breakfast
- 9 a.m. Welcome and department highlights from FY22
Benjamin Segal, MD
*Chair, Department of Neurology
Co-director, Neurological Institute*
- 9:10-9:55 a.m. Updates on the management and treatment of headache disorders
Kevin Weber, MD, MHA
Clinical Assistant Professor, Department of Neurology Director, Division of Headache and Sports Concussion
- 10-10:45 a.m. The latest buzz in diagnosis and treatment of cognitive disorders
Douglas Scharre, MD
Clinical Professor, Department of Neurology Director, Division of Cognitive Neurology
- 10:45-11 a.m. BREAK
- 11-11:45 a.m. Update in the diagnosis and management of neuropathy
Mary Petruilis, MD
Clinical Assistant Professor, Department of Neurology
- 11:45 a.m.-12:30 p.m. Neurology specialty clinics: Advantages, updates and progress
Sarita Maturu, DO
*Clinical Assistant Professor, Department of Neurology
Interim Director, Division of Epilepsy
Director, Neurology Specialty Clinics*
- 12:30-1 p.m. LUNCH
- 1-1:45 p.m. Updates in multiple sclerosis
Tirisham Gyang, MD
*Clinical Assistant Professor, Department of Neurology
Neurologist, Division of Multiple Sclerosis and Neuroimmunology*
- 1:45-2:30 p.m. Principles of symptom management in Parkinson's disease
Pietro Mazzoni, MD
*Clinical Associate Professor, Department of Neurology
Co-director, Division of Parkinson's Disease and Related Movement Disorders*
- 2:30-2:45 p.m. BREAK
- 2:45-3:30 p.m. Updates in epilepsy
Jaysingh Singh, MD
*Clinical Assistant Professor, Department of Neurology
Neurologist, Division of Epilepsy*
- 3:30-4:30 p.m. Panel discussion: Current and emerging clinical trials
Benjamin Segal, MD
*Chair, Department of Neurology
Co-director, Neurological Institute*
Miriam Freimer, MD
*Clinical Professor, Department of Neurology
Director, Division of Neuromuscular Disorders*
Tirisham Gyang, MD
*Clinical Assistant Professor, Department of Neurology
Neurologist, Division of Multiple Sclerosis and Neuroimmunology*
Kevin Kerber, MD
*Professor, Department of Neurology
Director, Division of Health Services Research*
Ariane Park, MD
*Clinical Associate Professor, Department of Neurology
Co-director, Division of Parkinson's Disease and Related Movement Disorders*
Jaysingh Singh, MD
*Clinical Assistant Professor, Department of Neurology
Neurologist, Division of Epilepsy*
Douglas Scharre, MD
*Clinical Professor, Department of Neurology
Director, Division of Cognitive Neurology*
- 4:30 p.m. Reception

2023 Speakers

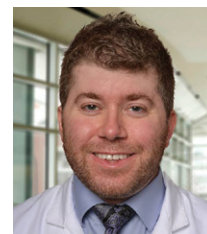


Benjamin Segal, MD

*Chair, Department of Neurology
Co-director, Neurological Institute
Director, Division of Multiple Sclerosis and
Neuroimmunology*

Benjamin Segal, MD, is a neurologist with subspecialty training in the diagnosis and treatment of multiple sclerosis (MS) and related disorders. His current positions are chair of the Department of Neurology, director of the Neuroscience Research Institute, director of the Multiple Sclerosis and Neuroimmunology Center and co-director of the Neurological Institute at The Ohio State University Wexner Medical Center. He also holds the Stanley D. and Joan H. Ross Chair in Neuromodulation. His mission as an MS physician is to provide an accurate diagnosis and a highly personalized treatment plan for each patient. MS is a complex disease that affects each individual in unique ways. At the Ohio State Multiple Sclerosis and Neuroimmunology Center, we strive to alleviate symptoms and neurological deficits, prevent relapses, block new lesion formation in the brain and spinal cord and slow or halt neurological decline using the latest medical research and cutting-edge therapies. Our ultimate goal is to improve our patients' quality of life and position them for the best long-term outcome possible.

His research on MS and neuroimmunology has been published in high-impact journals and featured at academic meetings internationally. Our research is supported by annual funding from the National Institutes of Health in excess of \$1.3 million. We've discovered that the type of inflammation that causes damage to the nervous system during MS can vary between individuals, suggesting that prescribed medicines must be customized for each patient. Active research projects are focused on understanding how the immune system and the central nervous system interact, and explaining their role in disease progression, remission and potential repair of neurological damage. Dr. Segal's also investigating how we can use blood and spinal cord fluid samples from patients to better predict how an individual's disease might progress and what therapies could be most effective.



Kevin Weber, MD, MHA

*Clinical Assistant Professor, Neurology
Director, Division of Headache and Sports Concussion*

Kevin Weber, MD, MHA, is a clinical assistant professor of Neurology in and the director of the Headache Division at The Ohio State University Department of Neurology. His clinical and research interests include headaches and sports concussion. He completed his neurology training at The Ohio State University and was chief resident his final year of residency training. He is board-certified in neurology. Dr. Weber later completed his fellowship in headache medicine at the Cleveland Clinic, and is United Council for Neurologic Subspecialties-certified in headache medicine, with an award as an Emerging Leader in the American Headache Society in 2020. Kevin is the Associate Fellowship Director of the UCNS Headache Medicine Fellowship at Ohio State, as well as the Associate Residency Director of the ACGME Neurology Residency Program. He co-manages a Sports Neurology Clinic with Ohio State Sports Medicine. Dr. Weber also serves on the Admissions Committee at The Ohio State University College of Medicine.



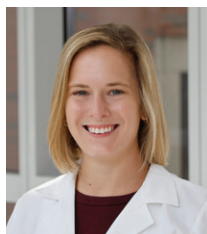
Douglas Scharre, MD

*Clinical Professor, Neurology
Director, Division of Cognitive Neurology*

Douglas W. Scharre, MD, is the director of the Division of Cognitive Neurology, director of the Center for Cognitive and Memory Disorders and clinical professor of Neurology and Psychiatry. He's a clinical neuroscience researcher and behavioral neurologist specializing in the diagnosis and management of cognitive issues for more than 29 years. He's conducted or participated in more than 200 clinical research studies funded by NIH, foundations and industry utilizing neuroimaging, serum and cerebrospinal fluid biomarkers, cognitive biomarkers, genetic biomarkers and cognitive, functional and behavioral scales on mild cognitive impairment, dementia and control subjects. The data from these Ohio State research subjects have contributed to more than 1,000 research publications. He's a contributing member of several national research and NIH-supported consortiums, including the Alzheimer's Disease Cooperative Study group, Alzheimer's Disease Neuroimaging Initiative, Global Alzheimer's Platform Foundation

and the Alzheimer's Clinical Trials Consortium. His site is also designated as one of the funded Lewy Body Dementia Association's Research Centers of Excellence.

Dr. Scharre has designed and developed both paper and digital versions of the Self-Administered Gerocognitive Examination (SAGE), a cognitive assessment instrument designed for identifying individuals in a practical way with mild cognitive impairment or early dementia from any cause and to be sensitive to changes over time. He was selected by his peers as one of the Best Doctor's in America for the last 17 years in a row. Dr. Scharre joined The Ohio State University College of Medicine faculty in the Department of Neurology in 1993.



Mary Petruilis, MD

Clinical Assistant Professor, Neurology

Mary Petruilis, MD, is a clinical assistant professor in the Department of Neurology. She received her medical degree from Wake Forest University School of Medicine. She completed her internship, neurology residency and neuromuscular fellowship at Washington University in St.

Louis/Barnes Jewish Collaborative, where she served as the chief resident for quality improvement and chief administrative fellow.



Sarita Maturu, DO

*Clinical Assistant Professor, Neurology
Director, Neurology Specialty Clinics
Interim Director, Division of Epilepsy*

Sarita Maturu, DO, is a clinical assistant professor of Neurology in the Division of Epilepsy and is the director of Specialty Clinics within the Neurology Department.

She completed her neurology residency at Henry Ford Hospital and her epilepsy fellowship at Case Western Reserve University. Her main clinical and research interests are with vulnerable epilepsy populations, including women with epilepsy and young adults and adolescents with epilepsy. She's a board member of My Epilepsy Story, which is the only nonprofit organization for women with epilepsy, and is the vice chair of the Pregnancy Outcomes Special Interest Group for the American Epilepsy Society.



Tirisham Gyang, MD

*Clinical Assistant Professor, Neurology
Program Director, MS/Neuroimmunology Fellowship*

Tirisham Gyang, MD, is a neurologist who specializes in treating multiple sclerosis, demyelinating diseases and autoimmune disorders of the central nervous system.

She's passionate about empowering patients by giving them the best care possible and ensuring they stay informed through every step of the process. She believes in providing customized, comprehensive and multidisciplinary care, giving patients the tools they need to thrive and maintain their quality of life. At The Ohio State University College of Medicine, she's the program director of the Multiple Sclerosis Fellowship. She's also been involved with clinical trials and researching experimental therapeutics for the field of neurology.



Pietro Mazzoni, MD

*Associate Professor, Neurology
Co-Director, Center for Parkinson's Disease and Other
Movement Disorders*

I am a neurologist with specialty expertise in movement disorders. I evaluate and treat patients with Parkinson's disease, parkinsonism syndromes, tremor, and gait disturbances. My research interest is gait abnormalities caused by Parkinson's disease, with a current focus on freezing of gait. I obtained my medical training at Harvard Medical School and my graduate degree at MIT. My Neurology residency and my Movement Disorders fellowship were at Columbia University. I was on the faculty at Columbia for 15 years and at Washington University in St. Louis for 6 years. I joined the Neurology Department at The Ohio State University College of Medicine as Co-Director of the Movement Disorders Division in September 2022.



Jaysingh Singh, MD

*Clinical Assistant Professor, Neurology
Director, Epilepsy Monitoring Unit
Co-Director, Epilepsy Surgery Program*

Jaysingh Singh, MD, is a clinical assistant professor of Neurology. He's the director of the Epilepsy Monitoring Unit and co-director of the Epilepsy Surgery Program at The Ohio State University Wexner Medical Center. His residency was at the University of Toledo, and his fellowship was at Mayo Clinic. Dr. Singh's research focuses on EEG source imaging, ICU EEG and predictors of favorable surgical outcomes. He's been the principal investigator on multiple clinical trials focusing on drug-resistant epilepsy and neuromodulation with deep brain stimulation.

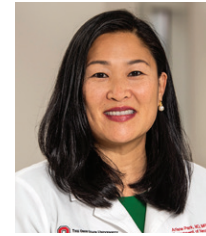


Miriam Freimer, MD

*Clinical Professor, Neurology
Director, Division of Neuromuscular Disorders*

Miriam Freimer, MD, is the director of the Division of Neuromuscular Disorders. She's been on the faculty of the Department of Neurology for more than 30 years. She's a neuromuscular disease specialist treating diseases of the nerve and muscle with an emphasis on autoimmune disorders. She also is an experienced electromyographer and has performed more than 15,000 EMGs during her career. For more than 30 years, Dr. Friemer's been a clinical neuromuscular researcher participating in studies investigating potential therapeutic options for many diseases including CIDP, inclusion body myositis, myasthenia gravis, Kennedy's disease, dermatomyositis, FSH dystrophy, myotonic dystrophy and small fiber neuropathies.

Dr. Freimer is a nationally recognized lecturer and panelist, invited to more than 50 national and international events. She's been selected by her peers as one of the Best Doctor's in America for 17 years.



Ariane Park, MD, MPH

*Clinical Associate Professor, Neurology
Co-Director, Center for Parkinson's Disease and Other Movement Disorders
Vice Chair of Academic Affairs, Neurology*

Ariane Park, MD, MPH, received her master's degree in chronic disease epidemiology from Yale University and her medical degree from Ohio State. She completed her internship and neurology residency at Northwestern Memorial Hospital and completed her fellowship in movement disorders at Duke University. Dr. Park is co-director of Ohio State's Madden Center for Parkinson's Disease. She's published predominantly in the area of Parkinson's disease, and has been the principal investigator on several clinical trials involving patients with Parkinson's disease.



Kevin Kerber, MD, MS

*Professor, Neurology
Co-Director, Health Services Research Division
Vice Chair of Clinical Operations, Neurology*

Kevin Kerber, MD, MS, is a neurologist and health services researcher whose primary focus is on dizziness and balance disorders, particularly pertaining to the vestibular system. He is the director of the Department of Neurology Dizziness Clinic, co-director of the Division of Health Services Research and vice chair of Clinical Operations. His grant funding, from the NIH and AHRQ, has included projects about the clinical epidemiology of dizziness, clinical decision rule development to identify stroke in acute dizziness presentations, health services randomized clinical trials to implement evidence-based care practices in routine care emergency departments and the development and evaluation of patient-oriented behavioral interventions. He currently is collaborating with Kaiser Permanente Southern California on an NIH-funded clinical trial of a provider- and patient-based implementation strategy to optimize management and outcomes for ED dizziness presentations. He has also contributed to work on a variety of other topics including stroke epidemiology, payment policy, geographic variation in neurologists and neurologic care, the value of neurologic care and headache care delivery.

The Ohio State University Wexner Medical Center

Department of Neurology

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Columbus, OH 43210

Phone: 614-293-4969

Fax: 614-293-6111

General information:

wexnermedical.osu.edu/neurology

Neurology locations:

Brain and Spine Hospital

300 W. 10th Ave.

Columbus, OH 43210

Dodd Rehabilitation Hospital

480 Medical Center Drive

Columbus, OH 43210

Martha Morehouse Outpatient Care

2050 Kenny Road

Columbus, OH 43221

Outpatient Care Dublin

6700 University Blvd.

Dublin, OH 43016

Outpatient Care East

543 Taylor Ave.

Columbus, OH 43203

Outpatient Care Gahanna

920 N. Hamilton Road

Gahanna, OH 43230

Outpatient Care New Albany

6100 N. Hamilton Road

Westerville, OH 43081

University Hospital

410 W. 10th Ave.

Columbus, OH 43210

How to make a referral:

There are three quick and easy ways to refer your patients to Neurology specialists at The Ohio State University Wexner Medical Center:

Refer by phone

If you'd like to refer a patient by phone or if you have any questions during any part of the referral process, please feel free to call [614-293-4326](tel:614-293-4326).

Refer by paper form (fax)

Complete our single-page Universal Referral Form located at wexnermedical.osu.edu/referralform.

Fax the referral form and clinical documentation to [614-293-6111](tel:614-293-6111).

For referrals to The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute, please fax to [614-293-9449](tel:614-293-9449).

After we've received your fax, we'll contact your patient directly to schedule an appointment and send you confirmation of your patient's appointment for your records.

Refer online with CareLink

If you're an Ohio State CareLink user, you can refer your patients at wexnermedical.osu.edu/carelink.

CareLink is Ohio State's web-based program that provides real-time, HIPAA-protected access to all electronic health records.

It provides prompt communication of the patient's diagnosis, medications, test results and treatment plan, and allows you to place orders for tests and send referrals electronically.

Not a CareLink user? Visit wexnermedical.osu.edu/carelink to enroll today.