

MULTIPLE SCLEROSIS PATIENT NEWSLETTER

DEPARTMENT OF NEUROLOGY

SPRING 2022



Clinical research updates

Tirisham Gyang, MD

The Ohio State Multiple Sclerosis Center is actively involved in a variety of clinical research projects that are open for enrollment. We're recruiting patients for several studies and have upcoming studies starting very soon. As you review the studies below, consider if there are any that may be a fit for you. Contact us if you need more information about any of these studies.

Current studies

BTK inhibitors in relapsing and progressive forms of MS

Enrollment is open for two studies investigating the effectiveness of a new pill to treat both relapsing remitting and primary progressive MS. The oral drug under investigation works by blocking an enzyme called Bruton's tyrosine kinase (BTK); drugs in this category are called BTK inhibitors.

A unique feature of these drugs is the ability to affect not only circulating immune cells but also resident immune cells in the brain called microglia. In phase II studies, there was a significant reduction in new and active MRI lesions in patients with relapsing forms of MS. There's also hope that these drugs will prevent the progression of disability in patients with progressive forms of MS.

COVID-19 vaccine study in patients with MS

The results of the COVID-19 vaccine study in patients with MS showed that patients treated with certain disease-modifying drugs had a reduced response to receiving the COVID-19 vaccines. These include drugs that deplete the B-cells (ocrelizumab [Ocrevus] and rituximab [Rituxan]), and drugs that modulate sphingosine 1-phosphate receptor (fingolimod [Gilenya], siponimod [Mayzent], ozanimod [Zeposia] and ponesimod [Ponvory]). The study is now determining how patients respond to the booster dose of the vaccine.

Neuroscience Research Institute Brain Bank & Biorepository (NRI-BBB)

Led by Benjamin Segal, MD, and his colleagues, the goal of the NRI-BBB is to collect and store biospecimens like blood, spinal fluid and tissue from

patients undergoing testing for clinical care. When you see your doctor and undergo tests (such as blood and spinal tap tests) for the management of your illness, you can participate in this study by providing an extra sample of blood or spinal fluid to be stored for future research. These bio-samples are essential in increasing our understanding of the disease process in MS and other disorders.

Upcoming studies

Aging in MS

Yinan Zhang, MD, is conducting a study that will begin enrolling patients this spring. It will investigate biological aging in individuals with MS with the goal of determining if individuals with MS age differently from those without MS. A person's biological age is measured by various biomarkers that reflect the genetic and molecular changes accumulating over time that contributes to their age-related decline in function. The study will measure markers of biological aging from MS participants' blood and compare them to those from people without MS and correlate the biomarkers with clinical and MRI outcomes pertinent to MS.

If you're interested in any of these trials, please contact us at **614-293-6123** or msresearch@osumc.edu.



Integrative medicine for patients with MS

Emily Harrington, MD, PhD

Integrative medicine is often something that physicians overlook for patients with neurological conditions. A 2021 study highlighted that only one-third of multiple sclerosis clinical practice guidelines provide integrative medicine recommendations for treatment of MS. However, a 2019 study reported more than 90% of patients use at least one integrative medicine approach,

the most common being dietary supplements.

The Ohio State University Integrative Medicine program has a range of services available for patients, including massage, acupuncture, chiropractic care, nutrition services, Ayurvedic medicine, Chinese medicine and mind-body medicine. Studies of integrative medicine approaches in treating MS symptoms have broadly shown improvement with these therapies.

Several studies suggest an improvement in MS spasticity and bladder dysfunction with acupuncture. Massage in one study of people with MS found improvements in anxiety, mood, ambulation and physical and social functioning. Seven trials of yoga in MS reported improvement in

fatigue and mood. Eighteen studies of aerobic exercise and physical therapy indicated improvements in physical, mental and social function in people with MS.

More studies on dietary interventions for MS need to be performed. The use of vitamin D supplementation in combination with disease-modifying therapy in several small studies reduced relapse rate. A vitamin D level of 40-70 ng/ml and supplementation with less than 10,000 IU per day appears to be safe and may be beneficial for people with MS.

Your Ohio State MS team partners with the Integrative Medicine clinic. If you're interested in an integrative medicine approach, ask your doctor for a referral and explore the Integrative Medicine website.



MAKE AN APPOINTMENT

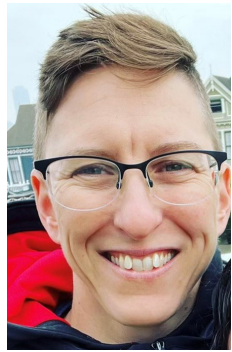
Our caring MS team is dedicated to you and your unique MS journey. Visit one of our experts in an MS specialty clinic to see how we can work with you to improve your quality of life.

Learn more at wexnermedical.osu.edu/neuroclinics.



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER



MS Care Team Staff spotlight: Emily “Em” Harrington, MD, PhD

Hometown: I’m from the suburbs of Kansas City (Olathe and Overland Park, Kansas) where I grew up before moving to California for college.

Education/Training:

- Undergrad: UC Berkeley
- Medical school and neurology residency: University of California San Francisco
- MS fellowship: Johns Hopkins University

Clinical and research interests: During graduate school, I started researching remyelination and myelin repair in MS, and during fellowship I became interested in immunology and how oligodendrocytes (the myelin-making cells) may directly interact with immune cells. I’m continuing to study myelin repair, especially in the setting of inflammation and aging, with the goal of developing therapies to promote remyelination and to treat progressive MS.

Clinically I enjoy getting to know my patients and developing an individualized treatment plan for what works best for treating their MS. I also enjoy teaching and mentoring trainees and getting young people interested in neurology and MS and advocating for under-represented patients and providers in medicine.

Hobbies and interests: I enjoy small home improvement projects, gardening and watching Ohio State football. Exploring restaurants and nature parks in Columbus is also something I enjoy.



Visit wexnermedical.osu.edu/mseducation to view recordings of our virtual MS Education Series. You’ll have access to past events, resources and the Q&A from each session.



Dance for MS

Gianna Buffano

Dance for MS is a free, low-stakes dance class designed for people with multiple sclerosis, their caregivers and their loved ones. In a welcoming virtual environment over Zoom, the Dance for MS program aims to empower participants to explore their movement potential in fun and creative ways while building community, collaboration and physical confidence. Over the course of several sessions, individuals will learn and experience activities that will work to build these tools through physical movement and mindfulness. Together as a cohesive group, participants will move and be guided through breath work, musicality and seated and standing stretches and combinations.

This program is based off the work from the Georgetown Lombardi Arts and Humanities Program established Movement for MS class, the Scottish Ballet’s Elevate program and the University of Florida’s Dance for MS. These three programs have aided in the development of promising practices for a dance class for participants with MS.

If you’re interested in signing up for the class or have any questions or concerns, contact Gianna Buffano at buffano.2@osu.edu or 682-365-0901.



Multiple Sclerosis Multidisciplinary Symptom Management Clinic

*Benjamin Segal, MD,
and Kristi Epstein, CNP*

Multiple sclerosis is a complex disease process that impacts many different body systems, creating varied symptoms. Management of these myriad symptoms requires a multidisciplinary approach to fully address them.

The **MS Quality of Life Clinic** at Ohio State is dedicated to a thorough appraisal of each patient’s symptoms and the challenges they impose. A comprehensive and multidisciplinary treatment plan is developed to address each symptom. The treatment

plan often involves referrals to a team of collaborating providers, each of whom has an interest in the care of patients with MS and advanced training in their field. The multidisciplinary team includes physical therapists, speech therapists, fatigue and sleep disorders specialists, neuropsychologists, psychiatrists, pain experts and urologists.

Many of these experts will evaluate and manage patients on the same day during an **MS Multidisciplinary Symptom Management Clinic**. We may order advanced testing, such as a neuropsychology battery (which provides a detailed assessment of cognitive strengths and weakness), urodynamic testing (to better diagnose bladder issues) and visual evoked responses or optic coherence tomography (to evaluate how MS has impacted the visual system).

Specially trained neuropsychologists might initiate cognitive rehabilitation therapy, which involves teaching

coping mechanisms to help overcome challenges with memory, concentration and fatigue, as well as stress-reducing exercises. Physical therapists devise a personalized exercise regimen, which may involve water-based or aqua therapy, strengthening and stretching exercises and gait and balance training.

Our MS Multidisciplinary Symptom Management Clinic is housed at Martha Morehouse Outpatient Care pavilion and takes place on designated Fridays. Appointment length is dependent on the number of subspecialists the patient will meet, and can vary from one to three hours. The plan and referral to this clinic will be discussed at an attending physician visit or at a quality-of-life visit prior to scheduling.

We’re very excited to offer the MS Multidisciplinary Symptom Management Clinic to our patients to provide expert specialty care and convenience.