Welcome Fall!
As we usher in the season’s vibrant colors, we also are enjoying changes in our MS Center.

If you aren’t aware, we’ve moved. Holy Name’s Alfiero & Lucia Palestroni Foundation Multiple Sclerosis Center is now located in a newly renovated suite in our Neuroscience Center on the Medical Center’s lobby level. Parking is in the visitor lot or by valet, both at the front of the hospital. The MS Infusion Center remains in its original space.

Physical changes are not the only news at our MS Center. We are providing more clinical trials, expanded cognitive evaluations, and therapies and research awareness of the link between Epstein Barr virus (EBV) and MS.

EBV, which causes mononucleosis, has been shown to play a strong role in triggering MS. Up to 90 percent of adults carry EBV. Research has shown that people exposed to EBV and who became sick with mononucleosis have a 15 times higher risk of developing MS than those who did not become ill.

This statistic comes, in part, from a study published by Harvard University researchers based on 20 years of work that began in the 1990s. The study looked at over 10 million young adults on active duty in the U.S. military. Of those, 955 were diagnosed with MS. Results show that the risk of MS increased 32-fold after participants had been infected with EBV, but not after infection with other viruses.

Once infected with EBV, it remains permanently in immune cells called B lymphocytes. Patients with MS and a genetic susceptibility seem to have a decreased ability to clear these EBV infected cells and prevent them from getting into the central nervous system. The good news is therapies that target B lymphocytes, such as Ocrevus, are very effective in decreasing MS activity. There are also studies in development with anti-viral agents that can inhibit DNA replication of EBV, which may prove beneficial for patients who currently have MS. One more highlight: Moderna, which produced a COVID vaccine, is also in early trials with a vaccine against EBV. Considering the connection between EBV and MS development, an EBV vaccine may help in preventing MS.
It seems like we’ve seen the worst of the COVID-19 pandemic but it’s not over yet. If you haven’t received your vaccines and boosters, rest assured, research shows they are safe and effective for most MS patients and pose no risk of worsening the condition. The National MS Society, Dr. Picone and I endorse vaccinations.

When possible, you should get vaccinated before starting an MS disease-modifying medication. We recommend an additional dose for all MS patients on Ocrevus, Rituxan, Kesimpta, Gilenya, Mayzent, Zeposia and Ponvory. When registering, don’t ask for a “booster” dose but rather an “additional” dose. This wording matters because the Moderna vaccine offers different dosages.

Based on numerous publications as well as our own observations, which we presented at the international ECTRIMS Meeting in October 2021 and was accepted for publication in the professional peer-reviewed journal for MS physicians and scientists, “Multiple Sclerosis and Related Disorders,” most MS medications, including interferons (Avonex, Rebif, Betaseron, Plegridy), Copaxone/Glatopa, Tecfidera/Vumerity, Aubagio, Tysabri, and Mavenclad, do not impede vaccine responsiveness.

However, some other MS disease-modifying drugs do interfere. Ocrevus (and similar medications, such as Rituxan and Kesimpta) work by killing immune system cells called B-cells, which make antibodies. Thus, people without B-cells are unlikely to make antibodies against a new vaccine. In our experience, about one of five Ocrevus/Rituxan patients mounted an antibody response to the COVID vaccine.

That being said, other parts of the immune system, such as T-cells, help provide protection and can “remember” a vaccine. Recent studies revealed that MS patients treated with Ocrevus mount a similar T-cell response as those without MS, though it may take a little longer to build up this response, 14 days versus 3–5 weeks, respectively. For this reason, we recommend spacing out your vaccine and your Ocrevus infusions, and continue to recommend getting vaccinated despite a “disappointing” antibody test result.

Other medications that have had a poor response to vaccinations due to the way they work—trapping immune system cells and rendering them inoperative—are the “S1P modulators,” including Gilenya, Mayzent, Zeposia and Ponvory. Our experience shows a little less than half of patients on these medications made an antibody response to the vaccine alone (more people made antibodies following Covid infection and vaccine together), while other researchers reported even smaller response rates.

The good news is that MS patients are not at higher risk for poor outcomes and Holy Name offers eligible patients an effective preventive medication, Evusheld. It is a monoclonal injection for people unable to make a great response to the vaccines. Patients need a prescription for it.
During the past year, we conducted a study to look at the effects of a weight-based training program on bone density, cognition and quality of life in people with multiple sclerosis. Low bone density, poor cognition and depression are health risks in older adults, and especially in people with MS, due to steroid treatments and less mobility. Bone density measures the strength of bones. Weight-based training—exercising using your bodyweight instead of actual weights—is one method of strengthening bones and providing a beneficial treatment for MS patient rehabilitation.

For this study, we enrolled 24 participants (16 completed the study), who had been diagnosed with MS and could walk without an assistive device. Each performed a 6-week training cycle, which included three sessions per week, one via zoom led by a physical therapist and the other two performed independently at home with a provided video guide.

Prior to weight-training, each subject completed cognitive testing, filled out a questionnaire evaluating their quality of life, and had a DEXA scan, which measures bone density. Participants filled out cognitive testing and questionnaire evaluations twice, two weeks and eight weeks after completing the weight-training. Each subject also returned for a second bone density DEXA scan at the completion of the study.

Our results showed after the weight-based training, participants had clinically significant improved quality of life scores. There were no statistical or clinically meaningful changes in cognition and no differences in DEXA Scores between the first and second measurements, likely because more time would have been needed in the training phase to see a clinically significant difference in these areas.

In conclusion, weight-based exercises seem to improve overall quality of life and may improve bone density and cognition. Improving these factors can mitigate health risks and help those living with MS experience an improved sense of wellbeing.

We want to thank all of our patients who participated and gave their time, effort and dedication to this study. It would not have been possible without you.

Dana Jones, MSN, AGPC NP-C, CCRN
Nurse Practitioner, MS Center

WEIGHT-BASED EXERCISES IMPROVE LIFE QUALITY

ROBOTIC HELP FOR BALANCE

Many MS patients suffering with balance issues now have access to the innovative Hunova Robotic Rehabilitation System, a programmable device that objectively evaluates balance problems and provides a range of exercises to improve the condition. Holy Name is one of the few hospitals in the tri-state area that offers the robotic system. It can be used standing or sitting and offers more than 200 evaluations and exercises for postural control, balance and core stability. If you are interested in using the Hunova, please talk with your provider.

"Balance is the key to all movement and plays a critical role in our ability to successfully complete daily activities," said Dr. Mary Ann Picone. "We’re proud to offer the latest technology to best enable our patients to improve their balance and, consequently, their quality of life."

Alexandria Garcia, a patient at the MS Center, demonstrates how the Hunova device is used to help improve balance.
Pediatric onset multiple sclerosis is a relapsing remitting form of MS, with the first symptoms appearing before the age of 18. It is rare for MS to start so early—only about 3–5% of cases start in childhood. The vast majority of MS patients affected are women, in their 20s–40s.

Pediatric signs and symptoms can be the same as in older patients: attacks of optic neuritis, leading to problems with painful loss of vision; inflammation of the spinal cord, causing problems with sensation or strength, or various parts of the brain leading to incoordination, unsteadiness or double vision. Because it is so uncommon for kids to be affected, a complete workup to rule out mimickers such as infections and other autoimmune diseases, as well as confirmation of the diagnosis by a clinician familiar with pediatric onset MS is advisable. At the same time, if pediatric onset MS is suspected, it is important to act quickly to intervene before another attack.

Treatment of pediatric onset MS is similar to that in adults, with the key exception being that only one drug, Gilenya, is officially FDA approved for children 10 and older. In practice, all the drugs that are used in adults may be considered for kids. Conventionally, interferons and Copaxone had been used under the assumption that they were ‘safest’ but more recently, clinicians have been using even more highly effective agents. In fact, large multicenter studies, published on behalf of the US Network of Pediatric MS Centers, identified that the newer disease-modifying treatments (pills and infusions) are more effective than interferons and Copaxone in preventing new clinical and MRI relapses and are generally equally safe/well-tolerated in the short term (several years) in kids as they are in adults. This is very important because kids who are untreated may have very active disease—several relapses in a year, and although they seem to heal well, with low physical disability while they are young, they are at risk for cognitive impairment and attaining secondary progressive MS at a younger age than adults who are diagnosed with MS at a more typical age.

Being diagnosed with any chronic condition adds a particular challenge to childhood. In the case of MS, this may mean being responsible to consistently take a medication, or asking for accommodations at school, for example: to be allowed to sit out gym class on a hot day, or postpone an important exam while the nervous system heals from an attack. It is important to discuss these needs with your neurologist. Attending a specific camp to meet other kids who have MS may help significantly. Find more information about this and other resources for people with MS at www.nationalmssociety.org.

Mental Health Care

Look for Nala

Dr. Gautam Bhasin is a dual specialty psychologist who specializes in the evaluation (neuropsychology) and treatment (clinical psychology) of individuals who have been diagnosed with MS. He utilizes evidence-based treatment methods to address mental and emotional roadblocks that often accompany MS. For patients who suffer cognitive deficits, Dr. Bhasin also teaches restorative or compensatory strategies to help improve cognitive functioning.

As a way of providing additional mental health care, Dr. Bhasin will be introducing his 2-year-old Bernedoodle puppy (Nala) to patients in the MS and Cancer Centers. Nala is being trained specifically to work in both infusion areas to offer social connection and emotional support.
Welcome John B. Fechter, Psy.D., a skilled neuropsychologist who provides comprehensive neuropsychological assessment and care at the MS Center. Dr. Fechter also conducts psychotherapy for patients experiencing depression, anxiety, frustration, stress and anger.

“I use an empathic and collaborative approach when working with patients and always attempt to create a safe space to discuss difficult topics,” Dr. Fechter said. “During our work together, I maintain close communication with every patient’s treatment team including physicians, nurses, and social workers to provide advanced, comprehensive, compassionate care.”

When patients come in for a neuropsychological evaluation, Dr. Fechter speaks with them and possibly family members to get a full history of symptoms and disease course. He runs tests designed to measure cognitive strengths and weaknesses in thinking skills such as attention, memory and executive functioning. Based on test results, Dr. Fechter provides recommendations for learning skills to compensate for cognitive deficits and how to optimize strengths.

Dr. Fechter completed his doctoral studies at Kean University’s Nathan Weiss Graduate College, in Combined School and Clinical Psychology. He received training in neuropsychology from Kessler Institute for Rehabilitation, in West Orange, NJ and Mt. Sinai Roosevelt Hospital, in NYC. For his full biography, go to holyname.org/fechter.
NEVER GIVE UP

Denise Ficara
“Get up, dress up and never give up” is Denise Ficara’s mantra for living her life.

At 65, Denise has been living with multiple sclerosis for more than two decades, yet she continues to have hope. “One day I want MS to stand for Mystery Solved, but until then, I still live my life,” she said.

She admits she wasn’t always so optimistic. It took some time for Denise to accept her diagnosis. She had been physically active—running and biking—and commuting to her job in New York City when her left shoulder started bothering her, now more than 25 years ago. The bag she threw over her shoulder on her way to and from work was making it ache and feel weak. A doctor thought it might be MS, but initial bloodwork came back negative and she didn’t follow up with any other tests.

As her disease progressed, she ignored such symptoms as having trouble carrying a basket of laundry. Then she fell off her bike, unable to right herself when she started to tilt. She knew she needed to find out what was wrong.

An MRI confirmed what her doctor initially guessed, she had MS. Though she lives in Cranford, she was referred to the MS Center at Holy Name, where she now sees Dr. Asya Wallach, a board-certified neurologist who is fellowship-trained in multiple sclerosis.

“Dr. Wallach is wonderful,” Denise said. “She doesn’t give false hope, doesn’t say I’m going to be running next week. She tells you the truth but she’s very upbeat, knowledgeable and compassionate. She helps me live my life to the best of my ability.”

Denise’s life with her 23-year-old son—her husband died not long after she was diagnosed—is filled with laughter, love and a lot of support from family and friends. They acknowledge her disease but find ways to make sure she still does the things she loves. And Thirsty Thursdays, when four to six women friends gather for food and drink twice a month, is a staple in her routine.

Denise gets infusions of Ocrevus twice a year, which has kept the progression of the disease in check. She said the staff at Holy Name makes it easy for her to get treatment, including valet parking, and always treats her with compassion.

“I know I’m getting the best care there,” Denise said.

Still, she worries about the future at times—where she’ll be in 10 years, if she’ll be able to pay her bills. She quickly dismisses those fears, instead using her sense of humor to cope.

“A woman in the grocery store asked me why I was using my scooter,” Denise said. “I told her I’m a leg model and my agent doesn’t want me to get any marks on my legs. You have to have a sense of humor through all this. I know I have MS for a reason—I don’t know what it is yet. But you can’t stop living. You have to just get up, dress up and never give up.”
Throw a curveball at Victor Familia and he'll hit it out of the park. Every time.

He was only a freshman when he made his high school varsity baseball team and at 13, faced a life-changing diagnosis with a dignity and strength beyond his years.

After months of tests and a variety of doctors, Victor was diagnosed with Multiple Sclerosis, a potentially disabling disease of the brain and spinal cord that causes communication problems between the brain and the rest of the body. Eventually, the disease can cause permanent damage to the nerves. One in 5,000 children in U.S. have the disease.

Victor’s first symptom was barely a blip, though a strange one, on his teenage radar. He drooled a couple of times while doing his class work. He thought it odd since he didn’t even drool while sleeping but with his focus on school and baseball, he quickly forgot about it.

About a month later, Victor’s smile seemed off, “like it was falling off my face,” he said. His frantic parents rushed him to a hospital emergency department near their Jersey City home. Tests showed nothing conclusive and Victor started seeing various specialists.

One of the physicians recommended Dr. Mary Ann Picone, Medical Director of Holy Name’s Multiple Sclerosis Center. She prescribed further tests, including an MRI, which Victor had refused to undergo in a different hospital.

“At Holy Name, the MRI was open, and I was able to handle it much better,” Victor said. “And the staff made me feel more comfortable so I was able to get through it.”
Andrea Greene, LCSW, a licensed clinical social worker, provides short-term, weekly psychotherapy that focuses on mindfulness practice, curiosity and acceptance. She provides a non-judgmental space where patients can explore difficulties they are experiencing, learn skills to cultivate awareness and navigate strong emotions and relationships.

Ms. Greene sees patients in person at the MS Center or via telehealth. She has more than a decade of experience providing psychotherapy to individuals and groups. She trained at New York University.

At Holy Name, the MRI was open, and I was able to handle it much better. And the staff made me feel more comfortable so I was able to get through it.

“Dr. Picone changed my medication and since that day, I haven’t had a relapse,” he said. “It’s been five years and my life is great.”

Now 20, Victor is living the life that Dr. Picone promised. He landed an internship at Major League Baseball and is finishing up his bachelor’s degree at Rutgers University. Next, he’s eyeing an MBA in Global Sports Business.

“Dr. Picone said I would live a normal life and that has come to fruition,” he said. “The only time I remember I have MS is when I go twice a year for MRIs and monthly for treatment. I’m so blessed. I don’t look at what’s wrong with me—I look at what I can do. And there’s no limit on that.”

Congratulations to Fred Foley, PhD, Director of Neuropsychology at Holy Name, for his Giants of Multiple Sclerosis award. This award is a premier neuroscience recognition that celebrates pioneers, innovators and future generations of leaders selected by their peers for their achievements in MS. Dr. Foley (pictured below right, accepting the award) earned the recognition for his research contributions that have led to better understanding and treatments for improving mental health in people with MS.
GUT MICROBIOME 101

Debbie Bessen, MS, RD, CSO, CLT
Nutrition Outreach Manager
Human Performance

Gut health is vital to overall health.
The end goal is high quality production of postbiotics.

There are trillions of microbes (bacteria, yeast, viruses, fungi, and other tiny organisms) living inside your body. Most of these microbes live in your large intestine, also known as your gut. This population of microbes is called your gut microbiome. Most of these bacteria are harmless; some are bad and may adversely impact your health, and many are good and may boost your immune system and brain and digestive health.

There are three ingredients that impact your microbiome (the environment where microbes live, mostly the gastrointestinal tract)—prebiotics, probiotics and postbiotics. They all sound similar but play different roles in keeping the gut healthy.

**Probiotics** are live microorganisms, which, when consumed in adequate amounts, confer a health benefit. Probiotics feed on prebiotics, which can lead to a healthy microbiome, depending on the quality of the prebiotics. Probiotic-rich foods include Kombucha, Kimchi, Kefir, yogurt and unpasteurized pickled vegetables such as sauerkraut and pickles.

**Prebiotics** are the preferred food for probiotics. They are indigestible fibers found in the large intestine, fueling the growth of good bacteria and other microbes. Some examples of prebiotic food sources are ground flaxseed, chia seeds, garlic, onions, leeks, chicory, radicchio, endive, jicama, Jerusalem artichokes, artichokes, asparagus, apples, green bananas and green banana flour.

**Postbiotics** are produced when probiotics break down prebiotics. They are material left behind after probiotic bacteria consume food that is eaten. Postbiotics support your immune system, help to prevent or treat diarrhea, reduce the severity of certain allergies and symptoms associated with irritable bowel diseases, and may help with weight loss. Short-chain fatty acids, enzymes and certain vitamins are a few examples of postbiotics.

Gut health is vital to overall health. The end goal is high quality production of postbiotics. Start by consuming fiber-rich foods (prebiotic) along with fermented foods (probiotic) to maximize the quality of your postbiotic.

CHANGES TO OUR MS CENTER  
Continued from page 1

At the same time, we are participating in clinical trials with a new class of drugs called BTKi inhibitors, which may be more effective than current therapies in stimulating remyelination. The future is hopeful.

We’ve also expanded our Neuropsychological program to offer more cognitive evaluations and cognitive therapy. We have Dr. Pritesh Shah, Chief of Psychiatry, who sees patients at the MS Center and Andrea Greene, a wonderful social worker who also provides counseling.

As always, all of us at the Holy Name MS Center are here for you. Stay positive. Stay active and let us know how we can better assist you.
BOOK FEATURES
MS PHYSICIANS

Dr. Mary Ann Picone and Dr. Asya Wallach provided important contributions to the recently published book, “Foot and Ankle Management.” Dr. Picone was one of the editors while Dr. Wallach wrote a chapter. This multidisciplinary approach to foot and ankle pain issues is an ideal resource for clinicians treating patients with neuropathy and other pain conditions involving the feet and musculoskeletal problems that may worsen their walking patterns.

MS FASHION SHOW 2023

Sunday, April 30, 2023  •  11:30 am
Tickets: $125 per person
Location: Glenpointe Marriott
100 Frank W Burr Boulevard, Teaneck, NJ 07666

Please join the Holy Name Foundation for the annual MS Fashion Show to benefit The Alfiero & Lucia Palestroni Foundation Multiple Sclerosis Center. The afternoon event includes the fashion show, luncheon and auction. Proceeds will benefit the MS Center's patient care and research programs.

For more information or sponsorship and ad journal pricing, please call Lisa Futterman at the Foundation, 201-833-3000 ext. 3899, email lfutterman@holynamne.org or visit holyname.org/Foundation.

BEST OF LUCK, MARIE!

Congratulations to Marie McGee on her retirement! We wish Marie the best of luck in her new endeavors. Marie was the Patient Financial Navigator in the MS Center and worked diligently for years assisting patients and their families with insurance negotiations and other financial conflict resolution situations. She was frequently praised by co-workers and patients for her work ethic and achievements while remaining calm and effective in stressful situations.

LUNCH AND LEARN

If you haven't participated in the MS Center’s virtual Lunch and Learn Series, please join us for our monthly interactive events. Dana Jones, an experienced nurse practitioner who specializes in MS care, hosts the series. The sessions focus on topics of interest related to living with MS and often include guest speakers. The events are open to anyone impacted by MS and their loved ones.

Events are typically held one Thursday per month, from noon to 1 p.m. Registration is required, look for your email from the MS Center, which will include dates and registration information.

ENROLLING IN A HUB PROGRAM

Juliana Avalo
Administrative Director, MS Center

Before starting an MS medication, your provider will discuss the drug at length. Part of this discussion will include having you sign a form that is sent to the pharmaceutical company hub. A hub, set up by the manufacturer, enables patients to have a singular point of contact for an array of services. You will then receive a welcome call from the hub, which signifies you are in their system and eligible for their services. These services may include financial assistance, access to nurse educators, injection training, free drug support and insurance counseling. We consider these hub services an extension to our MS Center and work hand-in-hand with them to ensure you are able to obtain and continue the medication for your MS treatment.
Your support helps us to continue providing compassionate, comprehensive care that includes accurate diagnostics and emerging therapies to patients of all ages living with multiple sclerosis. Contributions also enable The Alfiero & Lucia Palestroni Foundation MS Center to attract top medical talent, equip them with the most advanced technology, and help fund clinical trials.

To make a gift to the MS Center please
Visit: holyname.org/Foundation
Send: Holy Name Medical Center Foundation
718 Teaneck Road
Teaneck, NJ 07666
Contact: foundation@holyname.org
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THANK YOU FOR YOUR SUPPORT!