

## NEW PILOT RESEARCH PROJECTS BEGINNING MARCH 1, 2019

- “Acute Physiological Responses To Low-Load Resistance Exercise With Blood Flow Restriction Compared To Traditional High-Load Resistance Exercise in Multiple Sclerosis Patients”  
A team in Oklahoma is testing a modified weight training program for clues to increasing physical function and improving quality of life in people with MS.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$53,547  
**Project Leader: Michael Bemben, PhD**  
University of Oklahoma, Norman, OK
- “Prophylactic and Therapeutic Effects of Liproxstatin-1 in EAE”  
Investigators at the University of New Mexico are looking to inhibit a specific type of cell death in mice with MS-like disease, for clues to developing a strategy that might minimize damage and improve function in MS.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$55,000  
**Project Leader: Oscar Bizzozero, PhD**  
University of New Mexico, Albuquerque, NM
- “Describing Demyelinating Disease in Zambia”  
Researchers at Johns Hopkins are working with healthcare providers in sub-Saharan Africa to improve diagnosis and tracking of MS, for clues to factors that lead to development of this disease worldwide.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$54,612  
**Project Leader: Deanna Saylor, MD**  
Johns Hopkins University School of Medicine, Baltimore, MD
- “Interval vs. continuous walking training for people with multiple sclerosis: a comparison of effectiveness”  
Rutgers researchers are testing whether providing rest intervals throughout walking rehabilitation efforts improves their effectiveness.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$52,100  
**Project Leader: Evan Cohen, PhD**  
Rutgers, The State University of New Jersey, New Brunswick, NJ

- “Immunologic Effects of Prebiotics (Fermentable Dietary Fiber) as Compared to Probiotics in Multiple Sclerosis”  
New York researchers are testing two strategies for altering the gut microbiome in people with MS, in an effort to stop MS in its tracks.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$55,000  
**Project Leader:** **Rebecca Straus Farber, MD**  
Columbia University, New York, NY
- “Tai Chi and Mindfulness Training to Improve Postural Control and Quality of Life in People with Multiple Sclerosis: A Community-Based Intervention Study”  
UMass researchers are testing Tai Chi and Mindfulness Meditation training for their ability to improve balance in people with MS.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$54,973  
**Project Leader:** **Richard Van Emmerik, PhD**  
University of Massachusetts, Amherst, MA
- “Does melatonin improve insomnia in patients with MS?”  
Researchers at UCSF are testing whether sleep problems improve in people with MS with the use of melatonin.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$55,000  
**Project Leader:** **Riley Bove, MD**  
University of California, San Francisco, San Francisco, CA
- “Virtual Reality Pain Management: A Nonpharmacological Tool to Manage Pain in MS”  
NYU researchers are testing whether virtual reality techniques can reduce pain in people with MS.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$54,403  
**Project Leader:** **Leigh Charvet, PhD**  
New York University Langone Medical Center, New York, NY



RESEARCH  
BREAKTHROUGHS

- “Novel Neuroimaging Techniques for the Differentiation of Acute and Chronic MS Lesions Without Gadolinium: T1-Rho and Quantitative Susceptibility Mapping”  
A New York team is exploring a possible alternative to using the tracing agent gadolinium in MRI scans, which can accumulate in the brain over time.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$55,000  
**Project Leader:** **Asaff Harel, MD**  
The Feinstein Institute for Medical Research, New York, NY
- “The role of memory B-cells in multiple sclerosis pathology and disease monitoring”  
A team at UMass is investigating a specific subset of immune cells that may characterize highly inflammatory disease activity in people with MS.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$52,930  
**Project Leader:** **Christopher Hemond, MD**  
Univ. of Massachusetts, Worcester, MA
- “How do 8,9-unsaturated sterols promote oligodendrocyte formation and remyelination?”  
Case Western scientists are exploring how cholesterol-like molecules may act to promote myelin repair, for clues to targeting these molecules in MS repair strategies.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$55,000  
**Project Leader:** **Drew Adams, PhD**  
Case Western Reserve University, Cleveland, OH
- “Smoking and CNS Autoimmunity”  
Toronto researchers are using a model of MS to unravel the biology of the effects of smoking on MS.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$49,871  
**Project Leader:** **Shannon Dunn, PhD**  
Univ. Health Network, Toronto, Ontario, Canada
- “VAMP2mediated exocytosis in NG2 cells is needed for myelination”  
A University of Connecticut team is exploring whether immature myelin-making cells secrete molecules that are important for the formation of myelin, for clues to repair strategies for MS.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$55,000  
**Project Leader:** **Akiko Nishiyama, MD, PhD**  
University of Connecticut, Storrs Mansfield, CT



- “Myelinophagy under normal and demyelinating conditions”  
Researchers in Greece are investigating whether a molecular process that helps cells to regenerate can protect nerve-insulating myelin from damage in MS.  
**Term:** 3/1/2019 - 2/29/2020  
**Grant Amount:** \$50,000  
**Project Leader:** Maria Savvaki, PhD  
Foundation for Research and Technology- Hellas, Heraklion, Greece