

## NEW PILOT RESEARCH PROJECTS BEGINNING OCTOBER 1, 2018

- “Developing selective TNF-TNFR2 binding stabilizers to promote remyelination and repair in multiple sclerosis”  
Testing molecules that may be candidates for promoting neuroprotection and myelin repair in MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$55,000  
**Project Leader: Roberta Brambilla, PhD**  
University of Miami, Miami, FL
- “Anti-inflammatory endocannabinoids as potential MS therapeutics”  
Exploring a strategy for stopping the immune attack using a naturally occurring molecule similar to cannabis.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$55,000  
**Project Leader: Aditi Das, PhD**  
Univ. of Illinois at Urbana-Champaign, Champaign, IL
- “Impaired regulation of skeletal muscle blood flow during exercise in people with multiple sclerosis exhibiting autonomic cardiovascular dysfunction”  
To determine whether reduced muscle blood flow is a potential cause of lower exercise capacity in people with MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$54,844  
**Project Leader: Frank Dinunno, PhD**  
Colorado State University, Fort Collins, CO
- “A novel human CD3+CD56+ regulatory subset: potential involvement in the pathogenesis of Multiple Sclerosis.”  
Studying a previously unexplored T cell population with regulatory properties and its involvement in the development of MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$50,000  
**Project Leader: Mario Galgani, PhD**  
Consiglio Nazionale delle Ricerche - CNR, Napoli, Italy
- “Abdominal Functional Electrical Stimulation to improve bowel function in Multiple Sclerosis”  
Investigating the effectiveness of a strategy to improve the bowel function of people with MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$ 44,129  
**Project Leader: Simon Gandevia, MD, PhD**  
Neuroscience Research Australia, Sydney, Australia



RESEARCH  
BREAKTHROUGHS

- “Sex differences in neurodegeneration in CIS and early stage MS”  
Seeking to understand the basic mechanisms of MS and how they might differ between men and women.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$48,107  
**Project Leader:** **Stefan Gold, PhD**  
Charité - Universitätsmedizin Berlin, Berlin, Germany
- “Development of a machine-learning algorithm for automated cortical lesion identification in multiple sclerosis”  
Developing automated methods for evaluating tissue damage in people with MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$54,155  
**Project Leader:** **Daniel Harrison, MD**  
University of Maryland, Baltimore, Baltimore, MD
- “Reducing depression and anxiety in individuals with MS and their carepartners: An emotion regulation skills training intervention”  
Testing the efficacy of a unique group-based therapy for improving emotion regulation in people with MS and their carepartners.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$54,973  
**Project Leader:** **Abbey Hughes, PhD**  
Johns Hopkins University, Baltimore, MD
- “The Role of CD157+ Cells in Acute and Progressive MS”  
Studying immunological mechanisms that contribute to disease progression and to exploring their therapeutic potential for MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$50,000  
**Project Leader:** **Lior Mayo, PhD**  
Tel Aviv University, Tel Aviv, Israel
- “Overcoming the inhibitory lesion environment in multiple sclerosis: Targeting fibrin-induced neuroinflammation to promote remyelination.”  
Determining if fibrinogen’s inhibitory effects on myelin repair can be overcome as a new strategy to promote regeneration in the nervous system.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$50,000  
**Project Leader:** **Mark Petersen, MD**  
University of California, San Francisco, San Francisco, CA

- “Role of mechanotransducers YAP and TAZ in central nervous system myelin”  
Investigating a possible reason why new myelin fails to wrap around nerve fibers in MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$55,000  
**Project Leader:** Yannick Poitelon, PhD  
Albany Medical College, Albany, NY
- “Effects of central demyelination on properties of bladder innervating neurons and bladder function”  
Understanding the underlying changes in the bladder and bladder circuitry that can cause bladder symptoms in people with MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$55,000  
**Project Leader:** David Schulz, PhD  
University of Missouri-Columbia, Columbia, MO
- “Character Strengths as Buffers against the Negative Effects of Multiple Sclerosis”  
Determining if specific character strengths protect people with MS from reductions in symptoms and quality of life.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$54,950  
**Project Leader:** Susan Smedema, PhD  
University of Wisconsin-Madison, Madison, WI
- “Identification of pro-remyelinating factors in remyelinating multiple sclerosis lesions”  
Determining how cell communication in areas of myelin damage may be especially important for efficient myelin repair.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$48,000  
**Project Leader:** Christine Stadelmann, MD  
University Medical Center Goettingen, Goettingen, Germany
- “The influence of mitochondria-modulating drugs on metabolic processes relative to multiple sclerosis”  
Studying high dose biotin therapy and pioglitazone in models of progressive MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$55,000  
**Project Leader:** Hao Zhu, PhD  
University of Kansas Medical Center, Kansas City, KS

- “Genomic variants associated with DMF induced lymphopenia in MS [GenDMF-MS]”  
Seeking to predict and ultimately prevent adverse drug reactions in people with MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$46,339  
**Project Leader:** **Helen Tremlett, PhD**  
University of British Columbia, Vancouver, British Columbia, Canada
- “Simulation And Optimization Post-Processing Methods To Identify MS Subpial Lesions Using 7t MR Imaging”  
Developing an optimal method to image cortical lesions in MS using strong MRI technology and eventually translate this into better clinical care.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$55,000  
**Project Leader:** **Daniel Pelletier, MD**  
University of Southern California, Los Angeles, CA
- “Outcome Processing in Social Interactions in Individuals with Multiple Sclerosis: An Investigation using Pupillometry”  
Examining cognitive impediments that might prevent some individuals with MS from selecting the optimal behavior and from adapting to social environments.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$48,880  
**Project Leader:** **Ekaterina Dobryakova, PhD**  
Kessler Foundation Research Center, West Orange, NJ
- “Developing measures of sexual function and satisfaction with sex life for persons with Multiple Sclerosis”  
Improving questionnaires about sexual function so that they include relevant aspects of sexual function for people with MS.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$55,000  
**Project Leader:** **Dagmar Amtmann, PhD**  
University of Washington, Seattle, WA
- “Role of Lymphatic Vasculature in the development of Multiple Sclerosis”  
Examining how immune cells enter the brain and spinal cord during MS-like disease in mice.  
**Term:** 10/1/2018 - 9/30/2019  
**Grant Amount:** \$50,000  
**Project Leader:** **Andres Herrada, PhD**  
Universidad Autónoma de Chile, Temuco, Chile