



National  
Multiple Sclerosis  
Society

## **List of Current Research Projects Funded by the National MS Society**

Sorted by Topic/Research Priorities

April 2018

**Advocacy, Services and Research Department  
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## **Introduction**

The National MS Society invests in promising research to drive breakthroughs that will stop MS, restore function and end MS forever. We manage an international portfolio of academic and commercial research projects, train the next generation of scientists and MS specialists, foster global collaboration between MS researchers, and convene experts to identify strategic [research priorities](#). These priorities are critical to advancing solutions for people living with MS today, and ultimately to a prevention and cure.

This document lists all current MS research projects being funded by the National Multiple Sclerosis Society as of January 2018. **Notes:** 1) Some listed projects have indications of restricted support that has been provided by donors and other friends of the Society. These are listed in italic typeface directly beneath the project title. 2) This list is not an official record and any errors do not reflect official changes to research award agreements.

## **Research Priorities**

This list is sorted by topic – specifically, by the Society’s strategic research priorities. Additional details are [available here](#).

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### **Risk Factors: “Why do some people get MS and others don’t?”**

Although tremendous progress has been made in identifying key biological pathways that contribute to MS risk, the cause is still unknown. Preventing MS for future generations requires a deep understanding of what triggers MS, how triggers lead to the development of the disease, and how to protect against it.

### **Pathology: “What is the cause of MS?”**

Much has been learned about immune system activity in the relapsing-remitting phase of MS and this knowledge has led to the development of effective disease-modifying therapies. Less understood is the relationship between initial immune activity and progressive neurodegeneration and how innate immunity participates in the progressive phase of MS. Identifying the causes of MS, and the underlying mechanisms and biological pathways involved in MS injury to the brain and spinal cord, will expose new targets for the development of treatments to stop the damage that causes disability.

### **Progression: “How do we stop MS progression?”**

MS progression often occurs early in the disease, even while the brain compensates for injury and even in people successfully treated for relapses. Progression is not easily measured and usually happens over long periods of time, making it hard to quickly detect whether a therapy is impacting the course of disease. This

has made the development of therapies for progressive stages of MS a challenge. Diagnosing progressive disease based on biomarkers, in addition to clinical presentation would enable the testing of therapies earlier, promising better ways of protecting the nervous system from MS injury.

### **Neuroprotection/Nervous System Repair: “How do we repair the damage caused by MS?”**

The hopes of people living with MS today rest on finding a way to stop disease worsening by preventing neurodegeneration and reversing the damage to restore lost function. The brain can repair myelin and also rewire itself around damaged areas, but in order to significantly impact disease, this natural ability needs to be enhanced. In addition to developing treatment strategies, there is a crucial need for non-invasive ways to determine quickly whether neuroprotective and repair strategies are working.

### **Symptoms, Rehabilitation, Wellness: “How do we reverse symptoms and promote wellness?”**

Emerging evidence suggests that wellness behaviors and lifestyle factors can influence the risk for developing MS, disease course, severity of symptoms and quality of life. Finding ways to understand and address the variable and unpredictable symptoms caused by MS will have a profound impact on people’s quality of life. In addition, people with MS often live with other chronic medical conditions. Understanding how these other health conditions affect MS disease course and symptoms represents an important research opportunity. Focusing on opportunities to improve the design and conduct of clinical trials and providing strategies people can incorporate to enhance their wellbeing should be emphasized.

### **Research Awards**

The Society offers a spectrum of funding opportunities and resources to support MS investigators at virtually every stage of their careers. The type of award is indicated for each project in the list:

- **Career Transition Fellowships** – awards up to five years to facilitate the advancement of promising young investigators into full faculty positions
- **Collaborative MS Research Center Awards** – 5-year awards to help stimulate creativity and interaction among investigators working within and outside MS fields
- **Fast Forward Commercial/Drug Development** – Commercial or academic partnerships aimed at specific strategies to drive the discovery of new therapies for people with MS
- **Harry Weaver Neuroscience Scholarships** – special five-year projects by promising young investigators just starting their careers as independent researchers
- **Health Care Delivery & Policy Contracts** – initiated by the Society and awarded on a competitive basis to investigators studying subjects identified as mission priorities
- **International Progressive MS Alliance** – projects jointly funded by Alliance members; [Read more](#)
- **Mentor-based Postdoctoral Rehabilitation Fellowships** – to enhance research into MS rehabilitation to improve quality of life
- **NMSS/American Brain Foundation Clinician Scientist Development Award** -- to train physicians in MS clinical research
- **Pilot Research Grants** – aimed at exploring new, untested ideas
- **Postdoctoral Fellowships** – research projects by young investigators working under the mentorship of senior scientists, to provide training in MS research
- **Research Grants** – full grants for basic, clinical and rehabilitation research
- **Strategic Initiatives** – special projects that focus on core resources or other important unmet research needs
- **Sylvia Lawry Physician Fellowships** – young doctors working under the mentorship of seasoned clinicians, to provide training and experience in conducting clinical trials in people with MS

## About 'Categories'

This list includes the category, or research discipline, within which a specific project belongs.

- **Biochem./Biophysics** - Understanding basic cell processes to enhance knowledge of factors underlying MS
- **Biology of Glia/Myelin** - Investigating how myelin is formed and the role played by oligodendrocytes and other nervous system support cells in MS
- **CNS Repair** - Searching for ways to stop and reverse tissue damage in MS
- **Diagnostic Methods** - Investigating ways to improve the detection and diagnosis of MS
- **Epidemiology** - Investigating who gets MS in search of the cause and risk/ protective factors
- **Health Care Delivery/ Policy** - Studying how people with MS utilize health-care services and how health-care delivery can be improved
- **Human Genetics** - Searching for genes that make people susceptible to MS or otherwise influence the disease, for clues to its cause, prevention and better treatment
- **Human Therapy Trials/Management of MS** - Investigations into treatments for all forms of MS, and training physicians in MS clinical research and trials
- **Immunology** - Exploring the role of the immune system in the development and progression of MS to find ways to stop the immune attack on nervous tissues
- **Infectious Triggers** - Examining the possibility that viruses or bacteria could act as disease triggers in MS
- **Measuring MS Disease Activity** - Using sophisticated tools to track MS activity over time
- **Neuropathology** - Exploring how nerve fibers and cells are damaged during the course of MS
- **Neuropharmacology** - Studying how potential therapies impact the nervous system
- **Neurophysiology** - Exploring how nerve fibers and cells work normally and in the disease state
- **Physiology** - Understanding how MS may impact functions of the body
- **Preclinical Drug Development** - Laboratory research to collect data needed before an experimental therapy can be tested in people
- **Psychosocial Aspects of MS** - Understanding how MS effects cognitive functioning and other aspects of quality of life and wellness
- **Rehabilitation** - Seeking ways to maximize physical and mental abilities and reduce symptoms and increase wellbeing
- **Tissue/DNA Banks** - Shared resource of tissues and DNA banks that accumulate and store specimens for use by MS investigators

TBD = to be determined

## RISK FACTORS - "WHY DO SOME PEOPLE GET MS AND OTHERS DON'T?"

### Lilyana Amezcua, MD

University of Southern California  
Los Angeles, California  
Award: Research Grants

Research Priority: Risk Factors

#### **"Acculturation, genetic ancestry, and disability in Hispanic Americans with multiple sclerosis"**

Researchers at University of Southern California are spearheading a study to understand socio-cultural factors that impact MS in Hispanics and to provide solutions to prevent disease worsening.

Category: Epidemiology  
Strategic Area: Stop  
Funding: \$685,703  
Term: 4/1/2016-3/31/2020

### Sergio Baranzini, PhD

University of California, San Francisco  
San Francisco, California  
Award: Collaborative Research Center Awards

Research Priority: Risk Factors

**"The MS Microbiome Consortium (MSMC): an academic multi-disciplinary collaborative effort to elucidate the role of the gut microbiota in MS"** With this support to the MS Microbiome Consortium, a multi-center team is conducting a comprehensive analysis of gut bacteria in people with MS to determine factors that may drive progression and help to develop probiotic strategies for stopping progression.  
*2014 Stephen C. Reingold Research Award for most outstanding research proposal*

Category: Immunology  
Strategic Area: End  
Funding: \$800,898  
Term: 4/1/2015-3/31/2020

### Farren Briggs, PhD

Case Western Reserve University  
Cleveland, Ohio  
Award: Pilot Research Grants

Research Priority: Risk Factors

**"Quantifying the genetic burden of multiple sclerosis age of onset."** Exploring how genetic risk factors may be related to age at onset of MS.

Category: Epidemiology  
Strategic Area: End  
Funding: \$44,000  
Term: 9/1/2017-8/31/2018

### Kathleen Burns, MD, PhD

Johns Hopkins University  
Baltimore, Maryland  
Award: Pilot Research Grants

Research Priority: Risk Factors

**"Molecular basis of MS risk at the CD58 locus"** Determining the significance of a sequence of genetic material inherited by people with MS.

Category: Human Genetics  
Strategic Area: End  
Funding: \$44,000  
Term: 9/1/2017-8/31/2018

### Kathryn Fitzgerald, DSc

Johns Hopkins University  
Baltimore, Maryland  
Award: Postdoctoral Fellowships

Research Priority: Risk Factors

**"Integrative Analysis of Multiple Sclerosis Risk and Progression"** Researchers at Johns Hopkins are conducting studies characterizing how vitamin D protects individuals from getting MS and looking at genetic predictors of changes and progression in MS using measures of the eye.

Category: Epidemiology  
Strategic Area: End  
Funding: \$187,527  
Term: 7/1/2016-6/30/2019

**Stephen Francis, MS, PhD**

University of Nevada, Reno  
Reno, Nevada

Award: Pilot Research Grants

Research Priority: Risk Factors

**“A polymorphic SVA element at the HLA-DRB1 locus as a driver of genetic risk in MS”** Studying a specific genetic feature that may confer susceptibility to MS.

Category: Epidemiology

Strategic Area: End

Funding: \$43,628

Term: 9/1/2017-8/31/2018

**David Hafler, MD**

Yale University

New Haven, Connecticut

Award: Collaborative Research Center Awards

Research Priority: Risk Factors

**“Collaborative MS Research Center Award: Systematic Genome Editing of the Risk Variants in Multiple Sclerosis”** Researchers at Yale, Harvard, and two University of California institutions have teamed up to apply highly advanced technology to manipulate MS risk genes to tease out the exact pathways by which MS develops.

Category: Human Genetics

Strategic Area: End

Funding: \$825,000

Term: 4/1/2015-3/31/2020

**Marc Horwitz, PhD**

University of British Columbia

Vancouver, BC, Canada

Award: Pilot Research Grants

Research Priority: Risk Factors

**“A pre-clinical model for studying the role of EBV in MS”** Investigators from the University of British Columbia are testing whether Epstein Barr Virus specifically acts as an important factor in MS.

Category: Immunology

Strategic Area: Stop

Funding: \$44,000

Term: 11/1/2017-10/31/2018

**Amy Lovett-Racke, PhD**

Ohio State University

Columbus, Ohio

Award: Research Grants

Research Priority: Risk Factors

**“Neuroprotective Role of Vitamin D During Childhood”** Researchers at The Ohio State University are seeking to determine if low vitamin D in early life increases the risk of developing MS.

Category: Neurophysiology

Strategic Area: Stop

Funding: \$273,122

Term: 4/1/2016-3/31/2019

**Amir-Hadi Maghzi, MD**

Brigham and Women's Hospital

Boston, Massachusetts

Award: Clinician Scientist Award

Research Priority: Risk factors

**“Investigation of the microbiome in multiple sclerosis and its relationship to immunologic and clinical features of disease”** Investigators at Brigham and Women’s Hospital are researching the microbiome in MS and its relationship to immune activity and clinical features of disease.

Category: Immunology

Strategic Area: Stop

Funding: \$206,246-PENDING

Term: 7/1/2018-6/30/2021

**Jorge Oksenberg, PhD**

University of California, San Francisco

San Francisco, California

Award: Research Grants

Research Priority: Risk factors

**“Establishment of a core DNA repository for multiple sclerosis”** Researchers at the University of California, San Francisco are maintaining and enhancing a blood/biospecimen bank as a shared resource to identify genetic variants and other factors that contribute to the risk and heritability of MS.

Category: Tissue/DNA Banks

Strategic Area: End

Funding: \$595,690-PENDING

Term: 4/1/2018-3/31/2020

**Nikos Patsopoulos, MD, PhD**

Brigham and Women's Hospital

Boston, Massachusetts

Award: Research Grants

Research Priority: Risk factors

**“Sex specific genetics of multiple sclerosis”** Researchers at Brigham and Women's Hospital are analyzing large sets of genetic data to identify genes that explain why women are more susceptible to MS than men.

*Funded in part by the Al Otaiba Family*

Category: Human Genetics

Strategic Area: End

Funding: \$599,277-PENDING

Term: 4/1/2018-3/31/2021

**David Pitt, MD**

Yale University

New Haven, Connecticut

Award: Research Grants

Research Priority: Risk Factors

**“NF- $\kappa$ B-related MS risk variants drive excessive activation of astrocytes in multiple sclerosis”**

Researchers at Yale University are exploring a novel pathway by which newly discovered genetic variants in people with MS may promote changes that result in inflammatory damage, for clues to stopping and ending MS.

Category: Biology of Glia

Strategic Area: End

Funding: \$311,752

Term: 4/1/2017-3/31/2019

**Anne-Katrin Pröbstel, MD**

University of California, San Francisco

San Francisco, California

Award: Postdoctoral Fellowships

Research Priority: Risk factors

**“Gut-Brain-Axis: Dissecting the crosstalk between B cells and the gut microbiota in multiple sclerosis”**

Researchers at the University of California, San Francisco are identifying harmful gut bacteria in people with MS and testing their role in disease triggering and progression.

Category: Immunology

Strategic Area: Stop

Funding: \$201,197-PENDING

Term: 7/1/2018-6/30/2021

**Brent Richards, MD**

Jewish General Hospital

Montreal, QC, Canada

Award: Research Grants

Research Priority: Risk Factors

**“The effect of obesity and EBV on the risk of MS: A Mendelian Randomization Analysis”**

Researchers from Jewish General Hospital in Montreal are using advanced genetic tools to better understand the extent to which obesity and Epstein-Barr virus are associated with increased MS risk or MS progression.

Category: Epidemiology

Strategic Area: End

Funding: \$64,000

Term: 10/1/2016-9/30/2018

**Stephanie Tankou, MD, PhD**

Brigham and Women's Hospital

Boston, Massachusetts

Award: NMSS-ABF Clinician Scientist Award

Research Priority: Risk Factors

**“Investigation of the role of elevated archaea species in the microbiome of patients with MS.”**

Researchers at The Brigham and Women's Hospital are studying the relationship between a specific type of gut microbe and immune function and disease severity in people with MS.

*Funded in part by a gift from a generous donor*

Category: Immunology

Strategic Area: Stop

Funding: \$191,042

Term: 7/1/2015-6/30/2018

**Emmanuelle Waubant, MD, PhD**  
University of California, San Francisco  
San Francisco, California  
Award: Research Grants  
Research Priority: Risk Factors

Category: Epidemiology  
Strategic Area: Stop  
Funding: \$1,192,799  
Term: 10/1/2017-9/30/2020

**“Diet and relapse risk in pediatric multiple sclerosis (MS)”** Investigators at University of California, San Francisco are leading the Network of Pediatric MS Centers in a study of how kids’ diets impact MS relapses and progression.

**Howard Weiner, MD**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Research Grants  
Research Priority: Risk factors

Category: Immunology  
Strategic Area: Stop  
Funding: \$551,752-PENDING  
Term: 4/1/2018-3/31/2021

**“The role of fecal microRNAs in CNS autoimmune inflammatory disease”** Researchers at Harvard Medical School are investigating a type of molecule called microRNA that is found in the gut and that may someday be a treatment for MS.

**Li Wen, MD, PhD**  
Yale University School of Medicine  
New Haven, Connecticut  
Award: Pilot Research Grants  
Research Priority: Risk Factors

Category: Immunology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 11/1/2017-10/31/2018

**“The role of IgA-bound gut bacteria in MS”** Investigators are identifying which gut bacteria can stimulate the immune system and possibly promote the development of MS.

## **PATHOLOGY - “WHAT IS THE CAUSE OF MS?”**

**Martina Absinta, MD**  
National Institutes of Health  
Bethesda, Maryland  
Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$191,042  
Term: 1/1/2016-12/31/2018

**“Chronic Inflammation and Remyelination Failure in MS Lesions: in vivo and Postmortem Investigation of Chronic Lesions with Phase Rims”** Researchers at the National Institutes of Health in Bethesda are using an advanced type of MRI to examine lesions with subtle inflammation in the brains of people with MS to better understand how inflammation affects myelin repair.

**Robert Axtell, PhD**  
Oklahoma Medical Research Foundation  
Oklahoma City, Oklahoma  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$422,400  
Term: 10/1/2016-9/30/2018

**“Role of B-cells in TH17 induced Neuro-inflammation”** Researchers from Oklahoma Medical Research Foundation are investigating an immune modulating treatment for possible clues to stopping MS progression.



**Clare Baecher-Allan, PhD**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$593,988  
Term: 4/1/2016-3/31/2019

**“Extracellular Granzyme B mediated regulation of Treg function and immune responses in MS”**

Researchers at Brigham and Women’s Hospital are studying ways to restore regulation of immune system activity as a promising approach to developing better MS therapies.

**Erin Beck, MD, PhD**  
National Institute of Neurological Disorders and Stroke  
Bethesda, Maryland  
Award: NMSS-ABF Clinician Scientist Development  
Award  
Research Priority: Pathology

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$194,394  
Term: 7/1/2016-6/30/2019

**“Characterization of the pathophysiology, dynamics, and clinical implications of cortical demyelination in MS”** Researchers at the National Institute of Neurological Disorders and Stroke are improving magnetic resonance imaging to allow better monitoring of disease progression in people with MS.

**Ralph Benedict, PhD**  
The State University of New York at Buffalo  
Buffalo, New York  
Award: Research Grants  
Research Priority: Pathology

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$1063,919  
Term: 4/1/2015-5/31/2020

**“The Role of Cognitive Dysfunction in Defining MS Relapses and Freedom from Disease Activity”**

Researchers at the State University of New York at Buffalo are investigating the importance of cognitive problems in MS relapses to more precisely define disease activity during relapses and the absence of disease activity during periods of remission.

**Estelle Bettelli, PhD**  
Benaroya Research Institute  
Seattle, Washington  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$497,819  
Term: 10/1/2017-9/30/2020

**“Cell type specific modulation of STAT1 signaling to prevent the development of CNS autoimmunity”** Researchers at the Benaroya Research Institute in Seattle are studying a signaling pathway with the goal of improving protecting the nervous system from MS damage.

**Oscar Bizzozero, PhD**  
University of New Mexico  
Albuquerque, New Mexico  
Award: Pilot Research Grants  
Research Priority: Pathology

Category: Biochem./Biophysics  
Strategic Area: Stop  
Funding: \$44,000  
Term: 6/1/2017-5/31/2018

**“Identification of miRNAs that downregulate Nrf2 signaling in EAE”** Investigating how failure to launch an antioxidant response may contribute to MS damage, and thus may be a target for preventing damage in MS.

**Alexander Boyden, PhD**

The University of Iowa

Iowa City, Iowa

Award: Postdoctoral Fellowships

Research Priority: Pathology

Category: Immunology

Strategic Area: Stop

Funding: \$161,218

Term: 7/1/2015-6/30/2018

**“The role of CD8+ regulatory T cells in modulating B cell function during EAE”** Researchers at the University of Iowa are investigating the influence of two types of immune cells on each other to better understand and treat MS.

**Claudia Cantoni, PhD**

Washington University School of Medicine-M

Saint Louis, Missouri

Award: Postdoctoral Fellowships

Research Priority: Pathology

Category: Immunology

Strategic Area: Stop

Funding: \$172,444

Term: 7/1/2015-6/30/2018

**“Role of miR-223 in multiple sclerosis and its animal model”** Researchers at Washington University in St. Louis are examining the role of a molecule that may play a role in regulating immune attacks in MS.

**Myriam Chaumeil, PhD**

University of California, San Francisco

San Francisco, California

Award: Research Grants

Research Priority: Pathology

Category: Diagnostic Methods

Strategic Area: Stop

Funding: \$566,618

Term: 10/1/2017-9/30/2021

**“MR metabolic imaging of Multiple Sclerosis”** Researchers at the University of California, San Francisco are developing an imaging method to assess inflammation in the brain to develop new approaches to stopping MS.

**John Chen, MD, PhD**

Massachusetts General Hospital

Boston, Massachusetts

Award: Research Grants

Research Priority: Pathology

Category: Measuring MS Disease Activity

Strategic Area: Stop

Funding: \$591,389

Term: 4/1/2016-3/31/2019

**“Myeloperoxidase in multiple sclerosis”** Researchers at Harvard are using MRI to track a harmful inflammatory molecule called MPO as a possible biomarker of disease activity, and devising ways to block its effects as a potential treatment for MS.

**Youhai Chen, MD, PhD**

University of Pennsylvania

Philadelphia, Pennsylvania

Award: Research Grants

Research Priority: Pathology

Category: Immunology

Strategic Area: Stop

Funding: \$664,366

Term: 9/30/2016-9/30/2018

**“Multiple Sclerosis and the Transcription Factor c-Rel”** Researchers from the University of Pennsylvania are testing whether compounds that block a key molecule in the MS immune attack are effective in blocking disease activity in cells obtained from people with MS.

**Hongbo Chi, PhD**

St. Jude Children's Research Hospital  
Memphis, Tennessee  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$660,000  
Term: 4/1/2017-3/31/2020

**“Metabolic control of TH17 cell plasticity and pathogenicity in neuroinflammation”** Researchers at St. Jude Children's Research Hospital in Memphis, TN, are studying a novel immune pathway that may help to protect mice from developing MS-like disease, for clues to stopping the attack in MS.

**Ben Clarkson, PhD**

Mayo Clinic Rochester  
Rochester, Minnesota  
Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$184,654  
Term: 7/1/2017-6/30/2020

**“Role of ISGylation in MS Synaptopathy”** Researchers at the Mayo Clinic are investigating a process called “ISGylation” that may play a role in the cognitive problems experienced by many people with MS.

**John Corboy, MD**

University of Colorado Denver  
Denver, Colorado  
Award: Research Grants  
Research Priority: Pathology

Category: Tissue/DNA Banks  
Strategic Area: End  
Funding: \$1,026,944  
Term: 10/1/2013-9/30/2018

**“Rocky Mountain MS Center Tissue Bank”** Developing and maintaining a tissue bank of specimens from people with MS for use in research.

**Richard Daneman, PhD**

University of California San Diego  
San Diego, California  
Award: Research Grants  
Research Priority: Pathology

Category: Biology of Glia  
Strategic Area: Stop  
Funding: \$103,125  
Term: 10/1/2015-9/30/2018

**“Mechanisms of blood-brain barrier disruption during neuroinflammation”** University of California, San Diego researchers are studying how the barrier between the blood vessels and the brain becomes leaky, a condition in MS that allows potentially harmful cells and molecules to enter the brain from the bloodstream.

**Paola de Candia, PhD**

Fondazione MultiMedica ONLUS  
Milano, Italy  
Award: Pilot Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$40,000  
Term: 11/1/2016-4/30/2018

**“Unveiling the role of extracellular miR146a-5p in the loss of immune tolerance during multiple sclerosis.”** Exploring newly discovered mechanism related to immune function for clues to what goes wrong in MS and how to fix it.

**Alessandra De Paula Alves Sousa, PhD**

National Institute of Neurological Disorders and Stroke  
Bethesda, Maryland

Award: Postdoctoral Fellowships

Research Priority: Pathology

Category: Immunology

Strategic Area: Stop

Funding: \$161,040

Term: 7/1/2015-6/30/2018

**“Deep sequencing of T-cell receptor repertoire in patients with neurological immune-mediated disorders”**

Researchers at the National Institute of Neurological Disorders and Stroke are using advanced technology to identify immune cell abnormalities in people with MS, for clues to improving treatment approaches.

**M. Laura Feltri, MD**

The State University of New York at Buffalo  
Buffalo, New York

Award: Research Grants

Research Priority: Pathology

Category: Biology of Glia

Strategic Area: Restore

Funding: \$596,537

Term: 10/1/2014-9/30/2018

**“Characterization of a novel inhibitor of myelination: MAPK12/P38MAPK $\gamma$ .”** Does a natural inhibitor of nerve-insulating myelin have potential as a target for myelin repair in MS?

**Thomas Forsthuber, MD, PhD**

The University of Texas at San Antonio  
San Antonio, Texas

Award: Research Grants

Research Priority: Pathology

Category: Immunology

Strategic Area: Stop

Funding: \$660,270

Term: 10/1/2016-9/30/2019

**“NETs and lipid peroxidation as drivers of progressive EAE”** University of Texas at San Antonio researchers are exploring how to stop nervous system damage, for clues to developing treatments that stop MS progression.

**Elizabeth Frost, PhD**

University of Virginia  
Charlottesville, Virginia

Award: Postdoctoral Fellowships

Research Priority: Pathology

Category: Biology of Glia

Strategic Area: Stop

Funding: \$181,754-PENDING

Term: 7/1/2018-6/30/2021

**“Spleen tyrosine kinase regulation of microglial functions in experimental autoimmune**

**encephalomyelitis”** Researchers at the University of Virginia are investigating whether a molecule plays helpful roles in regulating the function of a cell type called microglia in MS.

**Murugaiyan Gopal, PhD**

Brigham and Women's Hospital  
Boston, Massachusetts

Award: Research Grants

Research Priority: Pathology

Category: Immunology

Strategic Area: Stop

Funding: \$274,308

Term: 4/1/2016-3/31/2019

**“MicroRNA Control of Inflammatory T cells in EAE and MS”** Researchers at Harvard Medical School are investigating how a small, naturally occurring molecule regulates the function of harmful types of immune cells in MS.

**Arielle Greenfield, MD**

University of California, San Francisco  
San Francisco, California  
Award: NMSS-ABF Clinician Scientist Development  
Award

Category: Immunology  
Strategic Area: Stop  
Funding: \$198,867  
Term: 7/1/2016-6/30/2019

Research Priority: Pathology

**“Antigen Targets of CNS-Infiltrating B Cells in Early, Untreated Multiple Sclerosis”** Researchers at the University of California, San Francisco are determining the targets of harmful immune cells called B cells in MS, which may lead to earlier, more effective treatment of MS or prevention.

*The Kathleen C. Moore Postdoctoral Fellowship*

**Caroline Guglielmetti, PhD**

University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$107,466  
Term: 7/1/2016-6/30/2019

**“MR imaging of oxidative stress in multiple sclerosis”** Researchers at the University of California, San Francisco are using a new type of imaging in mice to visualize oxidative stress, for clues to the possible role of oxidative stress-inducing immune cells in MS.

**Roland Henry, PhD**

University of California, San Francisco  
San Francisco, California  
Award: Research Grants  
Research Priority: Pathology

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$738,084-PENDING  
Term: 4/1/2018-3/31/2021

**“Enabling Multicenter MRI Studies of Neurodegeneration in Multiple Sclerosis”** Researchers at the University of California at San Francisco are gathering and standardizing existing MRI and genetic information from people with MS across the globe to accelerate research into progressive MS.

**Elena Herranz Muelas, PhD**

Massachusetts General Hospital  
Boston, Massachusetts  
Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$111,145  
Term: 7/1/2016-6/30/2018

**“In vivo MR-PET imaging of glial activation and its correlates in MS”** Researchers at Massachusetts General Hospital and Harvard Medical School are investigating new brain imaging methods for inflammation to increase understanding of MS disease progression and response to treatment.

**Sam Horng, MD, PhD**

Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Career Transition Fellowships  
Research Priority: Pathology

Category: Biology of Glia  
Strategic Area: Stop  
Funding: \$241,458  
Term: 7/1/2017-6/30/2022

**“How Does the Astrocyte Barrier Protein, JAM-A, Regulate Immune Cell Entry and Activity in CNS Inflammatory Lesions?”** Researchers at Icahn School of Medicine are exploring a novel strategy that pinpoints the entry of immune cells into the brain, for clues to stopping damage caused by the immune attack in MS.

**Hong Jiang, MD, PhD**

University of Miami

Atlanta, Georgia

Award: Research Grants

Research Priority: Pathology

Category: Measuring MS Disease Activity

Strategic Area: Stop

Funding: \$540,835

Term: 4/1/2016-3/31/2019

**“The role of retinal microvascular impairment on neurodegeneration in Multiple Sclerosis”**

University of Miami researchers are studying blood vessels at the back of the eye of people with MS to better understand nerve damage and MS progression.

**Trevor Kilpatrick, MBBS, PhD**

Florey Institute of Neuroscience and Mental Health

Melbourne, Australia

Award: Research Grants

Research Priority: Pathology

Category: Human Genetics

Strategic Area: End

Funding: \$384,098

Term: 10/1/2015-9/30/2018

**“Understanding the Role of MERTK in the Aetiology and Pathogenesis of MS”** Researchers at the

University of Melbourne in Australia are investigating the function of an immune cell protein which is abnormal in some people with MS, to understand its potential role in MS.

**Jonathan Kipnis, PhD**

University of Virginia

Charlottesville, Virginia

Award: Research Grants

Research Priority: Pathology

Category: Immunology

Strategic Area: Stop

Funding: \$660,000

Term: 10/1/2015-9/30/2018

**“The role of meningeal lymphatics in EAE/MS”** University of Virginia researchers are exploring the role of a previously unknown path of immune cells for clues to stopping MS.

**Alexandra Kitz, PhD**

Yale University School of Medicine

New Haven, Connecticut

Award: Postdoctoral Fellowships

Research Priority: Pathology

Category: Immunology

Strategic Area: Stop

Funding: \$175,431

Term: 7/1/2016-6/30/2019

**“Role of Akt kinases in regulating high-salt induced Treg dysfunction”** Yale researchers are using immune cells from the blood of healthy people and people with newly diagnosed MS to investigate how high salt may switch a helpful type of immune cell called Tregs to a harmful type called Th1 Tregs and if the helpful function can be restored.

**Alexandr Klistorner, PhD**

Macquarie University  
North Ryde, NSW, Australia  
Award: Research Grants  
Research Priority: Pathology

Category: Neurophysiology  
Strategic Area: Stop  
Funding: \$1,124,000  
Term: 7/1/2014-10/1/2018

**“Investigating mechanisms of axonal degeneration in multiple sclerosis”** What are the mechanisms that drive progressive nervous system damage in MS?

**Maarten Kole, PhD**

Netherlands Institute for Neuroscience  
Amsterdam, The Netherlands  
Award: Research Grants  
Research Priority: Pathology

Category: Neurophysiology  
Strategic Area: Stop  
Funding: \$449,340  
Term: 10/1/2016-9/30/2019

**“Mechanisms and consequences of synapse elimination in secondary progressive MS and the cuprizone model”** Researchers at the Netherlands Institute for Neuroscience are exploring a strategy for improving learning and memory in secondary progressive MS by addressing damage in a specific area of the brain associated with these functions.

**Dimitry Kremontsov, PhD**

University of Vermont  
Burlington, Vermont  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$552,845  
Term: 10/1/2016-9/30/2019

**“Mechanisms of Sex-Specific p38 MAPK-Mediated Pathogenesis in CNS Autoimmunity”** University of Vermont researchers are exploring immune system activity that may explain why MS affects women more than men, and may yield a strategy for stopping the immune attack.

**Klaus Lehmann-Horn, MD**

Technical University of Munich  
Munich, Germany  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$130,422  
Term: 1/1/2016-6/30/2018

**“Role of B cells in spontaneous chronic CNS autoimmune disease”** Exploring the role of immune B cells in MS disease progression.

**Jianrong Li, PhD**

Texas A&M AgriLife Research  
College Station, Texas  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$554,289  
Term: 4/1/2016-3/31/2019

**“Stat3 in myeloid cells: a regulator of autoimmune demyelination”** Texas A&M University researchers are targeting a molecule whose signals may be crucial to stopping the immune attack on the brain and spinal cord in MS.

**Xiaoxia Li, PhD**

Cleveland Clinic Foundation  
 Cleveland, Ohio  
 Award: Research Grants  
 Research Priority: Pathology

Category: Immunology  
 Strategic Area: Stop  
 Funding: \$732,861-PENDING  
 Term: 4/1/2018-3/31/2021

**“Cellular and molecular mechanisms of the inflammasome in CNS inflammation”** Researchers at the Cleveland Clinic are investigating the importance of harmful immune system molecules in an animal model of MS.

**Tsen-Hsuan (Abby) Lin, PhD**

Washington University School of Medicine-M  
 Saint Louis, Missouri  
 Award: Postdoctoral Fellowships  
 Research Priority: Pathology

Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$114,963  
 Term: 7/1/2016-6/30/2018

**“Imaging optic nerve function and pathologies in MS”** Researchers at Washington University School of Medicine are developing imaging methods to visualize damage in the eye and relate this damage to visual function in people with MS.

**Jennifer Linden, PhD**

Weill Cornell Medical College  
 New York, New York  
 Award: Career Transition Fellowships  
 Research Priority: Pathology

Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$583,486  
 Term: 7/1/2017-6/30/2022

**“Using Endothelial Microparticles to Study Real-Time Blood Brain Barrier Permeability in Multiple Sclerosis Patients”** Investigators at Weill Cornell Medical College in New York are studying a molecular “signature” found in blood that may indicate the status of the blood-brain barrier, which normally protects the brain by keeping harmful cells and molecules out of the brain.

**John Lindsey, MD**

The University of Texas Health Science Center at  
 Houston  
 Houston, Texas  
 Award: Pilot Research Grants  
 Research Priority: Pathology

Category: Infectious Agents  
 Strategic Area: Stop  
 Funding: \$44,000  
 Term: 6/1/2017-5/31/2018

**“CD8 cells in multiple sclerosis: Pilot proposal”** Exploring whether virus proteins stimulate an immune response similar to that which occurs in MS.

**Liliana Lucca, PhD**

Yale University  
 New Haven, Connecticut  
 Award: Postdoctoral Fellowships  
 Research Priority: Pathology

Category: Immunology  
 Strategic Area: Stop  
 Funding: \$178,467  
 Term: 7/1/2017-6/30/2020

**“The role of the co-inhibitory receptor TIGIT in the immune deregulation of MS patients”** Investigators at Yale University are testing the idea that a molecule called TIGIT, which is present on certain immune cells, turns down inflammation in healthy people but is unable to dampen inflammation in people with MS.



**Claudia Lucchinetti, MD**

Mayo Clinic College of Medicine-M  
Rochester, Minnesota  
Award: Collaborative Research Center Awards  
Research Priority: Pathology

Category: CNS Repair  
Strategic Area: Stop  
Funding: \$825,000  
Term: 4/1/2016-3/31/2021

**“Metabolic Dysfunction in MS Pathogenesis and Disease Progression: The Donald C. McGraw Foundation Collaborative MS Research Center”** A multi-center team at Mayo Clinic is taking a novel approach to studying nerve cells and possible ways to protect them from injury in MS and stopping MS progression.

**Kedar Mahajan, MD**

Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: NMSS-ABF Clinician Scientist Development  
Award  
Research Priority: Pathology

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$194,394  
Term: 7/1/2016-6/30/2019

**“Magnetic resonance fingerprinting and pathology correlations in multiple sclerosis”** Cleveland Clinic investigators are using novel imaging and tissue studies to understand how MS impacts an area deep in the brain, called the thalamus, and how its injury contributes to disability.

**Gordon Meares, PhD**

West Virginia University  
Morgantown, West Virginia  
Award: Career Transition Fellowships  
Research Priority: Pathology

Category: Biology of Glia  
Strategic Area: Stop  
Funding: \$380,636  
Term: 1/1/2015-12/31/2018

**“LKB1 and AMPK Signaling in Neuroinflammation”** Studying how cells in the brain and spinal cord may influence the immune system in MS, for clues to stopping immune attacks.

**Andrew Mendiola, PhD**

The J. David Gladstone Institutes  
San Francisco, California  
Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$177,243-PENDING  
Term: 7/1/2018-6/30/2021

**“In vivo imaging and profiling of mechanisms of T-cell recruitment and activation during neuroinflammatory disease”** Researchers at The Gladstone Institutes are investigating how a protein found in the blood called fibrinogen promotes a damaging immune response in MS.

**David Jay Mock, MD**

University of Rochester Medical Center  
Rochester, New York  
Award: Pilot Research Grants  
Research Priority: Pathology

Category: CNS Repair  
Strategic Area: Stop  
Funding: \$44,000  
Term: 9/1/2017-8/31/2018

**“Establishment of a new animal model that mimics latent human Herpes Virus 6 infection in the brain”** Determining whether a virus plays a role in preventing myelin repair in an MS model.

**Zahra Moinfar, MD, PhD**

University of California, San Francisco  
 San Francisco, California  
 Award: Postdoctoral Fellowships  
 Research Priority: Pathology

Category: Immunology  
 Strategic Area: Stop  
 Funding: \$177,243-PENDING  
 Term: 7/1/2018-6/30/2021

**“Pathogenic T cells that target NMO autoantigen aquaporin-4”** Researchers at the University of California at San Francisco are investigating similarities and differences between MS and a related but distinct disease called NMO.

**Jiwon Oh, MD**

Johns Hopkins University  
 Baltimore, Maryland  
 Award: Research Grants  
 Research Priority: Pathology

Category: Measuring MS Disease Activity  
 Strategic Area: Stop  
 Funding: \$500,000  
 Term: 10/1/2016-9/30/2019

**“Leptomeningeal Inflammation in Multiple Sclerosis: A Prospective MRI Study”** Johns Hopkins University researchers are exploring a novel imaging finding that may yield clues to understanding and stopping the progression of MS.

**Barbara Osborne, PhD**

University of Massachusetts Amherst  
 Amherst, Massachusetts  
 Award: Research Grants  
 Research Priority: Pathology

Category: Immunology  
 Strategic Area: Stop  
 Funding: \$462,000  
 Term: 10/1/2014-9/30/2018

**“The Role of Notch Family Members in the Development of EAE”** University of Massachusetts at Amherst researchers are investigating how specific proteins are important in immune attacks, results of which may suggest a new therapeutic target for treating MS.

**Gregory Owens, PhD**

University of Colorado Denver  
 Denver, Colorado  
 Award: Research Grants  
 Research Priority: Pathology

Category: Immunology  
 Strategic Area: Stop  
 Funding: \$610,077  
 Term: 10/1/2017-7/1/2020

**“Mechanisms of CNS injury in MS antibody-mediated demyelination”** Researchers at the University of Colorado are investigating how antibodies found in the cerebrospinal fluid of people with MS cause MS-like damage in mice, and the implications for treating MS.

**Yungki Park, PhD**

The State University of New York at Buffalo  
 Buffalo, New York  
 Award: Pilot Research Grants  
 Research Priority: Pathology

Category: Biology of Glia  
 Strategic Area: Stop  
 Funding: \$44,000  
 Term: 11/1/2017-10/31/2018

**“Elucidating the pathogenetic mechanisms of multiple sclerosis”** Researchers at The State University of New York at Buffalo are seeking to understand how genetic variations may contribute to MS risk, using cutting edge technology

**Julia Patzig, PhD**

Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Biology of Glia  
Strategic Area: Restore  
Funding: \$182,327  
Term: 7/1/2016-6/30/2019

**“The impact of nuclear structure on oligodendrocyte development and pathology.”** Researchers at the Icahn School of Medicine at Mount Sinai in New York are asking whether a molecule called LmnA, which is present in the nucleus of many cells including those that make myelin, is involved in normal myelin synthesis and in the loss of myelin in people with MS.

**Hongwei Qin, PhD**

University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$583,800  
Term: 4/1/2017-3/31/2020

**“Function of Protein Kinase CK2 in CD4+ T Cells and Autoimmune Disease”** Researchers at the University of Alabama at Birmingham are investigating an immune molecule called CK2 that may be harmful in MS.

**Francisco Quintana, PhD**

Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$624,082  
Term: 10/1/2016-9/30/2019

**“Therapeutic and environmental control of astrocyte function during autoimmune neuroinflammation”** Researchers at Brigham & Women’s Hospital are exploring an immune mechanism that may contribute to MS progression and may open doors to wellness strategies aimed at stopping progression.

**Alexander Rauscher, PhD**

University of British Columbia  
Vancouver, BC, Canada  
Award: Research Grants  
Research Priority: Pathology

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$309,320  
Term: 4/1/2016-3/31/2019

**“Imaging markers for tissue damage and repair in MS”** Researchers at the University of British Columbia in Vancouver are improving brain MRI to better detect disease activity, severity, and changes over time in people with MS.

**Richard Reynolds, PhD**

Imperial College London  
London, United Kingdom  
Award: Research Grants  
Research Priority: Pathology

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$646,187  
Term: 10/1/2016-9/30/2019

**“The role of meningeal inflammation induced cytokine signalling and mitochondrial dysfunction in neurodegeneration in progressive MS”** Researchers at Imperial College, London, have pinpointed a molecule that may signal nerve cell death, and are investigating how to alter these signals to stop MS progression.

**Bart Rypma, PhD**

The University of Texas at Dallas  
Dallas, Texas

Award: Pilot Research Grant  
Research Priority: Pathology

Category: Biology of Glia  
Strategic Area: Stop  
Funding: \$44,000-PENDING  
Term: 3/1/2018-2/28/2019

**“Role of astrocytes in neural-vascular coupling and its dysfunction in multiple sclerosis”** Using neuroimaging methods to determine the mechanisms of cognitive dysfunction in MS.

**Joseph Sabatino, MD, PhD**

University of California, San Francisco  
San Francisco, California

Award: NMSS-ABF Clinician Scientist Development  
Award

Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$213,981  
Term: 7/1/2016-6/30/2019

**“Myelin-specific CD8+ T cell pathogenicity in multiple sclerosis”** Investigators at the University of California, San Francisco are examining the possible role of a type of immune cell in causing and/or worsening MS to determine if blocking these cells could lead to a more specific therapy for MS.

**Shiv Saidha, MD**

Johns Hopkins University  
Baltimore, Maryland

Award: Research Grants  
Research Priority: Pathology

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$494,401  
Term: 4/1/2017-3/31/2020

**“In-vivo investigation of trans-synaptic neurodegeneration in multiple sclerosis”** Researchers at Johns Hopkins University are testing new methods of assessing nerve cell damage, involving the visual system, to determine its value for predicting more severe MS.

**Frank Schildberg, PhD**

Harvard Medical School  
Boston, Massachusetts  
Award: Postdoctoral Fellowships

Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$178,391  
Term: 7/1/2015-6/30/2018

**“Cell type-specific functions of PD-L1 in controlling EAE”** Researchers at Harvard are exploring the mechanisms by which a molecule seems to control the initiation and resolution of EAE of MS-like disease.

**Lucas Schirmer, MD**

University of California, San Francisco  
San Francisco, California

Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Biology of Glia  
Strategic Area: Stop  
Funding: \$201,135  
Term: 7/1/2017-6/30/2020

**“Understanding and modulating astrocyte diversity in MS and experimental demyelination”** Researchers at the University of California at San Francisco are investigating characteristics of the various types of astrocytes, a cell type that forms scars and blocks repair in lesions found in the brain in MS.  
*Funded in part by the Dave Tomlinson Research Fund*

**Larry Sherman, PhD**  
Oregon Health & Science University  
Portland, Oregon  
Award: Research Grants  
Research Priority: Pathology

Category: Preclinical Drug Development  
Strategic Area: Stop  
Funding: \$575,556  
Term: 10/1/2017-9/30/2020

**“WE-thrombin for the treatment of inflammatory demyelination”** Researchers at Oregon Health & Science University are developing a novel agent that fights inflammation, which may protect the nervous system from damage in MS.

**Mari Shinohara, PhD**  
Duke University Medical Center  
Charlotte, North Carolina  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$660,554  
Term: 10/1/2014-9/30/2018

**“Study on innate immune inflammation that enhances EAE”** Understanding differences in response to MS treatment by looking at MS models.

**Russell Shinohara, PhD**  
University of Pennsylvania  
Philadelphia, Pennsylvania  
Award: Research Grants  
Research Priority: Pathology

Category: Epidemiology  
Strategic Area: Stop  
Funding: \$585,061-PENDING  
Term: 4/1/2018-3/31/2021

**“A traveling subject study of replicability in conventional and advanced MRI MS biomarkers”** Researchers at the University of Pennsylvania are developing statistical methods to reduce differences in images obtained on different MRI scanners to improve the accuracy of MRI data from people with MS.

**Nancy Sicotte, MD**  
Cedars-Sinai Medical Center  
Los Angeles, California  
Award: Pilot Research Grants  
Research Priority: Pathology

Category: Human Genetics  
Strategic Area: Stop  
Funding: \$43,990  
Term: 11/1/2017-10/31/2018

**“Genetic, serologic, and clinical predictors of TNF- $\alpha$  associated demyelination”** Researchers at Cedars-Sinai Medical Center are seeking to understand what factors contribute to development of MS-like disease after administration of TNF-alpha blockers.

**Sheng-Kwei Song, PhD**  
Washington University School of Medicine-M  
Saint Louis, Missouri  
Award: Research Grants  
Research Priority: Pathology

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$648,976  
Term: 10/1/2017-9/30/2020

**“How Does Optic Neuritis Impact Nerve Function and Its Assessment?”** Researchers at The Hope Center at Washington University in St. Louis are developing a method to specifically image damage to the optic nerve to better understand MS disease processes.

**Ian Tagge, PhD**

Oregon Health & Science University  
Portland, Oregon  
Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$113,047  
Term: 7/1/2017-6/30/2019

**“Phenotyping leptomeningeal pathology in MS using DCE MRI”** Researchers at Oregon Health and Science University are using advanced imaging methods to visualize MS activity in the “leptomeninges,” which covers the outer surface of the brain.

**Paul Tesar, PhD**

Case Western Reserve University  
Cleveland, Ohio  
Award: Research Grants  
Research Priority: Pathology

Category: Human Genetics  
Strategic Area: Restore  
Funding: \$654,443  
Term: 10/1/2017-9/30/2020

**“The impact of chemical and genetic dysregulation of transcriptional pausing on oligodendrocyte generation and myelination in MS”** Investigators at Case Western Reserve University and the Whitehead Institute are investigating underlying factors that hinder stem cells in the brain from replacing myelin in people with MS.

**Rodolfo Thome, PhD**

Thomas Jefferson University  
Philadelphia, Pennsylvania  
Award: Postdoctoral Fellowships  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$184,654  
Term: 7/1/2017-6/30/2020

**“The role of IL-7 in pathogenesis of Experimental Autoimmune Encephalomyelitis”** Researchers at Thomas Jefferson University are investigating the role of an immune molecule that may drive damaging inflammation in MS.

**Carles Vilarino-Guell, PhD**

University of British Columbia  
Vancouver, British Columbia, Canada  
Award: Pilot Research Grant  
Research Priority: Pathology

Category: Neurophysiology  
Strategic Area: Stop  
Funding: \$40,000-PENDING  
Term: 3/1/2018-2/28/2019

**“Molecular and behavioral analysis of the NR1H3 (LXRA) model of progressive multiple sclerosis”** Developing and testing a new model of MS-like disease.

**Ari Waisman, PhD**

University Medical Center of the Johannes Gutenberg-  
University Mainz  
Mainz, Germany  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$484,464-PENDING  
Term: 4/1/2018-3/31/2021

**“The role and mode-of-action of IL-17 in the CNS”** Researchers in Mainz, Germany are identifying the destructive activities that are launched by an immune messenger called IL-17, for clues to stopping MS.

**James Waschek, PhD**  
University of California, Los Angeles  
Los Angeles, California  
Award: Research Grants  
Research Priority: Pathology

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$496,965  
Term: 10/1/2015-9/30/2018

**“Molecular dissection of neuroprotective and immunoprotective actions of PACAP signaling in the retina in murine EAE”** Researchers at the University of California, Los Angeles are investigating a molecule called PACAP to see if it has potential for protecting the visual system from damage caused by MS.

**Howard Weiner, MD**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$528,624  
Term: 4/1/2016-3/31/2019

**“Investigation of Pathogenic Gene Signature of Human TH17 cells in Multiple Sclerosis”**  
Researchers at Harvard Medical School are looking at genetic differences in a specific type of immune cell (“Th17”) which can be both harmful and beneficial in people with MS, to provide a strategy for more specific therapies.

**Chuan Wu, MD, PhD**  
National Cancer Institute, National Institutes of Health  
Bethesda, Maryland  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$375,000  
Term: 7/1/2017-6/30/2020

**“High salt diet influences the development of autoimmunity via inducible salt sensing kinase SGK1”**  
How might dietary salt influence the behavior of immune cells in MS?

**Chunying WU, PhD**  
Case Western Reserve University  
Cleveland, Ohio  
Award: Pilot Research Grants  
Research Priority: Pathology

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$44,000  
Term: 9/1/2017-8/31/2018

**“A Dual PET Imaging Technique for In Vivo Characterization of Myelination in Multiple Sclerosis”**  
Developing a novel imaging method for identifying changes to myelin in models of MS.

**Junqian Xu, PhD**  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Pilot Research Grants  
Research Priority: Pathology

Category: Neurophysiology  
Strategic Area: Stop  
Funding: \$43,998  
Term: 11/1/2017-10/31/2018

**“Towards validating magnetic resonance spectroscopy measured glutamate as an in vivo spinal cord neuroplasticity biomarker using dendritic morphometry”** Researchers at Icahn School of Medicine are optimizing tools to prepare for the investigation of the effects of rehabilitation in MS.

**Scott Zamvil, MD, PhD**

University of California, San Francisco  
San Francisco, California  
Award: Research Grants  
Research Priority: Pathology

Category: Immunology  
Strategic Area: Stop  
Funding: \$632,348  
Term: 10/1/2017-9/30/2020

**“Negative selection regulates development of pathogenic AQP4-specific T cells”** Researchers at the University of California, San Francisco are investigating abnormal immune cell development in a disease called neuromyelitis optica that resembles MS in some ways.

**PROGRESSION - “HOW DO WE STOP MS PROGRESSION?”**

**Annexon Biosciences,**

Annexon Biosciences  
South San Francisco, California  
Award: Fast Forward  
Research Priority: Progression

Category: Preclinical Drug Development  
Strategic Area: Stop  
Funding: \$693,113  
Term: 1/1/2017-12/31/2018

**“Identification of CSF Biomarkers to Establish Target Engagement and Dosing for a Novel MS Therapeutic”** Validating the applicability of a new neuroprotective compound to prevent or delay neurodegeneration in progressive MS.

**Douglas Arnold, MD**

McGill University  
Montreal, QC, Canada  
Award: International Progressive MS Alliance - Collaborative Network Center  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$4,560,000  
Term: 1/1/2017-12/31/2020

**“An MRI biomarker for disability progression for use in clinical trials”** Identifying a biomarker of disability progression for use in clinical trials.

*Joint commitment with other Progressive MS Alliance members*

**Oluwasheyi Ayeni, MD**

Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$130,000  
Term: 7/1/2016-6/30/2018

**“Sylvia Lawry Physician Fellowship”** A promising doctor at Icahn School of Medicine at Mount Sinai in New York will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Laura Baldassari, MD**

Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$130,000  
Term: 7/1/2017-6/30/2019

**“Training in multiple sclerosis diagnosis, management, and clinical trials”** A promising doctor at Cleveland Clinic Foundation will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.



**Pavan Bhargava, MD**

Johns Hopkins University  
Baltimore, Maryland  
Award: Career Transition Fellowships  
Research Priority: Progression

Category: Immunology  
Strategic Area: Stop  
Funding: \$457,540  
Term: 7/1/2016-6/30/2021

**“Targeting Leptomeningeal Inflammation for Progressive Multiple Sclerosis”** Researchers at Johns Hopkins University are working to establish a better model of progressive MS that will permit research into understanding and treating inflammation of the meninges, the tissue that covers the brain.

**Pavan Bhargava, MD**

Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$355,455-PENDING  
Term: 4/1/2018-3/31/2020

**“Bile acid supplementation for Multiple Sclerosis”** Johns Hopkins researchers are investigating whether a dietary supplement can be beneficial for the immune system, gut bacteria and MS disease activity.

**Theron Casper, PhD**

University of Utah  
Salt Lake City, Utah  
Award: Health Care Delivery and Policy Research  
Contracts  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: End  
Funding: \$3,000,000  
Term: 7/1/2016-6/30/2019

**“Multiple Sclerosis Pediatric Network Renewal”** The Society is supporting a one-of-a-kind network for research to advance knowledge and understanding of the triggers and impacts of MS in both children and adults.

**Jeremy Chataway, PhD, FRCP**

University College London  
London, United Kingdom  
Award: Strategic Initiatives  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$897,100-PENDING  
Term: 12:00:00 AM-2/28/2023

**“Funding for imaging to track some participants in the MS-STAT2 phase 3 clinical trial investigating simvastatin secondary progressive MS.”** This is an add-on study to use MRI to track some participants in the multicenter trial in the UK to test whether a repurposed cholesterol-lowering therapy can slow the course of secondary progressive MS.

*Co-funded by the UK MS Society*

**Tanuja Chitnis, MD**

Massachusetts General Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research  
Contracts  
Research Priority: Progression

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$492,718  
Term: 10/1/2015-9/30/2018

**“Patient-family views on pediatric MS research needs, outcomes, and methods”** Researchers at Harvard Medical School are gathering opinions about research priorities related to pediatric MS from parents of children and teenagers with MS, and adults with pediatric-onset MS.

**Tanuja Chitnis, MD**

Massachusetts General Hospital  
 Boston, Massachusetts  
 Award: Pilot Research Grants  
 Research Priority: Progression

Category: Measuring MS Disease Activity  
 Strategic Area: Stop  
 Funding: \$44,000  
 Term: 11/1/2017-10/31/2018

**“Distribution and predictors of disease severity in pediatric MS”** Investigators at Massachusetts General Hospital are evaluating what proportion of children with MS experience a severe course of the disease.

**John Corboy, MD**

University of Colorado Denver  
 Denver, Colorado  
 Award: Strategic Initiatives - 2016  
 Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
 Strategic Area: Stop  
 Funding: \$326,464  
 Term: 10/1/2016-9/30/2021

**“Discontinuation of Disease Modifying Therapies (DMTs) in Multiple Sclerosis (MS) – co-funding with Patient Centered Outcome Research Institute (PCORI)”** A trial to determine if and when MS therapies should be discontinued.

**Bonnie Dittel, PhD**

BloodCenter of Wisconsin  
 Milwaukee, Wisconsin  
 Award: Research Grants  
 Research Priority: Progression

Category: Immunology  
 Strategic Area: Stop  
 Funding: \$681,791  
 Term: 10/1/2015-9/30/2018

**“Characterization of a novel regulatory B cell subset that attenuates EAE”** Researchers at the BloodCenter of Wisconsin are investigating how a subset of immune “B cells” reduces inflammation, for clues to harnessing this power to stop MS.

*2016 Stephen C. Reingold Research Award for most outstanding research proposal - Funded in part by the Ladish Company Foundation*

**Carlos Duarte, PhD**

University of Coimbra  
 Coimbra, Portugal  
 Award: Research Grants  
 Research Priority: Progression

Category: Diagnostic Methods  
 Strategic Area: Stop  
 Funding: \$175,000  
 Term: 10/1/2016-9/30/2019

**“Novel cerebrospinal fluid and serum biomarkers for Multiple Sclerosis”** Investigators at the University of Coimbra, Portugal, are exploring whether proteins they have identified in the spinal fluid may be used as biomarkers or flags to help diagnose and track MS.

**Emily Evans, MD**

Washington University School of Medicine-M  
 St. Louis, Missouri  
 Award: Sylvia Lawry Physician Fellowships  
 Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
 Strategic Area: Stop  
 Funding: \$130,000-PENDING  
 Term: 7/1/2018-6/30/2020

**“Sylvia Lawry Clinical Trials Research Training Fellowship”** A promising doctor at Washington University School of Medicine will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Jenny Feng, MD**

Cleveland Clinic Foundation  
Cleveland, Ohio

Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

**“Training in multiple sclerosis diagnosis, management, and clinical trials”** A promising doctor at Cleveland Clinic Foundation will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$195,000-PENDING

Term: 7/1/2018-6/30/2021

**mahboobeh Fereidan-Esfahani, MD**

Mayo Clinic Rochester  
Rochester, Minnesota

Award: Postdoctoral Fellowships  
Research Priority: Progression

**“New Technologies to Characterize Therapeutic Human Antibodies for Demyelinating Disease”** Researchers at the Mayo Clinic are investigating characteristics of an antibody that may promote repair of some types of damage that occur in progressive MS.

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$110,388

Term: 7/1/2017-6/30/2019

**Robert Fox, MD**

Cleveland Clinic Foundation  
Cleveland, Ohio

Award: Strategic Initiatives  
Research Priority: Progression

**“Ibutilast Clinical Trial”** Clinical trial to test whether ibutilast, a re-purposed therapy, can protect the nervous system and slow or stop progressive MS

*Funded by a gift from the National MS Society Greater Delaware Valley Chapter*

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$592,151

Term: 10/1/2013-9/30/2018

**Robert Fox, MD**

Cleveland Clinic Foundation  
Cleveland, Ohio

Award: Health Care Delivery and Policy Research Contracts  
Research Priority: Progression

**“A Study of Benefit and Risk in People with MS”** Researchers at the Cleveland Clinic are probing the perspectives of people with MS in terms of perceived benefits and risks of MS therapies to better inform the development and approval of future therapies.

Category: Health Care Delivery/ Policy

Strategic Area: Stop

Funding: \$416,686

Term: 10/1/2015-12:00:00 AM

**Carla Francisco, MD**

University of California, San Francisco  
San Francisco, California

Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

**“Clinical Research/Sylvia Lawry”** A promising doctor at the University of California, San Francisco will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$195,000

Term: 7/1/2015-6/30/2018

**Jason Franz, PhD**

University of North Carolina at Chapel Hill  
 Chapel Hill, North Carolina  
 Award: Pilot Research Grants  
 Research Priority: Progression

Category: Diagnostic Methods  
 Strategic Area: Restore  
 Funding: \$43,604  
 Term: 9/1/2017-8/31/2018

**“Effect of optical flow perturbations on static and dynamic balance control in people with multiple sclerosis”** Studying how virtual reality might be used to accurately identify balance problems in people with MS.

**Ilena George, MD**

Icahn School of Medicine at Mount Sinai  
 New York, New York  
 Award: Sylvia Lawry Physician Fellowships  
 Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
 Strategic Area: Stop  
 Funding: \$130,000  
 Term: 7/1/2017-6/30/2019

**“Sylvia Lawry Physician Fellowship”** A promising doctor at Icahn School of Medicine at Mount Sinai will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Jennifer Graves, MD, PhD**

University of California, San Francisco  
 San Francisco, California  
 Award: Research Grants  
 Research Priority: Progression

Category: Human Genetics  
 Strategic Area: Stop  
 Funding: \$502,894  
 Term: 4/1/2017-3/31/2020

**“The role of biological aging on progression in MS”** Researchers at the University of California, San Francisco, are exploring an association between the biological process of aging and the progression of MS, for clues to stopping MS.

**Michael Halpern, MD, PhD, MPH**

Temple University  
 Philadelphia, Pennsylvania  
 Award: Health Care Delivery and Policy Research  
 Contracts  
 Research Priority: Progression

Category: Health Care Delivery/ Policy  
 Strategic Area: Stop  
 Funding: \$99,402  
 Term: 7/15/2016-9/15/2018

**“Secondary Analysis of Existing Data Sets: Patient-Reported Reasons for Changes in DMT Use and Subsequent Treatments and Clinical Outcomes”** Researchers at the University of Arizona are exploring the factors that help determine treatment choices and treatment switching to develop a framework for guiding decisions and improving outcomes.

**Daniel Hartung, MPH, PharmD**

Oregon State University  
 Portland, Oregon  
 Award: Health Care Delivery and Policy Research  
 Contracts  
 Research Priority: Progression

Category: Health Care Delivery/ Policy  
 Strategic Area: Stop  
 Funding: \$411,151  
 Term: 10/1/2016-9/30/2018

**“Costs, Access, and Value of Multiple Sclerosis Disease-Modifying Therapies”** Researchers at Oregon State University are investigating reasons for the escalating costs of MS treatments.

**Stephen Hauser, MD**

University of California, San Francisco

San Francisco, California

Award: Migration

Research Priority: Progression

Category: Measuring MS Disease Activity

Strategic Area: Stop

Funding: \$1,375,000

Term: 10/1/2016-9/30/2021

**“SUMMIT: An investigation of deeply phenotyped cohorts to understand disease outcomes and the biology of progression in MS”** SUMMIT (Serially Unified Multicenter Multiple Sclerosis Investigation) establishes an open research platform for identifying factors that influence the course of MS, with the goal of predicting and preventing progression.

**Lynn Hudson, PhD**

Critical Path Institute

Tucson, Arizona

Award: Strategic Initiatives

Research Priority: Progression

Category: Measuring MS Disease Activity

Strategic Area: Stop

Funding: \$3,000,000

Term: 10/1/2012-12:00:00 AM

**“Qualifying Clinical Outcome Assessments through a Multiple Sclerosis Consortium (MSC)”**

Analyzing data from MS clinical trials to develop a more sensitive tool for evaluating the benefits of treatments on clinical symptoms and progression of MS.

**Heather Kane, PhD**

RTI International

Raleigh, North Carolina

Award: Health Care Delivery and Policy Research

Contracts

Research Priority: Progression

Category: Health Care Delivery/ Policy

Strategic Area: Stop

Funding: \$214,840

Term: 10/1/2015-9/30/2018

**“To what extent are nurse practitioners and physician assistants utilized in MS and what impact do they have on costs, clinical outcomes, and patient satisfaction?”** Researchers at RTI International and University of Arizona are exploring how nurse practitioners and physician assistants may assist neurologists in providing access to care for individuals with MS.

**Batia Kaplan, PhD**

Sheba Medical Center

Tel-Hashomer, Ramat-Gan., Israel

Award: Pilot Research Grants

Research Priority: Progression

Category: Diagnostic Methods

Strategic Area: Stop

Funding: \$39,820

Term: 7/1/2016-6/30/2018

**“Analysis of immunoglobulin free light chain monomers and dimers in saliva of MS patients: Implications for diagnosis of MS and monitoring of response to treatment”** Developing and testing a lab test for diagnosis and monitoring disease progression and response to treatment

**Daniel Kaufman, PhD**

University of California, Los Angeles

Los Angeles, California

Award: Research Grants

Research Priority: Progression

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$594,348

Term: 4/1/2017-3/31/2020

**“Preclinical studies aimed at repurposing a clinically safe drug to help treat MS”** Researchers at the University of California are testing a molecule for its ability to limit inflammation in MS, to stop the disease in its tracks and reduce damage.

**Joo-won Kim, PhD**

Icahn School of Medicine at Mount Sinai  
 New York, New York  
 Award: Postdoctoral Fellowships  
 Research Priority: Progression

Category: Measuring MS Disease Activity  
 Strategic Area: Stop  
 Funding: \$184,654  
 Term: 7/1/2017-6/30/2020

**“Assessing Microstructural Integrity of Cervical Spinal Cord Gray and White Matter with Ultra-High Field Diffusion MRI for Progressive MS”** Researchers at the Icahn School of Medicine at Mount Sinai are using advanced imaging to evaluate damage to the spinal cord in people with progressive MS to allow better ways to predict and treat progression.

*Kathleen C. Moore Foundation Postdoctoral Fellowship*

**Yong Chan Kim, PhD**

Henry M. Jackson Foundation  
 Bethesda, Maryland  
 Award: Pilot Research Grants  
 Research Priority: Progression

Category: Preclinical Drug Development  
 Strategic Area: Stop  
 Funding: \$44,000  
 Term: 11/1/2017-10/31/2018

**“Development of AQP4 BAR-Tregs to suppress anti-AQP4 autoantibody response in Neuromyelitis Optica”** Researchers are developing an innovative therapeutic strategy to treat an MS-like disease.

**Robyn Klein, MD, PhD**

Washington University School of Medicine-M  
 Saint Louis, Missouri  
 Award: Research Grants  
 Research Priority: Progression

Category: Immunology  
 Strategic Area: Stop  
 Funding: \$662,812  
 Term: 4/1/2016-3/31/2019

**“Targeting S1PR2 to prevent Disease Progression in females with CNS autoimmunity”** Investigators at Washington University School of Medicine are investigating a molecule that appears to be involved in sex differences and possibly disease progression, in a model of MS and in people with MS.

**Kristen Krysko, MD**

University of California, San Francisco  
 San Francisco, California  
 Award: Sylvia Lawry Physician Fellowships  
 Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
 Strategic Area: Stop  
 Funding: \$195,000  
 Term: 7/1/2017-6/30/2020

**“Application for MS Clinical Research Fellowship at UCSF”** A promising doctor at the University of California, San Francisco will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Pawan Kumar, PhD**

State University of New York at Stony Brook  
 Stony Brook, New York  
 Award: Pilot Research Grant  
 Research Priority: Progression

Category: Immunology  
 Strategic Area: Stop  
 Funding: \$42,350-PENDING  
 Term: 3/1/2018-2/28/2019

**“The role of intestinal antimicrobial peptides in experimental autoimmune encephalomyelitis”** Testing a therapeutic approach using molecules that regulate gut bacteria to reduce severity of MS-like disease.

**Christopher Langston, MD, PhD**

Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$130,000-PENDING  
Term: 7/1/2018-6/30/2020

**“Sylvia Lawry Physician Fellowship”** A promising doctor at Icahn School of Medicine at Mount Sinai Hospital will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Sharon Lynch, PhD**

University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grant  
Research Priority: Progression

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$43,672-PENDING  
Term: 3/1/2018-2/28/2019

**“MS disability scales in the aging population”** Studying older people with MS and without MS and comparing the measurement of disability.

**Charlotte Madore, PhD**

Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Postdoctoral Fellowships  
Research Priority: Progression

Category: Immunology  
Strategic Area: Stop  
Funding: \$161,218  
Term: 7/1/2015-6/30/2018

**“Targeting ApoE pathway to restore unique microglial properties in EAE.”** Researchers at Brigham and Women’s Hospital in Boston are exploring the role of immune cells in the brain called microglia and their possible role in nervous system damage in people with MS.

**Don Mahad, MD, PhD**

University of Edinburgh  
Edinburgh, United Kingdom  
Award: Research Grants  
Research Priority: Progression

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$551,702  
Term: 10/1/2014-9/30/2018

**“Mitochondria and mechanisms of axon degeneration in progressive MS”** Exploring energy failure in cells as one possible cause of progressive MS.

**Muhammad Taimur Malik, MD**

Johns Hopkins University  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$130,000-PENDING  
Term: 7/1/2018-6/30/2020

**“MS Clinical Trials Fellowship”** A promising doctor at Johns Hopkins University will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Lior Mayo, PhD**

Tel Aviv University  
Tel Aviv, Israel  
Award: Research Grants  
Research Priority: Progression

Category: Immunology  
Strategic Area: Stop  
Funding: \$375,000  
Term: 1/1/2017-12/30/2019

**“Role of CD38 in the control of the innate and adaptive immune responses during CNS inflammation”** Researchers at Tel Aviv University are investigating an immune-system protein for its role in driving MS progression, for clues to stopping progression in its tracks.

**Marisa McGinley, DO**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/2016-6/30/2019

**“Training in multiple sclerosis diagnosis, management, and clinical trials”** A promising doctor at Cleveland Clinic will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Aisling McMahon,**  
MS Society UK  
London, United Kingdom  
Award: Strategic Initiatives  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$1,151,147  
Term: 7/1/2017-6/30/2026

**“Co-funding for MS-STAT2 phase 3 clinical trial investigating simvastatin secondary progressive MS, led by Dr. Jeremy Chataway”** Researchers from University College London are leading a multicenter trial in the UK to test whether a repurposed cholesterol-lowering therapy can slow the course of secondary progressive MS.

**Booki Min, DVM, PhD**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants  
Research Priority: Progression

Category: Immunology  
Strategic Area: Stop  
Funding: \$458,039  
Term: 10/1/2015-9/30/2018

**“IL-27-conditioned Foxp3+ regulatory T cells, a novel Treg therapy to treat autoimmune inflammation in the CNS”** Researchers at the Cleveland Clinic are exploring a novel way of reducing the immune attack on the brain and spinal cord that occurs in MS.

**Sarah Minden, MD**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts  
Research Priority: Progression

Category: Health Care Delivery and Policy Research Contracts  
Strategic Area: Stop  
Funding: \$329,613  
Term: 10/1/2011-12/31/2018

**“The impact of out of pocket health-related costs on people with MS and their families”** A detailed analyses of what people with MS spend on out-of-pocket health care costs and how this affects care and quality of life.

**Sarah Minden, MD**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts  
Research Priority: Progression

Category: Health Care Delivery/ Policy Research Contracts  
Strategic Area: Stop  
Funding: \$698,337  
Term: 10/1/2012-12/31/2018

**“Financial implications of informal (unpaid) caregiving”** The economic impacts for family members who provide care to people with MS.



**Sarah Minden, MD**

Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research  
Contracts  
Research Priority: Progression

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$316,266  
Term: 10/1/2013-12/31/2018

**“Sonya Slifka Longitudinal Multiple Sclerosis Study Phase III”** Analyzing and making available data from people with MS to answer a wide range questions about issues faced by people living with MS.

**Sarah Minden, MD**

Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Pilot Research Grants  
Research Priority: Progression

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$44,000  
Term: 10/1/2015-TBD

**“Feasibility of using telehealth to improve access to MS care”** Evaluating the benefits and feasibility of providing MS clinical care remotely.

**Joel Pachter, PhD**

University of Connecticut Health Center  
Farmington, Connecticut  
Award: Research Grants  
Research Priority: Progression

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$671,350  
Term: 10/1/2017-9/30/2020

**“Extracellular vesicles and MSCs as novel tools to aid in the diagnosis and treatment of secondary progressive disease”** Investigators at the University of Connecticut Health Center are exploring the therapeutic potential of stem cells and a novel method of tracking the course of secondary progressive MS in mice.

**Miguel Paz Soldan, MD, PhD**

Western Institute for Biomedical Research (WIBR)  
Salt Lake City, Utah  
Award: Pilot Research Grant  
Research Priority: Progression

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$44,000-PENDING  
Term: 3/1/2018-2/28/2019

**“CNS vulnerability in a Progressive MS Model”** To study whether differences in the cells of the central nervous system might contribute to the risk of developing progressive MS.

**Dzung Pham, PhD**

Henry M. Jackson Foundation  
Bethesda, Maryland  
Award: Research Grants  
Research Priority: Progression

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$576,675  
Term: 4/1/2016-3/31/2019

**“Imaging Biomarker Discovery With Advanced Brain Segmentation Algorithms”** Researchers at the National Institutes of Health are developing software tools to automatically measure MRI-detected brain lesions in MS to improve diagnosis and clinical trials.

**Francisco Quintana, PhD**

Brigham and Women's Hospital  
Boston, Massachusetts  
Award: International Progressive MS Alliance -  
Collaborative Network Center  
Research Priority: Progression

Category: Biology of Glia  
Strategic Area: Stop  
Funding: \$4,780,000  
Term: 1/1/2017-12/23/2020

**“Development of a drug discovery pipeline for progressive MS”** Identifying candidates with neuroprotective and/or myelin repair activity to speed the search for treatments for progressive MS. *Estimated joint commitment with other Progressive MS Alliance members; Funded in full by an Anonymous Donor*

**Michael Robers, MD**

University of Southern California  
Los Angeles, California  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$130,000-PENDING  
Term: 7/1/2018-6/30/2020

**“MS Fellowship”** A promising doctor at the University of Southern California, Los Angeles, will develop the skills involved in the conduct, design, implementation, and analysis of large epidemiological and clinical trials in MS.

**A.M. Rostami, MD, PhD**

Thomas Jefferson University  
Philadelphia, Pennsylvania  
Award: Research Grants  
Research Priority: Progression

Category: Immunology  
Strategic Area: Stop  
Funding: \$650,000  
Term: 4/1/2017-3/31/2020

**“IL-37, a novel therapeutic intervention for autoimmune neuroinflammation”** Researchers at Thomas Jefferson University in Philadelphia are exploring a novel strategy for stopping the immune attack in MS.

**David Scott, PhD**

Henry M. Jackson Foundation  
Bethesda, Maryland  
Award: Research Grants  
Research Priority: Progression

Category: Immunology  
Strategic Area: Stop  
Funding: \$485,942  
Term: 10/1/2017-9/30/2020

**“Engineering human CNS-specific T regulatory cells”** Researchers at the Uniformed Services University are investigating a way to specifically turn off components of the immune system that are harmful in people with MS.

**Afsaneh Shirani, MD**

Washington University School of Medicine-M  
Saint Louis, Missouri  
Award: NMSS-ABF Clinician Scientist Development  
Award  
Research Priority: Progression

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$198,894  
Term: 7/1/2017-6/30/2020

**“Predicting clinical progression in multiple sclerosis patients using a novel imaging biomarker targeted at differentiating and quantifying the underlying pathologies”** Researchers at Washington University School of Medicine are developing a new type of brain imaging to allow detection and prediction of different types of damage that occur in people with MS.

**Theresa Shireman, PhD**

Brown University  
Providence, Rhode Island  
Award: Health Care Delivery and Policy Research  
Contracts  
Research Priority: Progression

Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Funding: \$560,862  
Term: 10/1/2014-9/30/2018

**“Effectiveness of Medicaid's Home- and Community-Based Services for Persons with Multiple Sclerosis”** Optimizing home- and community-based services to maintain the independence of people with MS.

**Thomas Shoemaker, MD**

Johns Hopkins University School of Medicine  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$130,000  
Term: 7/1/2016-6/30/2018

**“MS Clinical Trials Fellowship”** A promising doctor at Johns Hopkins University will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Elizabeth Silbermann, MD**

Oregon Health & Science University  
Portland, Oregon  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Rehabilitation  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/2017-6/30/2020

**“Sylvia Lawry Clinical Trials Physician Fellowship”** A promising doctor at Oregon Health & Science University will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Andrew Smith, MD**

University of Rochester  
Rochester, New York  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/2015-6/30/2018

**“Experimental Therapeutics Fellowship in Multiple Sclerosis”** A promising doctor at the University of Rochester will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Seth Smith, PhD**

Vanderbilt University Medical Center  
Nashville, Tennessee  
Award: Research Grants  
Research Priority: Progression

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$397,117  
Term: 10/1/2015-9/30/2018

**“Quantitative and Longitudinal MRI Characterization of Spinal Cord Damage in Patients with MS”**  
Imaging specialists at Vanderbilt University are developing and implementing new, high-resolution MRI methods to better visualize and track MS disease activity and damage in the spinal cord.

**Elias Sotirchos, MD**

Johns Hopkins University School of Medicine  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/2017-6/30/2020

**“Sylvia Lawry Physician Fellowship”** A promising doctor at Johns Hopkins University will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Rebecca Spain, MD, MSPH**  
Oregon Health & Science University  
Portland, Oregon  
Award: Strategic Initiatives  
Research Priority: Progression

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$1,180,578  
Term: 10/1/2017-9/30/2021

**“Lipoic acid for the treatment of progressive multiple sclerosis”** Investigators at Oregon Health & Science University are conducting a clinical trial to determine if the oral supplement, lipoic acid, is an effective treatment for progressive forms of multiple sclerosis.

**Mary Stevenson, PhD**  
McGill University  
Montreal, QC, Canada  
Award: Pilot Research Grants  
Research Priority: Progression

Category: Immunology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 11/1/2017-10/31/2018

**“Therapeutic effects of intestinal nematode-derived proteins in EAE”** Researchers are investigating the effectiveness of helminth-derived proteins as therapy for mice with MS-like disease.

**Jenny Ting, PhD**  
University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina  
Award: Collaborative Research Center Awards  
Research Priority: Progression

Category: Preclinical Drug Development  
Strategic Area: Stop  
Funding: \$825,000  
Term: 4/1/2014-3/31/2019

**“Preclinical Therapeutic Development for Multiple Sclerosis”** Testing therapies to stop the immune attack and protect the nervous system.

**Chao Wang, PhD**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Career Transition Fellowships  
Research Priority: Progression

Category: Immunology  
Strategic Area: Stop  
Funding: \$587,079  
Term: 7/1/2017-6/30/2022

**“Regulation of TH17 cell function by CD5Like”** Researchers at Brigham and Women’s Hospital in Boston are exploring how a recently discovered molecule may be used to develop a strategy for stopping the immune attack in MS in its tracks.

**Howard Weiner, MD**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Research Grants  
Research Priority: Progression

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$1,375,000  
Term: 10/1/2016-9/30/2021

**“SUMMIT: An investigation of deeply phenotyped cohorts to understand disease outcomes and the biology of progression in MS”** SUMMIT (Serially Unified Multicenter Multiple Sclerosis Investigation) establishes an open research platform for identifying factors that influence the course of MS, with the goal of predicting and preventing progression.

**Margot Woodroffe, PhD**  
Sheffield Hallam University  
Sheffield, United Kingdom  
Award: Research Grants  
Research Priority: Progression

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$134,514-PENDING  
Term: 4/1/2018-3/31/2020

**“Lipidomics in progressive MS”** Investigators at Sheffield Hallam University are mapping changes in the fatty composition of the brain for clues to finding ways to stop progressive MS.

**Yuhong Yang, MD**

The Ohio State University  
Columbus, Ohio

Award: Pilot Research Grant

Research Priority: Progression

**“Activation of the inhibitory receptor PD-1 signaling pathway for MS therapy”** Targeting a novel pathway for stopping the immune attack in MS.

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$44,000-PENDING

Term: 3/1/2018-2/28/2019

**E. Yeh, MD**

The Hospital for Sick Children  
Toronto, ON, Canada

Award: Mentor-Based Postdoctoral Fellowships

Research Priority: Progression

**“Pediatric MS: Shaping the future of outcomes and disability”** This training program at the University of Toronto Hospital for Sick Children will equip researchers with experience and knowledge to design and conduct research aimed at improving wellness in children with MS.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$352,950

Term: 7/1/2015-6/30/2020

**Hao Zhang, PhD**

Medical College of Wisconsin  
Milwaukee, Wisconsin

Award: Research Grants

Research Priority: Progression

**“Therapeutic implications of KYC, a novel myeloperoxidase inhibitor, in multiple sclerosis”** Can blocking free radicals in an MS model provide clues to stopping disease progression in people with MS?

Category: Biochem./Biophysics

Strategic Area: Stop

Funding: \$646,763

Term: 10/1/2014-9/30/2018

**Ai-Hong Zhang, PhD**

Henry M. Jackson Foundation  
Bethesda, Maryland

Award: Pilot Research Grants

Research Priority: Progression

**“BAR regulatory T cell therapy for targeting CNS antigen-specific B cells”** Testing the feasibility of targeting brain-specific immune B cells with other immune cells to treat MS.

Category: Immunology

Strategic Area: Stop

Funding: \$44,000

Term: 11/1/2016-10/31/2018

**NEUROPROTECTION/REPAIR - “HOW DO WE REPAIR THE DAMAGE CAUSED BY MS?”****Adan Aguirre, PhD**

State University of New York at Stony Brook  
Stony Brook, New York

Award: Research Grants

Research Priority: Neuroprotection/Repair

**“Role of TGF-beta in oligodendrogenesis and myelin repair”** Researchers at the State University of New York, Stony Brook, are exploring the role of a molecule in stimulating myelin-making cells to repair nerve-insulating myelin in MS.

Category: Biology of Glia

Strategic Area: Restore

Funding: \$446,025

Term: 10/1/2016-9/30/2019

**Dennis Bourdette, MD**

Oregon Health & Science University  
Portland, Oregon

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Immunology

Strategic Area: Restore

Funding: \$598,082

Term: 4/1/2017-3/31/2020

**“Promoting remyelination in animal models of multiple sclerosis with a selective thyromimetic prodrug”** Researchers at Oregon Health & Science University are exploring a novel strategy for repairing myelin and restoring function in laboratory models of MS.

**Riley Bove, MD**

University of California, San Francisco  
San Francisco, California

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$578,719-PENDING

Term: 4/1/2018-3/31/2021

**“Functional validation of SERMs as remyelinating agents”** University of California, San Francisco researchers are determining the potential SERMs (selective estrogen receptor modulators) medications for stimulating repair of nerve-insulating myelin.

**Kae-Jiun Chang, PhD**

University of California, San Francisco  
San Francisco, California

Award: Postdoctoral Fellowships

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$175,431

Term: 7/1/2016-6/30/2019

**“Manipulation of membrane remodeling to maximize CNS remyelination”** Investigators at the University of California, San Francisco are examining membrane-curving proteins that may play a role in making nerve-insulating myelin, and that may be targets for improving myelin repair in people with MS.

**Holly Colognato, PhD**

State University of New York at Stony Brook  
Stony Brook, New York

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$582,278

Term: 4/1/2017-3/31/2020

**“Signaling pathways that regulate myelin repair”** Researchers at State University of New York at Stony Brook are exploring a strategy for stimulating signals that promote myelin repair in MS.

**Sara Colpitts, PhD**

Trustees of Dartmouth College  
Hanover, New Hampshire

Award: Pilot Research Grants

Research Priority: Neuroprotection/Repair

Category: Immunology

Strategic Area: Stop

Funding: \$44,000

Term: 9/1/2017-8/31/2018

**“The role of interleukin-15 in driving protective regulatory B cells during CNS inflammation”** Investigating how antibiotic treatment may induce a regulatory immune response in MS-like disease in mice.

**Andres Cruz-Herranz, MD**

University of California, San Francisco  
San Francisco, California

Award: Postdoctoral Fellowships

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Stop

Funding: \$195,427

Term: 7/1/2015-6/30/2018

**“Longitudinal Screening of Neuroprotective Therapies in Experimental Autoimmune**

**Encephalomyelitis with Optical Coherence Tomography”** Researchers at the University of California at San Francisco are imaging the back of the eye to visualize signs of myelin repair in mice as a means of identifying agents with potential to stimulate myelin repair in people with MS.

*The Jeveli Family Postdoctoral Fellow*

**Benjamin Deneen, PhD**

Baylor College of Medicine  
Houston, Texas

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$610,418

Term: 9/30/2015-9/30/2018

**“The role of NFIA in reactive astrocytes after white matter injury”** Researchers at Baylor College of Medicine are investigating a protein that may play a role in myelin repair and replacement of lost nerve cells, two events that may improve progressive MS.

*Funded in part by the The David and Eula Wintermann Foundation*

**Laura Dickey, PhD**

University of Utah  
Salt Lake City, Utah

Award: Postdoctoral Fellowships

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$166,724

Term: 7/1/2015-6/30/2018

**“Human neural precursor cell-mediated remyelination in a viral model of MS”** Researchers at the University of Utah are testing the idea that molecules secreted by stem cells improve potential for repairing nerve-insulating myelin.

*The McCarthy Family Postdoctoral Fellow*

**Ian Duncan, DVM, PhD**

University of Wisconsin-Madison  
Madison, Wisconsin

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$763,055

Term: 10/1/2015-9/30/2018

**“Remyelination following global demyelination and its promotion in a novel animal model”**

Researchers at the University of Wisconsin-Madison are exploring factors controlling the repair of nerve-insulating myelin and ways to non-invasively detect repair and enhance the process.

*Funded in part by the Ladish Company Foundation*

**Stephen Fancy, DVM, PhD**

University of California, San Francisco  
San Francisco, California

Award: Harry Weaver Neuroscience Scholarships

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$776,123

Term: 7/1/2017-6/30/2022

**“Oligodendroglial-vascular interactions control successful remyelination in Multiple Sclerosis”**

Researchers from the University of California at San Francisco are exploring interactions between blood vessels and myelin-making cells for clues to promoting myelin repair in MS.

**Douglas Feinstein, PhD**

University of Illinois at Chicago  
Chicago, Illinois

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Neuropathology

Strategic Area: Stop

Funding: \$651,000

Term: 10/1/2015-9/30/2018

**“Neuroprotective effects of the CRMP2 activator lanthionine ketimine ester in EAE”** Researchers from the University of Illinois are testing the possibility that a natural brain molecule called lanthionine ketimine can prevent neurodegeneration in a mouse model of progressive MS.

**Meng-meng Fu, PhD**

Stanford University  
Stanford, California

Award: Postdoctoral Fellowships

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$166,724

Term: 7/1/2015-6/30/2018

**“Regulation of MBP mRNA Transport in Oligodendrocytes”** Researchers at Stanford University are investigating how a protein critical to the formation of nerve-insulating myelin is made and how its message is transported, to gather information that may be critical to finding a way to repair myelin in people with MS.  
*Funded in part by a gift from the Brodsky Family Foundation*

**Babette Fuss, PhD**

Virginia Commonwealth University  
Richmond, Virginia

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$678,392

Term: 10/1/2016-9/30/2019

**“ATX: a regulator of CNS myelination”** Researchers from Virginia Commonwealth University are studying a signaling pathway to determine its potential for stimulating immature myelin-making cells to mature and form new myelin to restore function in MS.

**Vittorio Gallo, PhD**

The Children's National Medical Center  
Washington, District of Columbia

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$538,351

Term: 10/1/2016-9/30/2019

**“Signaling mechanisms underlying Sox17-mediated oligodendrocyte generation and repair”** Researchers at Children’s National Medical Center in Washington, DC, are investigating a molecule that influences the development of cells that make nerve-insulating myelin, for clues to promoting nervous system repair in MS.

**Stefanie Giera, PhD**

Boston Children's Hospital  
Boston, Massachusetts

Award: Postdoctoral Fellowships

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$178,391

Term: 7/1/2015-6/30/2018

**“Characterization of a novel G protein-coupled receptor in oligodendrocyte development”** Researchers at Boston Children’s Hospital are investigating the importance of a specific molecule in the ability of myelin-making cells to mature and make nerve-insulating myelin, for clues to promoting myelin repair in MS.

*The Thorsten Eickenhorst Postdoctoral Fellowship*



**Alexander Gow, PhD**

Wayne State University  
Detroit, Michigan

Award: Pilot Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Stop

Funding: \$44,000

Term: 6/1/2017-5/31/2018

**“Characterizing the radial component of CNS myelin”** Exploring a novel facet of the myelin that insulates nerve fibers, for clues to how it is targeted in the MS attack.

**Judith Grinspan, PhD**

Children's Hospital of Philadelphia  
Philadelphia, Pennsylvania

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$583,760

Term: 4/1/2016-3/31/2019

**“A key role for sterol regulatory element binding proteins in myelination”** Researchers at Children’s Hospital of Philadelphia are investigating the role of a specific protein in myelin regeneration for clues to restoring function in people with MS.

**Jaime Grutzendler, MD**

Yale University  
New Haven, Connecticut

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$330,000

Term: 10/1/2016-9/30/2019

**“Local astrocyte contributions to myelin repair”** Yale University researchers are exploring how cells called astrocytes contribute to the repair of nerve-insulating myelin and implications for promoting myelin repair in MS.

**MAY HAN, MD**

Stanford University  
Stanford, California

Award: Pilot Research Grants

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$43,999

Term: 9/1/2017-8/31/2018

**“Crucial role of astrocytes in CNS inflammation and remyelination”** Understanding how brain cells known as astrocytes may both promote and inhibit myelin repair in a novel MS model.

**Emily Harrington, MD, PhD**

Johns Hopkins University  
Baltimore, Maryland

Award: NMSS-ABF Clinician Scientist Development

Award

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Stop

Funding: \$276,697-PENDING

Term: 7/1/2018-6/30/2021

**“The role of oligodendrocyte progenitors as immune cells in MS models”** Johns Hopkins researchers are observing interactions between the immune system and myelin making cells for clues to stopping myelin loss and promoting myelin repair.

**Meredith Hartley, PhD**

Oregon Health & Science University  
Portland, Oregon

Award: Postdoctoral Fellowships  
Research Priority: Neuroprotection/Repair

Category: CNS Repair  
Strategic Area: Restore  
Funding: \$178,391  
Term: 7/1/2015-6/30/2018

**“A thyroid hormone-based strategy for promoting remyelination”** Researchers at Oregon Health & Science University are testing thyroid hormone-like drugs to see if they will improve myelin repair and to determine their potential for development as a treatment for MS.

*Funded in part by the Dave Tomlinson Research Fund*

**Jacob Hines, PhD**

Winona State University  
Winona, Minnesota

Award: Pilot Research Grants  
Research Priority: Neuroprotection/Repair

Category: Biology of Glia  
Strategic Area: Restore  
Funding: \$44,000  
Term: 11/1/2017-10/31/2018

**“The role of axon caliber in the selective myelination of nerve axons”** Researchers at Winona State University are learning what properties of the nerve fiber enable successful formation of myelin sheaths.

**Yang Hu, MD, PhD**

Stanford University  
Stanford, California

Award: Research Grants  
Research Priority: Neuroprotection/Repair

Category: CNS Repair  
Strategic Area: Stop  
Funding: \$467,623-PENDING  
Term: 4/1/2018-3/31/2021

**“Combined Neuronal Soma and Axon Protection by Manipulation of Both ER Stress and NAD+ Metabolism in EAE/Optic Neuritis”** Researchers at Stanford University are using a strategy of combination therapy in a mouse model of MS to protect the nervous system from a type of damage that occurs in MS.

**Teng-Wei Huang, PhD**

Baylor College of Medicine  
Houston, Texas

Award: Postdoctoral Fellowships  
Research Priority: Neuroprotection/Repair

Category: CNS Repair  
Strategic Area: Restore  
Funding: \$172,507  
Term: 7/1/2017-6/30/2020

**“The role of Sox9 in remyelination after white matter injury”** Researchers at Baylor College of Medicine are exploring a novel pathway to understand why myelin repair fails in people with MS, for clues to a possible repair strategy.

**Ethan Hughes, PhD**

University of Colorado Denver  
Denver, Colorado

Award: Research Grants  
Research Priority: Neuroprotection/Repair

Category: Biology of Glia  
Strategic Area: Restore  
Funding: \$586,687  
Term: 10/1/2017-9/30/2020

**“Mechanisms and Dynamics of Cortical Remyelination”** Researchers at the University of Colorado are investigating methods to improve and visualize repair of nerve-insulating myelin, ultimately to restore function for people with MS.

**Christopher Jewell, PhD**

University of Maryland - College Park

College Park, Maryland

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Immunology

Strategic Area: Stop

Funding: \$598,715

Term: 10/1/2015-9/30/2018

**“Harnessing intra-lymph node controlled release to promote myelin-specific tolerance”** Researchers at the University of Maryland are investigating a strategy that may help turn off the harmful aspects of the immune system that occur in MS while leaving beneficial functions of the immune system intact.

**Kadimastem LTD,**

Kadimastem LTD.

Nes-Ziona, Israel

Award: Fast Forward

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$174,400

Term: 9/25/2015-9/30/2018

**“Use of human oligodendrocytes for drug screening and discovery of new neuroprotection and repair therapies for MS”** Developing and testing a potential therapy to promote myelin repair in MS.

**Eve Kelland, PhD**

University of Southern California

Los Angeles, California

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$645,623

Term: 4/1/2017-3/31/2020

**“Assessment of the neuroprotective activity of angiotensin 1-7 and its potential role in demyelinating disease”** Researchers at the University of Southern California are exploring whether a drug can be repurposed to protect myelin-making cells (oligodendrocytes) from death in MS models.

**Trevor Kilpatrick, MBBS, PhD**

Florey Institute of Neuroscience and Mental Health

Melbourne, Australia

Award: Pilot Research Grants

Research Priority: Neuroprotection/Repair

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$37,208

Term: 9/1/2017-8/31/2018

**“Targeting Tyro3 to promote remyelination in Multiple Sclerosis”** Developing a cutting-edge method for exploring a therapeutic target that may enhance myelin production in MS.

**Michael Kornberg, MD, PhD**

Johns Hopkins University

Baltimore, Maryland

Award: NMSS-ABF Clinician Scientist Award

Research Priority: Neuroprotection/Repair

Category: Biochem./Biophysics

Strategic Area: Stop

Funding: \$259,590

Term: 7/1/2015-6/30/2018

**“The role and therapeutic potential of nitric oxide-induced nuclear GAPDH signaling in multiple sclerosis.”** Researchers at Johns Hopkins University are conducting preliminary lab tests to understand whether a therapy called selegiline may be useful for treating MS by blocking the harmful effects of a molecule called nitric oxide.

**Thomas Lane, PhD**

University of Utah  
Salt Lake City, Utah  
Award: Collaborative Research Center Awards  
Research Priority: Neuroprotection/Repair

Category: Neuropathology  
Strategic Area: Restore  
Funding: \$825,000  
Term: 7/1/2017-6/30/2022

**“Novel approaches towards understanding disease progression and repair using viral models of multiple sclerosis”** University of Utah researchers from a variety of fields are trying different experimental approaches including adult stem cells to stop progression of MS-like disease in mice and promote repair of the nervous system.

**Hyun Kyoung Lee, PhD**

Baylor College of Medicine  
Houston, Texas  
Award: Research Grants  
Research Priority: Neuroprotection/Repair

Category: Biology of Glia  
Strategic Area: Restore  
Funding: \$375,000  
Term: 3/1/2016-2/28/2019

**“The Role of Daam2 in Oligodendrocyte Development and Multiple Sclerosis”** Focusing on molecules that control the maturation process of cells that can repair lost myelin in MS.

**Steven LeVine, PhD**

University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grants  
Research Priority: Neuroprotection/Repair

Category: CNS Repair  
Strategic Area: Restore  
Funding: \$44,000  
Term: 11/1/2017-10/31/2018

**“High Dose Biotin Therapy and Remyelination”** Researchers from the University of Kansas Medical Center are investigating how high dose biotin therapy might act to promote myelin repair processes in people with MS.

**Jianrong Li, PhD**

Texas A&M AgriLife Research  
College Station, Texas  
Award: Research Grants  
Research Priority: Neuroprotection/Repair

Category: CNS Repair  
Strategic Area: Stop  
Funding: \$521,327  
Term: 10/1/2017-9/30/2020

**“Role of Galectin-9 in CNS Inflammation, Demyelination and Myelin Repair”** Researchers at Texas A&M University are investigating a target for developing biomarkers and treatment strategies for progressive MS.

**Wensheng Lin, MD, PhD**

University of Minnesota  
Minneapolis, Minnesota  
Award: Research Grants  
Research Priority: Neuroprotection/Repair

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$561,891  
Term: 10/1/2014-9/30/2018

**“Oligodendrocyte impact on neurodegeneration in the experimental autoimmune encephalomyelitis mouse model of multiple sclerosis”** Seeking Ways to protect myelin-making cells and nerve fibers from damage in MS.

**Fang Liu, MD, PhD**

Centre for Addiction and Mental Health

Toronto, ON, Canada

Award: Fast Forward

Research Priority: Neuroprotection/Repair

**“Preclinical characterization and modification of small molecule drugs for the treatment for multiple sclerosis”** Researchers at the Centre for Addiction and Mental Health in Toronto are refining a novel approach to stopping MS damage to the nervous system and progression.

*Funded in collaboration with the MS Society of Canada*

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$838,300

Term: 4/1/2017-3/31/2019

**Longevity Biotech, Inc,**

Longevity Biotech, Inc

Philadelphia, Pennsylvania

Award: Fast Forward

Research Priority: Neuroprotection/Repair

**“Evaluation of a Parkinson’s Disease Drug Candidate in Myelination Events Associated with Multiple Sclerosis”** Pre-clinical testing of the ability of a drug being tested in Parkinson's to protect and repair damaged nerve cells while also restoring balance to the immune system.

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$316,384

Term: 9/26/2017-3/31/2019

**Qing Lu, PhD**

Children's Hospital Medical Center - Cincinnati

Cincinnati, Ohio

Award: Research Grants

Research Priority: Neuroprotection/Repair

**“Long non-coding RNA control of CNS myelination and remyelination”** Researchers at the Cincinnati Children’s Hospital Medical Center are investigating the possible role of a type of molecule called long noncoding RNA that may regulate repair of myelin, which is destroyed in MS.

Category: Biology of Glia

Strategic Area: Restore

Funding: \$698,640

Term: 4/1/2016-3/31/2019

**Gianvito Martino, MD**

Fondazione Centro San Raffaele

Milano, Italy

Award: International Progressive MS Alliance -

Collaborative Network Center

Research Priority: Neuroprotection/Repair

**“Bioinformatics and cell reprogramming to develop an in vitro platform to discover new drugs for progressive multiple sclerosis (BRAVEinMS)”** Identifying therapy candidates with neuroprotective and/or myelin repair activity to speed the search for treatments for progressive MS.

*Joint commitment with other Progressive MS Alliance members*

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$4,780,000

Term: -4/30/2021

**Glenn Matsushima, PhD**

University of North Carolina at Chapel Hill

Chapel Hill, North Carolina

Award: Research Grants

Research Priority: Neuroprotection/Repair

**“Function of microglia during remyelination”** Researchers at University of North Carolina at Chapel Hill are exploring a novel strategy for promoting the natural capacity of the brain to repair the damage that occurs in MS.

Category: CNS Repair

Strategic Area: Restore

Funding: \$500,009

Term: 4/1/2017-3/31/2020

**Yevgeniya Mironova, PhD**

Johns Hopkins University  
Baltimore, Maryland

Award: Postdoctoral Fellowships

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$181,754-PENDING

Term: 7/1/2018-6/30/2021

**“Non-progenitor functions of oligodendrocyte precursor cells in the brain”** Researchers at Johns Hopkins University are studying how oligodendrocyte precursor cells in the adult brain play multiple roles in repair of myelin damage.

**Kelly Monk, PhD**

Washington University School of Medicine-M  
Saint Louis, Missouri

Award: Harry Weaver Neuroscience Scholarships

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$521,023

Term: 7/1/2016-6/30/2021

**“Molecular mechanisms that govern oligodendrocyte biology”** Researchers at Washington University School of Medicine are investigating how certain genes control the formation of nerve-insulating myelin, for clues to developing myelin repair strategies.

**Sarah Moyon, PhD**

Research Foundation of CUNY-ASRC  
New York, New York

Award: Postdoctoral Fellowships

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$125,564

Term: 7/1/2016-6/30/2019

**“Investigating the role of DNA methylation and hydroxymethylation in adult oligodendrocyte progenitor cells during remyelination”** Researchers at the Icahn School of Medicine at Mount Sinai in New York are investigating age-related changes to genes that may affect the maturation of cells needed to repair myelin, which is damaged in MS.

**Thanh Nguyen, PhD**

Weill Cornell Medical College  
New York, New York

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Measuring MS Disease Activity

Strategic Area: Restore

Funding: \$897,375

Term: 10/1/2016-9/30/2020

**“Quantitative MRI of lesion iron and myelin repair”** Weill Cornell Medical College researchers are testing and validating a novel imaging technique for use in determining how iron in MS lesions in the brain may affect myelin repair.

**Akiko Nishiyama, MD, PhD**

University of Connecticut  
Storrs, Connecticut

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$610,077

Term: 10/1/2017-9/30/2020

**“Neuronal activity-dependent regulation of remyelination and chromatin remodeling”** Researchers from the University of Connecticut and University of Paris are using cutting-edge technology to explore a novel possibility for restoring damaged nerve-insulating myelin.

**Hiroko Nobuta, PhD**

Albert Einstein College of Medicine  
Bronx, New York

Award: Career Transition Fellowship

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$562,908-PENDING

Term: 7/1/2018-6/30/2023

**“Development of a Human Compatible Platform to Study Oligodendrocyte Biology”** Researchers at the Albert Einstein College of Medicine, New York, are optimizing ways of producing human myelin-making cells to speed efforts to find strategies to repair nerve-insulating myelin and restore function in MS.

**Carlos Parras, PhD**

INSERM - Institut National de la Santé et de la Recherche  
Médicale

Paris, France

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$586,502

Term: 10/1/2015-9/30/2018

**“Chd7 chromatin remodeller function in myelination and remyelination”** Researchers at Salpêtrière Hospital in Paris are examining MS lesions and mouse models to investigate the role of a protein called CHD7 in chromatin remodeling, which is required for oligodendrocyte maturation and subsequent myelin repair.

**Xianhua Piao, MD, PhD**

Boston Children's Hospital

Boston, Massachusetts

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$660,000

Term: 10/1/2015-9/30/2018

**“The role of GPR56 in CNS myelination and myelin repair”** Investigators at Boston Children's Hospital are studying a protein involved in the growth of nerve-insulating myelin as a possible mechanism for stimulating myelin repair in MS.

**David Pleasure, MD**

University of California, Davis

W. Sacramento, California

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Immunology

Strategic Area: Stop

Funding: \$519,547

Term: 10/1/2014-9/30/2018

**“Minimizing axon loss in a murine multiple sclerosis model by conditionally deleting astroglial CCL2 (MCP-1)”** Exploring how specific cells contribute to nerve damage and progression in a model of MS.

**Brian Popko, PhD**

University of Chicago

Chicago, Illinois

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$626,735

Term: 10/1/2015-9/30/2018

**“Investigating the role that ZFP191 phosphorylation state plays in regulating oligodendrocyte maturation”** University of Chicago researchers are studying a molecular “switch” that may be a key to turning on the repair processes of nerve-insulating myelin to restore function to people with MS.

*Paid by special funds provided by the Illinois Lottery*

**Ruchika Prakash, PhD**

Ohio State University

Columbus, Ohio

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Rehabilitation

Strategic Area: Restore

Funding: \$631,261

Term: 10/1/2016-9/30/2019

**“A physical activity-based tracking intervention to enhance cognitive and neural plasticity”**

Researchers from The Ohio State University are testing whether increasing physical activity through the use of simple accelerometers can improve cognitive functioning in MS.

**Francisco Quintana, PhD**

Brigham and Women's Hospital

Boston, Massachusetts

Award: Harry Weaver Neuroscience Scholarships

Research Priority: Neuroprotection/Repair

Category: Immunology

Strategic Area: Stop

Funding: \$766,186

Term: 7/1/2014-6/30/2019

**“Role of astrocytes in multiple sclerosis and experimental autoimmune encephalomyelitis”** What role do brain cells called astrocytes play in progressive MS?

**James Salzer, MD, PhD**

New York University School of Medicine

New York, New York

Award: Fast Forward

Research Priority: Neuroprotection/Repair

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$598,950

Term: 9/23/2015-12/21/2018

**“Enhancing Remyelination by Targeting Gli1”** Developing a potential therapy that promotes myelin repair by stimulating the body's repair mechanisms.

*Funded in collaboration with the MS Society of Canada*

**Carmen Sato-Bigbee, PhD**

Virginia Commonwealth University

Richmond, Virginia

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$587,785

Term: 10/1/2015-9/30/2018

**“The  $\mu$ -opioid/nociceptin-orphanin FQ receptor system in oligodendrocyte development and remyelination”** Researchers at Virginia Commonwealth University are investigating newly discovered docking sites that may be key to stimulating natural repair of nerve-insulating myelin.

**Ryan Schubert, MD**

University of California, San Francisco

San Francisco, California

Award: NMSS-ABF Clinician Scientist Development

Award

Research Priority: Neuroprotection/Repair

Category: Immunology

Strategic Area: Stop

Funding: \$269,394

Term: 7/1/2017-6/30/2020

**“Using comprehensive phage display coupled with next-generation sequencing to define the evolution of autoantibodies and viral antibodies in the two years after a first demyelinating event”**

Researchers at the University of California at San Francisco are looking for antibody “signatures” in fluid samples that can predict which of those individuals with a first neurological event will go on to develop definite MS.



**David Selwood, PhD**

University College London  
London, United Kingdom

Award: Fast Forward

Research Priority: Neuroprotection/Repair

**“Lead optimisation of a novel MS drug for nerve loss”** Developing a novel therapy to prevent nerve tissue damage in people with MS.

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$804,767

Term: 11/23/2015-12/31/2018

**David Selwood, PhD**

University College London  
London, United Kingdom

Award: Fast Forward

Research Priority: Neuroprotection/Repair

**“The development of selective ion channel activators for neuroprotection”** Developing novel approaches to stopping nerve tissue damage in people with MS.

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$551,726

Term: 9/1/2016-8/31/2020

**Fu-Dong Shi, MD, PhD**

St. Joseph's Hospital and Medical Center  
Los Angeles, California

Award: Research Grants

Research Priority: Neuroprotection/Repair

**“Neruorepair following brain inflammation”** Researchers at St. Joseph's Hospital and Medical Center in Phoenix are investigating a type of cell that may play a role in inhibiting nervous system repair in MS, for clues to restoring function in people with MS.

Category: CNS Repair

Strategic Area: Restore

Funding: \$438,900

Term: 4/1/2016-3/31/2019

**Fraser Sim, PhD**

The State University of New York at Buffalo  
Buffalo, New York

Award: Research Grants

Research Priority: Neuroprotection/Repair

**“Targeting extracellular sulfatases to accelerate oligodendrocyte progenitor-based myelin repair and regeneration”** Researchers at The State University of New York at Buffalo are attempting a new strategy to improve the ability of cells to repair of nerve-insulating myelin.

Category: CNS Repair

Strategic Area: Restore

Funding: \$579,899

Term: 10/1/2017-9/30/2020

**Fraser Sim, PhD**

The State University of New York at Buffalo  
Buffalo, New York

Award: Pilot Research Grants

Research Priority: Neuroprotection/Repair

**“Modeling human cell-based remyelination in large chronic demyelinating lesions”** Investigators at The State University of New York at Buffalo are establishing a new model of demyelination to determine whether human cell therapy has the capacity to restore lost myelin.

Category: CNS Repair

Strategic Area: Restore

Funding: \$44,000-PENDING

Term: 11/1/2017-10/31/2018

**Athena Soulika, PhD**

University of California, Davis  
W. Sacramento, California

Award: Research Grants

Research Priority: Neuroprotection/Repair

**“Novel lipid-mediated mechanism controls oligodendrocyte maturation”** Investigators at the University of California, Davis, are exploring a new strategy for repairing nerve-insulating myelin and restoring function in MS.

Category: Biology of Glia

Strategic Area: Restore

Funding: \$652,582

Term: 10/1/2017-9/30/2020

**Lu Sun, PhD**

Stanford University  
Stanford, California

Award: Career Transition Fellowship

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$589,886-PENDING

Term: 7/1/2018-6/30/2023

**“Identification of a novel pathway that regulates CNS myelination and remyelination”** Stanford University researchers are investigating mechanisms involved in the loss of cells that make nerve-insulating myelin, and potential ways to promote their survival and myelin repair.

**William Talbot, PhD**

Stanford University  
Stanford, California

Award: Research Grants

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$436,224-PENDING

Term: 4/1/2018-3/31/2021

**“Role of Raga in Lysosome Function and Myelination in Oligodendrocytes”** Researchers at Stanford University are investigating two genes that affect the growth of nerve-insulating myelin, for clues to finding ways to repair myelin in people with MS.

**TG Therapeutics,**

TG Therapeutics  
New York, New York

Award: Fast Forward

Research Priority: Neuroprotection/Repair

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$254,452

Term: 9/1/2017-8/31/2018

**“Pre-clinical testing of existing drug candidates to determine if it can protect the nervous system from damage and/or can repair damage”** Pre-clinical testing of existing drug candidates to determine if it can protect the nervous system from damage and/or can repair damage, especially for the treatment of progressive MS.

**Haley Titus, PhD**

Northwestern University Feinberg School of Medicine  
Evanston, Illinois

Award: Postdoctoral Fellowships

Research Priority: Neuroprotection/Repair

Category: CNS Repair

Strategic Area: Restore

Funding: \$161,218

Term: 7/1/2015-6/30/2018

**“Immunoregulatory and myelin repair therapies in T cell-mediated mouse models of Multiple Sclerosis.”** Researchers at Northwestern University in Chicago are trying to develop a possible two-step approach to therapy for MS, making the immune system tolerant of myelin rather than attacking it, and promoting myelin repair.

*Paid by special funds provided by the Illinois Lottery*

**J. Bradley Zuchero, PhD**

Stanford University  
Stanford, California

Award: Career Transition Fellowships

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$581,647

Term: 7/1/2014-6/30/2019

**“What is the cellular mechanism of CNS myelin wrapping?”** Can understanding the role of cellular scaffolding in the formation of nerve-insulating myelin provide new targets to promote myelin repair in MS? *Funded in part by a gift from an Anonymous Donor in honor of JoAnn LeMaistre, PhD*

**J. Bradley Zuchero, PhD**

Stanford University  
Stanford, California

Award: Harry Weaver Neuroscience

Research Priority: Neuroprotection/Repair

Category: Biology of Glia

Strategic Area: Restore

Funding: \$772,639-PENDING

Term: 7/1/2018-6/30/2023

**“How does the actin cytoskeleton control myelination and remyelination?”** Stanford University researchers are investigating how scaffold-like structures inside cells change during the formation of myelin, for clues to stimulating myelin repair in MS.

**SYMPTOMS, REHAB, WELLNESS - “HOW DO WE REVERSE SYMPTOMS AND PROMOTE WELLNESS?”**

**Kevin Alschuler, PhD**

University of Washington  
Seattle, Washington

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Psychosocial Aspects of MS

Strategic Area: Restore

Funding: \$794,769

Term: 4/1/2014-3/31/2019

**“Life after MS diagnosis: a biopsychosocial assessment of symptom trajectory”** How does quality of life change for individuals over the first year after diagnosis with MS?

**Peter Altenburger, PT, PhD**

Indiana University  
Bloomington, Indiana

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation

Strategic Area: Restore

Funding: \$33,000

Term: 9/1/2016-8/31/2018

**“G-EO Gait Rehabilitation Training in Progressive Multiple Sclerosis”** A trial testing a novel method of improving walking in people with progressive MS.

**Alexander Aruin, DSc**

University of Illinois at Chicago  
Chicago, Illinois

Award: Mentor-Based Postdoctoral Fellowships

Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation

Strategic Area: Restore

Funding: \$405,990

Term: 7/1/2012-6/30/2018

**“Rehabilitation research training to enhance functional performance in MS”** Training young scientists to conduct research in rehabilitation approaches to help people with MS achieve higher quality of life and maximal function.

*Paid in part by special funds provided by the Illinois Lottery*

**Alexander Aruin, DSc**

University of Illinois at Chicago  
Chicago, Illinois

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation

Strategic Area: Restore

Funding: \$43,900

Term: 4/1/2016-6/30/2018

**“Enhancement of Anticipatory Postural Control in Individuals with Multiple Sclerosis”** Investigating a method of improving balance in people with MS.

**Lisa Barcellos, PhD**

University of California, Berkeley  
Berkeley, California

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Cognitive Function and Physical Disability in White, Black and Hispanic MS Patients”** This team is using a novel, web-based tool to study the influence of genetic, environmental and other clinical factors in hundreds of people with MS to help further understand why some develop worse cognitive function and physical disability.

Category: Epidemiology

Strategic Area: Restore

Funding: \$421,570

Term: 4/1/2017-3/31/2020

**Lisa Barcellos, PhD**

University of California, Berkeley  
Berkeley, California

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“A Pilot Approach to Establish a Pipeline for Epigenetic Studies of T Cells in MS”** Applying cutting edge technology to study immune cells in people with MS, compared with controls without the disease, for clues to MS development and treatment.

Category: Immunology

Strategic Area: Stop

Funding: \$44,000

Term: 7/1/2017-6/30/2018

**Michael Basso, PhD**

University of Tulsa  
Tulsa, Oklahoma

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“A manualized cognitive rehabilitation program for Multiple Sclerosis”** Developing a standardized program to improve memory, and testing its effects on memory function and ability to manage daily responsibilities in a small number of people with MS.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$39,873

Term: 2/1/2012-9/30/2018

**Meghan Beier, Ph.D.**

Johns Hopkins University  
Baltimore, Maryland

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“200 to 2,000: Expanding the Scope of Multiple Sclerosis Cognitive Research by Establishing the Reliability of a Web-based Cognitive Assessment”** Developing a web-based tool for assessing cognitive changes in people with MS.

Category: Measuring MS Disease Activity

Strategic Area: Restore

Funding: \$44000

Term: 3/1/2017-2/28/2019

**Meghan Beier, PhD**

Johns Hopkins University  
Baltimore, Maryland

Award: Mentor-Based Postdoctoral Fellowships

Research Priority: Symptoms, Rehab, Wellness

**“Advancing multiple sclerosis research through neuroscience”** This training program will equip two fellows with crucial clinical and research skills necessary to conduct rehabilitation research aimed at improving wellness for people with MS.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$242,512

Term: 4/1/2017-3/31/2020

**Malachy Bishop, PhD**

University of Kentucky  
Lexington, Kentucky

Award: Health Care Delivery and Policy Research

Category: Health Care Delivery and Policy

Research Contracts

Strategic Area: Stop

Funding: \$206,300

Contracts

Term: 12/12/2016-12/31/2018

Research Priority: Symptoms, Rehab, Wellness

**“Impact of the NMSS Strategic Plan”** Analyzing the impact on the quality of life of people affected by MS resulting from the work of the National MS Society.

**Valerie Block, DSc, PT**

University of California, San Francisco

San Francisco, California

Award: Postdoctoral Fellowships

Research Priority: Symptoms, Rehab, Wellness

**“Incorporating Continuous Daily Assessment of Remote Step Count Monitoring with Quantitative Spinal Cord and Brain MRI to Improve Characterization of MS-related Disability”** Researchers at the University of California San Francisco are determining whether a person’s average daily step count can be used to measure and track progression of MS disability.

Category: Measuring MS Disease Activity

Strategic Area: Stop

Funding: \$177,243-PENDING

Term: 7/1/2018-6/30/2021

**Charles Bombardier, PhD**

University of Washington

Seattle, Washington

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“The effect of aerobic exercise on cognition in multiple sclerosis”** Can aerobic exercise improve cognitive impairment in people with MS?

Category: Rehabilitation

Strategic Area: Restore

Funding: \$1,466,730

Term: 10/1/2013-9/30/2018

**Dennis Bourdette, MD**

Oregon Health & Science University

Portland, Oregon

Award: Collaborative Research Center Awards

Research Priority: Symptoms, Rehab, Wellness

**“Developing patient-centered and evidence-based wellness programs for people with MS”**

Researchers at Oregon Health & Science University are collaborating to develop patient-centered and evidenced-based wellness programs to improve the daily life of people with MS.

Category: Human Therapy Trials/Management of MS

Strategic Area: Restore

Funding: \$825,000

Term: 4/1/2015-3/31/2020

**Riley Bove, MD**

University of California, San Francisco

San Francisco, California

Award: Career Transition Fellowships

Research Priority: Symptoms, Rehab, Wellness

**“Mechanisms underlying the effect of menopause on multiple sclerosis course”** Researchers at Harvard Medical School in Boston are investigating the effects of menopause on the brain in women with MS.

Category: Measuring MS Disease Activity

Strategic Area: Stop

Funding: \$406,791

Term: 10/1/2015-9/30/2018

**Nina Bozinov, MD**

Stanford University

Stanford, California

Award: Sylvia Lawry Physician Fellowships

Research Priority: Symptoms, Rehab, Wellness

**“Training fellowship in clinical MS/Neuroimmunology and Master's Degree in Epidemiology & Clinical Research. Project in imaging and immunopathologic biomarkers of cognitive impairment in Multiple Sclerosis.”** A promising doctor at Stanford University will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Category: Measuring MS Disease Activity

Strategic Area: Restore

Funding: \$130,000-PENDING

Term: 7/1/2018-6/30/2020

Category: Psychosocial Aspects of MS

**Tiffany Braley, MD**

University of Michigan  
Ann Arbor, Michigan

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“A randomized trial of positive airway pressure therapy to treat cognitive dysfunction in MS patients with obstructive sleep apnea”** University of Michigan researchers will determine whether a commonly used treatment for sleep apnea could improve cognitive performance in people with MS who also have sleep apnea.

Strategic Area: Restore

Funding: \$827,967

Term: 4/1/2015-3/31/2019

**Chung-Yi Chiu, PhD**

University of Illinois at Urbana-Champaign  
Springfield, Illinois

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Developing A Person-centered Internet-based Health Action Process Approach to Promoting Physical Activity in People with Multiple Sclerosis”** Researchers at the University of Illinois are testing a program aimed at increasing physical activity among people with MS to promote healthier lifestyles.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$548,359-PENDING

Term: 4/1/2018-3/31/2021

**Veronica Cipriani, MD**

University of Chicago Medical Center  
Chicago, Illinois

Award: Sylvia Lawry Physician Fellowships

Research Priority: Symptoms, Rehab, Wellness

**“Assessing Cognition and Cognitive Impairment in Multiple Sclerosis through Training in Clinical Trials”** A promising doctor at the University of Chicago Medical Center will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Category: Measuring MS Disease Activity

Strategic Area: Stop

Funding: \$130,000

Term: 7/1/2016-6/30/2018

**William Conte, MD**

University of Chicago  
Chicago, Illinois

Award: Sylvia Lawry Physician Fellowships

Research Priority: Symptoms, Rehab, Wellness

**“Dysphagia in multiple sclerosis”** A promising doctor at the University of Chicago Medical Center will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Category: Human Therapy Trials/Management of MS

Strategic Area: Restore

Funding: \$130,000

Term: 7/1/2017-6/30/2019

**John DeLuca, PhD**

Kessler Foundation Research Center  
West Orange, New Jersey

Award: Collaborative Research Center Awards

Research Priority: Symptoms, Rehab, Wellness

**“MS Collaborative Network of New Jersey”** What is the connection between cognitive and motor functions in people with MS?

Category: Rehabilitation

Strategic Area: Restore

Funding: \$821,585

Term: 4/1/2014-3/31/2019

**John DeLuca, PhD**

Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$404,698  
Term: 7/1/2017-6/30/2022

**“MS Fellowship in Neuropsychological Rehabilitation”** Rehabilitation researchers at Kessler Foundation have received funding to train promising rehabilitation professionals to conduct MS rehabilitation research.

**Hannes Devos, PT, PhD**

University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Neurophysiology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 9/1/2017-8/31/2018

**“The Eyes Have It: Use of Pupillometry to Assess Cognition in Multiple Sclerosis”** Testing a novel method of assessing cognitive function through measuring the pupil in people with MS.

**Lee Dibble, PT, PhD**

University of Utah  
Salt Lake City, Utah  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$436,220  
Term: 10/1/2017-9/30/2020

**“Gaze and postural stability in persons with MS at risk for falls: Characterizing deficits and response to treatment”** Researchers at the University of Utah are investigating whether exercises specifically designed to improve inner ear function can improve balance and vision stability in people with MS.

**Ekaterina Dobryakova, PhD**

Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$407,888  
Term: 10/1/2015-9/30/2018

**“The Effect of Feedback Presentation on the Fronto-Striatal Network Activity and Fatigue in Individuals with MS.”** Researchers at the Kessler Foundation are investigating whether a rehabilitation technique known as “feedback presentation” can relieve fatigue experienced by people with MS.

**Dawn Ehde, PhD**

University of Washington  
Seattle, Washington  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$879,991-PENDING  
Term: 4/1/2018-3/31/2022

**“Mindfulness based Cognitive Therapy and Cognitive Behavioral Therapy for Chronic Pain in Multiple Sclerosis”** University of Washington researchers are conducting a clinical trial testing two non-pharmacological approaches to managing pain in people with MS.

**Marcia Finlayson, PhD**

Queen's University  
Kinston ON, Canada

Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$382,724  
Term: 7/1/2014-6/30/2019

**“Building capacity for MS self-management research and knowledge translation”** Mentor-Based Postdoctoral Fellowship in MS Rehabilitation Research to provide training in research into self-management programs for people with MS.

**Brett Fling, PhD**

Colorado State University  
Fort Collins, Colorado

Award: Pilot Research Grant

Category: Neurophysiology  
Strategic Area: Restore  
Funding: \$44,000-PENDING  
Term: 3/1/2018-2/28/2019

Research Priority: Symptoms, Rehab, Wellness

**“Interhemispheric communication in MS: implications for balance and mobility”** Testing how changes in communication between the two sides of the brain contribute to lower limb asymmetries and the resultant declines in mobility for people with MS.

*Funded by Billie Busby and Sid Smith – In honor of Carrie Smith Simpkins*

**Nora Fritz, PT, PhD**

Wayne State University  
Detroit, Michigan

Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$44,000  
Term: 6/1/2017-5/31/2018

**“Development and Efficacy of a Telephone-Delivered Physical Activity Intervention for Multiple Sclerosis Fatigue”** Testing the effectiveness of telephone-delivered exercise to improve fatigue in people with relapsing-remitting MS.

**Joe Gasper, PhD**

Westat  
Rockville, Maryland

Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Funding: \$989,434  
Term: 10/1/2015-9/30/2018

Research Priority: Symptoms, Rehab, Wellness

**“Cost-Benefit Analysis of Multiple Sclerosis Adult Day Programs”** Westat investigators are surveying benefits and costs of MS adult day programs to document their impact on quality of life for people with MS and their caregivers, to expand their availability.

*Funded by a gift from the Conrad N. Hilton Foundation*

**Helen Genova, PhD**

Kessler Foundation Research Center  
West Orange, New Jersey

Award: Research Grants

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$479,784  
Term: 4/1/2016-3/31/2019

Research Priority: Symptoms, Rehab, Wellness

**“Remediation of Emotional Processing Deficits in MS: A Randomized Clinical Trial”** Researchers at the Kessler Foundation are testing a strategy aimed at improving emotional processing abilities in individuals with MS.



**Helen Genova, PhD**

Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$43,986  
Term: 6/1/2017-5/31/2018

**“Examining Neural Changes Following an Emotional Processing Intervention in Individuals with Multiple Sclerosis”** Examining the effects of an intervention aimed at improving emotional processing abilities in individuals with MS.

**Nader Ghasemlou, PhD**

Queen's University  
Kinston, ON, Canada  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Physiology  
Strategic Area: Restore  
Funding: \$38,625  
Term: 11/1/2017-10/31/2018

**“Circadian control of pain in multiple sclerosis”** Researchers at Queen's University, London, are identifying new therapeutic targets that can be used to block or reduce pain in those living with MS.

**Stefan Gold, PhD**

Charité - Universitätsmedizin Berlin  
Berlin, Germany  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$1,397,712  
Term: 4/1/2016-3/31/2020

**“Online program to reduce depression in MS – a phase III international multicenter randomized controlled trial”** Researchers at Berlin, Germany’s Charité University Medical Center are testing the effectiveness of a computer program for overcoming MS-related depression.

**Stefan Gold, PhD**

Charité - Universitätsmedizin Berlin  
Berlin, Germany  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$414,685-PENDING  
Term: 7/1/2018-6/30/2023

**“Neurobiological Mechanisms of Rehabilitation in MS”** Researchers at the Charité University Medical Center Berlin, Germany are training promising professionals to advance MS rehabilitation research by applying molecular biology techniques.

**Myla Goldman, MD**

University of Virginia  
Charlottesville, Virginia  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$624,604  
Term: 10/1/2016-9/30/2020

**“Assessment of the Clinical Importance of Insulin Resistance & Steroid-Associated Hyperglycemia in Relapsing Multiple Sclerosis”** A team from the University of Virginia School of Medicine is exploring whether controlling blood sugar can decrease the severity and/or improve recovery from an acute MS relapse.

**Charles Guttman, MD**

Brigham and Women's Hospital

Boston, Massachusetts

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Neurogenic Determinants of Fatigue in MS”** Researchers at Harvard Medical School are investigating the relationship between fatigue in people with MS and damage to a particular circuit in the brain using advanced imaging techniques.

Category: Measuring MS Disease Activity

Strategic Area: Restore

Funding: \$651,000

Term: 10/1/2015-9/30/2018

**Michael Halpern, MD, PhD, MPH**

Temple University

Philadelphia, Pennsylvania

Award: Health Care Delivery and Policy Research

Contracts

Research Priority: Symptoms, Rehab, Wellness

**“What are the barriers preventing access to rehabilitation services, particularly maintenance services among people with MS and what are some of the potential solutions to these barriers?”** Researchers at Temple University in Philadelphia are examining how to improve access to rehabilitation services for people with MS.

Category: Health Care Delivery/ Policy

Strategic Area: Restore

Funding: \$359,411

Term: 10/1/2017-9/30/2019

**Jeffrey Hausdorff, PhD**

Tel Aviv Sourasky Medical Center

Tel Aviv, Israel

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Virtual Reality-treadmill combined intervention for enhancing mobility and cognitive function in patients with Relapsing-Remitting Multiple Sclerosis”** Researchers at the Tel Aviv Sourasky Medical Center, Israel and the University of Illinois at Urbana-Champaign are conducting a trial to test a rehabilitation strategy that addresses walking and thinking issues in a single, integrated approach.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$938,522

Term: 4/1/2016-3/31/2020

**Christoph Heesen, MD**

University Medical Center Hamburg-Eppendorf

Hamburg, Germany

Award: Mentor-Based Postdoctoral Fellowships

Research Priority: Symptoms, Rehab, Wellness

**“Development and validation of behavioural interventions to enhance self-management in MS”**

Training in research aimed at developing ways to help people with MS enhance their knowledge and ability for managing their disease.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$396,392

Term: 7/1/2013-6/30/2018

**Audrey Hicks, PhD**

McMaster University

Hamilton, Ontario, Canada

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Exercise and Brain Health in MS”** Researchers at McMaster University are investigating the impact of exercise on brain health in people with MS.

Category: Neurophysiology

Strategic Area: Restore

Funding: \$96,500-PENDING

Term: 4/1/2018-3/31/2019

**Fay Horak, PT, PhD**

Oregon Health & Science University  
 Portland, Oregon  
 Award: Mentor-Based Postdoctoral Fellowships  
 Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
 Strategic Area: Restore  
 Funding: \$432,457  
 Term: 7/1/2014-6/30/2019

**“Rehabilitation Research Training in Postural Control of Multiple Sclerosis”** Mentor-Based Postdoctoral Fellowship in MS Rehabilitation Research to enhance research into ways to use rehabilitation to improve balance and gait in people with MS.

**Min-Hui Huang, PT, PhD**

Regents of the University of Michigan  
 Flint, Michigan  
 Award: Pilot Research Grants  
 Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
 Strategic Area: Restore  
 Funding: \$43,643  
 Term: 9/1/2017-8/31/2018

**“Effects of Inspiratory Muscle Training in Persons with Advanced Multiple Sclerosis”** Testing a method of improving breathing and reducing the complications of breathing problems in people with advanced MS.

**Herbert Karpatkin, DSc**

Hunter College  
 New York, New York  
 Award: Pilot Research Grants  
 Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
 Strategic Area: Restore  
 Funding: \$43,991  
 Term: 9/1/2016-8/31/2018

**“Effect of acupuncture on mobility, sensorimotor impairments, and quality of life in persons with Multiple Sclerosis”** A clinical trial to determine whether acupuncture can improve symptoms in 30 people with MS.

**Ilana Katz Sand, MD**

Icahn School of Medicine at Mount Sinai  
 New York, New York  
 Award: Research Grants  
 Research Priority: Symptoms, Rehab, Wellness

Category: Human Therapy Trials/Management of MS  
 Strategic Area: Restore  
 Funding: \$161,975  
 Term: 10/1/2016-9/30/2018

**“Pilot Study of a Dietary Intervention for Multiple Sclerosis”** Researchers at the Icahn School of Medicine at Mount Sinai in New York are exploring the potential of a dietary approach to improving health and wellness in people with MS.

**Naiman Khan, PhD**

University of Illinois at Urbana-Champaign  
 Springfield, Illinois  
 Award: Pilot Research Grants  
 Research Priority: Symptoms, Rehab, Wellness

Category: Measuring MS Disease Activity  
 Strategic Area: Restore  
 Funding: \$43,051  
 Term: 3/1/2017-2/28/2019

**“Retinal Lutein and Visual Health in Multiple Sclerosis”** Testing whether dietary factors play a role in vision problems in MS.

**Sonya Kim, CRC, PhD**

New York University School of Medicine  
New York, New York

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Psychometric validation of the posttraumatic growth scale in partners of persons with multiple sclerosis”** Developing an instrument that measures the partner’s responses to the impact of MS.

Category: Psychosocial Aspects of MS

Strategic Area: Restore

Funding: \$44,000

Term: 6/1/2017-5/31/2019

**Lauren Krupp, MD**

New York University Langone Medical Center  
New York, New York

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“The neurodevelopmental influence of pediatric versus adult onset MS on cognition”** Researchers at New York University are studying how MS affects cognitive abilities in children and adolescents, to help guide interventions.

Category: Psychosocial Aspects of MS

Strategic Area: Restore

Funding: \$1,046,676

Term: 4/1/2016-3/31/2020

**Sherri LaVela, MBA, MPH, PhD**

CARES - Chicago Association for Research and  
Education in Science  
Chicago, Illinois

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Evaluating the Use of Acute Intermittent Hypoxia to Enhance Motor Function in Persons with Multiple Sclerosis”** Investigators from the Chicago Association of Research and Education in Science are evaluating motor function of the lower limbs and whether a novel therapy strengthens the ankle and muscles.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$43,993-PENDING

Term: 11/1/2017-10/31/2018

**Victoria Leavitt, PhD**

Columbia University  
New York, New York

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Resting State Functional Connectivity as a Predictor of Memory Decline in Multiple Sclerosis”** Looking for a way to predict who will experience memory decline due to MS so that treatments to slow or prevent it can be started early.

Category: Diagnostic Methods

Strategic Area: Restore

Funding: \$558,130

Term: 8/1/2014-3/31/2019

**Victoria Leavitt, PhD**

Columbia University  
New York, New York

Award: Mentor-Based Postdoctoral Fellowships

Research Priority: Symptoms, Rehab, Wellness

**“Cognitive Rehabilitation in MS: From Neuroscience to Clinical Practice”** An award supporting the training of promising young candidates in cognitive rehabilitation for people with multiple sclerosis.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$389,211

Term: 7/1/2017-6/30/2022

**Victoria Leavitt, PhD**

Columbia University  
New York, New York  
Award: Pilot Research Grant

Research Priority: Symptoms, Rehab, Wellness

**“A randomized control trial of e-Support as a social network intervention in MS”** Using an online format to deliver the benefits of support groups to people with MS.

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$43,864-PENDING  
Term: 3/1/2018-2/28/2019

**Jeri-Anne Lyons, PhD**

University of Wisconsin-Milwaukee  
Milwaukee, Wisconsin  
Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Investigating the Effect of Photobiomodulation Therapy for Improved Muscle Function in Relapsing/Remitting Multiple Sclerosis”** Researchers are conducting a clinical trial to determine the effectiveness of a form of light therapy to treat muscle fatigue in people with MS.

*Funded in part by the Ladish Company Foundation*

Category: Human Therapy Trials/Management of MS  
Strategic Area: Restore  
Funding: \$44,000  
Term: 11/1/2017-10/31/2018

**Deborah Miller, PhD**

Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Health Care Delivery and Policy Research Contracts

Research Priority: Symptoms, Rehab, Wellness

**“Assessing Access, Change, Concerns, and Consequences of People with MS Regarding Four Types of Personal Insurances”** Researchers at Cleveland Clinic are evaluating the availability and concerns around available insurance coverage for individuals with MS and their families.

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$545,144  
Term: 10/1/2015-9/30/2018

**Sarah Minden, MD**

Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts

Research Priority: Symptoms, Rehab, Wellness

**“A comprehensive analysis of the direct and indirect costs of multiple sclerosis”** Documenting the complete costs of MS to individuals and society, providing much-needed statistics to aid advocacy for improved health care and quality of life.

Category: Health Care Delivery and Policy Research Contracts  
Strategic Area: Stop  
Funding: \$622,531  
Term: 11/1/2009-12/31/2018

**Sarah Minden, MD**

Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts

Research Priority: Symptoms, Rehab, Wellness

**“What is the extent to which people with MS utilize complementary and alternative medicine (CAM)?”** Investigators at the Brigham & Women’s Hospital and collaborators are launching an extensive effort to understand complementary and alternative medicine use in MS.

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$411,387-PENDING  
Term: 10/1/2017-9/30/2019

**Mia Minen, MD, MPH**

New York University Langone Medical Center  
New York, New York

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Multiple Sclerosis and Migraine: Can smartphone based progressive muscle relaxation therapy help MS patients' headaches, sleep, mood/anxiety and stress levels?”** Testing a method of reducing pain from migraine and MS.

Category: Health Care Delivery/ Policy

Strategic Area: Restore

Funding: \$44,000

Term: 9/1/2017-8/31/2018

**Robert Motl, PhD**

University of Alabama at Birmingham  
Birmingham, Alabama

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Project BIPAMS: Behavioral Intervention for increasing Physical Activity in MS”** Researchers are testing an internet-based behavioral intervention with people with MS to increase their physical activity and alleviate symptoms.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$813,305

Term: 10/1/2014-7/31/2020

**Robert Motl, PhD**

University of Alabama at Birmingham  
Birmingham, Alabama

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Sedentary Behavior in MS: Examining it's Prevalence, Distribution, and Correlates using the NARCOMS Registry”** Determining factors that contribute to sedentary behavior in people with MS.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$43,677

Term: 8/1/2016-4/20/2018

**Robert Motl, PhD**

University of Alabama at Birmingham  
Birmingham, Alabama

Award: Health Care Delivery and Policy Research  
Contracts

Research Priority: Symptoms, Rehab, Wellness

**“Project COMPLETE: Coordinated Multiple Sclerosis Exercise Toolkit”** Researchers are developing a set of tools to promote physical activity in people with MS, which is expected to reduce disability and improve quality of life.

Category: Health Care Delivery/ Policy

Strategic Area: Restore

Funding: \$363,811

Term: 1/1/2017-12/31/2018

**Robert Motl, PhD**

University of Alabama at Birmingham  
Birmingham, Alabama

Award: Collaborative Research

Research Priority: Symptoms, Rehab, Wellness

**“Healthy Aging through LifeStyle in Multiple Sclerosis: The HALT MS Research Center”**

University of Alabama at Birmingham researchers have joined together to stimulate interdisciplinary research on lifestyle and wellness for healthy aging in MS.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$816,557-PENDING

Term: 4/1/2018-3/31/2023

**Ellen Mowry, MD, MPH**

Johns Hopkins University  
Baltimore, Maryland

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$1,728,703

Term: 4/1/2011-3/31/2019

**“A randomized controlled trial of vitamin D supplementation in multiple sclerosis”** A clinical trial investigating whether vitamin D supplements can alter disease activity in people with MS who are taking a standard therapy.

*Funded by a gift from the National MS Society Greater Delaware Valley Chapter*

**Ellen Mowry, MD, MPH**

Johns Hopkins University  
Baltimore, Maryland

Award: Harry Weaver Neuroscience Scholarships

Research Priority: Symptoms, Rehab, Wellness

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$781,377

Term: 7/1/2015-6/30/2020

**“A pilot study of intermittent calorie restriction in multiple sclerosis”** Researchers at Johns Hopkins University in Baltimore are doing a pilot trial testing the safety and tolerability of a diet that intermittently restricts calorie intake as a treatment for disease activity in people with MS.

**Bardia Nourbakhsh, MD**

Johns Hopkins University  
Baltimore, Maryland

Award: Pilot Research Grant

Research Priority: Symptoms, Rehab, Wellness

Category: Therapy/Management of MS

Strategic Area: Restore

Funding: \$43,914-PENDING

Term: 3/1/2018-2/28/2019

**“Randomized control trial of ketamine for treatment of multiple sclerosis-related fatigue”**

Performing a clinical trial to find out if ketamine can alleviate the severity of fatigue in people with MS.

**Kevin Patel, MD**

Massachusetts General Hospital  
Boston, Massachusetts

Award: NMSS-ABF Clinician Scientist Award

Research Priority: Symptoms, Rehab, Wellness

Category: Psychosocial Aspects of MS

Strategic Area: Restore

Funding: \$184,890

Term: 7/1/2015-6/30/2018

**“Functional connectivity changes underlying cognitive decline in early multiple sclerosis - evidence of compensatory function or sequelae of structural compromise?”** Researchers at Massachusetts General Hospital are using imaging to understand the relationship between cognitive problems in people with MS and differences in connections between various parts of the brain.

*Funded in part by a gift from a generous donor*

**Laura Piccio, MD, PhD**

Washington University School of Medicine-M  
Saint Louis, Missouri

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$777,853-PENDING

Term: 12:00:00 AM-3/31/2020

**“Randomized controlled trial of intermittent fasting in multiple sclerosis”** Investigators at Washington University in St. Louis are conducting a clinical trial comparing intermittent fasting with a normal western diet in people with MS.

**Lara Pilutti, PhD**

University of Ottawa

Ottawa, ON, Canada

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation

Strategic Area: Restore

Funding: \$351,620

Term: 10/1/2016-11/30/2018

**“Lifestyle physical activity intervention for improving cardiorespiratory fitness and vascular comorbidity risk in multiple sclerosis”** University of Ottawa researchers are testing an intervention to increase physical activity to determine if it can improve fitness and reduce vascular disease risk in people with MS.

**Laura Rice, PT, PhD**

University of Illinois at Urbana-Champaign

Springfield, Illinois

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation

Strategic Area: Restore

Funding: \$570,217

Term: 10/1/2017-9/30/2020

**“Validation of a Fall Prevention Program Among Non-Ambulatory Wheeled Mobility Device Users with Multiple Sclerosis”** Researchers at the University of Illinois at Urbana-Champaign are developing a program designed to help prevent falling for people with MS who are wheelchair users.

**Thorsten Rudroff, PhD**

Colorado State University

Fort Collins, Colorado

Award: Pilot Research Grant

Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation

Strategic Area: Restore

Funding: \$44,000-PENDING

Term: 3/1/2018-2/28/2019

**“Can transcranial direct stimulation improve walking in multiple sclerosis”** Examining the effectiveness of electrical stimulation to improve walking in people with MS.

**Bart Rypma, PhD**

The University of Texas at Dallas

Dallas, Texas

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Neurophysiology

Strategic Area: Restore

Funding: \$492,792

Term: 4/1/2016-3/31/2019

**“The Effect of Neural-Vascular Coupling Changes on Cognitive Performance in Multiple Sclerosis”** University of Texas, Dallas researchers are seeking to understand biological mechanisms that underlie MS “brain fog” as a path toward finding solutions to cognitive problems in MS.

**Janet Shucard, PhD**

The State University of New York at Buffalo

Buffalo, New York

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation

Strategic Area: Restore

Funding: \$608,859

Term: 4/1/2017-3/31/2020

**“The Effects of Working Memory Training on Brain Function, Structure, and Cognition in MS”** Investigators at The State University of New York at Buffalo, Jacobs School of Medicine and Biomedical Sciences, are testing two training programs for improving cognitive function in people with MS.



**Catherine Siengsukon, PT, PhD**  
University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$44,000  
Term: 11/1/2017-10/31/2018

**“Assessing the Feasibility of Cognitive Behavioral Therapy for Insomnia in Individuals with MS with Symptoms of Insomnia”** Researchers at the University of Kansas Medical Center are assessing the feasibility of using cognitive behavioral therapy to improve MS symptoms of reduced sleep quality and fatigue in individuals with MS with symptoms of insomnia.

**Barbara Slusher, PhD**  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants

Category: Preclinical Drug Development  
Strategic Area: Restore  
Funding: \$654,166  
Term: 4/1/2016-3/31/2019

Research Priority: Symptoms, Rehab, Wellness

**“Development of 2-PMPA prodrugs for the treatment of cognitive impairment in multiple sclerosis”** Researchers at Johns Hopkins University are developing versions of a promising compound for possible use in improving cognitive function in MS.

**Jacob Sosnoff, PhD**  
University of Illinois at Urbana-Champaign  
Springfield, Illinois  
Award: Research Grants

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$627,770  
Term: 10/1/2014-9/30/2018

Research Priority: Symptoms, Rehab, Wellness

**“Fall Risk and Incidence Reduction in Multiple Sclerosis”** Testing an exercise program to reduce the risk of falling in older people with MS.

*Paid by special funds provided by the Illinois Lottery*

**Lauren Strober, PhD**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Funding: \$513,495  
Term: 10/1/2014-9/30/2018

Research Priority: Symptoms, Rehab, Wellness

**“Standardization and Normative Data of the Symbol Digit Modalities Test-Oral Version”** Improving a test that measures cognitive function.

**Lauren Strober, PhD**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Pilot Research Grants

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$44,000  
Term: 9/1/2016-8/31/2018

Research Priority: Symptoms, Rehab, Wellness

**“The SEMS Project: Staying Employed with Multiple Sclerosis”** Testing a comprehensive intervention that may help people with MS to stay employed.

**James Sumowski, PhD**

Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$43,999  
Term: 11/1/2016-4/30/2018

**“Pilot Randomized Controlled Trial of Atomoxetine to Treat Memory Impairment in MS Patients”**

Testing a therapy for its ability to address memory problems in people with MS.

**Aaron Turner, PhD**

University of Washington  
Seattle, Washington  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness

Category: Rehabilitation  
Strategic Area: Restore  
Funding: \$401,426-PENDING  
Term: 7/1/2018-6/30/2023

**“The Seattle Collaborative Fellowship”** Researchers at the University of Washington are training a series of promising professionals in how to conduct MS rehabilitation research.

**Caila Vaughn, PhD, MPH**

The State University of New York at Buffalo  
Buffalo, New York  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Human Therapy Trials/Management of MS  
Strategic Area: Restore  
Funding: \$43,725-PENDING  
Term: 11/1/2017-10/31/2018

**“The Usefulness of the Talkitt Speech Recognition Technology in Improving Quality of Life for Individuals with Multiple Sclerosis and Dysarthria”** Researchers at the State University of New York at Buffalo are conducting a trial to determine whether an application for smart devices improves communication-related quality of life in people with MS and speech disorders.

**Terry Wahls, MD**

The University of Iowa  
Iowa City, Iowa  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness

Category: Human Therapy Trials/Management of MS  
Strategic Area: Restore  
Funding: \$1,098,981  
Term: 7/1/2016-6/30/2020

**“Dietary Approaches to Treating Multiple Sclerosis Related Fatigue”** A team at the University of Iowa is comparing two dietary approaches to determine their effectiveness for treating MS-related fatigue.

**Mitchell Wallin, MD, MPH**

Institute for Clinical Research, Inc.  
Washington, District of Columbia  
Award: Health Care Delivery and Policy Research Contracts  
Research Priority: Symptoms, Rehab, Wellness

Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Funding: \$441,744  
Term: 10/1/2017-9/30/2019

**“Multiple Sclerosis Telehealth Utilization Project”** Researchers at the VA Multiple Sclerosis Center of Excellence-East (Baltimore & Washington, DC) along with collaborators in Boston, MA and Palo Alto, CA are investigating the use of technology to deliver specialty care remotely to people with MS, with the goal of improving access to quality care through telehealth.

**Katharine Whartenby, PhD**

Johns Hopkins University  
Baltimore, Maryland

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Mechanisms of Increased Morbidity and Mortality of Influenza Infections in People with MS”**

Researchers at Johns Hopkins University are studying mice with MS-like disease that are infected with flu virus to investigate why flu is dangerous for people with MS.

Category: Infectious Agents

Strategic Area: Stop

Funding: \$731,878

Term: 10/1/2015-9/30/2018

**Brooks Wingo, PhD**

University of Alabama at Birmingham  
Birmingham, Alabama

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Pilot and feasibility trial of a telehealth dietary intervention for MS”** Investigators at the University of Alabama at Birmingham are testing a comprehensive behavioral lifestyle intervention that includes both diet and exercise components, delivered through a web-based telecoaching platform.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$39,628

Term: 11/1/2017-10/31/2018

**Heather Wishart, PhD**

Trustees of Dartmouth College  
Hanover, New Hampshire

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Cognitive evaluation in MS: Expanding clinical research potential through the validation of an online testing battery”** Researchers at the Geisel Medical School at Dartmouth are testing the feasibility of administering cognitive testing online, to improve the process of evaluating cognitive changes in large-scale studies in MS.

Category: Psychosocial Aspects of MS

Strategic Area: Stop

Funding: \$366,010

Term: 4/1/2017-3/31/2020

**Bing Yao, PhD**

Kessler Foundation Research Center  
West Orange, New Jersey

Award: Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Investigating the Correlation between Cognitive Fatigue and Brain Iron Deposition in Basal Ganglia in Multiple Sclerosis”** Investigators at Kessler Foundation Research Center In West Orange, NJ, are exploring whether iron in certain areas of the brain contributes to cognitive fatigue in people with MS.

Category: Diagnostic Methods

Strategic Area: Restore

Funding: \$558,314

Term: 10/1/2017-9/30/2020

**E. Yeh, MD**

The Hospital for Sick Children  
Toronto, ON, Canada

Award: Pilot Research Grants

Research Priority: Symptoms, Rehab, Wellness

**“Sleep, Physical Activity and MS Symptoms in Paediatric MS”** Researchers at The Hospital for Sick Children are seeking to understand how sleep habits, physical activity, and disease symptoms are related to one another in youth with MS.

Category: Rehabilitation

Strategic Area: Restore

Funding: \$43,807

Term: 11/1/2017-10/31/2018