List of Current Research Projects Funded by the National MS Society

Sorted by Topic/Research Priorities

April 2019

Research Department
National Multiple Sclerosis Society
733 Third Avenue
New York, NY 10017-3288
(212) 476-0417

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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 April 2019.

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?”

Kirsten Anderson, PhD  
Category: Human Genetics  
Strategic Area: Stop  
Funding: $188,067  
Term: 7/1/2019-6/30/2022

“Killer immunoglobulin-like receptor polymorphism associations with Multiple Sclerosis: Bioinformatics approach to understanding the genetic impact on disease phenotypes, disability progression and clinical outcomes” UCSF researchers are studying genes that instruct certain immune cells in people with MS, because differences in these genes may impact why some people have more MS relapses and or experience MS progression sooner.

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

“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

Vikram Bhise, MD  
Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: $44,000  
Term: 6/1/2018-5/31/2019

“Childhood Radiologically Isolated Syndrome Study” Studying children with evidence of MS-like damage on MRI, but no symptoms, for ways of predicting MS.

Theron Casper, PhD  
Category: Human Therapy Trials/Management of MS  
Strategic Area: End  
Funding: $3,490,520  
Term: 7/1/2019-6/30/2022

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

Stephen Crocker, PhD  
Category: CNS Repair  
Strategic Area: Restore  
Funding: $608,036  
Term: 10/1/2018-9/30/2021

“Cellular Senescence in Neural Progenitor Cells Limits CNS Remyelination” University of Connecticut investigators are exploring the reasons why repair of nerve-insulating myelin in MS can fail, and seeking ways to reverse the problem to restore function.
Shannon Dunn, PhD
Univ. Health Network
Toronto, Ontario, Canada
Award: Pilot Research Grant
Research Priority: Risk Factors

“Smoking and CNS Autoimmunity”  Toronto researchers are using a model of MS to unravel the biology of the effects of smoking on MS.

Marika Falcone, MD, PhD
Fondazione Centro San Raffaele
Milan, Italy
Award: Research Grants
Research Priority: Risk Factors

“Assessing the immune regulatory role of gut microbiota in brain autoimmunity and disease activity in RRMS patients”  Researchers in Milan, Italy are analyzing how gut bacteria influence immune cell behavior in the brain, and how alterations in those bacteria may reduce or exacerbate MS disease activity.

Kathryn Fitzgerald, DSc, PhD
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.

David Hafler, MD, MS
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.

Adil Harroud, MD
University of California, San Francisco
San Francisco, California
Award: Clinician Scientist Development Award
Research Priority: Risk Factors

“The genetic basis of progression in multiple sclerosis”  UCSF researchers are analyzing genetic material from people with MS to determine the role that genes may play in MS progression.
Disease characteristics and healthcare utilization patterns in advantaged and disadvantaged patients with multiple sclerosis” Researchers at Northwestern are examining how people with MS access healthcare, and how residing in a disadvantaged area, racial identity, and distance to medical services may impact their use of the healthcare system.

Tanja Kuhlmann, MD
University Hospital Münster
Münster, Germany
Award: Research Grants
Research Priority: Risk Factors
“Effect of age on human oligodendroglial differentiation and (re-)myelination” Researchers at University Hospital in Münster, Germany, are determining the factors that may limit the repair of myelin damaged during the course of MS.

Netta Levin, MD, PhD
Medical Research Fund of Hadassah Medical Organization
Jerusalem, Israel
Award: Research Grants
Research Priority: Risk Factors
“Temporal reorganization to overcome monocular demyelination – unique plasticity mechanism in MS – A renewal application” Researchers at Hadassah Hebrew University in Israel are investigating how eyesight is restored by natural repair and rewiring processes after optic neuritis in MS.

Matthew Lincoln, MD, PhD
Yale University
New Haven, Connecticut
Award: Career Transition Fellowships
Research Priority: Risk Factors
“Genetic and molecular heterogeneity of MS” A team at Yale is seeking to fine tune MS genetic studies using a novel framework that combines MS genetics data with similar data from related diseases, for insight into disease mechanisms and possible gene regulation.

Averil Ma, MD
University of California, San Francisco
San Francisco, California
Award: Research Grants
Research Priority: Risk Factors
“Ubiquitin Mediated Prevention of Multiple Sclerosis” A UCSF team is testing whether changes to a potent inflammation-reducing protein contribute to the onset of MS-like disease in mice, for clues to developing new therapies to stop MS.
Amir-Hadi Maghzi, MD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: NMSS-ABF Clinician Scientist Development Awards  
Research Priority: Risk Factors  
“Investigation of the microbiome in multiple sclerosis and its relationship to immunologic and clinical features of disease”  
Investigators are researching gut bacteria in MS and its relationship to immune activity and other features of the disease.

Caterina Mainiero, MD, PhD  
Massachusetts General Hospital  
Boston, Massachusetts  
Award: Research Grants  
Research Priority: Risk Factors  
“Multimodal imaging of neuroinflammation and its contribution to cortical demyelination and regeneration in multiple sclerosis”  
Researchers at Massachusetts General Hospital are developing methods to monitor cells called microglia that likely play a role in myelin repair in people with MS.

Rosella Mechelli, PhD  
Università Telematica San Raffaele Roma  
Rome, Italy  
Award: Research Grants  
Research Priority: Risk Factors  
“EBV genotyping in MS”  
Investigators in Rome, Italy are confirming and clarifying the possible role of specific strains of Epstein-Barr virus as a triggering factor in MS.

Ute-Christiane Meier, PhD  
Queen Mary University of London  
London, United Kingdom  
Award: Pilot Research Grants  
Research Priority: Risk Factors  
“Testing molecular mimicry between human endogenous retrovirus envelope proteins and myelin proteins”  
Exploring one idea for how the immune attack is launched on the brain and spinal cord in MS.

Jorge Oksenberg, PhD  
University of California, San Francisco  
San Francisco, California  
Award: Strategic Initiatives  
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 risk and genetic susceptibility in MS.
Nikos Patsopoulos, MD, PhD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Harry Weaver Neuroscience Scholarships  
Research Priority: Risk Factors  
“Omic-based precision medicine strategies in multiple sclerosis”  Researchers at Brigham and Women's Hospital are refining a system to better predict an individual's risk for developing MS.

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 CFMS Foundation and the Al Otaiba Family*

Anne-Louise Ponsonby, PhD  
The Australian National University  
Canberra, Australia  
Award: Research Grants  
Research Priority: Risk Factors  
“Identifying epigenetic factors involved in MS onset : utilising population-based studies with genetic and environmental measures.”  Researchers at the Australian National University are studying a link between the environment and how genes are turned on and off to trigger the onset of MS.

Anne-Katrin Pröbstel, MD  
University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships  
Research Priority: Risk Factors  
“Kathleen C. Moore Foundation Postdoctoral Fellowship: Gut-Brain-Axis: crosstalk between B cells and gut microbiota in MS”  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.  
The *Kathleen C. Moore Foundation Postdoctoral Fellowship*

Joseph Sabatino, MD, PhD  
University of California, San Francisco  
San Francisco, California  
Award: Research Grants  
Research Priority: Risk Factors  
“Characterization of myelin-reactive CD8+ T cells in Multiple Sclerosis”  UCSF researchers are analyzing immune cells in the blood and spinal fluid from people with MS and other neurologic diseases to determine if unique cell populations drive the immune response in MS.
Naresha Saligrama, PhD  
Stanford University  
Stanford, California  
Award: Career Transition Fellowships  
Research Priority: Risk Factors  
"Understanding T cell receptor diversity and specificity in Multiple sclerosis and Experimental autoimmune encephalomyelitis” A Stanford team is using advanced and high-throughput technologies to analyze a novel subset of immune cells in people with MS during relapses, remissions, and after treatment with disease-modifying therapy, for clues to what activates and sustains the T cell immune response in MS.

Deanna Saylor, MD  
Johns Hopkins University School of Medicine  
Baltimore, Maryland  
Award: Pilot Research Grant  
Research Priority: Risk Factors  
"Describing Demyelinating Disease in Zambia” Researchers at Johns Hopkins are working with healthcare providers in sub-Saharan Africa to improve diagnosis and tracking of MS, for clues to factors that lead to development of this disease worldwide.

Andrew Steelman, PhD  
University of Illinois at Urbana-Champaign  
Champaign, Illinois  
Award: Research Grants  
Research Priority: Risk Factors  
"Upper-respiratory infection, glial activation and disease exacerbation” Researchers at the University of Illinois are exploring how upper respiratory infections may trigger MS attacks, by studying immune reactions to infection in mice with an MS-like disease.

Helen Tremlett, PhD  
University of British Columbia  
Vancouver, British Columbia, Canada  
Award: Pilot Research Grant  
Research Priority: Risk Factors  
"Genomic variants associated with DMF induced lymphopenia in MS [GenDMF-MS]” Seeking to predict and ultimately prevent adverse drug reactions in people with MS.

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

Pathology: “What is the cause of MS?”
Omer AL-Louzi, PhD
National Institutes of Neurological Disorders and Stroke
Bethesda, Maryland
Award: Clinician Scientist Development Award
Research Priority: Pathology
“Characterizing the central vein sign in multiple sclerosis using advanced magnetic resonance imaging techniques and pathology correlations” NIH imaging specialists are using advanced MRI to determine whether a central blood vessel in brain lesions (areas of damage) can distinguish MS from similar disorders, and thus expedite the process of diagnosing MS.

Douglas Arnold, MD
McGill University
Montreal QC, Canada
Award: International Progressive MS Alliance - Collaborative Network Center
Research Priority: Pathology
“An MRI biomarker for disability progression for use in clinical trials” Identifying a biomarker of disability progression for use in clinical trials. Estimated joint commitment with other Progressive MS Alliance members

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

Christina Azevedo, MD
University of Southern California
Los Angeles, California
Award: Research Grants
Research Priority: Pathology
“Disentangling MS-Specific Brain Atrophy from Normal Aging” Researchers at the University of Southern California are identifying a reliable MRI marker that could be used to screen potential therapies for progressive forms of MS.
**Clare Baecher-Allan, PhD**
Brigham and Women's Hospital
Boston, Massachusetts
Award: Research Grants
Research Priority: Pathology

"Are CD20+ T cells dysfunctional in Multiple Sclerosis?" A team at Brigham and Women's Hospital is studying blood samples from people with MS to determine whether a novel set of immune cells drives MS, for clues to developing a therapeutic strategy for stopping the disease.

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

"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. Funded in part by Daniel and Anita Schwab

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

"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.

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

"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.

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**Claudia Cantoni, PhD**
Washington University School of Medicine-M
Saint Louis, Missouri
Award: Career Transition Fellowships
Research Priority: Pathology

"MiR-223: a new potential therapeutic target to modulate myeloid cells in multiple sclerosis" Researchers at Washington University are exploring the possibility that a subset of immune cells in the blood may be impaired in MS, for clues to how these cells might be manipulated to suppress disease activity.
Myriam Chaumeil, PhD  
University of California, San Francisco  
San Francisco, California  
Award: Research Grants  
Research Priority: Pathology  
“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.

Hongbo Chi, PhD  
St. Jude Children’s Research Hospital  
Memphis, Tennessee  
Award: Research Grants  
Research Priority: Pathology  
“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.

Bogoljub Ciric, MSc, PhD  
Thomas Jefferson University  
Philadelphia, Pennsylvania  
Award: Research Grants  
Research Priority: Pathology  
“The role of CSF-1R and its ligands, CSF-1 and IL-34, in CNS autoimmunity.” Researchers at Thomas Jefferson University are investigating regulators of specific immune cells involved in nervous system tissue damage in MS.

Ben Clarkson, PhD  
Mayo Clinic Rochester  
Rochester, Minnesota  
Award: Postdoctoral Fellowships  
Research Priority: Pathology  
“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  
“Rocky Mountain MS Center Tissue Bank” Developing and maintaining a tissue bank of specimens from people with MS for use in research.
John Corboy, MD  
University of Colorado Denver  
Denver, Colorado  
Award: MS Brain and Tissue Repositories  
Research Priority: Pathology  
Planning grant to develop a proposal for developing an MS tissue repository as a shared research resource.

Dimitrios Davalos, PhD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants  
Research Priority: Pathology  
Gliovascular Mechanisms of Blood-Brain Barrier Disruption in Multiple Sclerosis  
Cleveland Clinic researchers are using novel imaging, genetic and to explore mechanisms involved in early immune cell infiltration into the nervous system in MS-like disease, for clues to stopping immune attacks in MS.

Philip De Jager, MD, PhD  
Columbia University  
New York, New York  
Award: MS Brain and Tissue Repositories  
Research Priority: Pathology  
Planning grant to develop a proposal for developing an MS tissue repository as a shared research resource.

Jordon Dunham, MS, PhD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Postdoctoral Fellowships  
Research Priority: Pathology  
Neuronal morphology and expression profiles in a novel sub-variant of MS  
Scientists at the Cleveland Clinic are studying mechanisms of damage in some people with MS who seem to have injury to nerve cells but not to nerve-insulating myelin typically seen in MS.

Jeff Dunn, PhD  
University of Calgary  
Calgary, Canada  
Award: Research Grants  
Research Priority: Pathology  
Using light based technology to identify the extent of hypoxia in the cortex of patients with MS  
University of Calgary researchers are using new technology to detect and investigate whether and how reduced levels of oxygen in parts of the brain may impact people with MS.
Stephen Fancy, DVM, PhD  
University of California, San Francisco  
San Francisco, California  
Award: MS Brain and Tissue Repositories  
Research Priority: Pathology  

“Planning grant to develop a proposal for developing an MS tissue repository as a shared research resource.” Planning grant to develop a proposal for developing an MS tissue repository as a shared research resource.

Thomas Forsthuber, MD, PhD  
The University of Texas at San Antonio  
San Antonio, Texas  
Award: Research Grants  
Research Priority: Pathology  

“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  

“Spleen tyrosine kinase regulation of microglial functions in experimental autoimmune encephalomyelitis” Researchers are investigating whether an enzyme plays helpful roles in regulating the function of a cell type called microglia in MS.

Mario Galgani, PhD  
Consiglio Nazionale delle Ricerche - CNR  
Rome, Italy  
Award: Pilot Research Grants  
Research Priority: Pathology  

“A novel human CD3+CD56+ regulatory subset: potential involvement in the pathogenesis of Multiple Sclerosis.” Studying a previously unexplored T cell population with regulatory properties and its involvement in the development of MS.

Shailendra Giri, PhD  
Henry Ford Health System  
Detroit, Michigan  
Award: Research Grants  
Research Priority: Pathology  

“Impaired DHA metabolism in multiple sclerosis” Researchers at Henry Ford Health System are looking at whether people with MS have abnormalities in their ability to process polyunsaturated fatty acids -- dietary components that may fight inflammation.
**Stefan Gold, PhD**  
Charité - Universitätsmedizin Berlin  
Berlin, Germany  
Award: Pilot Research Grants  
Research Priority: Pathology  
*“Sex differences in neurodegeneration in CIS and early stage MS”* Seeking to understand the basic mechanisms of MS and how they might differ between men and women.

**Ariele Greenfield, MD**  
University of California, San Francisco  
San Francisco, California  
Award: NMSS-ABF Clinician Scientist Development Awards  
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 Foundation Postdoctoral Fellowship*

**Caroline Guglielmetti, MD**  
University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships  
Research Priority: Pathology  
*“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.

**Joel Guthridge, PhD**  
Oklahoma Medical Research Foundation  
Oklahoma City, Oklahoma  
Award: MS Brain and Tissue Repositories  
Research Priority: Pathology  
*“Planning grant to develop a proposal for developing an MS tissue repository as a shared research resource.”* Planning grant to develop a proposal for developing an MS tissue repository as a shared research resource.

**Asaff Harel, MD**  
The Feinstein Institute for Medical Research  
New York, New York  
Award: Pilot Research Grant  
Research Priority: Pathology  
*“Novel Neuroimaging Techniques for the Differentiation of Acute and Chronic MS Lesions Without Gadolinium: T1-Rho and Quantitative Susceptibility Mapping”* A New York team is exploring a possible alternative to using the tracing agent gadolinium in MRI scans, which can accumulate in the brain over time.

*Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: $55,000  
Term: 3/1/2019-2/29/2020*
Daniel Harrison, MD
University of Maryland, Baltimore
Baltimore, Maryland
Award: Pilot Research Grants
Research Priority: Pathology
“Development of a machine-learning algorithm for automated cortical lesion identification in multiple sclerosis” Developing automated methods for evaluating tissue damage in people with MS.

Christopher Hemond, MD
Univ. of Massachusetts
Worcester, MA, Greater New England
Award: Pilot Research Grant
Research Priority: Pathology
“The role of memory B-cells in multiple sclerosis pathology and disease monitoring” A team at UMass is investigating a specific subset of immune cells that may characterize highly inflammatory disease activity in people with MS.

Roland Henry, PhD
University of California, San Francisco
San Francisco, California
Award: Research Grants
Research Priority: Pathology
“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.

Andres Herrada, PhD
Universidad Autónoma de Chile
Temuco, Chile
Award: Pilot Research Grant
Research Priority: Pathology
“Role of Lymphatic Vasculature in the development of Multiple Sclerosis” Examining how immune cells enter the brain and spinal cord during MS-like disease in mice.

Sam Horng, MD, PhD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Career Transition Fellowships
Research Priority: Pathology
“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  
*“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.

**Joo-won Kim, PhD**  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Postdoctoral Fellowships  
Research Priority: Pathology  
*“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.

*The Kathleen C. Moore Foundation Postdoctoral Fellowship*

**Alexandra Kitz, PhD**  
Yale University School of Medicine  
NEW HAVEN, Connecticut  
Award: Postdoctoral Fellowships  
Research Priority: Pathology  
*“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, New South Wales  
Award: Research Grants  
Research Priority: Pathology  
*“Investigating mechanisms of axonal degeneration in multiple sclerosis”*  
What are the mechanisms that drive progressive nervous system damage in MS?

**Maarten Kole, MSc, PhD**  
Netherlands Institute for Neuroscience  
Amsterdam, The Netherlands  
Award: Research Grants  
Research Priority: Pathology  
*“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 Kremenov, PhD
University of Vermont
Burlington, Vermont
Award: Research Grants
Research Priority: Pathology
“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.

Jianrong Li, PhD
Texas A&M AgriLife Research
College Station, Texas
Award: Research Grants
Research Priority: Pathology
“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.

Xiaoxia Li, PhD
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Research Grants
Research Priority: Pathology
“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.

Jennifer Linden, PhD
Weill Cornell Medical College
New York, New York
Award: Career Transition Fellowships
Research Priority: Pathology
“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.

Liliana Lucca, PhD
Yale University
NEW HAVEN, Connecticut
Award: Postdoctoral Fellowships
Research Priority: Pathology
“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
“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, PhD
Cleveland Clinic Foundation
Cleveland, Ohio
Award: NMSS-ABF Clinician Scientist Development Awards
Research Priority: Pathology
“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.  
*Funded in part by Daniel and Anita Schwab*

Michael Matise, PhD
Rutgers, The State University of New Jersey
Piscataway, New Jersey
Award: Research Grants
Research Priority: Pathology
“Role of Shh-responsive astrocytes in blood-brain barrier integrity”  Researchers at Rutgers University are exploring the role of a molecule in maintaining and repairing the blood-brain barrier, which malfunctions in MS.

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

Zahra Moinfar, MD, PhD
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
Research Priority: Pathology
“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  Category: Measuring MS Disease Activity  
Johns Hopkins University  Strategic Area: Stop  
Baltimore, Maryland  Funding: $500,000  
Award: Research Grants  Term: 10/1/2016-9/30/2019  
Research Priority: Pathology  
“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.

Mohamed Oukka, PhD  Category: Immunology  
Seattle Children's Hospital  Strategic Area: Stop  
Seattle, Washington  Funding: $724,876  
Award: Research Grants  Term: 10/1/2018-9/30/2021  
Research Priority: Pathology  
“Effects of Fingolimod on T cells”  Researchers at Seattle Children’s Hospital are exploring immune regulators to refine attempts to stop MS disease activity.

Gregory Owens, PhD  Category: Immunology  
University of Colorado Denver  Strategic Area: Stop  
Denver, Colorado  Funding: $705,727  
Award: Research Grants  Term: 10/1/2017-7/1/2020  
Research Priority: Pathology  
“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.

Daniel Pelletier, MD  Category: Measuring MS Disease Activity  
University of Southern California  Strategic Area: Stop  
Los Angeles, California  Funding: $55,000  
Award: Pilot Research Grant  Term: 10/1/2018-9/30/2019  
Research Priority: Pathology  
“Simulation And Optimization Post-Processing Methods To Identify MS Subpial Lesions Using 7t MR Imaging”  Developing an optimal method to image cortical lesions in MS using strong MRI technology and eventually translate this into better clinical care.

Yannick Poitelon, PhD  Category: Biology of Glia  
Albany Medical College  Strategic Area: Stop  
Albany, New York  Funding: $55,000  
Award: Pilot Research Grants  Term: 10/1/2018-9/30/2019  
Research Priority: Pathology  
“Role of mechanotransducers YAP and TAZ in central nervous system myelin”  Investigating a possible reason why new myelin fails to wrap around nerve fibers in MS.
Hongwei Qin, PhD
University of Alabama at Birmingham
Birmingham, Alabama
Award: Research Grants
Research Priority: Pathology
“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.

Richard Reynolds, PhD
Imperial College London
London, United Kingdom
Award: Research Grants
Research Priority: Pathology
“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.

A.M. Rostami, MD, PhD
Thomas Jefferson University
Philadelphia, Pennsylvania
Award: Research Grants
Research Priority: Pathology
“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.

Joseph Sabatino, MD, PhD
University of California, San Francisco
San Francisco, California
Award: NMSS-ABF Clinician Scientist Development Awards
Research Priority: Pathology
“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, MBBS, MD
Johns Hopkins University
Baltimore, Maryland
Award: Research Grants
Research Priority: Pathology
“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.
Maria Savvaki, PhD  
Foundation for Research and Technology- Hellas  
Heraklion, Greece  
Award: Pilot Research Grant  
Research Priority: Pathology  
“**Myelophagy under normal and demyelinating conditions**” Researchers in Greece are investigating whether a molecular process that helps cells to regenerate can protect nerve-insulating myelin from damage in MS.

Lucas Schirmer, MD  
University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships  
Research Priority: Pathology  
“**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*

Hengameh Shams, PhD  
University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships  
Research Priority: Pathology  
“**Characterization of the interplay between T and B lymphocytes in multiple sclerosis using functional proteomics**” A UCSF team is using advanced technology to study links between immune function and disease status in people with MS, for clues to key biological events that underlie disease initiation and response to treatment.

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

Russell Shinoahara, PhD  
University of Pennsylvania  
Philadelphia, Pennsylvania  
Award: Research Grants  
Research Priority: Pathology  
“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.
Mari Shinohara, PhD  
Duke University Medical Center  
Charlotte, North Carolina  
Award: Research Grants  
Research Priority: Pathology  
“Study on innate immune inflammation that enhances EAE”  
Duke University researchers are exploring how immune system activity leads to nerve degeneration, for insights into ways to prevent nerve loss and MS progression.

Afsaneh Shirani, MD  
Washington University School of Medicine-M  
Saint Louis, Missouri  
Award: NMSS-ABF Clinician Scientist Development Awards  
Research Priority: Pathology  
“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.  
*Funded in part by Daniel and Anita Schwab*

Nancy Sicotte, MD  
Cedars-Sinai Medical Center  
Los Angeles, California  
Award: Pilot Research Grants  
Research Priority: Pathology  
“Genetic, serologic, and clinical predictors of TNF-α 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  
“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  
“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  
“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  
“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.

Bruce Trapp, PhD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: MS Brain and Tissue Repositories  
Research Priority: Pathology  
“Planning grant to develop a proposal for developing an MS tissue repository as a shared research resource.”  
Planning grant to develop a proposal for developing an MS tissue repository as a shared research resource.

Ari Waisman, PhD  
University Medical Center of the Johannes Gutenberg-University Mainz  
Mainz, Germany  
Award: Research Grants  
Research Priority: Pathology  
“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.

Gregory Wu, MD, PhD  
Washington University School of Medicine-M  
Saint Louis, Missouri  
Award: Research Grants  
Research Priority: Pathology  
“Formation of ectopic lymphoid tissue in autoimmune encephalomyelitis and MS”  
Washington University researchers are exploring a novel feature of the immune system that may prevent therapies that target immune B cells from being effective in some people with progressive MS, for clues to better management of MS progression.
“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?

Junqian Xu, PhD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Pilot Research Grants
Research Priority: Pathology
“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
“How do we stop MS progression?”
Researchers at the University of California, San Francisco are working to identify unique genes that are turned on in CD8+ T cells from people with MS compared to people without the disease.

Lilyana Amezcua, MD
University of Southern California
Los Angeles, California
Award: Research Grants
Research Priority: Progression
“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.

Annexon Biosciences, Annexon Biosciences
South San Francisco, California
Award: Fast Forward
Research Priority: Progression
“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.
Laura Baldassari, 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.

Erin Beck, MD, PhD
National Institute of Neurological Disorders and Stroke
Bethesda, Maryland
Award: Career Transition Fellowships
Research Priority: Progression

“Evolution of cortical pathology and its relation to meningeal inflammation in multiple sclerosis” NIH researchers are using advanced imaging to look at specific areas of damage in the brains of people with MS that are linked with progression, for clues to developing treatments that can stop the disease.

Pavan Bhargava, MBBS, MD
Johns Hopkins University
Baltimore, Maryland
Award: Research Grants
Research Priority: Progression

“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.

Pavan Bhargava, MBBS, MD
Johns Hopkins University
Baltimore, Maryland
Award: Career Transition Fellowships
Research Priority: Progression

“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.

Oscar Bizzozero, PhD
University of New Mexico
Albuquerque, NM, New Mexico
Award: Pilot Research Grant
Research Priority: Progression

“Prophylactic and Therapeutic Effects of Liprooxstatin-1 in EAE” Investigators at the University of New Mexico are looking to inhibit a specific type of cell death in mice with MS-like disease, for clues to developing a strategy that might minimize damage and improve function in MS.
<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Strategic Area</th>
<th>Funding</th>
<th>Term</th>
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</thead>
<tbody>
<tr>
<td>Nina Bozinov, MD, MD</td>
<td>Measuring MS Disease Activity</td>
<td>Restore</td>
<td>$130,000</td>
<td>7/1/2018-6/30/2020</td>
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<td>Stanford University, Stanford, California</td>
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<tr>
<td>Award: Sylvia Lawry Physician Fellowships</td>
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<td>Research Priority: Progression</td>
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<tr>
<td>“Training fellowship in clinical MS/Neuroimmunology and Master's Degree in Epidemiology &amp; Clinical Research. Project in imaging and immunopathologic biomarkers of cognitive impairment in Multiple Sclerosis.”</td>
<td>A promising doctor at Stanford University will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.</td>
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| Theron Casper, PhD, PhD       | Human Therapy Trials/Management of MS | End                  | $3,000,000      | 7/1/2016-6/30/2019        |
| University of Utah, Salt Lake City, Utah |                     |                     |                 |                           |
| Award: Health Care Delivery and Policy Research Contracts |                     |                     |                 |                           |
| Research Priority: Progression|                                   |                     |                 |                           |
| “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, MA, MD, FRCP(C), PhD, MedScD | Measuring MS Disease Activity | Stop                | $448,550        | 10/1/2017-9/30/2022       |
| University College London, London, United Kingdom |                     |                     |                 |                           |
| Award: Research Grants |                     |                     |                 |                           |
| Research Priority: Progression |                                   |                     |                 |                           |
| “MS-STAT2-MRI” | 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. |

<p>| Mingnan Chen, PhD, PhD       | Preclinical Drug Development      | Stop                 | $767,534        | 7/1/2019-6/30/2021        |
| University of Utah, Salt Lake City, Utah |                     |                     |                 |                           |
| Award: Research Grants |                     |                     |                 |                           |
| Research Priority: Progression |                                   |                     |                 |                           |
| “Understanding and utilizing the role of programmed death 1-positive (PD-1+) cells in multiple sclerosis” | A team at the University of Utah is developing a therapy that targets specific immune cells, and testing it in MS mouse models to see if it can stop MS-like attacks without affecting normal immune function. |</p>
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<thead>
<tr>
<th>Name</th>
<th>University</th>
<th>Research Priority: Progression</th>
<th>Category:</th>
<th>Strategic Area:</th>
<th>Funding:</th>
<th>Term:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanuja Chitnis, MD</td>
<td>Massachusetts General Hospital, Boston, Massachusetts</td>
<td>Award: Health Care Delivery and Policy Research Contracts</td>
<td>Psychosocial Aspects of MS</td>
<td>Stop</td>
<td>$492,718</td>
<td>10/1/2015-9/30/2019</td>
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<tr>
<td>William Conte, MD</td>
<td>University of Chicago</td>
<td>Research Priority: Progression</td>
<td>Human Therapy Trials/Management of MS</td>
<td>Restore</td>
<td>$130,000</td>
<td>7/1/2017-6/30/2019</td>
</tr>
<tr>
<td>John Corboy, MD</td>
<td>University of Colorado Denver, Denver, Colorado</td>
<td>Award: Strategic Initiatives - 2016</td>
<td>Discontinuation of Disease Modifying Therapies (DMTs) in Multiple Sclerosis (MS) – co-funding with Patient Centered Outcome Research Institute (PCORI)</td>
<td>Stop</td>
<td>$326,464</td>
<td>10/1/2016-9/30/2021</td>
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<td>Aditi Das, PhD</td>
<td>University of Illinois at Urbana-Champaign, Springfield, Illinois</td>
<td>Research Priority: Progression</td>
<td>Anti-inflammatory endocannabinoids as potential MS therapeutics</td>
<td>Stop</td>
<td>$55,000</td>
<td>10/1/2018-9/30/2019</td>
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<td>Carlos Duarte, PhD</td>
<td>University of Coimbra</td>
<td>Research Priority: Progression</td>
<td>Novel cerebrospinal fluid and serum biomarkers for Multiple Sclerosis</td>
<td>Stop</td>
<td>$175,000</td>
<td>10/1/2016-9/30/2019</td>
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“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.

“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.

“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.

“Anti-inflammatory endocannabinoids as potential MS therapeutics” Exploring a strategy for stopping the immune attack using a naturally occurring molecule similar to cannabis.

“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 Saint Louis, Missouri
Award: Sylvia Lawry Physician Fellowships
Research Priority: Progression
“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.

Ilena George, MD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Sylvia Lawry Physician Fellowships
Research Priority: Progression
“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.

Carolyn Goldschmidt, DO
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 the Cleveland Clinic 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
“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.
Sasha Gupta, MD  
University of California, San Francisco  
San Francisco, California  
Award: Clinician Scientist Development Award  
Research Priority: Progression  
“Use of anti-CD19 CAR-T cells in treatment of CNS autoimmune demyelinating disease in mouse model”  
A UCSF team is testing a therapy used to target immune B cells in cancer for clues to whether this treatment can slow or prevent disease progression in MS lab models.

David Hafler, MD, MS  
Yale University School of Medicine  
New Haven, Connecticut  
Award: Research Grants  
Research Priority: Progression  
“Longitudinal, single-cell assessment to define the mechanism of B cell depletion therapy in Multiple Sclerosis”  
Yale University researchers are investigating the role of immune B cells in MS and what happens to the immune system in people with MS who are taking B cell-depleting therapies.

Michael Halpern, MD, PhD, MPH  
Temple University  
Philadelphia, Pennsylvania  
Award: Health Care Delivery and Policy Research Contracts  
Research Priority: Progression  
“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  
Corvallis, Oregon  
Award: Health Care Delivery and Policy Research Contracts  
Research Priority: Progression  
“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  
“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.
Daniel Kaufman, PhD  
University of California, Los Angeles  
Los Angeles, California  
Award: Research Grants  
Research Priority: Progression  
“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.

Robyn Klein, MD, PhD  
Washington University School of Medicine-M  
Saint Louis, Missouri  
Award: Research Grants  
Research Priority: Progression  
“Interferon lambda as a biomarker and target for Diseases Progression in MS” Researchers at Washington University School of Medicine are investigating the role of a molecule called interferon lambda in progressive forms of MS.

Kristen Krysko, MD  
University of California, San Francisco  
San Francisco, California  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression  
“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.

Vipin Kumar, PhD  
University of California San Diego  
San Diego, California  
Award: Research Grants  
Research Priority: Progression  
“Targeting lysophospholipid-reactive type II NKT cells for potential oral therapeutic in multiple sclerosis” Researchers at the University of California, San Diego are investigating the usefulness of an oral therapy already in use for another purpose for its ability to reduce MS-like disease in a mouse model.

Christopher Langston, MD  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression  
“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.
Don Mahad, MD, PhD
University of Edinburgh
Edinburgh, United Kingdom
Award: Research Grants
Research Priority: Progression
“Targeting mitochondria to protect axons in progressive MS” A team at the University of Edinburgh is attempting to enhance energy production in nerve cells, in hopes that making these cells more robust will protect them from damage in MS.

Muhammad Taimur Malik, MD
Johns Hopkins University
Baltimore, Maryland
Award: Sylvia Lawry Physician Fellowships
Research Priority: Progression
“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
“The 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.

Lior Mayo, PhD
Tel Aviv University
Tel Aviv, Israel
Award: Pilot Research Grants
Research Priority: Progression
“The Role of CD157+ Cells in Acute and Progressive MS” Studying immunological mechanisms that contribute to disease progression and to exploring their therapeutic potential for MS.

Marisa McGinley, DO
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 will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Funded in part by Daniel and Anita Schwab
“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
Gryphon Scientific
Boston, Massachusetts
Award: Health Care Delivery and Policy Research Contracts
Research Priority: Progression
“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.

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.

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.

Financial implications of informal (unpaid) caregiving” The economic impacts for family members who provide care to people with MS.
Sarah Minden, MD  
Gryphon Scientific  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts  
Research Priority: Progression  
“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.

Vanessa Morais, PhD  
Instituto de Medicina Molecular  
Lisboa, Portugal  
Award: Pilot Research Grants  
Research Priority: Progression  
“Unravelling longitudinal mitochondrial DNA mutations in Multiple Sclerosis: association with disease activity and progression” Clarifying the connection between MS and dysfunction of the mitochondria -the "powerhouses" of cells.

Ellen Mowry, MD, MCR  
Johns Hopkins University  
Baltimore, Maryland  
Award: Strategic Initiatives  
Research Priority: Progression  
“Establishing an MS biobank, leveraging two comparative effectiveness clinical trials supported by PCORI” The Society is leveraging PCORI-funded clinical trials to support an MS biobank as a shared resource for researchers searching for biomarkers that will help elucidate predictors of long-term disability and treatment response.

MS Society UK,  
MS Society UK  
London, United Kingdom  
Award: Strategic Initiatives  
Research Priority: Progression  
“HTA-CET-15/57/143-Dr Jeremy Chataway - MS-STAT2 - Phase 3 trial simvastatin” 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.

Bardia Nourbakhsh, MD  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants  
Research Priority: Progression  
“Evaluating the effects of short-term B-cell depletion on long-term disease activity and immune tolerance in relapsing multiple sclerosis” Johns Hopkins researchers are exploring the longer-term impacts of short-term use of B-cell depleting therapy on the immune system and MS disease activity.
Daniel Ontaneda, MD, MS
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Strategic Initiatives
Research Priority: Progression
“The Society is leveraging PCORI-funded clinical trials to support an MS biobank as a shared resource for researchers searching for biomarkers that will help elucidate predictors of long-term disability and treatment response.” The Society is leveraging PCORI-funded clinical trials to support an MS biobank as a shared resource for researchers searching for biomarkers that will help elucidate predictors of long-term disability and treatment response.

Joel Pachter, PhD
University of Connecticut Health Center
Farmington, Connecticut
Award: Research Grants
Research Priority: Progression
“Extracellular vesicles and MSCs as novel tools to aid in the diagnosis and treatment of secondary progressive disease” Investigators are 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.

Dzung Pham, PhD
Henry M. Jackson Foundation
Bethesda, Maryland
Award: Research Grants
Research Priority: Progression
“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.

Prevalence Workgroup,
National Multiple Sclerosis Society
New York, New York
Award: Health Care Delivery and Policy Research Contracts
Research Priority: Progression
“Prevalence Workgroup” Special initiative to ascertain the prevalence of multiple sclerosis in the United States

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

Ryan Schubert, MD  
University of California, San Francisco  
San Francisco, California  
Award: NMSS-ABF Clinician Scientist Development Awards  
Research Priority: Progression  
“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 Scott, PhD  
Henry M. Jackson Foundation  
Bethesda, Maryland  
Award: Research Grants  
Research Priority: Progression  
“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.

Elizabeth Silbermann, MD  
Oregon Health & Science University  
Portland, Oregon  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression  
“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.

Elias Sotirchos, MD  
Johns Hopkins University School of Medicine  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression  
“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  
“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, Quebec, Canada  
Award: Pilot Research Grants  
Research Priority: Progression  
“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.

**Elaine Su, MD**  
Stanford University  
Stanford, California  
Award: Sylvia Lawry Physician Fellowships  
Research Priority: Progression  
“Neuroimmunology Fellowship with Training in Epidemiology and Clinical Research”  
A promising doctor at Stanford will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Yisong Wan, PhD**  
University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina  
Award: Research Grants  
Research Priority: Progression  
“Targeting T cell function to halt MS/EAE development”  
Researchers at the University of North Carolina at Chapel Hill are studying a factor that appears to be important in abnormal activation of immune cells that are harmful in MS.

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

“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 Woodroofe, PhD  
Sheffield Hallam University  
Sheffield, United Kingdom  
Award: Research Grants

Research Priority: progression

“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  
Ohio State University  
Columbus, Ohio  
Award: Pilot Research Grants

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.

Yinan Zhang, MD  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Sylvia Lawry Physician Fellowships

Research Priority: Progression

“Sylvia Lawry Fellowship in MS Clinical Trials” A promising doctor at Mount Sinai will develop the skills involved in the design, implementation, and analysis of clinical trials of new therapies in MS.

Hao Zhu, PhD  
University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grants

Research Priority: Progression

“The influence of mitochondria-modulating drugs on metabolic processes relative to multiple sclerosis” Studying high dose biotin therapy and pioglitazone in models of progressive MS.
Neuroprotection/Nervous System Repair: “How do we repair the damage caused by MS?”

Drew Adams, PhD
Case Western Reserve University
Cleveland, Ohio
Award: Pilot Research Grant
Research Priority: Neuroprotection/Repair

“How do 8,9-unsaturated sterols promote oligodendrocyte formation and remyelination?” Case Western scientists are exploring how cholesterol-like molecules may act to promote myelin repair, for clues to targeting these molecules in MS repair strategies.

Adan Aguirre, PhD
State University of New York at Stony Brook
Stony Brook, New York
Award: Research Grants
Research Priority: Neuroprotection/Repair

“How do 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.

Francesca Bagnato, MD, PhD
Vanderbilt University
Nashville, Tennessee
Award: Pilot Research Grants
Research Priority: Neuroprotection/Repair

“Imaging axons in multiple sclerosis using Spherical Mean Technique” Testing a new type of imaging to capture the extent of nerve fiber loss in the brains of people with MS.

Dennis Bourdette, MD
Oregon Health & Science University
Portland, Oregon
Award: Research Grants
Research Priority: Neuroprotection/Repair

“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

“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.
Roberta Brambilla, PhD
University of Miami
Atlanta, Georgia
Award: Pilot Research Grants
Research Priority: Neuroprotection/Repair
“Developing selective TNF-TNFR2 binding stabilizers to promote remyelination and repair in multiple sclerosis” Testing molecules that may be candidates for promoting neuroprotection and myelin repair in MS.

Cashel Neural, Inc.,
Cashel Neural, Inc.
Cleveland, Ohio
Award: Fast Forward
Research Priority: Neuroprotection/Repair
“The Optimization of a remyelination candidate” Cashel Neural scientists are conducting laboratory studies to advance a compound that may promote the development of cells that make nerve-insulating myelin, which is destroyed in MS.

Kae-Jiun Chang, PhD
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
Research Priority: Neuroprotection/Repair
“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
“The 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.

Ian Duncan, DVM, PhD
University of Wisconsin-Madison
Madison, Wisconsin
Award: Research Grants
Research Priority: Neuroprotection/Repair
“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
Gregory Duncan, PhD
Oregon Health & Science University
Portland, Oregon
Award: Postdoctoral Fellowships
Research Priority: Neuroprotection/Repair
“Mechanisms of neuronal adaptation to chronic demyelination”  An Oregon team is determining how nerve cells may adapt to prevent themselves from being damaged in MS models, for clues to reducing damage and disease progression in people with MS.

Kirsten Evonuk, PhD
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Postdoctoral Fellowships
Research Priority: Neuroprotection/Repair
“Selective deletion of AMPA-type glutamate receptors on oligodendrocytes is neuroprotective in autoimmune demyelination”  Cleveland Clinic researchers are seeking to discover how dysfunctional signaling of the nerve signaling chemical glutamate may block myelin repair in mice, for clues to promoting myelin repair in MS.

Stephen Fancy, DVM, PhD
University of California, San Francisco
San Francisco, California
Award: Harry Weaver Neuroscience Scholarships
Research Priority: Neuroprotection/Repair
“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
“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.

Mahboobeh Fereidan-Esfahani, MD
Mayo Clinic Rochester
Rochester, Minnesota
Award: Postdoctoral Fellowships
Research Priority: Neuroprotection/Repair
“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.
Babette Fuss, PhD  Virginia Commonwealth University  Richmond, Virginia  Award: Research Grants  Research Priority: Neuroprotection/Repair  “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  “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.

Jaime Grutzendler, MD  Yale University  NEW HAVEN, Connecticut  Award: Research Grants  Research Priority: Neuroprotection/Repair  “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.

Emily Harrington, MD, PhD  Johns Hopkins University  Baltimore, Maryland  Award: NMSS-ABF Clinician Scientist Development Awards  Research Priority: Neuroprotection/Repair  “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.

Jacob Hines, PhD  Winona State University  Winona, Minnesota  Award: Pilot Research Grants  Research Priority: Neuroprotection/Repair  “The role of axon caliber in the selective myelination of nerve axons” Researchers are Winona State University are learning what properties of the nerve fiber enable successful formation of myelin sheaths.
Kevin Hodgetts, PhD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Fast Forward  
Research Priority: Neuroprotection/Repair  
“Development of an Improved Etifoxine Analog for the Treatment of Multiple Sclerosis” Researchers at Brigham and Women’s Hospital are creating and evaluating chemical cousins of an anti-anxiety drug to develop a therapy that can slow MS disease activity and promote repair.

Yang Hu, MD, PhD  
Stanford University  
Stanford, California  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“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  
“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.

Jeffrey Huang, PhD  
Georgetown University  
Washington, District of Columbia  
Award: Harry Weaver Neuroscience Scholarships  
Research Priority: Neuroprotection/Repair  
“Amino acid induced microglia/macrophage-OPC crosstalk in CNS remyelination” A Georgetown team is exploring the role of a specific molecule that appears to be very active when myelin damage occurs, for clues to developing a strategy that curtails its activity and promotes myelin repair.

Ethan Hughes, PhD  
University of Colorado Denver  
Denver, Colorado  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“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.

Funded in part by a private foundation
Eve Kelland, PhD  
University of Southern California  
Los Angeles, California  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“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.

Thomas Lane, PhD  
University of Utah  
Salt Lake City, Utah  
Award: Collaborative Research Center Awards  
Research Priority: Neuroprotection/Repair  
“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.

Fang Liu, MD, PhD  
Centre for Addiction and Mental Health  
Toronto, Ontario, 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

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.  
Funded in Collaboration with the MS Society of Canada

Amy Lovett-Racke, PhD  
Ohio State University  
Columbus, Ohio  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“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.
David Martinelli, PhD
University of Connecticut Health Center
Farmington, Connecticut
Award: Pilot Research Grants
Research Priority: Neuroprotection/Repair
“The role of C1QL1 in oligodendrocyte maturation” Identifying a previously unknown mechanism by which the brain can create new myelin-making cells to conduct tissue repair.

Category: Biology of Glia
Strategic Area: Restore
Funding: $44,000
Term: 6/1/2018-5/31/2019

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.

Category: Preclinical Drug Development
Strategic Area: Restore
Funding: $3,998,585
Term: 10/1/2017-9/30/2021

Leandro Marziali, PhD
State University of New York at Buffalo
Buffalo, New York
Award: Postdoctoral Fellowships
Research Priority: Neuroprotection/Repair
“p38MAPKγ signaling in myelin biology: a novel molecular target to promote myelination and remyelination” A team at SUNY Buffalo is studying a protein that may inhibit myelin repair in people with MS, for clues to promoting myelin repair and recovery.

Category: CNS Repair
Strategic Area: Restore
Funding: $188,067
Term: 7/1/2019-6/30/2021

Glenn Matsushima, MS, 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: $500,259
Term: 4/1/2017-3/31/2020

Medared
Menlo Park, California
Award: Fast Forward
Research Priority: Neuroprotection/Repair
“Humanization of Monoclonal Antibody 5B8 for Neuroprotection in MS” Developing an antibody that has shown promise in preclinical studies as a potential treatment to protect the nervous system from MS damage.

Category: Preclinical Drug Development
Strategic Area: Stop
Funding: $330,000

“Humanization of Monoclonal Antibody 5B8 for Neuroprotection in MS” Developing an antibody that has shown promise in preclinical studies as a potential treatment to protect the nervous system from MS damage.
Booki Min, PhD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
"The role of Foxp3+ regulatory T cells during glucocorticoid treatment of autoimmunity"  
Cleveland Clinic researchers are exploring how high-dose steroids to treat acute MS attacks influence the activity of immune cells and how this approach to reducing inflammation may be improved.  
Category: Immunology  
Strategic Area: Stop  
Funding: $667,710  
Term: 4/1/2019-3/31/2022

Yevgeniya Mironova, PhD  
Johns Hopkins University  
Baltimore, Maryland  
Award: Postdoctoral Fellowships  
Research Priority: Neuroprotection/Repair  
“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.  
Category: CNS Repair  
Strategic Area: Restore  
Funding: $181,754  
Term: 7/1/2018-6/30/2021

Kelly Monk, PhD  
Oregon Health & Science University  
Portland, Oregon  
Award: Harry Weaver Neuroscience Scholarships  
Research Priority: Neuroprotection/Repair  
“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.  
Category: Biology of Glia  
Strategic Area: Restore  
Funding: $379,895  
Term: 12/1/2017-11/30/2021

Sarah Moyon, PhD  
Research Foundation of CUNY-ASRC  
New York, New York  
Award: Postdoctoral Fellowships  
Research Priority: Neuroprotection/Repair  
“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.  
Category: Biology of Glia  
Strategic Area: Restore  
Funding: $125,564  
Term: 7/1/2016-6/30/2019

David Naor, PhD  
The Hebrew University of Jerusalem  
Jerusalem, Israel  
Award: Pilot Research Grants  
Research Priority: Neuroprotection/Repair  
“Oral delivery of a 5-MER peptide attenuates paralysis in EAE model of Multiple Sclerosis”  
Testing a synthetic product that shows promise for protecting against nervous system damage in mice with MS-like disease.  
Category: Preclinical Drug Development  
Strategic Area: Stop  
Funding: $40,000  
Term: 6/1/2018-5/31/2019

Funded by Joy and Avi Avidan
Thañh Nguyen, PhD  
Weill Cornell Medical College  
New York, New York  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“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 Mansfield, CT, Connecticut  
Award: Pilot Research Grant  
Research Priority: Neuroprotection/Repair  
“VAMP2-mediated exocytosis in NG2 cells is needed for myelination”  
A University of Connecticut team is exploring whether immature myelin-making cells secrete molecules that are important for the formation of myelin, for clues to repair strategies for MS.

Akiko Nishiyama, MD, PhD  
University of Connecticut  
Storrs, Connecticut  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“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 Fellowships  
Research Priority: Neuroprotection/Repair  
“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.

Pablo Paez, PhD  
The State University of New York at Buffalo  
Buffalo, New York  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“Voltage-gated calcium channels in reactive astrocytes, a possible therapeutic target to reduce brain inflammation and promote remyelination in MS.”  
SUNY Buffalo scientists are studying whether deleting tiny molecules that monitor calcium regulation in brain cells results in reducing inflammation and possibly promoting myelin repair.
Mark Petersen, MD  
University of California, San Francisco  
San Francisco, California  
Award: Pilot Research Grants  
Research Priority: Neuroprotection/Repair  
“Overcoming the inhibitory lesion environment in multiple sclerosis: Targeting fibrin-induced neuroinflammation to promote remyelination.”  
Determining if fibrinogen’s inhibitory effects on myelin repair can be overcome as a new strategy to promote regeneration in the nervous system.

Stefano Pluchino, MD  
University of Cambridge  
Cambridge, United Kingdom  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“Characterisation and manipulation of the metabolic pathways driving neuroinflammation”  
Researchers at the University of Cambridge are studying a type of immune cell and a molecule called succinate made by these cells, and their potential role in nervous system damage in progressive MS.

Brian Popko, PhD  
University of Chicago  
Chicago, Illinois  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“ZFP24 Control of the myelination program of oligodendrocytes”  
University of Chicago scientists are exploring molecules that may play a key role in the development and function of myelin-making cells, for clues to promoting the repair of nerve-insulating myelin in MS.

Ruchika Prakash, PhD  
Ohio State University  
Columbus, Ohio  
Award: Research Grants  
Research Priority: Neuroprotection/Repair  
“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  
“Role of astrocytes in multiple sclerosis and experimental autoimmune encephalomyelitis”  
What role do brain cells called astrocytes play in progressive MS?
Phase 2, Randomized, Double Blind, Placebo Controlled Study of Intrathecal autologous MSC-NP Cells in Patients With MS” The Tisch MS Research Center of New York is conducting a phase II clinical trial to see whether stem cells derived from individuals' own bone marrow can inhibit immune mechanisms and augment tissue repair in progressive MS.

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

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

Roles of TMEM2 and CEMIP in oligodendrocyte differentiation” Determining the role of two proteins that may inhibit repair of nerve-insulating myelin in MS.
Mariapaola Sidoli, PhD
Stanford University
Stanford, California
Award: Postdoctoral Fellowships
Research Priority: Neuroprotection/Repair
“A new approach to analyze cAMP in oligodendrocyte development and myelination”  Stanford University researchers are analyzing a specific signal in the brain that stimulates the formation of myelin, for clues to harnessing the signal as a therapeutic target to promote myelin repair in MS.

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.

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.

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.

Christine Stadelmann, MD
University Medical Center Goettingen
Göttingen, Germany
Award: Pilot Research Grants
Research Priority: Neuroprotection/Repair
“Identification of pro-remyelinating factors in remyelinating multiple sclerosis lesions”  Determining how cell communication in areas of myelin damage may be especially important for efficient myelin repair.
William Talbot, PhD
Stanford University
Stanford, California
Award: Research Grants
Research Priority: Neuroprotection/Repair
“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.

Alessia Tassoni, PhD
University of California, Los Angeles
Los Angeles, California
Award: Postdoctoral Fellowships
Research Priority: Neuroprotection/Repair
“Disability specific drug discovery for MS: Focus on Vision” Novel technology is allowing a team from UCLA to analyze changes in the optic nerve of MS models, for clues to developing neuroprotective strategies in people with MS.

TG Therapeutics,
TG Therapeutics
New York, New York
Award: Fast Forward
Research Priority: Neuroprotection/Repair
“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.

Teresa Wood, PhD
Rutgers, The State University of New Jersey
Piscataway, New Jersey
Award: Research Grants
Research Priority: Neuroprotection/Repair
“Cooperative Functions of mTOR and TrkB/Erk Signaling in Remyelination” Researchers at Rutgers University are studying two molecular pathways that may work together to maintain and repair myelin following injury to myelin in mice.

J. Bradley Zuchero, PhD
Stanford University
Stanford, California
Award: Career Transition Fellowships
Research Priority: Neuroprotection/Repair
“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*
“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, Rehabilitation, 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
“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
“G-EO Gait Rehabilitation Training in Progressive Multiple Sclerosis” A trial testing a novel method of improving walking in people with progressive MS.

**Dagmar Amtmann, PhD**
University of Washington
Seattle, Washington
Award: Pilot Research Grant
Research Priority: Symptoms, Rehab, Wellness
“Developing measures of sexual function and satisfaction with sex life for persons with Multiple Sclerosis” Improving questionnaires about sexual function so that they include relevant aspects of sexual function for people with MS.

**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.
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.

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.

Michael Bemben, PhD  
University of Oklahoma  
Norman, Oklahoma  
Award: Pilot Research Grant  
Research Priority: Symptoms, Rehab, Wellness  
“**Acute Physiological Responses To Low-Load Resistance Exercise With Blood Flow Restriction Compared To Traditional High-Load Resistance Exercise in Multiple Sclerosis Patients**” A team in Oklahoma is testing a modified weight training program for clues to increasing physical function and improving quality of life in people with MS.

Malachy Bishop, PhD  
University of Wisconsin-Madison  
Madison, Wisconsin  
Award: Health Care Delivery and Policy Research Contracts  
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.
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?

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

Riley Bove, MD
University of California, San Francisco
San Francisco, California
Award: Pilot Research Grant
Research Priority: Symptoms, Rehab, Wellness
“Does melatonin improve insomnia in patients with MS?” Researchers at UCSF are testing whether sleep problems improve in people with MS with the use of melatonin.

Tiffany Braley, MD, MS
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.

Korhan Buyukturkoglu, PhD
Columbia University
New York, New York
Award: Postdoctoral Fellowships
Research Priority: Symptoms, Rehab, Wellness
“Building a Pattern Classifier to Distinguish Cognitive Phenotypes in MS” Columbia University researchers are bringing several different MRI methods together to see the ‘big picture’ of cognitive impairment in MS, to better evaluate and overcome this dysfunction.
Leigh Charvet, PhD
New York University Langone Medical Center 
New York, New York
Award: Research Grants
Research Priority: Symptoms, Rehab, Wellness
“A randomized controlled trial of remotely-supervised transcranial direct current stimulation (RS-tDCS) for the treatment of fatigue in multiple sclerosis” New York University researchers are conducting a small clinical trial of transcranial direct current stimulation to assess its effectiveness for treating MS-related fatigue.

Leigh Charvet, PhD
New York University Langone Medical Center 
New York, New York
Award: Pilot Research Grant
Research Priority: Symptoms, Rehab, Wellness
“Virtual Reality Pain Management: A Nonpharmacological Tool to Manage Pain in MS” NYU researchers are testing whether virtual reality techniques can reduce pain in people with MS.

Chung-Yi Chiu, PhD
University of Illinois at Urbana-Champaign 
Springfield, Illinois
Award: Pilot Research Grants
Research Priority: Symptoms, Rehab, Wellness
“The Effects of Religiosity/Spirituality in Coping with Multiple Sclerosis” Addressing how religion and spirituality affect coping behavior and health management behavior in people with MS.

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.

Evan Cohen, PhD
Rutgers, The State University of New Jersey 
New Brunswick, New Jersey
Award: Pilot Research Grant
Research Priority: Symptoms, Rehab, Wellness
“Interval vs. continuous walking training for people with multiple sclerosis: a comparison of effectiveness” Rutgers researchers are testing whether providing rest intervals throughout walking rehabilitation efforts improves their effectiveness.
Silvana Costa, PhD  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“Keep an eye on the Symbol Digit Modalities Test”  
Kessler Foundation investigators are analyzing aspects of a cognitive test commonly used in MS, to develop more comprehensive and specific rehabilitation strategies.

John DeLuca, PhD  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness  
“MS Fellowship in Neuropsychological Rehabilitation”  
Rehabilitation researchers at Kessler Foundation have received funding to train promising rehabilitation professionals to conduct MS rehabilitation research.

John DeLuca, ABPP, 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?

Lee Dibble, PhD  
University of Utah  
Salt Lake City, Utah  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“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: Pilot Research Grant  
Research Priority: Symptoms, Rehab, Wellness  
“Outcome Processing in Social Interactions in Individuals with Multiple Sclerosis: An Investigation using Pupillometry”  
Examining cognitive impediments that might prevent some individuals with MS from selecting the optimal behavior and from adapting to social environments.
Ekaterina Dobryakova, PhD  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“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  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“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.

Dawn Ehde, PhD  
University of Washington  
Award: Strategic Initiatives  
Research Priority: Symptoms, Rehab, Wellness  
“A Randomized Controlled Trial of Telephone-Delivered Cognitive Behavioral Therapy, Modafinil, and Combination Therapy of Both Interventions for Fatigue 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  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness  
“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.

Kathryn Fitzgerald, ScD  
Johns Hopkins University  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“The Melanopsin Pathway, Changes to Brain Structure and Depression in People with Multiple Sclerosis” Because depression is common in MS, Johns Hopkins researchers are looking for early signs of brain and eye changes that may signal depression, for clues to identifying and preventing this symptom.
Simon Gandevia, MD, PhD  
Neuroscience Research Australia  
Sydney, Australia  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“Abdominal Functional Electrical Stimulation to improve bowel function in Multiple Sclerosis”  
Investigating the effectiveness of a strategy to improve the bowel function of people with MS.

Joe Gasper, PhD  
Westat  
Rockville, Maryland  
Award: Health Care Delivery/ Policy  
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: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“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, Ontario, Canada  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“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: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness  
“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.
**Stefan Gold, PhD**  
Charité - Universitätsmedizin Berlin  
Berlin, Germany  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness

**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.

**Myla Goldman, MD, MS**  
University of Virginia  
Charlottesville, Virginia  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness

**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 Guttmann, 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.

**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.

**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.
Fay Horak, PhD, PT  
Oregon Health & Science University  
Portland, Oregon  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness  
“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  
“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.

Abbey Hughes, MA, PhD  
Johns Hopkins University  
Baltimore, Maryland  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“Reducing depression and anxiety in individuals with MS and their caregivers: An emotion regulation skills training intervention”  
Testing the efficacy of a unique group-based therapy for improving emotion regulation in people with MS and their carepartners.

Herbert Karpatkin, DSc  
Hunter College  
New York, New York  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“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.

Naiman Khan, PhD  
University of Illinois at Urbana-Champaign  
Champaign, Illinois  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“Retinal Lutein and Visual Health in Multiple Sclerosis”  
Testing whether dietary factors play a role in vision problems in MS.
Sonya Kim, 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.

Anna Kratz, PhD  
University of Michigan  
Ann Arbor, Michigan  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness  
“Training to Advance Rehabilitation Research in Multiple Sclerosis”  
Researchers at the University of Michigan are training promising professionals to advance MS rehabilitation research.

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.

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.

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.
Victoria Leavitt, PhD
Columbia University
New York, New York
Award: Pilot Research Grants
Research Priority: Symptoms, Rehab, Wellness
“A Randomized Controlled 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
Term: 3/1/2018-2/28/2020

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: $572,755
Term: 8/1/2014-3/31/2020

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: 11/1/2017-10/31/2019

Soe Mar, MD
Washington University School of Medicine-M Saint Louis, Missouri
Award: Pilot Research Grants
Research Priority: Symptoms, Rehab, Wellness
“Development of the disease-specific PedsQL™ for Pediatric Patients with MS”
To develop and validate a measure for evaluating quality of life in children and adolescents with MS.

Category: Psychosocial Aspects of MS
Strategic Area: Restore
Funding: $43,370
Term: 6/1/2018-5/31/2019

Robert McBurney, PhD
Accelerated Cure Project for MS Boston, Massachusetts
Award: Strategic Initiatives
Research Priority: Symptoms, Rehab, Wellness
“Pathways to Cures Project Collaboration”
Collaborating with iConquerMS patient powered platform to gain input on research priorities and impacts.

Category: Psychosocial Aspects of MS
Strategic Area: Restore
Funding: $1,014,881
Term: 10/1/2018-9/30/2021
Sarah Minden, MD  
Gryphon Scientific  
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.

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.

Ivan Molton, PhD  
University of Washington  
Seattle, Washington  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“Efficacy of a psychological intervention to improve ability to cope with uncertainty in MS.”  
University of Washington researchers are comparing traditional behavioral therapy with an alternate approach to determine how to better help people newly diagnosed with MS to cope with the uncertainty of the disease.

Robert Motl, PhD  
University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness  
“What is an effective intervention to promote physical activity in MS”  
University of Alabama at Birmingham researchers have joined together to stimulate interdisciplinary research on lifestyle and wellness for healthy aging in MS.

Robert Motl, PhD  
University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Collaborative Research Center Awards  
Research Priority: Symptoms, Rehab, Wellness  
“What is an effective intervention to promote physical activity in MS”  
University of Alabama at Birmingham researchers have joined together to stimulate interdisciplinary research on lifestyle and wellness for healthy aging in MS.
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 at the University of Alabama, Birmingham are testing an internet-based behavioral intervention with people with MS to increase their physical activity and alleviate symptoms.

Robert Motl, PhD  
University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Health Care Delivery and Policy Research Contracts  
Research Priority: Symptoms, Rehab, Wellness  
“Project COMPLETete: Coordinated Multiple Sclerosis Exercise Toolkit” Researchers at the University of Illinois at Urbana-Champaign 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.

Ellen Mowry, MD, MPH  
Johns Hopkins University  
Baltimore, Maryland  
Award: Harry Weaver Neuroscience Scholarships  
Research Priority: Symptoms, Rehab, Wellness  
“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.

Ellen Mowry, MD, MPH  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“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*

Laura Piccio, MD, PhD  
Washington University School of Medicine-M  
Saint Louis, Missouri  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
“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
“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
“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
The University of Iowa
Iowa City, Iowa
Award: Pilot Research Grants
Research Priority: Symptoms, Rehab, Wellness
“Can Transcranial Direct Stimulation Improve Walking in Multiple Sclerosis?” Examining the effectiveness of electrical stimulation to improve walking in people with MS.

David Schulz, PhD
University of Missouri-Columbia
Columbia, Missouri
Award: Pilot Research Grants
Research Priority: Symptoms, Rehab, Wellness
“Effects of central demyelination on properties of bladder innervating neurons and bladder function” Understanding the underlying changes in the bladder and bladder circuitry that can cause bladder symptoms in people with MS.

Janet Shucard, PhD
The State University of New York at Buffalo
Buffalo, New York
Award: Research Grants
Research Priority: Symptoms, Rehab, Wellness
“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.
Jacob Sloane, MD, PhD  
Beth Israel Deaconess Medical Center  
Boston, Massachusetts  
Award: Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
"Role of sleep apnea in MS fatigue and disability"  
Researchers at Beth Israel Deaconess Medical Center are exploring the prevalence of sleep apnea in people with MS and whether treating apnea can reduce MS-related fatigue.

Barbara Slusher, PhD  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants  
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.

Susan Smedema, MS, PhD  
University of Wisconsin-Madison  
Madison, Wisconsin  
Award: Pilot Research Grants  
Research Priority: Symptoms, Rehab, Wellness  
"Character Strengths as Buffers against the Negative Effects of Multiple Sclerosis”  
Determining if specific character strengths protect people with MS from reductions in symptoms and quality of life.

Jacob Sosnoff, PhD  
University of Illinois at Urbana-Champaign  
Champaign, Illinois  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness  
"Cognitive Motor Interference Rehabilitation in Multiple Sclerosis”  
Experienced mentors/researchers at the University of Illinois Urbana-Champaign are training promising rehabilitation professionals to conduct MS rehabilitation studies.

Rebecca Straus Farber, MD  
Columbia University  
New York, New York  
Award: Pilot Research Grant  
Research Priority: Symptoms, Rehab, Wellness  
"Immunologic Effects of Prebiotics (Fermentable Dietary Fiber) as Compared to Probiotics in Multiple Sclerosis”  
New York researchers are testing two strategies for altering the gut microbiome in people with MS, in an effort to stop MS in its tracks.
Aaron Turner, PhD  
University of Washington  
Seattle, Washington  
Award: Mentor-Based Postdoctoral Fellowships  
Research Priority: Symptoms, Rehab, Wellness  
Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: $382,459  
Term: 7/1/2013-6/30/2019

“The Seattle collaborative post-doctoral fellowship in MS rehabilitation research”  
Researchers at the University of Washington are training a series of promising professionals in how to conduct MS rehabilitation research.

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

“The Seattle Collaborative Fellowship”  
Researchers at the University of Washington and VA Puget Sound are training a series of promising professionals in how to conduct MS rehabilitation research.

Richard Van Emmerik, PhD  
University of Massachusetts  
Amherst, Massachusetts  
Award: Pilot Research Grant  
Research Priority: Symptoms, Rehab, Wellness  
Category: Rehabilitation  
Strategic Area: Restore  
Funding: $54,973  
Term: 3/1/2019-2/29/2020

“Tai Chi and Mindfulness Training to Improve Postural Control and Quality of Life in People with Multiple Sclerosis: A Community-Based Intervention Study”  
UMass researchers are testing Tai Chi and Mindfulness Meditation training for their ability to improve balance in people with MS.

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  
Term: 11/1/2017-10/31/2019

“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

“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.

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.

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.

E. Yeh, MD
The Hospital for Sick Children
Toronto, Ontario, Canada
Award: Mentor-Based Postdoctoral Fellowships
Research Priority: Symptoms, Rehab, Wellness

“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.

E. Yeh, MD
The Hospital for Sick Children
Toronto, Ontario, Canada
Award: Pilot Research Grants
Research Priority: Symptoms, Rehab, Wellness

“Sleep, Physical Activity and MS Symptoms in Pediatric 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.