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 (USA) sorted by state and country, as of January 2018.

Notes: 1) Some listed projects have indications of restricted support that has been provided by donors and other friends of the Society. These are listed in italic typeface directly beneath the project title. 2) This list is not an official record and any errors do not reflect official changes to research award agreements.

TBD = to be determined

About Our Research Projects
The Society offers a spectrum of funding opportunities and resources to support MS investigators at virtually every stage of their careers. These include:

- **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 and 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 and attracting new researchers to investigate MS
- **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 affects 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
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PROJECTS OUTSIDE OF THE U.S.A.

AUSTRALIA
Trevor Kilpatrick, MBBS, PhD
Florey Institute of Neuroscience and Mental Health
Melbourne, Australia
Award: Research Grants

“Understanding the Role of MERTK in the Aetiology and Pathogenesis of MS” Researchers at the University of Melbourne in Australia are investigating the function of an immune cell protein which is abnormal in some people with MS, to understand its potential role in MS.

Trevor Kilpatrick, MBBS, PhD
Florey Institute of Neuroscience and Mental Health
Melbourne, Australia
Award: Pilot Research Grants

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

Alexandr Klistorner, PhD
Macquarie University
North Ryde, NSW, Australia
Award: Research Grants

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

CANADA
Audrey Hicks, PhD
McMaster University
Hamilton, Ontario, Canada
Award: Research Grants

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

Marcia Finlayson, PhD
Queen's University
Kinston ON, Canada
Award: Mentor-Based Postdoctoral Fellowships

“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.
Nader Ghasemlou, PhD
Queen's University
Kinston, ON, Canada
Award: Pilot Research Grants
Category: Physiology
Strategic Area: Restore
Approx. Funding: $38,625
Term: 11/1/2017-10/31/2018

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

Douglas Arnold, MD
McGill University
Montreal, QC, Canada
Award: International Progressive MS Alliance - Collaborative Network Center
Category: Human Therapy Trials/Management of MS
Strategic Area: Stop
Approx. Funding: $4,560,000
Term: 1/1/2017-12/31/2020

“An MRI biomarker for disability progression for use in clinical trials” Identifying a biomarker of disability progression for use in clinical trials.
Joint commitment with other Progressive MS Alliance members

Brent Richards, MD
Jewish General Hospital
Montreal, QC, Canada
Award: Research Grants
Category: Epidemiology
Strategic Area: End
Approx. Funding: $64,000
Term: 10/1/2016-9/30/2018

“The effect of obesity and EBV on the risk of MS: A Mendelian Randomization Analysis” Researchers from Jewish General Hospital in Montreal are using advanced genetic tools to better understand the extent to which obesity and Epstein-Barr virus are associated with increased MS risk or MS progression.

Mary Stevenson, PhD
McGill University
Montreal, QC, Canada
Award: Pilot Research Grants
Category: Immunology
Strategic Area: Stop
Approx. Funding: $44,000
Term: 11/1/2017-10/31/2018

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

Lara Pilutti, PhD
University of Ottawa
Ottawa, ON, Canada
Award: Research Grants
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $351,620
Term: 10/1/2016-11/30/2018

“Lifestyle physical activity intervention for improving cardiorespiratory fitness and vascular comorbidity risk in multiple sclerosis” University of Ottawa researchers are testing an intervention to increase physical activity to determine if it can improve fitness and reduce vascular disease risk in people with MS.
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

E. Yeh, MD
The Hospital for Sick Children
Toronto, ON, Canada
Award: Mentor-Based Postdoctoral Fellowships
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $352,950
Term: 7/1/2015-6/30/2020

“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, ON, Canada
Award: Mentor-Based Postdoctoral Fellowships
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $352,950
Term: 7/1/2015-6/30/2020

“Sleep, Physical Activity and MS Symptoms in Paediatric MS” Researchers at The Hospital for Sick Children are seeking to understand how sleep habits, physical activity, and disease symptoms are related to one another in youth with MS.

Marc Horwitz, PhD
University of British Columbia
Vancouver, BC, Canada
Award: Pilot Research Grants
Category: Immunology
Strategic Area: Stop
Approx. Funding: $44,000
Term: 11/1/2017-10/31/2018

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

Alexander Rauscher, PhD
University of British Columbia
Vancouver, BC, Canada
Award: Research Grants
Category: Measuring MS Disease Activity
Strategic Area: Stop
Approx. Funding: $309,320
Term: 4/1/2016-3/31/2019

“Imaging markers for tissue damage and repair in MS” Researchers at the University of British Columbia in Vancouver are improving brain MRI to better detect disease activity, severity, and changes over time in people with MS.
Carles Vilarino-Guell, PhD  
University of British Columbia  
Vancouver, British Columbia, Canada  
Award: Pilot Research Grant  
Category: Neurophysiology  
Strategic Area: Stop  
Approx. Funding: $40,000-PENDING  
Term: 3/1/2018-2/28/2019  

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

FRANCE  
Carlos Parras, PhD  
INSERM - Institut National de la Santé et de la Recherche Médicale  
Paris, France  
Award: Research Grants  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $586,502  
Term: 10/1/2015-9/30/2018

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

GERMANY  
Stefan Gold, PhD  
Charité - Universitätsmedizin Berlin  
Berlin, Germany  
Award: Research Grants  
Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $1,397,712  
Term: 4/1/2016-3/31/2020

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

Stefan Gold, PhD  
Charité - Universitätsmedizin Berlin  
Berlin, Germany  
Award: Mentor-Based Postdoctoral Fellowships  
Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Approx. Funding: $414,685-PENDING  
Term: 7/1/2018-6/30/2023

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

Christoph Heesen, MD  
University Medical Center Hamburg-Eppendorf  
Hamburg, Germany  
Award: Mentor-Based Postdoctoral Fellowships  
Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $396,392  
Term: 7/1/2013-6/30/2018

“Development and validation of behavioural interventions to enhance self-management in MS”  
Training in research aimed at developing ways to help people with MS enhance their knowledge and ability for managing their disease.
**Ari Waisman, PhD**  
University Medical Center of the Johannes Gutenberg-University Mainz, Germany  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $484,464-PENDING  
Term: 4/1/2018-3/31/2021  

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

**Klaus Lehmann-Horn, MD**  
Technical University of Munich, Germany  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $130,422  
Term: 1/1/2016-6/30/2018  

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

**ISRAEL**  
Kadimastem LTD, Israel  
Award: Fast Forward  
Category: CNS Repair  
Strategic Area: Restore  
Approx. Funding: $174,400  
Term: 9/25/2015-9/30/2018  

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

**Jeffrey Hausdorff, PhD**  
Tel Aviv Sourasky Medical Center, Israel  
Award: Research Grants  
Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $938,522  
Term: 4/1/2016-3/31/2020  

“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.

**Lior Mayo, PhD**  
Tel Aviv University, Israel  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $375,000  
Term: 1/1/2017-12/30/2019  

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

**Batia Kaplan, PhD**  
Sheba Medical Center, Ramat-Gan, Israel  
Award: Pilot Research Grants  
Category: Diagnostic Methods  
Strategic Area: Stop  
Approx. Funding: $39,820  
Term: 7/1/2016-6/30/2018  

“Analysis of immunoglobulin free light chain monomers and dimers in saliva of MS patients: Implications for diagnosis of MS and monitoring of response to treatment” Developing and testing a lab test for diagnosis and monitoring disease progression and response to treatment.
ITALY
Paola de Candia, PhD
Fondazione MultiMedica ONLUS
Milano, Italy
Award: Pilot Research Grants
“Unveiling the role of extracellular miR146a-5p in the loss of immune tolerance during multiple sclerosis.” Exploring newly discovered mechanism related to immune function for clues to what goes wrong in MS and how to fix it.

Gianvito Martino, MD
Fondazione Centro San Raffaele
Milano, Italy
Award: International Progressive MS Alliance - Collaborative Network Center
“Bioinformatics and cell reprogramming to develop an in vitro platform to discover new drugs for progressive multiple sclerosis (BRAVEinMS)” Identifying therapy candidates with neuroprotective and/or myelin repair activity to speed the search for treatments for progressive MS.
Joint commitment with other Progressive MS Alliance members

PORTUGAL
Carlos Duarte, PhD
University of Coimbra
Coimbra, Portugal
Award: Research Grants
“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.

THE NETHERLANDS
Maarten Kole, PhD
Netherlands Institute for Neuroscience
Amsterdam, The Netherlands
Award: Research Grants
“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.

UNITED KINGDOM
Don Mahad, MD, PhD
University of Edinburgh
Edinburgh, United Kingdom
Award: Research Grants
“Mitochondria and mechanisms of axon degeneration in progressive MS” Exploring energy failure in cells as one possible cause of progressive MS.
Jeremy Chataway, PhD, FRCP
University College London
London, United Kingdom
Award: Strategic Initiatives
Category: Human Therapy Trials/Management of MS
Strategic Area: Stop
Approx. Funding: $897,100-PENDING
Term: 12:00:00 AM-2/28/2023

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

Co-funded by the UK MS Society

Aisling McMahon,
MS Society UK
London, United Kingdom
Award: Strategic Initiatives
Category: Human Therapy Trials/Management of MS
Strategic Area: Stop
Approx. Funding: $1,151,147
Term: 7/1/2017-6/30/2026

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

Richard Reynolds, PhD
Imperial College London
London, United Kingdom
Award: Research Grants
Category: Neuropathology
Strategic Area: Stop
Approx. Funding: $646,187
Term: 10/1/2016-9/30/2019

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

David Selwood, PhD
University College London
London, United Kingdom
Award: Fast Forward
Category: Preclinical Drug Development
Strategic Area: Stop
Approx. Funding: $804,767
Term: 11/23/2015-12/31/2018

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

David Selwood, PhD
University College London
London, United Kingdom
Award: Fast Forward
Category: Preclinical Drug Development
Strategic Area: Stop
Approx. Funding: $551,726
Term: 9/1/2016-8/31/2020

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

**PROJECTS INSIDE OF THE U.S.A.**

**Robert Motl, PhD**
University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Pilot Research Grants  
Approx. Funding: $43,677  
Term: 8/1/2016-4/20/2018

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

**Robert Motl, PhD**
University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Health Care Delivery and Policy Research Contracts  
Approx. Funding: $363,811  
Term: 1/1/2017-12/31/2018

“Project COMPLETE: Coordinated Multiple Sclerosis Exercise Toolkit” Researchers are developing a set of tools to promote physical activity in people with MS, which is expected to reduce disability and improve quality of life.

**Robert Motl, PhD**
University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Collaborative Research  
Approx. Funding: $816,557-PENDING  
Term: 4/1/2018-3/31/2023

“Healthy Aging through LifesTyle in Multiple Sclerosis: The HALT MS Research Center” University of Alabama at Birmingham researchers have joined together to stimulate interdisciplinary research on lifestyle and wellness for healthy aging in MS.
**Hongwei Qin, PhD**  
University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $583,800  
Term: 4/1/2017-3/31/2020  

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

**Brooks Wingo, PhD**  
University of Alabama at Birmingham  
Birmingham, Alabama  
Award: Pilot Research Grants  
Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $39,628  
Term: 11/1/2017-10/31/2018  

"**Pilot and feasibility trial of a telehealth dietary intervention for MS**"  
Investigators at the University of Alabama at Birmingham are testing a comprehensive behavioral lifestyle intervention that includes both diet and exercise components, delivered through a web-based telecoaching platform.

**ARIZONA**  
Lynn Hudson, PhD  
Critical Path Institute  
Tucson, Arizona  
Award: Strategic Initiatives  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Approx. Funding: $3,000,000  
Term: 10/1/2012-12:00:00 AM  

"**Qualifying Clinical Outcome Assessments through a Multiple Sclerosis Consortium (MSC)**"  
Analyzing data from MS clinical trials to develop a more sensitive tool for evaluating the benefits of treatments on clinical symptoms and progression of MS.

**CALIFORNIA**  
Lisa Barcellos, PhD  
University of California, Berkeley  
Berkeley, California  
Award: Research Grants  
Category: Epidemiology  
Strategic Area: Restore  
Approx. Funding: $421,570  
Term: 4/1/2017-3/31/2020  

"**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.

**Lisa Barcellos, PhD**  
University of California, Berkeley  
Berkeley, California  
Award: Pilot Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $44,000  
Term: 7/1/2017-6/30/2018  

"**A Pilot Approach to Establish a Pipeline for Epigenetic Studies of T Cells in MS**"  
Applying cutting edge technology to study immune cells in people with MS, compared with controls without the disease, for clues to MS development and treatment.
Lilyana Amezcua, MD  
University of Southern California  
Los Angeles, California  
Award: Research Grants  
Category: Epidemiology  
Strategic Area: Stop  
Approx. Funding: $685,703  
Term: 4/1/2016-3/31/2020  

“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.

Daniel Kaufman, PhD  
University of California, Los Angeles  
Los Angeles, California  
Award: Research Grants  
Category: Preclinical Drug Development  
Strategic Area: Stop  
Approx. Funding: $594,348  
Term: 4/1/2017-3/31/2020  

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

Eve Kelland, PhD  
University of Southern California  
Los Angeles, California  
Award: Research Grants  
Category: Preclinical Drug Development  
Strategic Area: Stop  
Approx. Funding: $645,623  
Term: 4/1/2017-3/31/2020  

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

Michael Robers, MD  
University of Southern California  
Los Angeles, California  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $130,000-PENDING  
Term: 7/1/2018-6/30/2020  

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

Fu-Dong Shi, MD, PhD  
St. Joseph's Hospital and Medical Center  
Los Angeles, California  
Award: Research Grants  
Category: CNS Repair  
Strategic Area: Restore  
Approx. Funding: $438,900  
Term: 4/1/2016-3/31/2019  

“Neruorepair following brain inflammation”  
Researchers at St. Joseph's Hospital and Medical Center in Phoenix are investigating a type of cell that may play a role in inhibiting nervous system repair in MS, for clues to restoring function in people with MS.
**Nancy Sicotte, MD**
Cedars-Sinai Medical Center
Los Angeles, California
Award: Pilot Research Grants

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

“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.

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

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

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

**Richard Daneman, PhD**
University of California San Diego
San Diego, California
Award: Research Grants

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

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

**Sergio Baranzini, PhD**
University of California, San Francisco
San Francisco, California
Award: Collaborative Research Center Awards

Category: Immunology
Strategic Area: End
Approx. 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 progressi

*2014 Stephen C. Reingold Research Award for most outstanding research proposal*

**Valerie Block, DSc, PT**
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships

Category: Measuring MS Disease Activity
Strategic Area: Stop
Approx. Funding: $177,243-PENDING
Term: 7/1/2018-6/30/2021

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

“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.

“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.

“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.

“Longitudinal Screening of Neuroprotective Therapies in Experimental Autoimmune Encephalomyelitis with Optical Coherence Tomography” Researchers at the University of California at San Francisco are imaging the back of the eye to visualize signs of myelin repair in mice as a means of identifying agents with potential to stimulate myelin repair in people with MS.
Stephen Fancy, DVM, PhD  
University of California, San Francisco  
San Francisco, California  
Award: Harry Weaver Neuroscience Scholarships  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $776,123  
Term: 7/1/2017-6/30/2022

“Oligodendroglial-vascular interactions control successful remyelination in Multiple Sclerosis”  
Researchers from the University of California at San Francisco are exploring interactions between blood vessels and myelin-making cells for clues to promoting myelin repair in MS.

Carla Francisco, MD  
University of California, San Francisco  
San Francisco, California  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $195,000  
Term: 7/1/2015-6/30/2018

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

Jennifer Graves, MD, PhD  
University of California, San Francisco  
San Francisco, California  
Award: Research Grants  
Category: Human Genetics  
Strategic Area: Stop  
Approx. Funding: $502,894  
Term: 4/1/2017-3/31/2020

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

Ariele Greenfield, MD  
University of California, San Francisco  
San Francisco, California  
Award: NMSS-ABF Clinician Scientist Development Award  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $198,867  
Term: 7/1/2016-6/30/2019

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

The Kathleen C. Moore Postdoctoral Fellowship

Caroline Guglielmetti, PhD  
University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships  
Category: Diagnostic Methods  
Strategic Area: Stop  
Approx. Funding: $107,466  
Term: 7/1/2016-6/30/2019

“MR imaging of oxidative stress in multiple sclerosis”  
Researchers at the University of California, San Francisco are using a new type of imaging in mice to visualize oxidative stress, for clues to the possible role of oxidative stress-inducing immune cells in MS.
Stephen Hauser, MD
University of California, San Francisco
San Francisco, California
Award: Migration
Category: Measuring MS Disease Activity
Strategic Area: Stop
Approx. Funding: $1,375,000
Term: 10/1/2016-9/30/2021

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

Roland Henry, PhD
University of California, San Francisco
San Francisco, California
Award: Research Grants
Category: Measuring MS Disease Activity
Strategic Area: Stop
Approx. Funding: $738,084-PENDING
Term: 4/1/2018-3/31/2021

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

Kristen Krysko, MD
University of California, San Francisco
San Francisco, California
Award: Sylvia Lawry Physician Fellowships
Category: Human Therapy Trials/Management of MS
Strategic Area: Stop
Approx. Funding: $195,000
Term: 7/1/2017-6/30/2020

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

Andrew Mendiola, PhD
The J. David Gladstone Institutes
San Francisco, California
Award: Postdoctoral Fellowships
Category: Immunology
Strategic Area: Stop
Approx. Funding: $177,243-PENDING
Term: 7/1/2018-6/30/2021

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

Zahra Moinfar, MD, PhD
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
Category: Immunology
Strategic Area: Stop
Approx. Funding: $177,243-PENDING
Term: 7/1/2018-6/30/2021

“Pathogenic T cells that target NMO autoantigen aquaporin-4” Researchers at the University of California at San Francisco are investigating similarities and differences between MS and a related but distinct disease called NMO.
Jorge Oksenberg, PhD
University of California, San Francisco
San Francisco, California
Award: Research Grants
Category: Tissue/DNA Banks
Strategic Area: End
Approx. Funding: $595,690-PENDING
Term: 4/1/2018-3/31/2020

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

Anne-Katrin Pröbstel, MD
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
Category: Immunology
Strategic Area: Stop
Approx. Funding: $201,197-PENDING
Term: 7/1/2018-6/30/2021

“Gut-Brain-Axis: Dissecting the crosstalk between B cells and the gut microbiota in multiple sclerosis” Researchers at the University of California, San Francisco are identifying harmful gut bacteria in people with MS and testing their role in disease triggering and progression.

Joseph Sabatino, MD, PhD
University of California, San Francisco
San Francisco, California
Award: NMSS-ABF Clinician Scientist Development Award
Category: Immunology
Strategic Area: Stop
Approx. Funding: $213,981
Term: 7/1/2016-6/30/2019

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

Lucas Schirmer, MD
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
Category: Biology of Glia
Strategic Area: Stop
Approx. Funding: $201,135
Term: 7/1/2017-6/30/2020

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

Ryan Schubert, MD
University of California, San Francisco
San Francisco, California
Award: NMSS-ABF Clinician Scientist Development Award
Category: Immunology
Strategic Area: Stop
Approx. Funding: $269,394
Term: 7/1/2017-6/30/2020

“Using comprehensive phage display coupled with next-generation sequencing to define the evolution of autoantibodies and viral antibodies in the two years after a first demyelinating event” Researchers at the University of California at San Francisco are looking for antibody “signatures” in fluid samples that can predict which of those individuals with a first neurological event will go on to develop definite MS.
Emmanuelle Waubant, MD, PhD
University of California, San Francisco
San Francisco, California
Award: Research Grants
Category: Epidemiology
Strategic Area: Stop
Approx. Funding: $1,192,799
Term: 10/1/2017-9/30/2020

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

Scott Zamvil, MD, PhD
University of California, San Francisco
San Francisco, California
Award: Research Grants
Category: Immunology
Strategic Area: Stop
Approx. Funding: $632,348
Term: 10/1/2017-9/30/2020

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

Annexon Biosciences,
Annexon Biosciences
South San Francisco, California
Award: Fast Forward
Category: Preclinical Drug Development
Strategic Area: Stop
Approx. Funding: $693,113
Term: 1/1/2017-12/31/2018

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

Nina Bozinov, MD
Stanford University
Stanford, California
Award: Sylvia Lawry Physician Fellowships
Category: Measuring MS Disease Activity
Strategic Area: Restore
Approx. Funding: $130,000-PENDING
Term: 7/1/2018-6/30/2020

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

Meng-meng Fu, PhD
Stanford University
Stanford, California
Award: Postdoctoral Fellowships
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $166,724
Term: 7/1/2015-6/30/2018

“Regulation of MBP mRNA Transport in Oligodendrocytes” Researchers at Stanford University are investigating how a protein critical to the formation of nerve-insulating myelin is made and how its message is transported, to gather information that may be critical to finding a way to repair myelin in people with

*Funded in part by a gift from the Brodsky Family Foundation*
MAY HAN, MD
Stanford University
Stanford, California
Award: Pilot Research Grants
Category: CNS Repair
Strategic Area: Restore
Approx. Funding: $43,999
Term: 9/1/2017-8/31/2018

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

Yang Hu, MD, PhD
Stanford University
Stanford, California
Award: Research Grants
Category: CNS Repair
Strategic Area: Stop
Approx. Funding: $467,623-PENDING
Term: 4/1/2018-3/31/2021

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

Lu Sun, PhD
Stanford University
Stanford, California
Award: Career Transition Fellowship
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $589,886-PENDING
Term: 7/1/2018-6/30/2023

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

William Talbot, PhD
Stanford University
Stanford, California
Award: Research Grants
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $436,224-PENDING
Term: 4/1/2018-3/31/2021

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

J. Bradley Zuchero, PhD
Stanford University
Stanford, California
Award: Career Transition Fellowships
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $581,647
Term: 7/1/2014-6/30/2019

“What is the cellular mechanism of CNS myelin wrapping?” Can understanding the role of cellular scaffolding in the formation of nerve-insulating myelin provide new targets to promote myelin repair in MS?

Funded in part by a gift from an Anonymous Donor in honor of JoAnn LeMaistre, PhD
“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.

David Pleasure, MD
University of California, Davis
W. Sacramento, California
Award: Research Grants
Category: Immunology
Strategic Area: Stop
Approx. Funding: $519,547
Term: 10/1/2014-9/30/2018

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

Athena Soulika, PhD
University of California, Davis
W. Sacramento, California
Award: Research Grants
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $652,582
Term: 10/1/2017-9/30/2020

“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.

COLORADO
John Corboy, MD
University of Colorado Denver
Denver, Colorado
Award: Research Grants
Category: Tissue/DNA Banks
Strategic Area: End
Approx. Funding: $1,026,944
Term: 10/1/2013-9/30/2018

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

John Corboy, MD
University of Colorado Denver
Denver, Colorado
Award: Strategic Initiatives - 2016
Category: Human Therapy Trials/Management of MS
Strategic Area: Stop
Approx. Funding: $326,464
Term: 10/1/2016-9/30/2021

“Discontinuation of Disease Modifying Therapies (DMTs) in Multiple Sclerosis (MS) – co-funding with Patient Centered Outcome Research Institute (PCORI)” A trial to determine if and when MS therapies should be discontinued.
**Ethan Hughes, PhD**  
University of Colorado Denver  
Denver, Colorado  
Award: Research Grants  
Category: Biology of Glia  
Approx. Funding: $586,687  
Term: 10/1/2017-9/30/2020  

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

**Gregory Owens, PhD**  
University of Colorado Denver  
Denver, Colorado  
Award: Research Grants  
Category: Immunology  
Approx. Funding: $610,077  
Term: 10/1/2017-7/1/2020  

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

**Brett Fling, PhD**  
Colorado State University  
Fort Collins, Colorado  
Award: Pilot Research Grant  
Category: Neurophysiology  
Approx. Funding: $44,000-PENDING  
Term: 3/1/2018-2/28/2019  

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

**Thorsten Rudroff, PhD**  
Colorado State University  
Fort Collins, Colorado  
Award: Pilot Research Grant  
Category: Rehabilitation  
Approx. Funding: $44,000-PENDING  
Term: 3/1/2018-2/28/2019  

“Can transcranial direct stimulation improve walking in multiple sclerosis” Examining the effectiveness of electrical stimulation to improve walking in people with MS.

**CONNECTICUT**

**Joel Pachter, PhD**  
University of Connecticut Health Center  
Farmington, Connecticut  
Award: Research Grants  
Category: Diagnostic Methods  
Approx. Funding: $671,350  
Term: 10/1/2017-9/30/2020  

“Extracellular vesicles and MSCs as novel tools to aid in the diagnosis and treatment of secondary progressive disease” Investigators at the University of Connecticut Health Center are exploring the therapeutic potential of stem cells and a novel method of tracking the course of secondary progressive MS in mice.
Jaime Grutzendler, MD
Yale University
New Haven, Connecticut
Award: Research Grants
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $330,000
Term: 10/1/2016-9/30/2019

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

David Hafler, MD
Yale University
New Haven, Connecticut
Award: Collaborative Research Center Awards
Category: Human Genetics
Strategic Area: End
Approx. Funding: $825,000
Term: 4/1/2015-3/31/2020

“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.

Alexandra Kitz, PhD
Yale University School of Medicine
New Haven, Connecticut
Award: Postdoctoral Fellowships
Category: Immunology
Strategic Area: Stop
Approx. Funding: $175,431
Term: 7/1/2016-6/30/2019

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

Liliana Lucca, PhD
Yale University
New Haven, Connecticut
Award: Postdoctoral Fellowships
Category: Immunology
Strategic Area: Stop
Approx. Funding: $178,467
Term: 7/1/2017-6/30/2020

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

David Pitt, MD
Yale University
New Haven, Connecticut
Award: Research Grants
Category: Biology of Glia
Strategic Area: End
Approx. Funding: $311,752
Term: 4/1/2017-3/31/2019

“NFκB-related MS risk variants drive excessive activation of astrocytes in multiple sclerosis” Researchers at Yale University are exploring a novel pathway by which newly discovered genetic variants in people with MS may promote changes that result in inflammatory damage, for clues to stopping and ending MS.
Li Wen, MD, PhD  
Yale University School of Medicine  
New Haven, Connecticut  
Award: Pilot Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $44,000  
Term: 11/1/2017-10/31/2018

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

Akiko Nishiyama, MD, PhD  
University of Connecticut  
Storrs, Connecticut  
Award: Research Grants  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $610,077  
Term: 10/1/2017-9/30/2020

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

DISTRICT OF COLUMBIA
Vittorio Gallo, PhD  
The Children's National Medical Center  
Washington, District of Columbia  
Award: Research Grants  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $538,351  
Term: 10/1/2016-9/30/2019

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

Mitchell Wallin, MD, MPH  
Institute for Clinical Research, Inc.  
Washington, District of Columbia  
Award: Health Care Delivery and Policy Research  
Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Approx. Funding: $441,744  
Term: 10/1/2017-9/30/2019

“Multiple Sclerosis Telehealth Utilization Project”  Researchers at the VA Multiple Sclerosis Center of Excellence-East (Baltimore & Washington, DC) along with collaborators in Boston, MA and Palo Alto, CA are investigating the use of technology to deliver specialty care remotely to people with MS, with the

GEORGIA
Hong Jiang, MD, PhD  
University of Miami  
Atlanta, Georgia  
Award: Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Approx. Funding: $540,835  
Term: 4/1/2016-3/31/2019

“The role of retinal microvascular impairment on neurodegeneration in Multiple Sclerosis”  University of Miami researchers are studying blood vessels at the back of the eye of people with MS to better understand nerve damage and MS progression.
**ILLINOIS**

**Alexander Aruin, DSc**

University of Illinois at Chicago  
Chicago, Illinois

Award: Mentor-Based Postdoctoral Fellowships  

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

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

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**Alexander Aruin, DSc**

University of Illinois at Chicago  
Chicago, Illinois

Award: Pilot Research Grants  

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

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**Veronica Cipriani, MD**

University of Chicago Medical Center  
Chicago, Illinois

Award: Sylvia Lawry Physician Fellowships  

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

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**William Conte, MD**

University of Chicago  
Chicago, Illinois

Award: Sylvia Lawry Physician Fellowships  

**“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.

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**Douglas Feinstein, PhD**

University of Illinois at Chicago  
Chicago, Illinois

Award: Research Grants  

**“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.
Sherri LaVela, MBA, MPH, PhD  
CARES - Chicago Association for Research and Education in Science  
Chicago, Illinois  
Award: Pilot Research Grants  
Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $43,993-PENDING  
Term: 11/1/2017-10/31/2018

“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.

Brian Popko, PhD  
University of Chicago  
Chicago, Illinois  
Award: Research Grants  
Category: CNS Repair  
Strategic Area: Restore  
Approx. Funding: $626,735  
Term: 10/1/2015-9/30/2018

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

Haley Titus, PhD  
Northwestern University Feinberg School of Medicine  
Evanston, Illinois  
Award: Postdoctoral Fellowships  
Category: CNS Repair  
Strategic Area: Restore  
Approx. Funding: $161,218  
Term: 7/1/2015-6/30/2018

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

Chung-Yi Chiu, PhD  
University of Illinois at Urbana-Champaign  
Springfield, Illinois  
Award: Research Grants  
Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $548,359-PENDING  
Term: 4/1/2018-3/31/2021

“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.

Naiman Khan, PhD  
University of Illinois at Urbana-Champaign  
Springfield, Illinois  
Award: Pilot Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Approx. Funding: $43,051  
Term: 3/1/2017-2/28/2019

“Retinal Lutein and Visual Health in Multiple Sclerosis”  
Testing whether dietary factors play a role in vision problems in MS.
Laura Rice, PT, PhD
University of Illinois at Urbana-Champaign
Springfield, Illinois
Award: Research Grants
Approx. Funding: $570,217
Term: 10/1/2017-9/30/2020

“Validation of a Fall Prevention Program Among Non-Ambulatory Wheeled Mobility Device Users with Multiple Sclerosis” Researchers at the University of Illinois at Urbana-Champaign are developing a program designed to help prevent falling for people with MS who are wheelchair users.

Jacob Sosnoff, PhD
University of Illinois at Urbana-Champaign
Springfield, Illinois
Award: Research Grants
Approx. Funding: $627,770
Term: 10/1/2014-9/30/2018

“Fall Risk and Incidence Reduction in Multiple Sclerosis” Testing an exercise program to reduce the risk of falling in older people with MS. 

Paid by special funds provided by the Illinois Lottery

INDIANA
Peter Altenburger, PT, PhD
Indiana University
Bloomington, Indiana
Award: Pilot Research Grants
Approx. Funding: $33,000
Term: 9/1/2016-8/31/2018

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

IOWA
Alexander Boyden, PhD
The University of Iowa
Iowa City, Iowa
Award: Postdoctoral Fellowships
Approx. Funding: $161,218
Term: 7/1/2015-6/30/2018

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

Terry Wahls, MD
The University of Iowa
Iowa City, Iowa
Award: Research Grants
Approx. 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.
**KANSAS**

**Hannes Devos, PT, PhD**
University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grants  
“The Eyes Have It: Use of Pupillometry to Assess Cognition in Multiple Sclerosis”  
Testing a novel method of assessing cognitive function through measuring the pupil in people with MS.

**Steven LeVine, PhD**
University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grants  
“High Dose Biotin Therapy and Remyelination”  
Researchers from the University of Kansas Medical Center are investigating how high dose biotin therapy might act to promote myelin repair processes in people with MS.

**Sharon Lynch, PhD**
University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grant  
“MS disability scales in the aging population”  
Studying older people with MS and without MS and comparing the measurement of disability.

**Catherine Siengsukon, PT, PhD**
University of Kansas Medical Center  
Kansas City, Kansas  
Award: Pilot Research Grants  
“Assessing the Feasibility of Cognitive Behavioral Therapy for Insomnia in Individuals with MS with Symptoms of Insomnia”  
Researchers at the University of Kansas Medical Center are assessing the feasibility of using cognitive behavioral therapy to improve MS symptoms of reduced sleep quality and fatigue in individuals with MS with symptoms of insomnia.

**KENTUCKY**

**Malachy Bishop, PhD**
University of Kentucky  
Lexington, Kentucky  
Award: Health Care Delivery and Policy Research Contracts  
“The 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.
MARYLAND
Meghan Beier, Ph.D.
Johns Hopkins University
Baltimore, Maryland
Award: Pilot Research Grants

“200 to 2,000: Expanding the Scope of Multiple Sclerosis Cognitive Research by Establishing the Reliability of a Web-based Cognitive Assessment”

Developing a web-based tool for assessing cognitive changes in people with MS.

Meghan Beier, PhD
Johns Hopkins University
Baltimore, Maryland
Award: Mentor-Based Postdoctoral Fellowships

“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.

Pavan Bhargava, MD
Johns Hopkins University
Baltimore, Maryland
Award: Career Transition Fellowships

“Targeting Leptomeningeal Inflammation for Progressive Multiple Sclerosis”

Researchers at Johns Hopkins University are working to establish a better model of progressive MS that will permit research into understanding and treating inflammation of the meninges, the tissue that covers the brain.

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

“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.

Kathleen Burns, MD, PhD
Johns Hopkins University
Baltimore, Maryland
Award: Pilot Research Grants

“Molecular basis of MS risk at the CD58 locus”

Determining the significance of a sequence of genetic material inherited by people with MS.
**Kathryn Fitzgerald, DSc**  
Johns Hopkins University  
Baltimore, Maryland  
Award: Postdoctoral Fellowships  
Category: Epidemiology  
Strategic Area: End  
Approx. Funding: $187,527  
Term: 7/1/2016-6/30/2019  

*“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.

**Emily Harrington, MD, PhD**  
Johns Hopkins University  
Baltimore, Maryland  
Award: NMSS-ABF Clinician Scientist Development Award  
Category: Biology of Glia  
Strategic Area: Stop  
Approx. Funding: $276,697-PENDING  
Term: 7/1/2018-6/30/2021  

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

**Michael Kornberg, MD, PhD**  
Johns Hopkins University  
Baltimore, Maryland  
Award: NMSS-ABF Clinician Scientist Award  
Category: Biochem./Biophysics  
Strategic Area: Stop  
Approx. Funding: $259,590  
Term: 7/1/2015-6/30/2018  

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

**Muhammad Taimur Malik, MD**  
Johns Hopkins University  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $130,000-PENDING  
Term: 7/1/2018-6/30/2020  

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

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

*Non-progenitor functions of oligodendrocyte precursor cells in the brain*” Researchers at Johns Hopkins University are studying how oligodendrocyte precursor cells in the adult brain play multiple roles in repair of myelin damage.
Ellen Mowry, MD, MPH
Johns Hopkins University
Baltimore, Maryland
Award: Research Grants
Category: Human Therapy Trials/Management of MS
Strategic Area: Stop
Approx. Funding: $1,728,703
“A randomized controlled trial of vitamin D supplementation in multiple sclerosis” A clinical trial investigating whether vitamin D supplements can alter disease activity in people with MS who are taking a standard therapy.
*Funded by a gift from the National MS Society Greater Delaware Valley Chapter*

Ellen Mowry, MD, MPH
Johns Hopkins University
Baltimore, Maryland
Award: Harry Weaver Neuroscience Scholarships
Category: Human Therapy Trials/Management of MS
Strategic Area: Stop
Approx. Funding: $781,377
Term: 7/1/2015-6/30/2020
“A pilot study of intermittent calorie restriction in multiple sclerosis” Researchers at Johns Hopkins University in Baltimore are doing a pilot trial testing the safety and tolerability of a diet that intermittently restricts caloric intake as a treatment for disease activity in people with MS.

Bardia Nourbakhsh, MD
Johns Hopkins University
Baltimore, Maryland
Award: Pilot Research Grant
Category: Therapy/Management of MS
Strategic Area: Restore
Approx. Funding: $43,914-PENDING
Term: 3/1/2018-2/28/2019
“Randomized control trial of ketamine for treatment of multiple sclerosis-related fatigue” Performing a clinical trial to find out if ketamine can alleviate the severity of fatigue in people with MS.

Ji-won Oh, MD
Johns Hopkins University
Baltimore, Maryland
Award: Research Grants
Category: Measuring MS Disease Activity
Strategic Area: Stop
Approx. Funding: $500,000
Term: 10/1/2016-9/30/2019
“Leptomeningeal Inflammation in Multiple Sclerosis: A Prospective MRI Study” Johns Hopkins University researchers are exploring a novel imaging finding that may yield clues to understanding and stopping the progression of MS.

Shiv Saidha, MD
Johns Hopkins University
Baltimore, Maryland
Award: Research Grants
Category: Measuring MS Disease Activity
Strategic Area: Stop
Approx. Funding: $494,401
Term: 4/1/2017-3/31/2020
“In-vivo investigation of trans-synaptic neurodegeneration in multiple sclerosis” Researchers at Johns Hopkins University are testing new methods of assessing nerve cell damage, involving the visual system, to determine its value for predicting more severe MS.
Thomas Shoemaker, MD  
Johns Hopkins University School of Medicine  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $130,000  
Term: 7/1/2016-6/30/2018

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

Barbara Slusher, PhD  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants  
Category: Preclinical Drug Development  
Strategic Area: Restore  
Approx. Funding: $654,166  
Term: 4/1/2016-3/31/2019

“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.

Elias Sotirchos, MD  
Johns Hopkins University School of Medicine  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $195,000  
Term: 7/1/2017-6/30/2020

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

Katharine Whartenby, PhD  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants  
Category: Infectious Agents  
Strategic Area: Stop  
Approx. Funding: $731,878  
Term: 10/1/2015-9/30/2018

“Mechanisms of Increased Morbidity and Mortality of Influenza Infections in People with MS”  Researchers at Johns Hopkins University are studying mice with MS-like disease that are infected with flu virus to investigate why flu is dangerous for people with MS.

Martina Absinta, MD  
National Institutes of Health  
Bethesda, Maryland  
Award: Postdoctoral Fellowships  
Category: Neuropathology  
Strategic Area: Stop  
Approx. Funding: $191,042  
Term: 1/1/2016-12/31/2018

“Chronic Inflammation and Remyelination Failure in MS Lesions: in vivo and Postmortem Investigation of Chronic Lesions with Phase Rims”  Researchers at the National Institutes of Health in Bethesda are using an advanced type of MRI to examine lesions with subtle inflammation in the brains of people with MS to better understand how inflammation affects myelin repair.
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Category</th>
<th>Strategic Area</th>
<th>Approx. Funding</th>
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<tr>
<td>Erin Beck, MD, PhD</td>
<td>National Institute of Neurological Disorders and Stroke</td>
<td>Measuring MS Disease Activity</td>
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<td>Alexandre Teixeira, MD, PhD</td>
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<td>Immunology</td>
<td>Stop</td>
<td>$485,942</td>
<td>10/1/2017-9/30/2020</td>
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**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.

**Deep sequencing of T-cell receptor repertoire in patients with neurological immune-mediated disorders** Researchers at the National Institute of Neurological Disorders and Stroke are using advanced technology to identify immune cell abnormalities in people with MS, for clues to improving treatment approaches.

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

**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.

**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.
Chuan Wu, MD, PhD  
National Cancer Institute, National Institutes of Health  
Bethesda, Maryland  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $375,000  
Term: 7/1/2017-6/30/2020  

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

Ai-Hong Zhang, PhD  
Henry M. Jackson Foundation  
Bethesda, Maryland  
Award: Pilot Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $44,000  
Term: 11/1/2016-10/31/2018  

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

Christopher Jewell, PhD  
University of Maryland - College Park  
College Park, Maryland  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $598,715  
Term: 10/1/2015-9/30/2018  

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

Joe Gasper, PhD  
Westat  
Rockville, Maryland  
Award: Health Care Delivery and Policy Research Contracts  
Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Approx. Funding: $989,434  
Term: 10/1/2015-9/30/2018  

“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

BARBARA OSBORNE, PhD  
University of Massachusetts Amherst  
Amherst, Massachusetts  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $462,000  
Term: 10/1/2014-9/30/2018  

“The Role of Notch Family Members in the Development of EAE”  
University of Massachusetts at Amherst researchers are investigating how specific proteins are important in immune attacks, results of which may suggest a new therapeutic target for treating MS.
Clare Baecher-Allan, PhD  
Brigham and Women’s Hospital  
Boston, Massachusetts  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $593,988  
Term: 4/1/2016-3/31/2019  

“Extracellular Granzyme B mediated regulation of Treg function and immune responses in MS”  
Researchers at Brigham and Women’s Hospital are studying ways to restore regulation of immune system activity as a promising approach to developing better MS therapies.

John Chen, MD, PhD  
Massachusetts General Hospital  
Boston, Massachusetts  
Award: Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Approx. Funding: $591,389  
Term: 4/1/2016-3/31/2019  

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

Tanuja Chitnis, MD  
Massachusetts General Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts  
Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Approx. Funding: $492,718  
Term: 10/1/2015-9/30/2018  

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

Tanuja Chitnis, MD  
Massachusetts General Hospital  
Boston, Massachusetts  
Award: Pilot Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Approx. Funding: $44,000  
Term: 11/1/2017-10/31/2018  

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

Stefanie Giera, PhD  
Boston Children’s Hospital  
Boston, Massachusetts  
Award: Postdoctoral Fellowships  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $178,391  
Term: 7/1/2015-6/30/2018  

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

*The Thorsten Eickenhorst Postdoctoral Fellowship*
Murugaiyan Gopal, PhD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $274,308  
Term: 4/1/2016-3/31/2019  

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

Charles Guttmann, MD  
Brigham and Women's Hospital  
Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Approx. Funding: $651,000  
Term: 10/1/2015-9/30/2018  

“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.

Elena Herranz Muelas, PhD  
Massachusetts General Hospital  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Approx. Funding: $111,145  
Term: 7/1/2016-6/30/2018  

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

Charlotte Madore, PhD  
Brigham and Women's Hospital  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $161,218  
Term: 7/1/2015-6/30/2018  

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

Amir-Hadi Maghzi, MD  
Brigham and Women's Hospital  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $206,246-PENDING  
Term: 7/1/2018-6/30/2021  

“Investigation of the microbiome in multiple sclerosis and its relationship to immunologic and clinical features of disease” Investigators at Brigham and Women’s Hospital are researching the microbiome in MS and its relationship to immune activity and clinical features of disease.
Sarah Minden, MD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts  
Category: Health Care Delivery and Policy Research Contracts  
Strategic Area: Stop  
Approx. Funding: $622,531  
Term: 11/1/2009-12/31/2018

“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.

Sarah Minden, MD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts  
Category: Health Care Delivery and Policy Research Contracts  
Strategic Area: Stop  
Approx. Funding: $329,613  
Term: 10/1/2011-12/31/2018

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

Sarah Minden, MD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts  
Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Approx. Funding: $698,337  
Term: 10/1/2012-12/31/2018

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

Sarah Minden, MD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts  
Category: Health Care Delivery Policy  
Strategic Area: Stop  
Approx. Funding: $316,266  
Term: 10/1/2013-12/31/2018

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

Sarah Minden, MD  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Pilot Research Grants  
Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Approx. Funding: $44,000  
Term: 10/1/2015-TBD

“Feasibility of using telehealth to improve access to MS care”  Evaluating the benefits and feasibility of providing MS clinical care remotely.
**Sarah Minden, MD**
Brigham and Women's Hospital
Boston, Massachusetts
Award: Health Care Delivery and Policy Research Contracts
Category: Health Care Delivery/ Policy
Strategic Area: Stop
Approx. Funding: $411,387-PENDING
Term: 10/1/2017-9/30/2019

*“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.

**Kevin Patel, MD**
Massachusetts General Hospital
Boston, Massachusetts
Award: NMSS-ABF Clinician Scientist Award
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Approx. Funding: $184,890
Term: 7/1/2015-6/30/2018

*“Functional connectivity changes underlying cognitive decline in early multiple sclerosis - evidence of compensatory function or sequelae of structural compromise?”* Researchers at Massachusetts General Hospital are using imaging to understand the relationship between cognitive problems in people with MS and differences in connections between various parts of the brain.

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

**Nikos Patsopoulos, MD, PhD**
Brigham and Women's Hospital
Boston, Massachusetts
Award: Research Grants
Category: Human Genetics
Strategic Area: End
Approx. Funding: $599,277-PENDING
Term: 4/1/2018-3/31/2021

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

*Funded in part by the Al Otaiba Family*

**Xianhua Piao, MD, PhD**
Boston Children's Hospital
Boston, Massachusetts
Award: Research Grants
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $660,000
Term: 10/1/2015-9/30/2018

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

**Francisco Quintana, PhD**
Brigham and Women's Hospital
Boston, Massachusetts
Award: Harry Weaver Neuroscience Scholarships
Category: Immunology
Strategic Area: Stop
Approx. Funding: $766,186
Term: 7/1/2014-6/30/2019

*“Role of astrocytes in multiple sclerosis and experimental autoimmune encephalomyelitis”* What role do brain cells called astrocytes play in progressive MS?
“Therapeutic and environmental control of astrocyte function during autoimmune neuroinflammation” Researchers at Brigham & Women’s Hospital are exploring an immune mechanism that may contribute to MS progression and may open doors to wellness strategies aimed at stopping progression.

“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.

“Investigation of the role of elevated archaea species in the microbiome of patients with MS.” Researchers at The Brigham and Women's Hospital are studying the relationship between a specific type of gut microbe and immune function and disease severity in people with MS. Funded in part by a gift from a generous donor.

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

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

Howard Weiner, MD
Brigham and Women's Hospital
Boston, Massachusetts
Award: Research Grants
Category: Measuring MS Disease Activity
Strategic Area: Stop
Approx. Funding: $1,375,000
Term: 10/1/2016-9/30/2021

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

Howard Weiner, MD
Brigham and Women's Hospital
Boston, Massachusetts
Award: Research Grants
Category: Immunology
Strategic Area: Stop
Approx. Funding: $551,752-PENDING
Term: 4/1/2018-3/31/2021

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

MICHIGAN
Tiffany Braley, MD
University of Michigan
Ann Arbor, Michigan
Award: Research Grants
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Approx. Funding: $827,967
Term: 4/1/2015-3/31/2019

“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.

Nora Fritz, PT, PhD
Wayne State University
Detroit, Michigan
Award: Pilot Research Grants
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $44,000
Term: 6/1/2017-5/31/2018

“Development and Efficacy of a Telephone-Delivered Physical Activity Intervention for Multiple Sclerosis Fatigue” Testing the effectiveness of telephone-delivered exercise to improve fatigue in people with relapsing-remitting MS.
Alexander Gow, PhD  
Wayne State University  
Detroit, Michigan  
Award: Pilot Research Grants  
Category: Biology of Glia  
Strategic Area: Stop  
Approx. Funding: $44,000  
Term: 6/1/2017-5/31/2018  
“Characterizing the radial component of CNS myelin”  
Exploring a novel facet of the myelin that insulates nerve fibers, for clues to how it is targeted in the MS attack.

Min-Hui Huang, PT, PhD  
Regents of the University of Michigan  
Flint, Michigan  
Award: Pilot Research Grants  
Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $43,643  
Term: 9/1/2017-8/31/2018  
“Effects of Inspiratory Muscle Training in Persons with Advanced Multiple Sclerosis”  
Testing a method of improving breathing and reducing the complications of breathing problems in people with advanced MS.

MINNESOTA  
Wensheng Lin, MD, PhD  
University of Minnesota  
Minneapolis, Minnesota  
Award: Research Grants  
Category: Neuropathology  
Strategic Area: Stop  
Approx. Funding: $561,891  
Term: 10/1/2014-9/30/2018  
“Oligodendrocyte impact on neurodegeneration in the experimental autoimmune encephalomyelitis mouse model of multiple sclerosis”  
Seeking Ways to protect myelin-making cells and nerve fibers from damage in MS.

Ben Clarkson, PhD  
Mayo Clinic Rochester  
Rochester, Minnesota  
Award: Postdoctoral Fellowships  
Category: Neuropathology  
Strategic Area: Stop  
Approx. Funding: $184,654  
Term: 7/1/2017-6/30/2020  
“Role of ISGylation in MS Synaptopathy”  
Researchers at the Mayo Clinic are investigating a process called “ISGylation” that may play a role in the cognitive problems experienced by many people with MS.

mahboobeh Fereidan-Esfahani, MD  
Mayo Clinic Rochester  
Rochester, Minnesota  
Award: Postdoctoral Fellowships  
Category: Preclinical Drug Development  
Strategic Area: Restore  
Approx. Funding: $110,388  
Term: 7/1/2017-6/30/2019  
“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.
Claudia Lucchinetti, MD  
Mayo Clinic College of Medicine-M  
Rochester, Minnesota  
Award: Collaborative Research Center Awards  
Category: CNS Repair  
Strategic Area: Stop  
Approx. Funding: $825,000  
Term: 4/1/2016-3/31/2021  

“The 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.

Jacob Hines, PhD  
Winona State University  
Winona, Minnesota  
Award: Pilot Research Grants  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $44,000  
Term: 11/1/2017-10/31/2018  

“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.

MISSOURI

Claudia Cantoni, PhD  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: Postdoctoral Fellowships  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $172,444  
Term: 7/1/2015-6/30/2018  

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

Robyn Klein, MD, PhD  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $662,812  
Term: 4/1/2016-3/31/2019  

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

Tsen-Hsuan (Abby) Lin, PhD  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: Postdoctoral Fellowships  
Category: Neuropathology  
Strategic Area: Stop  
Approx. Funding: $114,963  
Term: 7/1/2016-6/30/2018  

“Imaging optic nerve function and pathologies in MS” Researchers at Washington University School of Medicine are developing imaging methods to visualize damage in the eye and relate this damage to visual function in people with MS.
Laura Piccio, MD, PhD  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: Research Grants  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $777,853-PENDING  
Term: 12:00:00 AM-3/31/2020  

“Randomized controlled trial of intermittent fasting in multiple sclerosis” Investigators at Washington University in St. Louis are conducting a clinical trial comparing intermittent fasting with a normal western diet in people with MS.

Afsaneh Shirani, MD  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: NMSS-ABF Clinician Scientist Development  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Approx. Funding: $198,894  
Term: 7/1/2017-6/30/2020  

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

Sheng-Kwei Song, PhD  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: Research Grants  
Category: Diagnostic Methods  
Strategic Area: Stop  
Approx. Funding: $648,976  
Term: 10/1/2017-9/30/2020  

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

Emily Evans, MD  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $130,000-PENDING  
Term: 7/1/2018-6/30/2020  

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

NEVADA  
Stephen Francis, MS, PhD  
University of Nevada, Reno  
Reno, Nevada  
Award: Pilot Research Grants  
Category: Epidemiology  
Strategic Area: End  
Approx. Funding: $43,628  
Term: 9/1/2017-8/31/2018  

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

Sara Colpitts, PhD  
Trustees of Dartmouth College  
Hanover, New Hampshire  
Award: Pilot Research Grants  
**“The role of interleukin-15 in driving protective regulatory B cells during CNS inflammation”**  
Investigating how antibiotic treatment may induce a regulatory immune response in MS-like disease in mice.

Heather Wishart, PhD  
Trustees of Dartmouth College  
Hanover, New Hampshire  
Award: Research Grants  
**“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.

**NEW JERSEY**

John DeLuca, PhD  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Collaborative Research Center Awards  
**“MS Collaborative Network of New Jersey”**  
What is the connection between cognitive and motor functions in people with MS?

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

Ekaterina Dobryakova, PhD  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Research Grants  
**“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.
**Helen Genova, PhD**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Research Grants  
**Category:** Rehabilitation  
**Strategic Area:** Restore  
**Approx. Funding:** $479,784  
**Term:** 4/1/2016-3/31/2019

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

**Helen Genova, PhD**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Pilot Research Grants  
**Category:** Psychosocial Aspects of MS  
**Strategic Area:** Restore  
**Approx. Funding:** $43,986  
**Term:** 6/1/2017-5/31/2018

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

**Lauren Strober, PhD**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Health Care Delivery and Policy Research Contracts  
**Category:** Measuring MS Disease Activity  
**Strategic Area:** Restore  
**Approx. Funding:** $513,495  
**Term:** 10/1/2014-9/30/2018

**“Standardization and Normative Data of the Symbol Digit Modalities Test-Oral Version”** Improving a test that measures cognitive function.

**Lauren Strober, PhD**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Pilot Research Grants  
**Category:** Psychosocial Aspects of MS  
**Strategic Area:** Restore  
**Approx. Funding:** $44,000  
**Term:** 9/1/2016-8/31/2018

**“The SEMS Project: Staying Employed with Multiple Sclerosis”** Testing a comprehensive intervention that may help people with MS to stay employed.

**Bing Yao, PhD**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Research Grants  
**Category:** Diagnostic Methods  
**Strategic Area:** Restore  
**Approx. Funding:** $558,314  
**Term:** 10/1/2017-9/30/2020

**“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.

**NEW MEXICO**

**Oscar Bizzozero, PhD**  
University of New Mexico  
Albuquerque, New Mexico  
Award: Pilot Research Grants  
**Category:** Biochem./Biophysics  
**Strategic Area:** Stop  
**Approx. Funding:** $44,000  
**Term:** 6/1/2017-5/31/2018

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

Hiroko Nobuta, PhD
Albert Einstein College of Medicine
Bronx, New York
Award: Career Transition Fellowship
“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.

Ralph Benedict, PhD
The State University of New York at Buffalo
Buffalo, New York
Award: Research Grants
“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.

M. Laura Feltri, MD
The State University of New York at Buffalo
Buffalo, New York
Award: Research Grants
“Characterization of a novel inhibitor of myelination: MAPK12/P38MAPKgamma.” Does a natural inhibitor of nerve-insulating myelin have potential as a target for myelin repair in MS?

Yungki Park, PhD
The State University of New York at Buffalo
Buffalo, New York
Award: Pilot Research Grants
“Elucidating the pathogenetic mechanisms of multiple sclerosis” Researchers at The State University of New York at Buffalo are seeking to understand how genetic variations may contribute to MS risk, using cutting edge technology.

Janet Shucard, PhD
The State University of New York at Buffalo
Buffalo, New York
Award: Research Grants
“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.
Fraser Sim, PhD
The State University of New York at Buffalo
Buffalo, New York
Award: Research Grants
Approx. Funding: $579,899
Term: 10/1/2017-9/30/2020
“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.

Fraser Sim, PhD
The State University of New York at Buffalo
Buffalo, New York
Award: Pilot Research Grants
Approx. Funding: $44,000-PENDING
Term: 11/1/2017-10/31/2018
“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.

Caila Vaughn, PhD, MPH
The State University of New York at Buffalo
Buffalo, New York
Award: Pilot Research Grants
Approx. Funding: $43,725-PENDING
Term: 11/1/2017-10/31/2018
“The Usefulness of the Talkitt Speech Recognition Technology in Improving Quality of Life for Individuals with Multiple Sclerosis and Dysarthria” Researchers at the State University of New York at Buffalo are conducting a trial to determine whether an application for smart devices improves communication-related quality of life in people with MS and speech disorders.

Oluwasheyi Ayeni, MD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Sylvia Lawry Physician Fellowships
Approx. Funding: $130,000
Term: 7/1/2016-6/30/2018
“Sylvia Lawry Physician Fellowship” A promising doctor at Icahn School of Medicine at Mount Sinai in New York will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Ilena George, MD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Sylvia Lawry Physician Fellowships
Approx. Funding: $130,000
Term: 7/1/2017-6/30/2019
“Sylvia Lawry Physician Fellowship” A promising doctor at Icahn School of Medicine at Mount Sinai will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.
Sam Horng, MD, PhD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Career Transition Fellowships
Category: Biology of Glia
Strategic Area: Stop
Approx. Funding: $241,458
Term: 7/1/2017-6/30/2022

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

Herbert Karpatkin, DSc
Hunter College
New York, New York
Award: Pilot Research Grants
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $43,991
Term: 9/1/2016-8/31/2018

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

Ilana Katz Sand, MD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Research Grants
Category: Human Therapy Trials/Management of MS
Strategic Area: Restore
Approx. Funding: $161,975
Term: 10/1/2016-9/30/2018

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

Sonya Kim, CRC, PhD
New York University School of Medicine
New York, New York
Award: Pilot Research Grants
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Approx. Funding: $44,000
Term: 6/1/2017-5/31/2019

“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.
Joo-won Kim, PhD
Icahn School of Medicine at Mount Sinai  
Category: Measuring MS Disease Activity
New York, New York  
Strategic Area: Stop
Award: Postdoctoral Fellowships  
Approx. Funding: $184,654
Term: 7/1/2017-6/30/2020

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

Kathleen C. Moore Foundation Postdoctoral Fellowship

Lauren Krupp, MD
New York University Langone Medical Center  
Category: Psychosocial Aspects of MS
New York, New York  
Strategic Area: Restore
Award: Research Grants  
Approx. Funding: $1,046,676
Term: 4/1/2016-3/31/2020

“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.

Christopher Langston, MD, PhD
Icahn School of Medicine at Mount Sinai  
Category: Measuring MS Disease Activity
New York, New York  
Strategic Area: Stop
Award: Sylvia Lawry Physician Fellowships  
Approx. Funding: $130,000-PENDING
Term: 7/1/2018-6/30/2020

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

Victoria Leavitt, PhD
Columbia University  
Category: Diagnostic Methods
New York, New York  
Strategic Area: Restore
Award: Research Grants  
Approx. Funding: $558,130
Term: 8/1/2014-3/31/2019

“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.

Victoria Leavitt, PhD
Columbia University  
Category: Rehabilitation
New York, New York  
Strategic Area: Restore
Award: Mentor-Based Postdoctoral Fellowships  
Approx. Funding: $389,211
Term: 7/1/2017-6/30/2022

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

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

**Jennifer Linden, PhD**  
Weill Cornell Medical College  
New York, New York  
Award: Career Transition Fellowships  
Category: Neuropathology  
Strategic Area: Stop  
Approx. Funding: $583,486  
Term: 7/1/2017-6/30/2022

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

**Mia Minen, MD, MPH**  
New York University Langone Medical Center  
New York, New York  
Award: Pilot Research Grants  
Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Approx. Funding: $44,000  
Term: 9/1/2017-8/31/2018

“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.

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

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

**Thanh Nguyen, PhD**  
Weill Cornell Medical College  
New York, New York  
Award: Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Approx. Funding: $897,375  
Term: 10/1/2016-9/30/2020

“Quantitative MRI of lesion iron and myelin repair” Weill Cornell Medical College researchers are testing and validating a novel imaging technique for use in determining how iron in MS lesions in the brain may affect myelin repair.
Julia Patzig, PhD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Postdoctoral Fellowships
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $182,327
Term: 7/1/2016-6/30/2019

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

James Salzer, MD, PhD
New York University School of Medicine
New York, New York
Award: Fast Forward
Category: Preclinical Drug Development
Strategic Area: Restore
Approx. Funding: $598,950
Term: 9/23/2015-12/21/2018

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

Funded in collaboration with the MS Society of Canada

James Sumowski, PhD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Pilot Research Grants
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $43,999
Term: 11/1/2016-4/30/2018

“Pilot Randomized Controlled Trial of Atomoxetine to Treat Memory Impairment in MS Patients” Testing a therapy for its ability to address memory problems in people with MS.

TG Therapeutics,
TG Therapeutics
New York, New York
Award: Fast Forward
Category: Preclinical Drug Development
Strategic Area: Stop
Approx. Funding: $254,452
Term: 9/1/2017-8/31/2018

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

Junqian Xu, PhD
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Pilot Research Grants
Category: Neurophysiology
Strategic Area: Stop
Approx. Funding: $43,998
Term: 11/1/2017-10/31/2018

“Towards validating magnetic resonance spectroscopy measured glutamate as an in vivo spinal cord neuroplasticity biomarker using dendritic morphometry” Researchers at Icahn School of Medicine are optimizing tools to prepare for the investigation of the effects of rehabilitation in MS.
David Jay Mock, MD  
University of Rochester Medical Center  
Rochester, New York  
Award: Pilot Research Grants  
Category: CNS Repair  
Strategic Area: Stop  
Approx. Funding: $44,000  
Term: 9/1/2017-8/31/2018  

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

Andrew Smith, MD  
University of Rochester  
Rochester, New York  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $195,000  
Term: 7/1/2015-6/30/2018  

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

Adan Aguirre, PhD  
State University of New York at Stony Brook  
Stony Brook, New York  
Award: Research Grants  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $446,025  
Term: 10/1/2016-9/30/2019  

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

Holly Colognato, PhD  
State University of New York at Stony Brook  
Stony Brook, New York  
Award: Research Grants  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $582,278  
Term: 4/1/2017-3/31/2020  

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

Pawan Kumar, PhD  
State University of New York at Stony Brook  
Stony Brook, New York  
Award: Pilot Research Grant  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $42,350-PENDING  
Term: 3/1/2018-2/28/2019  

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

NORTH CAROLINA  
Jason Franz, PhD  
University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina  
Award: Pilot Research Grants  
Category: Diagnostic Methods  
Strategic Area: Restore  
Approx. Funding: $43,604  
Term: 9/1/2017-8/31/2018  

“Effect of optical flow perturbations on static and dynamic balance control in people with multiple sclerosis”  Studying how virtual reality might be used to accurately identify balance problems in people with MS.
Glenn Matsushima, PhD
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina
Award: Research Grants
Category: CNS Repair
Strategic Area: Restore
Approx. Funding: $500,009
Term: 4/1/2017-3/31/2020

“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.

Jenny Ting, PhD
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina
Award: Collaborative Research Center Awards
Category: Preclinical Drug Development
Strategic Area: Stop
Approx. Funding: $825,000
Term: 4/1/2014-3/31/2019

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

Mari Shinohara, PhD
Duke University Medical Center
Charlotte, North Carolina
Award: Research Grants
Category: Immunology
Strategic Area: Stop
Approx. Funding: $660,554
Term: 10/1/2014-9/30/2018

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

Heather Kane, PhD
RTI International
Raleigh, North Carolina
Award: Health Care Delivery and Policy Research
Category: Health Care Delivery/ Policy
Strategic Area: Stop
Approx. Funding: $214,840
Term: 10/1/2015-9/30/2018

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

OHIO
Qing Lu, PhD
Children's Hospital Medical Center - Cincinnati
Cincinnati, Ohio
Award: Research Grants
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $698,640
Term: 4/1/2016-3/31/2019

“Long non-coding RNA control of CNS myelination and remyelination” Researchers at the Cincinnati Children's Hospital Medical Center are investigating the possible role of a type of molecule called long noncoding RNA that may regulate repair of myelin, which is destroyed in MS.
Laura Baldassari, MD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $130,000  
Term: 7/1/2017-6/30/2019  

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

Farren Briggs, PhD  
Case Western Reserve University  
Cleveland, Ohio  
Award: Pilot Research Grants  
Category: Epidemiology  
Strategic Area: End  
Approx. Funding: $44,000  
Term: 9/1/2017-8/31/2018  

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

Jenny Feng, MD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $195,000-PENDING  
Term: 7/1/2018-6/30/2021  

“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.

Robert Fox, MD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Strategic Initiatives  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $592,151  
Term: 10/1/2013-9/30/2018  

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

_Funded by a gift from the National MS Society Greater Delaware Valley Chapter_

Robert Fox, MD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Health Care Delivery and Policy Research Contracts  
Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Approx. Funding: $416,686  
Term: 10/1/2015-12:00:00 AM  

“A Study of Benefit and Risk in People with MS” Researchers at the Cleveland Clinic are probing the perspectives of people with MS in terms of perceived benefits and risks of MS therapies to better inform the development and approval of future therapies.
Xiaoxia Li, PhD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $732,861-PENDING  
Term: 4/1/2018-3/31/2021  

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

Kedar Mahajan, MD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: NMSS-ABF Clinician Scientist Development  
Category: Diagnostic Methods  
Strategic Area: Stop  
Approx. Funding: $194,394  
Term: 7/1/2016-6/30/2019  

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

Marisa McGinley, DO  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Sylvia Lawry Physician Fellowships  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $195,000  
Term: 7/1/2016-6/30/2019  

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

Deborah Miller, PhD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Health Care Delivery and Policy Research Contracts  
Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Approx. Funding: $545,144  
Term: 10/1/2015-9/30/2018  

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

Booki Min, DVM, PhD  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $458,039  
Term: 10/1/2015-9/30/2018  

“IL-27-conditioned Foxp3+ regulatory T cells, a novel Treg therapy to treat autoimmune inflammation in the CNS”  Researchers at the Cleveland Clinic are exploring a novel way of reducing the immune attack on the brain and spinal cord that occurs in MS.
Paul Tesar, PhD
Case Western Reserve University
Cleveland, Ohio
Award: Research Grants
Category: Human Genetics
Strategic Area: Restore
Approx. Funding: $654,443
Term: 10/1/2017-9/30/2020

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

Chunying WU, PhD
Case Western Reserve University
Cleveland, Ohio
Award: Pilot Research Grants
Category: Diagnostic Methods
Strategic Area: Stop
Approx. Funding: $44,000
Term: 9/1/2017-8/31/2018

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

Amy Lovett-Racke, PhD
Ohio State University
Columbus, Ohio
Award: Research Grants
Category: Neurophysiology
Strategic Area: Stop
Approx. Funding: $273,122
Term: 4/1/2016-3/31/2019

“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.

Ruchika Prakash, PhD
Ohio State University
Columbus, Ohio
Award: Research Grants
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $631,261
Term: 10/1/2016-9/30/2019

“A physical activity-based tracking intervention to enhance cognitive and neural plasticity” Researchers from The Ohio State University are testing whether increasing physical activity through the use of simple accelerometers can improve cognitive functioning in MS.

Yuhong Yang, MD
The Ohio State University
Columbus, Ohio
Award: Pilot Research Grant
Category: Preclinical Drug Development
Strategic Area: Stop
Approx. Funding: $44,000-PENDING
Term: 3/1/2018-2/28/2019

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

OKLAHOMA
Robert Axtell, PhD
Oklahoma Medical Research Foundation
Oklahoma City, Oklahoma
Award: Research Grants
Category: Immunology
Strategic Area: Stop
Approx. Funding: $422,400
Term: 10/1/2016-9/30/2018

“Role of B-cells in TH17 induced Neuro-inflammation” Researchers from Oklahoma Medical Research Foundation are investigating an immune modulating treatment for possible clues to stopping MS progression.
Michael Basso, PhD
University of Tulsa
Tulsa, Oklahoma
Award: Pilot Research Grants
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $39,873
Term: 2/1/2012-9/30/2018
“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.

OREGON
Dennis Bourdette, MD
Oregon Health & Science University
Portland, Oregon
Award: Collaborative Research Center Awards
Category: Human Therapy Trials/Management of MS
Strategic Area: Restore
Approx. Funding: $825,000
Term: 4/1/2015-3/31/2020
“Developing patient-centered and evidence-based wellness programs for people with MS” Researchers at Oregon Health & Science University are collaborating to develop patient-centered and evidenced-based wellness programs to improve the daily life of people with MS.

Dennis Bourdette, MD
Oregon Health & Science University
Portland, Oregon
Award: Research Grants
Category: Immunology
Strategic Area: Restore
Approx. Funding: $598,082
Term: 4/1/2017-3/31/2020
“Promoting remyelination in animal models of multiple sclerosis with a selective thyromimetic prodrug” Researchers at Oregon Health & Science University are exploring a novel strategy for repairing myelin and restoring function in laboratory models of MS.

Meredith Hartley, PhD
Oregon Health & Science University
Portland, Oregon
Award: Postdoctoral Fellowships
Category: CNS Repair
Strategic Area: Restore
Approx. Funding: $178,391
Term: 7/1/2015-6/30/2018
“A thyroid hormone-based strategy for promoting remyelination” Researchers at Oregon Health & Science University are testing thyroid hormone-like drugs to see if they will improve myelin repair and to determine their potential for development as a treatment for MS.
Funded in part by the Dave Tomlinson Research Fund

Daniel Hartung, MPH, PharmD
Oregon State University
Portland, Oregon
Award: Health Care Delivery and Policy Research Contracts
Category: Health Care Delivery/ Policy
Strategic Area: Stop
Approx. Funding: $411,151
Term: 10/1/2016-9/30/2018
“Costs, Access, and Value of Multiple Sclerosis Disease-Modifying Therapies” Researchers at Oregon State University are investigating reasons for the escalating costs of MS treatments.
Fay Horak, PT, PhD  
Oregon Health & Science University  
Portland, Oregon  
Award: Mentor-Based Postdoctoral Fellowships  
Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $432,457  
Term: 7/1/2014-6/30/2019

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

Kelly Monk, PhD  
Oregon Health & Science University  
Portland, Oregon  
Award: Harry Weaver Neuroscience Scholarships  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $521,023  
Term: 7/1/2016-6/30/2021

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

Larry Sherman, PhD  
Oregon Health & Science University  
Portland, Oregon  
Award: Research Grants  
Category: Preclinical Drug Development  
Strategic Area: Stop  
Approx. Funding: $575,556  
Term: 10/1/2017-9/30/2020

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

Elizabeth Silbermann, MD  
Oregon Health & Science University  
Portland, Oregon  
Award: Sylvia Lawry Physician Fellowships  
Category: Rehabilitation  
Strategic Area: Stop  
Approx. Funding: $195,000  
Term: 7/1/2017-6/30/2020

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

Rebecca Spain, MD, MSPH  
Oregon Health & Science University  
Portland, Oregon  
Award: Strategic Initiatives  
Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Approx. Funding: $1,180,578  
Term: 10/1/2017-9/30/2021

“Lipoic acid for the treatment of progressive multiple sclerosis”  
Investigators at Oregon Health & Science University are conducting a clinical trial to determine if the oral supplement, lipoic acid, is an effective treatment for progressive forms of multiple sclerosis.
Ian Tagge, PhD
Oregon Health & Science University
Portland, Oregon
Award: Postdoctoral Fellowships
Category: Measuring MS Disease Activity
Strategic Area: Stop
Approx. Funding: $113,047
Term: 7/1/2017-6/30/2019

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

PENNSYLVANIA
Youhai Chen, MD, PhD
University of Pennsylvania
Philadelphia, Pennsylvania
Award: Research Grants
Category: Immunology
Strategic Area: Stop
Approx. Funding: $664,366
Term: 9/30/2016-9/30/2018

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

Judith Grinspan, PhD
Children's Hospital of Philadelphia
Philadelphia, Pennsylvania
Award: Research Grants
Category: Biology of Glia
Strategic Area: Restore
Approx. Funding: $583,760
Term: 4/1/2016-3/31/2019

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

Michael Halpern, MD, PhD, MPH
Temple University
Philadelphia, Pennsylvania
Award: Health Care Delivery and Policy Research
Category: Health Care Delivery/ Policy
Strategic Area: Stop
Approx. Funding: $99,402
Term: 7/15/2016-9/15/2018

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

“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.
**Longevity Biotech, Inc,**  
Longevity Biotech, Inc  
Philadelphia, Pennsylvania  
Award: Fast Forward  
Approx. Funding: $316,384  
Term: 9/26/2017-3/31/2019

**“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.

**A.M. Rostami, MD, PhD**  
Thomas Jefferson University  
Philadelphia, Pennsylvania  
Approx. Funding: $650,000  
Term: 4/1/2017-3/31/2020

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

**Russell Shinohara, PhD**  
University of Pennsylvania  
Philadelphia, Pennsylvania  
Approx. Funding: $585,061-PENDING  
Term: 4/1/2018-3/31/2021

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

**Rodolfo Thome, PhD**  
Thomas Jefferson University  
Philadelphia, Pennsylvania  
Approx. Funding: $184,654  
Term: 7/1/2017-6/30/2020

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

**RHODE ISLAND**

**Theresa Shireman, PhD**  
Brown University  
Providence, Rhode Island  
Approx. Funding: $560,862  
Term: 10/1/2014-9/30/2018

**“Effectiveness of Medicaid’s Home- and Community-Based Services for Persons with Multiple Sclerosis”** Optimizing home- and community-based services to maintain the independence of people with MS.
**TENNESSEE**  
**Hongbo Chi, PhD**  
St. Jude Children's Research Hospital  
Memphis, Tennessee  
Award: Research Grants  
“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.

**Seth Smith, PhD**  
Vanderbilt University Medical Center  
Nashville, Tennessee  
Award: Research Grants  
“Quantitative and Longitudinal MRI Characterization of Spinal Cord Damage in Patients with MS”  
Imaging specialists at Vanderbilt University are developing and implementing new, high-resolution MRI methods to better visualize and track MS disease activity and damage in the spinal cord.

**TEXAS**  
**Jianrong Li, PhD**  
Texas A&M AgriLife Research  
College Station, Texas  
Award: Research Grants  
“Stat3 in myeloid cells: a regulator of autoimmune demyelination”  
Texas A&M University researchers are targeting a molecule whose signals may be crucial to stopping the immune attack on the brain and spinal cord in MS.

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

**Bart Rypma, PhD**  
The University of Texas at Dallas  
Dallas, Texas  
Award: Research Grants  
“The Effect of Neural-Vascular Coupling Changes on Cognitive Performance in Multiple Sclerosis”  
University of Texas, Dallas researchers are seeking to understand biological mechanisms that underlie MS “brain fog” as a path toward finding solutions to cognitive problems in MS.
Bart Rypma, PhD  
The University of Texas at Dallas  
Dallas, Texas  
Award: Pilot Research Grant  
Category: Biology of Glia  
Strategic Area: Stop  
Approx. Funding: $44,000-PENDING  
Term: 3/1/2018-2/28/2019  

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

Benjamin Deneen, PhD  
Baylor College of Medicine  
Houston, Texas  
Award: Research Grants  
Category: CNS Repair  
Strategic Area: Restore  
Approx. Funding: $610,418  
Term: 9/30/2015-9/30/2018  

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

Teng-Wei Huang, PhD  
Baylor College of Medicine  
Houston, Texas  
Award: Postdoctoral Fellowships  
Category: CNS Repair  
Strategic Area: Restore  
Approx. Funding: $172,507  
Term: 7/1/2017-6/30/2020

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

Hyun Kyoung Lee, PhD  
Baylor College of Medicine  
Houston, Texas  
Award: Research Grants  
Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $375,000  
Term: 3/1/2016-2/28/2019

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

John Lindsey, MD  
The University of Texas Health Science Center at Houston  
Houston, Texas  
Award: Pilot Research Grants  
Category: Infectious Agents  
Strategic Area: Stop  
Approx. Funding: $44,000  
Term: 6/1/2017-5/31/2018

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

Thomas Forsthuber, MD, PhD  
The University of Texas at San Antonio  
San Antonio, Texas  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Approx. Funding: $660,270  
Term: 10/1/2016-9/30/2019

“NETs and lipid peroxidation as drivers of progressive EAE”  
University of Texas at San Antonio researchers are exploring how to stop nervous system damage, for clues to developing treatments that stop MS progression.
UTAH
Theron Casper, PhD
University of Utah
Salt Lake City, Utah
Award: Health Care Delivery and Policy Research Contracts
Category: Human Therapy Trials/Management of MS
Strategic Area: End
Approx. Funding: $3,000,000
Term: 7/1/2016-6/30/2019

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

Lee Dibble, PT, PhD
University of Utah
Salt Lake City, Utah
Award: Research Grants
Category: Rehabilitation
Strategic Area: Restore
Approx. Funding: $436,220
Term: 10/1/2017-9/30/2020

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

Laura Dickey, PhD
University of Utah
Salt Lake City, Utah
Award: Postdoctoral Fellowships
Category: CNS Repair
Strategic Area: Restore
Approx. Funding: $166,724
Term: 7/1/2015-6/30/2018

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

The McCarthey Family Postdoctoral Fellow

Thomas Lane, PhD
University of Utah
Salt Lake City, Utah
Award: Collaborative Research Center Awards
Category: Neuropathology
Strategic Area: Restore
Approx. Funding: $825,000
Term: 7/1/2017-6/30/2022

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

Miguel Paz Soldan, MD, PhD
Western Institute for Biomedical Research (WIBR)
Salt Lake City, Utah
Award: Pilot Research Grant
Category: Neuropathology
Strategic Area: Stop
Approx. Funding: $44,000-PENDING
Term: 3/1/2018-2/28/2019

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

Dimitry Krementsov, PhD  
Category: Immunology  
University of Vermont  
Strategic Area: Stop  
Burlington, Vermont  
Approx. Funding: $552,845  
Award: Research Grants  
Term: 10/1/2016-9/30/2019

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

VIRGINIA

Elizabeth Frost, PhD  
Category: Biology of Glia  
University of Virginia  
Strategic Area: Stop  
Charlottesville, Virginia  
Approx. Funding: $181,754-PENDING  
Award: Postdoctoral Fellowships  
Term: 7/1/2018-6/30/2021

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

Myla Goldman, MD  
University of Virginia  
Category: Human Therapy Trials/Management of MS  
Charlottesville, Virginia  
Strategic Area: Stop  
Approx. Funding: $624,604  
Award: Research Grants  
Term: 10/1/2016-9/30/2020

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

Jonathan Kipnis, PhD  
University of Virginia  
Category: Immunology  
Charlottesville, Virginia  
Strategic Area: Stop  
Approx. Funding: $660,000  
Award: Research Grants  
Term: 10/1/2015-9/30/2018

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

Babette Fuss, PhD  
Virginia Commonwealth University  
Category: Biology of Glia  
Richmond, Virginia  
Strategic Area: Restore  
Approx. Funding: $678,392  
Award: Research Grants  
Term: 10/1/2016-9/30/2019

“ATX: a regulator of CNS myelination”  
Researchers from Virginia Commonwealth University are studying a signaling pathway to determine its potential for stimulating immature myelin-making cells to mature and form new myelin to restore function in MS.
Carmen Sato-Bigbee, PhD  
Virginia Commonwealth University  
Richmond, Virginia  
Award: Research Grants  

Category: Biology of Glia  
Strategic Area: Restore  
Approx. Funding: $587,785  
Term: 10/1/2015-9/30/2018

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

WASHINGTON  
Kevin Alschuler, PhD  
University of Washington  
Seattle, Washington  
Award: Research Grants  

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Approx. Funding: $794,769  
Term: 4/1/2014-3/31/2019

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

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

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

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

Charles Bombardier, PhD  
University of Washington  
Seattle, Washington  
Award: Research Grants  

Category: Rehabilitation  
Strategic Area: Restore  
Approx. Funding: $1,466,730  
Term: 10/1/2013-9/30/2018

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

Dawn Ehde, PhD  
University of Washington  
Seattle, Washington  
Award: Research Grants  

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

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

Aaron Turner, PhD  
University of Washington  
Seattle, Washington  
Award: Mentor-Based Postdoctoral Fellowships  

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Approx. Funding: $382,459  
Term: 7/1/2013-6/30/2018

“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  
Category: Rehabilitation  
Approx. Funding: $401,426-PENDING  
Term: 7/1/2018-6/30/2023  
“The Seattle Collaborative Fellowship” Researchers at the University of Washington are training a series of promising professionals in how to conduct MS rehabilitation research.

WEST VIRGINIA  
Gordon Meares, PhD  
West Virginia University  
Morgantown, West Virginia  
Award: Career Transition Fellowships  
Category: Biology of Glia  
Approx. Funding: $380,636  
Term: 1/1/2015-12/31/2018  
“LKB1 and AMPK Signaling in Neuroinflammation” Studying how cells in the brain and spinal cord may influence the immune system in MS, for clues to stopping immune attacks.

WISCONSIN  
Ian Duncan, DVM, PhD  
University of Wisconsin-Madison  
Madison, Wisconsin  
Award: Research Grants  
Category: CNS Repair  
Approx. Funding: $763,055  
Term: 10/1/2015-9/30/2018  
“Remyelination following global demyelination and its promotion in a novel animal model” Researchers at the University of Wisconsin-Madison are exploring factors controlling the repair of nerve-insulating myelin and ways to non-invasively detect repair and enhance the process.  
*Funded in part by the Ladish Company Foundation*

Bonnie Dittel, PhD  
BloodCenter of Wisconsin  
Milwaukee, Wisconsin  
Award: Research Grants  
Category: Immunology  
Approx. Funding: $681,791  
Term: 10/1/2015-9/30/2018  
“Characterization of a novel regulatory B cell subset that attenuates EAE” Researchers at the BloodCenter of Wisconsin are investigating how a subset of immune “B cells” reduces inflammation, for clues to harnessing this power to stop MS.  
*2016 Stephen C. Reingold Research Award for most outstanding research proposal - Funded in part by the Ladish Company Foundation*

Jeri-Anne Lyons, PhD  
University of Wisconsin-Milwaukee  
Milwaukee, Wisconsin  
Award: Pilot Research Grants  
Category: Human Therapy Trials/Management of MS  
Approx. Funding: $44,000  
Term: 11/1/2017-10/31/2018  
“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*
Hao Zhang, PhD
Medical College of Wisconsin
Milwaukee, Wisconsin
Award: Research Grants
Category: Biochem./Biophysics
Strategic Area: Stop
Approx. Funding: $646,763
Term: 10/1/2014-9/30/2018

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