List of Current Research Projects Funded by the National MS Society

Sorted by State/Country

October 2019

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

JOIN THE MOVEMENT
www.nationalmssociety.org
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 MS research projects being funded by the National Multiple Sclerosis Society (USA), sorted by state and country, as of October 1, 2019.

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

Research Priorities
Risk Factors: “Why do some people get MS and others don’t?”
Although tremendous progress has been made in identifying key biological pathways that contribute to MS risk, the cause is still unknown. Preventing MS for future generations requires a deep understanding of what triggers MS, how triggers lead to the development of the disease, and how to protect against it.

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

Progression: “How do we stop MS progression?”
MS progression often occurs early in the disease, even while the brain compensates for injury and even in people successfully treated for relapses. Progression is not easily measured and usually happens over long periods of time, making it hard to quickly detect whether a therapy is impacting the course of disease. This has made the development of therapies for progressive stages of MS a challenge. Diagnosing progressive disease based on biomarkers, in addition to clinical presentation would enable the testing of therapies earlier, promising better ways of protecting the nervous system from MS injury.

Neuroprotection/Nervous System Repair: “How do we repair the damage caused by MS?”
The hopes of people living with MS today rest on finding a way to stop disease worsening by preventing neurodegeneration and reversing the damage to restore lost function. The brain can repair myelin and also rewire itself around damaged areas, but in order to significantly impact disease, this natural ability needs to be enhanced. In addition to developing treatment strategies, there is a crucial need for non-invasive ways to determine quickly whether neuroprotective and repair strategies are working.
Symptoms, Rehabilitation, Wellness: “How do we reverse symptoms and promote wellness?”
Emerging evidence suggests that wellness behaviors and lifestyle factors can influence the risk for developing MS, disease course, severity of symptoms and quality of life. Finding ways to understand and address the variable and unpredictable symptoms caused by MS will have a profound impact on people’s quality of life. In addition, people with MS often live with other chronic medical conditions. Understanding how these other health conditions affect MS disease course and symptoms represents an important research opportunity. Focusing on opportunities to improve the design and conduct of clinical trials and providing strategies people can incorporate to enhance their wellbeing should be emphasized.

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 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 effects cognitive functioning and other aspects of quality of life and wellness
- **Rehabilitation** - Seeking ways to maximize physical and mental abilities and reduce symptoms and increase wellbeing
- **Tissue/DNA Banks** - Shared resource of tissues and DNA banks that accumulate and store specimens for use by MS investigators
Projects by Location – click on active links to jump to section

OUTSIDE OF THE UNITED STATES .......................................................................................................................... 5
AUSTRALIA ............................................................................................................................................................... 5
CANADA ................................................................................................................................................................. 6
GERMANY ............................................................................................................................................................... 8
GREECE ................................................................................................................................................................. 10
ISRAEL ................................................................................................................................................................. 10
ITALY ..................................................................................................................................................................... 11
LEBANON ............................................................................................................................................................... 12
PORTUGAL ............................................................................................................................................................. 12
UNITED KINGDOM .................................................................................................................................................. 12

INSIDE OF THE UNITED STATES .......................................................................................................................... 14
ALABAMA ................................................................................................................................................................. 14
CALIFORNIA ........................................................................................................................................................... 16
COLORADO ............................................................................................................................................................. 26
CONNECTICUT ....................................................................................................................................................... 27
DISTRICT OF COLUMBIA ...................................................................................................................................... 30
FLORIDA ................................................................................................................................................................. 30
GEORGIA ................................................................................................................................................................. 30
ILLINOIS ................................................................................................................................................................. 31
IOWA ........................................................................................................................................................................ 34
KANSAS ................................................................................................................................................................. 34
MARYLAND ............................................................................................................................................................ 34
 MASSACHUSETTS .................................................................................................................................................. 40
MICHIGAN ............................................................................................................................................................... 45
MINNESOTA ............................................................................................................................................................ 46
MISSOURI ................................................................................................................................................................. 47
NEW JERSEY ............................................................................................................................................................ 49
NEW MEXICO .......................................................................................................................................................... 51
NEW YORK .............................................................................................................................................................. 52
NORTH CAROLINA ................................................................................................................................................ 59
OHIO ........................................................................................................................................................................ 60
OKLAHOMA ............................................................................................................................................................. 63
OREGON ................................................................................................................................................................. 63
PENNSYLVANIA ..................................................................................................................................................... 65
 TENNESSEE ........................................................................................................................................................ 67
TEXAS ....................................................................................................................................................................... 68
UTAH ......................................................................................................................................................................... 69
VERMONT ............................................................................................................................................................... 70
VIRGINIA ................................................................................................................................................................. 70
WASHINGTON ....................................................................................................................................................... 71
WISCONSIN ............................................................................................................................................................ 73
AUSTRALIA

Jonathan Baell, Ph.D.
Monash University
Clayton, Victoria, Australia
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
“PEGylated Gas6 for treating progressive multiple sclerosis”  Monash University researchers are developing and testing a version of a natural brain protein for its ability to protect the nervous system from the damaging impacts of MS.

Trevor Kilpatrick, M.B.B.S., Ph.D.
Florey Institute of Neuroscience and Mental Health
Melbourne, Victoria, Australia
Award: Research Grants
Term: 10/1/2019-9/30/2022
“Modulating microglial activity for treatment of demyelinating diseases of the CNS”  Australian researchers are testing whether the transplant of modified microglia – immune cells of the brain – can improve repair of nerve-insulating myelin in a model of MS.

Alexandr Klistorner, Ph.D.
Macquarie University
North Ryde, New South Wales, Australia
Award: Research Grants
Term: 7/1/2014-10/1/2020
“Investigating mechanisms of axonal degeneration in multiple sclerosis”  What are the mechanisms that drive progressive nervous system damage in MS?

Anne-Louise Ponsonby, FRACP, M.B.B.S., Ph.D.
The Australian National University
Canberra, Australian Capital Territory, Australia
Award: Research Grants
Term: 10/1/2018-10/1/2021
“Identifying epigenetic factors involved in MS onset : utilising population-based studies with genetic and environmental measures.”  Researchers at the Australian National University are studying a link between the environment and how genes are turned on and off to trigger the onset of MS.
**CANADA**

**Douglas Arnold, M.D.**
McGill University
Montreal, Quebec, Canada
Award: International Progressive MS Alliance - Collaborative Network Center
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.

*Estimated joint commitment with other Progressive MS Alliance members*

**Shannon Dunn, Ph.D.**
University Health Network
Toronto, Ontario, Canada
Award: Pilot Research Grants
Term: 3/1/2019-2/29/2020

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

**Jeff Dunn, Ph.D.**
University of Calgary
Calgary, Alberta, Canada
Award: Research Grants
Term: 4/1/2019-3/31/2022

*“Using light based technology to identify the extent of hypoxia in the cortex of patients with MS”* University of Calgary researchers are using new technology to detect and investigate whether and how reduced levels of oxygen in parts of the brain may impact people with MS.

**Marcia Finlayson, Ph.D.**
Queen’s University
Kinston, Ontario, Canada
Award: Mentor-Based Postdoctoral Fellowships
Term: 7/1/2014-6/30/2020

*“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, Ph.D.**
Queen’s University
Kinston, Ontario, Canada
Award: Pilot Research Grants
Term: 11/1/2017-1/31/2020

*“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.
Fang Liu, M.D., Ph.D.
Centre for Addiction and Mental Health
Toronto, Ontario, Canada
Award: Fast Forward
Term: 3/23/2017-1/1/2020
Category: Preclinical Drug Development
Strategic Area: Stop
Research Priority: Neuroprotection/Repair
Approx. Funding: $838300

“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

Lara Pilutti, Ph.D.
University of Ottawa
Ottawa, Ontario, Canada
Award: Research Grants
Term: 10/1/2016-11/30/2019
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $351620

“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.

Lara Pilutti, Ph.D.
University of Ottawa
Ottawa, Ontario, Canada
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $44821

“Characterizing the Acute Response to Adapted Exercise in Non-ambulatory People with Multiple Sclerosis” University of Ottawa researchers are studying the impacts and enjoyment of adapted exercise in people with MS who use wheelchairs.

Alexander Rauscher, M.Sc., Ph.D.
University of British Columbia
Vancouver, British Columbia, Canada
Award: Research Grants
Term: 4/1/2016-9/30/2020
Category: Measuring MS Disease Activity
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $309320

“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.
E. Yeh, M.D.
The Hospital for Sick Children
Toronto, Ontario, Canada
Award: Mentor-Based Postdoctoral Fellowships
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, M.D.
The Hospital for Sick Children
Toronto, Ontario, Canada
Award: Pilot Research Grants
Term: 11/1/2017-10/31/2019
**“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.

E. Yeh, M.D.
The Hospital for Sick Children
Toronto, Ontario, Canada
Award: Research Grants
Term: 10/1/2019-9/30/2022
**“Physical Activity, Quality of Life and Disease Outcomes in Youth with Multiple Sclerosis: the ATOMIC (Active Teens Multiple Sclerosis) Physical Activity Research Program”** A team at the Hospital for Sick Children in Toronto is testing if a smartphone app that provides tailored physical activity info/coaching can increase physical activity in pediatric MS.

**GERMANY**

**Stefan Gold, Ph.D.**
Charité - Universitätsmedizin Berlin
Berlin, Germany
Award: Research Grants
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, Ph.D.**
Charité - Universitätsmedizin Berlin
Berlin, Germany
Award: Mentor-Based Postdoctoral Fellowships
Term: 7/1/2018-6/30/2023

Category: Psychosocial Aspects of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $414685

**“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.

**Tanja Kuhlmann, M.D.**
University Hospital Münster
Münster, Germany
Award: Research Grants
Term: 7/20/2018-9/30/2020

Category: Biology of Glia
Strategic Area: Restore
Research Priority: Risk Factors
Approx. Funding: $337352

**“Effect of age on human oligodendroglial differentiation and (re-)myelination”** Researchers at University Hospital in Münster, Germany, are determining the factors that may limit the repair of myelin damaged during the course of MS.

**Lucas Schirmer, M.D.**
University of Heidelberg
Heidelberg, Germany
Award: Research Grants
Term: 7/1/2017-6/30/2020

Category: Biology of Glia
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $129666

**“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.

**Ari Waisman, B.S, M.Sc., Ph.D.**
University Medical Center of the Johannes Gutenberg-University Mainz
Mainz, Germany
Award: Research Grants
Term: 4/1/2018-3/31/2021

Category: Immunology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $484464

**“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.
GREECE
Maria Savvaki, M.Sc., Ph.D.
Foundation for Research and Technology-Hellas
Heraklion, Greece
Award: Pilot Research Grants
Term: 3/1/2019-2/29/2020
“Myelinophagy under normal and demyelinating conditions” Researchers in Greece are investigating whether a molecular process that helps cells to regenerate can protect nerve-insulating myelin from damage in MS.

Category: Biology of Glia
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $50000

ISRAEL
Jeffrey Hausdorff, Ph.D.
Tel Aviv Sourasky Medical Center
Tel Aviv, Israel
Award: Research Grants
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.

Netta Levin, M.D., Ph.D.
Medical Research Fund of Hadassah Medical Organization
Jerusalem, Israel
Award: Research Grants
Term: 7/25/2018-9/30/2020
“Temporal reorganization to overcome monocular demyelination – unique plasticity mechanism in MS – A renewal application” Researchers at Hadassah Hebrew University in Israel are investigating how eyesight is restored by natural repair and rewiring processes after optic neuritis in MS.

Lior Mayo, Ph.D.
Tel Aviv University
Tel Aviv, Israel
Award: Research Grants
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.

Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $938522

Category: Immunology
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $375000

Category: Measuring MS Disease Activity
Strategic Area: Restore
Research Priority: Risk Factors
Approx. Funding: $147360
Lior Mayo, Ph.D.
Tel Aviv University
Tel Aviv, Israel
Award: Pilot Research Grants
Term: 10/1/2018-3/31/2020
“The Role of CD157+ Cells in Acute and Progressive MS” Studying immunological mechanisms that contribute to disease progression and to exploring their therapeutic potential for MS.

ITALY
Marika Falcone, M.D., Ph.D.
Fondazione Centro San Raffaele
Milano, Italy
Award: Research Grants
Term: 4/1/2019-3/31/2022
“Assessing the immune regulatory role of gut microbiota in brain autoimmunity and disease activity in RRMS patients” Researchers in Milan, Italy are analyzing how gut bacteria influence immune cell behavior in the brain, and how alterations in those bacteria may reduce or exacerbate MS disease activity.

Elizabeth Hubbard, Ph.D.
Berry College
Rome, Italy
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
“Feasibility and efficacy of a high-intensity interval training program in persons with multiple sclerosis who have walking impairment” Researchers at Berry College are looking at the impact of individualized arm and leg exercise regimens on movement, fatigue, depression and other symptoms in people with mobility impairments.

Gianvito Martino, M.D.
Fondazione Centro San Raffaele
Milano, Italy
Award: International Progressive MS Alliance - Collaborative Network Center
Term: 10/1/2017-9/30/2021
“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.

Estimated joint commitment with other Progressive MS Alliance members; Funded in full by an Anonymous Investor
**Rosella Mechelli, Ph.D.**
Università Telematica San Raffaele Roma
Rome, Italy
Award: Research Grants
Term: 4/1/2019-3/31/2021
Category: Infectious Agents
Strategic Area: End
Research Priority: Risk Factors
Approx. Funding: $100000

**“EBV genotyping in MS”** Investigators in Rome, Italy are confirming an clarifying the possible role of specific strains of Epstein-Barr virus as a triggering factor in MS.

**LEBANON**

**Hala Darwish, Ph.D.**
American University of Beirut
Beirut, Lebanon
Award: Pilot Research Grants
Term: 6/1/2019-5/31/2020
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $49900

**“Interacting with Nature using virtual reality: A pilot intervention to restore cognitive fatigue in patients with Multiple Sclerosis (MS)”** A team in Beirut is testing whether interacting with nature via virtual reality can decrease cognitive fatigue in people with MS.

**PORTUGAL**

**Carlos Duarte, Ph.D.**
University of Coimbra
Coimbra, Portugal
Award: Research Grants
Term: 10/1/2016-6/30/2020
Category: Diagnostic Methods
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $175000

**“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.

**UNITED KINGDOM**

**Jeremy Chataway, M.A., M.D., FRCP(C), Ph.D., Med.ScD.**
University College London
London, United Kingdom
Award: Research Grants
Term: 10/1/2017-9/30/2022
Category: Measuring MS Disease Activity
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $448550

**“MS-STAT2-MRI”** 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.
**Don Mahad, M.D., Ph.D.**  
University of Edinburgh  
Edinburgh, United Kingdom  
Award: Research Grants  
Term: 4/1/2019-3/31/2021  
Category: Neuropathology  
Strategic Area: Stop  
Research Priority: Progression  
Approx. Funding: $169494  
“Targeting mitochondria to protect axons in progressive MS” A team in Scotland is attempting to enhance energy production in nerve cells, in hopes that making these cells more robust will protect them from damage in MS.

**Stefano Pluchino, M.D., Ph.D.**  
University of Cambridge  
Cambridge, United Kingdom  
Award: Research Grants  
Term: 10/1/2018-9/30/2021  
Category: CNS Repair  
Strategic Area: Stop  
Research Priority: Pathology  
Approx. Funding: $289219  
“Characterisation and manipulation of the metabolic pathways driving neuroinflammation” Researchers at the University of Cambridge are studying a type of immune cell and a molecule called succinate made by these cells, and their potential role in nervous system damage in progressive MS.

**David Selwood, Ph.D.**  
University College London  
London, United Kingdom  
Award: Fast Forward  
Term: 11/23/2015-12/31/2019  
Category: Preclinical Drug Development  
Strategic Area: Stop  
Research Priority: Neuroprotection/Repair  
Approx. Funding: $804767  
“The development of selective ion channel activators for neuroprotection” Developing novel approaches to stopping nerve tissue damage in people with MS.

**David Selwood, Ph.D.**  
University College London  
London, United Kingdom  
Award: Fast Forward  
Term: 9/1/2016-2/3/2020  
Category: Preclinical Drug Development  
Strategic Area: Stop  
Research Priority: Neuroprotection/Repair  
Approx. Funding: $551726  
“The development of selective ion channel activators for neuroprotection” Developing novel approaches to stopping nerve tissue damage in people with MS.

**UK MS Society,**  
UK MS Society  
London, United Kingdom  
Award: Strategic Initiatives  
Term: 4/1/2017-6/30/2026  
Category: Human Therapy  
Trials/Management of MS  
Strategic Area: Stop  
Research Priority: Progression  
Approx. Funding: $1499829  
“Co-funding for MS-STAT Phase 3 clinical trial of simvastatin in secondary progressive MS 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.
UK MS Society,
UK MS Society Category: Human Therapy
London, United Kingdom Trials/Management of MS
Award: Strategic Initiatives Strategic Area: Stop
Term: 10/1/2019-12:00:00 AM Research Priority: Progression
Approx. Funding: $313000

“ChariotMS Trial: Cladribine to halt deterioration in people with advanced multiple sclerosis” The Society is helping to fund an international clinical trial to determine whether cladribine can stop worsening of upper limb function in people with advanced MS.

Margot Woodroffe, B.S, Ph.D.
Sheffield Hallam University Category: Neuropathology
Sheffield, United Kingdom Strategic Area: Stop
Award: Research Grants Research Priority: Progression

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

INSIDE OF THE UNITED STATES

ALABAMA

Tapan Mehta, M.S., Ph.D. Category: Psychosocial Aspects of MS
University of Alabama at Birmingham Strategic Area: Restore
Birmingham, Alabama Research Priority: Symptoms, Rehab, Wellness
Award: Pilot Research Grants Approx. Funding: $54954
Term: 6/1/2019-5/31/2020

“Open-Label Placebos to Treat Fatigue in Multiple Sclerosis” Researchers at the University of Alabama at Birmingham are testing the ability of the placebo effect to reduce MS-related fatigue.

Robert Motl, Ph.D.
University of Alabama at Birmingham Category: Rehabilitation
Birmingham, Alabama Strategic Area: Restore
Award: Research Grants Research Priority: Symptoms, Rehab, Wellness
Term: 10/1/2014-7/31/2020 Approx. Funding: $813305

“Project BIPAMS: Behavioral Intervention for increasing Physical Activity in MS” University of Alabama, Birmingham researchers are testing an internet-based behavioral intervention with people with MS to increase their physical activity and alleviate symptoms.
Robert Motl, Ph.D.
University of Alabama at Birmingham
Birmingham, Alabama
Award: Health Care Delivery and Policy Research
Contracts
Term: 1/1/2017-12/31/2019
“Project COMPLETe: Coordinated Multiple Sclerosis Exercise Toolkit” Researchers at the University of Illinois at Urbana-Champaign are developing a set of tools to promote physical activity in people with MS, which is expected to reduce disability and improve quality of life.

Robert Motl, Ph.D.
University of Alabama at Birmingham
Birmingham, Alabama
Award: Mentor-Based Postdoctoral Fellowships
Term: 1/1/2017-12/31/2019
“Training in Physical Activity Promotion for Multiple Sclerosis” Mentor-Based Postdoctoral Fellowship in MS Rehabilitation Research to provide training in physical activity promotion for MS.

Robert Motl, Ph.D.
University of Alabama at Birmingham
Birmingham, Alabama
Award: Collaborative Research Center Awards
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.

Robert Motl, Ph.D.
University of Alabama at Birmingham
Birmingham, Alabama
Award: Strategic Initiatives
Term: 7/1/2019-6/30/2022
“Supplemental Funding for MSSC Feinstein Study: Improving Cognition In People With Progressive Multiple Sclerosis: A Multi-Arm, Randomized, Blinded, Sham-Controlled Trial Of Cognitive Rehabilitation And Aerobic Exercise” Supplemental funding to support additional imaging to detect brain plasticity for an international trial comparing the benefits of exercise and cognitive rehabilitation in people with MS and cognitive impairment.
**Hongwei Qin, Ph.D.**
University of Alabama at Birmingham
Birmingham, Alabama
Award: Research Grants
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.

**CALIFORNIA**
**Lilyana Amezcua, M.D., M.S.**
University of Southern California
Los Angeles, California
Award: Research Grants
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.

**Kirsten Anderson, Ph.D.**
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
Term: 7/1/2019-6/30/2022
**“Killer immunoglobulin-like receptor polymorphism associations with Multiple Sclerosis: Bioinformatics approach to understanding the genetic impact on disease phenotypes, disability progression and clinical outcomes”** UCSF researchers are studying genes that instruct certain immune cells in people with MS, because differences in these genes may impact why some people have more MS relapses and or experience MS progression sooner.

**Annexon Biosciences**
South San Francisco, California
Award: Fast Forward
Term: 1/1/2017-4/1/2020
**“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.
**Christina Azevedo, M.D., M.P.H.**
University of Southern California
Los Angeles, California
Award: Research Grants
Term: 10/1/2018-9/30/2021
**“Disentangling MS-Specific Brain Atrophy from Normal Aging”** Researchers at the University of Southern California are identifying a reliable MRI marker that could be used to screen potential therapies for progressive forms of MS.

**Sergio Baranzini, Ph.D.**
University of California, San Francisco
San Francisco, California
Award: Collaborative Research Center Awards
Term: 4/1/2015-3/31/2020
**“The MS Microbiome Consortium (MSMC): an academic multi-disciplinary collaborative effort to elucidate the role of the gut microbiota in MS”** With this support to the MS Microbiome Consortium, a multi-center team is conducting a comprehensive analysis of gut bacteria in people with MS to determine factors that may drive progression and help to develop probiotic strategies for stopping progression.

**Lisa Barcellos, Ph.D., M.P.H.**
University of California, Berkeley
Berkeley, California
Award: Research Grants
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.

**Valerie Block, D.Sc., P.T.**
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
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.
Riley Bove, M.D., M.Sc.
University of California, San Francisco  San Francisco, California
Award: Research Grants  Award: Pilot Research Grants
“Functional validation of SERMs as remyelinating agents”  “Does melatonin improve insomnia in patients with MS?”
University of California, San Francisco researchers are determining the potential SERMs (selective estrogen receptor modulators) medications for stimulating repair of nerve-insulating myelin.
Researchers at UCSF are testing whether sleep problems improve in people with MS with the use of melatonin.

Riley Bove, M.D., M.Sc.
University of California, San Francisco  San Francisco, California
Award: Pilot Research Grants  Award: Sylvia Lawry Physician Fellowships
“Does melatonin improve insomnia in patients with MS?”
Researchers at UCSF are testing whether sleep problems improve in people with MS with the use of melatonin.

Nina Bozinov, M.D.
Stanford University  Stanford, California
Award: Sylvia Lawry Physician Fellowships  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.

Myriam Chaumeil, Ph.D.
University of California, San Francisco  San Francisco, California
Award: Research Grants  Term: 10/1/2017-9/30/2021
“MR metabolic imaging of Multiple Sclerosis”
Researchers at the University of California, San Francisco are developing an imaging method to assess inflammation in the brain to develop new approaches to stopping MS.
Stephen Fancy, D.V.M., Ph.D.
University of California, San Francisco    Category: Biology of Glia
San Francisco, California    Strategic Area: Restore
Award: Harry Weaver Neuroscience Scholarships    Research Priority: Neuroprotection/Repair
Term: 7/1/2017-6/30/2022    Approx. Funding: $776123

“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.
Funded in part by the Dave Tomlinson Research Fund

Jennifer Graves, M.D., Ph.D.
University of California San Diego    Category: Human Genetics
San Francisco, California    Strategic Area: Stop
Award: Research Grants    Research Priority: Progression
Term: 7/1/2018-3/31/2020    Approx. Funding: $405900

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

Sasha Gupta, M.D.
University of California, San Francisco    Category: Preclinical Drug Development
San Francisco, California    Strategic Area: Stop
Award: NMSS-ABF Clinician Scientist Awards    Research Priority: Progression
Term: 7/1/2019-6/30/2022    Approx. Funding: $136408

“Use of anti-CD19 CAR-T cells in treatment of CNS autoimmune demyelinating disease in mouse model” A UCSF team is testing a therapy used to target immune B cells in cancer for clues to whether this treatment can slow or prevent disease progression in MS lab models.

Adil Harroud, M.D.
University of California, San Francisco    Category: Human Genetics
San Francisco, California    Strategic Area: Stop
Award: NMSS-ABF Clinician Scientist Awards    Research Priority: Risk Factors
Term: 7/1/2019-6/30/2022    Approx. Funding: $201697

“The genetic basis of progression in multiple sclerosis” UCSF researchers are analyzing 10,000 DNA samples from people over age 55 who have had MS for at least 10 years to determining the role of genes connected to obesity may play a role in MS progression.
Funded in part by a gift from a generous donor

Stephen Hauser, M.D.
University of California, San Francisco    Category: Measuring MS Disease Activity
San Francisco, California    Strategic Area: Stop
Award: Migration    Research Priority: Progression
Term: 10/1/2016-9/30/2021    Approx. Funding: $1375000

“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, Ph.D.
University of California, San Francisco
San Francisco, California
Award: Research Grants
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.

Yang Hu, M.D., Ph.D.
Stanford University
Stanford, California
Award: Research Grants
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.

Daniel Kaufman, Ph.D.
University of California, Los Angeles
Los Angeles, California
Award: Research Grants
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, Ph.D.
University of Southern California
Los Angeles, California
Award: Research Grants
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.
Kristen Krysko, M.D.
University of California, San Francisco
San Francisco, California
Award: Sylvia Lawry Physician Fellowships
Term: 7/1/2017-6/30/2020
Category: Human Therapy
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $195000

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

Vipin Kumar, Ph.D.
University of California San Diego
San Diego, California
Award: Research Grants
Term: 10/1/2018-9/30/2021
Category: Preclinical Drug Development
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $625486

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

Averil Ma, M.D.
University of California, San Francisco
San Francisco, California
Award: Research Grants
Term: 4/1/2019-3/31/2022
Category: Immunology
Strategic Area: End
Research Priority: Risk Factors
Approx. Funding: $658766

“Ubiquitin Mediated Prevention of Multiple Sclerosis” A UCSF team is testing whether changes to a potent inflammation-reducing protein contribute to the onset of MS-like disease in mice, for clues to developing new therapies to stop MS.

Medared
Menlo Park, California
Award: Fast Forward
Category: Preclinical Drug Development
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $330000

“Humanization of Monoclonal Antibody 5B8 for Neuroprotection in MS” Developing an antibody that has shown promise in preclinical studies as a potential treatment to protect the nervous system from MS damage.

Andrew Mendiola, Ph.D.
The J. David Gladstone Institutes
San Francisco, California
Award: Postdoctoral Fellowships
Term: 7/1/2018-6/30/2021
Category: Immunology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $177243

“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.

Funded in part by the Dave Tomlinson Research Fund
Zahra Moinfar, M.D., Ph.D.
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
Term: 7/1/2018-6/30/2021
Category: Immunology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $177243

“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.

Rashed Nagra, Ph.D.
Brentwood Biomedical Research Institute
Los Angeles, California
Award: Strategic Initiatives
Term: 11/1/2009-12:00:00 AM
Category: Tissue/DNA Banks
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $1760112

“Human brain and spinal fluid resource center” Developing and maintaining a tissue bank of specimens from people with MS for use in research.

Jorge Oksenberg, Ph.D.
University of California, San Francisco
San Francisco, California
Award: Strategic Initiatives
Term: 4/1/2018-3/31/2020
Category: Tissue/DNA Banks
Strategic Area: End
Research Priority: Risk Factors
Approx. Funding: $595690

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

Jorge Oksenberg, Ph.D.
University of California, San Francisco
San Francisco, California
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: Human Genetics
Strategic Area: Stop
Research Priority: Risk Factors
Approx. Funding: $830156

“The role of Ataxin1 in autoimmune demyelination” A team at UCSF is seeking to understand the contribution of a gene known as “ATXN1” to MS risk and clinical course.

Anne-Katrin Probstel, M.D.
University of California, San Francisco
San Francisco, California
Award: Postdoctoral Fellowships
Term: 7/1/2018-6/30/2021
Category: Immunology
Strategic Area: Stop
Research Priority: Risk Factors
Approx. Funding: $146797

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

Kathleen C. Moore Foundation Postdoctoral Fellowship
Michael Robers, M.D.
University of Southern California
Los Angeles, California
Award: Sylvia Lawry Physician Fellowships
Term: 7/1/2018-6/30/2020
Category: Human Therapy
Trials/Management of MS
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $130000

“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.

Joseph Sabatino, M.D., Ph.D.
University of California, San Francisco
San Francisco, California
Award: Research Grants
Term: 7/1/2019-6/30/2022
Category: Immunology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $61875

“Characterization of myelin-reactive CD8+ T cells in Multiple Sclerosis” UCSF researchers are analyzing immune cell types in blood samples from people with MS and other neurologic diseases to determine if unique cell populations drive the immune response in MS.

Naresha Saligrama, Ph.D.
Stanford University
Stanford, California
Award: Career Transition Fellowships
Term: 7/1/2019-6/30/2024
Category: Immunology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $598908

“Understanding T cell receptor diversity and specificity in Multiple sclerosis and Experimental autoimmune encephalomyelitis” A Stanford team is using advanced technologies to analyze a novel set of immune cells in people with MS during relapses, remissions and after treatment, for clues to what activates and sustains the immune response in MS.

Ryan Schubert, M.D.
University of California, San Francisco
San Francisco, California
Award: NMSS-ABF Clinician Scientist Awards
Term: 7/1/2017-6/30/2020
Category: Immunology
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $269394

“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.
Nisarg Shah, Ph.D.
University of California San Diego  
San Diego, California  
Award: Pilot Research Grants  
Term: 10/1/2019-9/30/2020  
“Promoting T-cell reconstitution after bone marrow transplantation for MS therapy”  
UC San Diego scientists are testing a way to speed the regeneration of immune system cells after bone marrow transplantation in MS, to improve the ability to fight infection after this procedure.

Hengameh Shams, Ph.D.
University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships  
Term: 7/1/2019-6/30/2022  
“Characterization of the interplay between T and B lymphocytes in multiple sclerosis using functional proteomics”  
A UCSF team is using advanced technology to study links between immune function and disease status in people with MS, for clues to the key molecular events that underlie disease initiation and response to treatment.  
*Funded in part by a gift from a generous donor*

Nancy Sicotte, M.D.
Cedars-Sinai Medical Center  
Los Angeles, California  
Award: Pilot Research Grants  
Term: 11/1/2017-10/31/2019  
“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.

Mariapaola Sidoli, Ph.D.
Stanford University  
Stanford, California  
Award: Postdoctoral Fellowships  
Term: 7/1/2019-6/30/2022  
“A new approach to analyze cAMP in oligodendrocyte development and myelination”  
Stanford University researchers are analyzing a specific signal in the brain that induces the formation of myelin, for clues to harnessing the signal as therapeutic target to promote myelin repair in MS.

Athena Soulika, Ph.D.
University of California, Davis  
W. Sacramento, California  
Award: Research Grants  
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.
Elaine Su, M.D.
Stanford University
Stanford, California
Award: Sylvia Lawry Physician Fellowships
Term: 7/1/2019-6/30/2021
Category: Human Therapy
Trials/Management of MS
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $130000

“Neuroimmunology Fellowship with Training in Epidemiology and Clinical Research” Under the mentorship of Drs. Jeffrey Dunn and Lorene Nelson, Dr. Elaine Su at Stanford will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

William Talbot, Ph.D.
Stanford University
Stanford, California
Award: Research Grants
Term: 4/1/2018-3/31/2021
Category: Biology of Glia
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $436224

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

Alessia Tassoni, Ph.D.
University of California, Los Angeles
Los Angeles, California
Award: Postdoctoral Fellowships
Term: 7/1/2019-6/30/2021
Category: Preclinical Drug Development
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $127386

“Disability specific drug discovery for MS: Focus on Vision” Novel technology is allowing a team from UCLA to analyze changes in the optic nerve of MS models, for clues to developing neuroprotective strategies in people with MS.
Funded in part by Richard & Robin Kelly

Seema Tiwari-Woodruff, Ph.D.
University of California, Riverside
Riverside, California
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: CNS Repair
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $482270

“Reprogramming proinflammatory responses to increase CXCL1 levels and axon remyelination in EAE” University of California researchers are determining how compounds that connect with estrogen docking sites work to promote repair of nerve-insulating myelin.

James Waschek, Ph.D.
University of California, Los Angeles
Los Angeles, California
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: Physiology
Strategic Area: Stop
Research Priority: Neuroprotection/Repair
Approx. Funding: $646510

“Preservation of axon integrity by neural PACAP/PAC1 signaling in a chronic EAE model” A team at UCLA is testing a novel approach for protecting the nervous system from damage in MS.
Emmanuelle Waubant, M.D., Ph.D.  
University of California, San Francisco  
San Francisco, California  
Award: Research Grants  
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.  

J. Bradley Zuchero, Ph.D.  
Stanford University  
Stanford, California  
Award: Harry Weaver Neuroscience Scholarships  
Term: 7/1/2018-6/30/2023  
“How does the actin cytoskeleton control myelination and remyelination?”  
Stanford University researchers are investigating how scaffold-like structures inside cells change during the formation of myelin, for clues to stimulating myelin repair in MS.  

COLORADO  
John Corboy, M.D.  
University of Colorado Denver  
Denver, Colorado  
Award: Strategic Initiatives  
Term: 10/1/2013-12:00:00 AM  
“Rocky Mountain MS Center Tissue Bank”  
Developing and maintaining a tissue bank of specimens from people with MS for use in research.  

John Corboy, M.D.  
University of Colorado Denver  
Denver, Colorado  
Award: Strategic Initiatives  
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, Ph.D.  
University of Colorado Denver  
Denver, Colorado  
Award: Research Grants  
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.  

Funded in part by a private foundation
Gregory Owens, Ph.D.
University of Colorado Denver
Denver, Colorado
Award: Research Grants
Term: 10/1/2017-9/30/2022
Approx. Funding: $705938
“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.

CONNECTICUT
Stephen Crocker, Ph.D.
University of Connecticut Health Center
Farmington, Connecticut
Award: Research Grants
Term: 10/1/2018-9/30/2021
“Cellular Senescence in Neural Progenitor Cells Limits CNS Remyelination” University of Connecticut investigators are exploring the reasons why repair of nerve-insulating myelin in MS can fail, and seeking ways to reverse the problem to restore function.

Stephen Crocker, Ph.D.
University of Connecticut Health Center
Farmington, Connecticut
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
“Does Central Nervous System Myelination Impact Bladder Function?” UConn Health researchers are investigating the link between bladder problems in MS and the loss of myelin in the brain, for clues to better addressing both issues.

Elizabeth Gromisch, M.A., Ph.D.
Mount Sinai Rehabilitation Hospital
Hartford, Connecticut
Award: Pilot Research Grants
Term: 6/1/2019-5/31/2020
“Development of a Risk Factor Model for Self-Management Skills among Persons with Multiple Sclerosis” Mount Sinai researchers are looking at factors that may impede self-management to improve quality of life for people with MS.
David Hafler, M.D., M.S.
Yale University
New Haven, Connecticut
Award: Collaborative Research Center Awards
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.

David Hafler, M.D., M.S.
Yale University
New Haven, Connecticut
Award: Research Grants
Term: 10/1/2018-9/30/2021
“Longitudinal, single-cell assessment to define the mechanism of B cell depletion therapy in Multiple Sclerosis” Yale University researchers are investigating the role of immune B cells in MS and what happens to the immune system in people with MS who are taking B cell-depleting therapies.

Matthew Lincoln, M.D., Ph.D.
Yale University
New Haven, Connecticut
Award: Career Transition Fellowships
Term: 7/1/2019-6/30/2024
“Genetic and molecular heterogeneity of MS” A team at Yale is seeking to fine tune MS genetic studies using a novel framework that combines MS genetics data with similar data from related diseases, for insight into disease mechanisms and possible gene regulation.

Liliana Lucca, Ph.D.
Yale University
New Haven, Connecticut
Award: Postdoctoral Fellowships
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 TGIT, which is present on certain immune cells, turns down inflammation in healthy people but is unable to dampen inflammation in people with MS.

David Martinelli, Ph.D.
University of Connecticut Health Center
Farmington, Connecticut
Award: Pilot Research Grants
Term: 6/1/2018-11/30/2019
“The role of C1QL1 in oligodendrocyte maturation” Identifying a previously unknown mechanism by which the brain can create new myelin-making cells to conduct tissue repair.


Akiko Nishiyama, M.D., Ph.D.
University of Connecticut
Storrs, Connecticut
Award: Research Grants
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.

Approx. Funding: $610077

Akiko Nishiyama, M.D., Ph.D.
University of Connecticut
Storrs, Connecticut
Award: Pilot Research Grants
Term: 3/1/2019-2/29/2020
“VAMP2-mediated exocytosis in NG2 cells is needed for myelination”
A University of Connecticut team is exploring whether immature myelin-making cells secrete molecules that are important for the formation of myelin, for clues to repair strategies for MS.

Approx. Funding: $55000

Joel Pachter, Ph.D.
University of Connecticut Health Center
Farmington, Connecticut
Award: Research Grants
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 are the University of Connecticut Health Center are exploring the therapeutic potential of stem cells and a novel method of tracking the course of secondary progressive MS in mice.

Approx. Funding: $671350

David Pitt, M.D.
Yale University
New Haven, Connecticut
Award: Pilot Research Grants
Term: 6/1/2019-5/31/2020
“Identifying macrophage/microglia and astroglial phenotypes and their interactions in MS lesions.” Yale scientists are using cutting-edge imaging techniques to study the role of different cells in the immune attack on brain tissues in people with MS.

Approx. Funding: $55000

Yanjiao Zhou, M.D., Ph.D.
University of Connecticut Health Center
Farmington, Connecticut
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
“Investigating the intestinal virome in patients with multiple sclerosis”
UConn Health researchers are investigating intestinal viruses in MS and how they may interact with gut bacteria, to inform the development of microbiome-based therapeutics.
DISTRICT OF COLUMBIA

Jeffrey Huang, Ph.D.
Georgetown University
Washington, District of Columbia
Award: Harry Weaver Neuroscience Scholarships
Term: 7/1/2019-6/30/2024
“Amino acid induced microglia/macrophage-OPC crosstalk in CNS remyelination” A Georgetown team is exploring the role of a specific molecule that appears to be very active when myelin damage occurs, for clues to developing a strategy that curtails its activity and promotes myelin repair.

FLORIDA

Hong Jiang, M.D., Ph.D.
University of Miami
Miami, Florida
Award: Research Grants
Term: 4/1/2016-3/31/2020
“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.

GEORGIA

Deborah Backus, P.T., Ph.D.
Shepherd Center
Atlanta, Georgia
Award: Strategic Initiatives
Term: 7/1/2019-1/31/2022
“Comparative Effectiveness of an Exercise Intervention Delivered via Telerehabilitation and Conventional Mode of Delivery” The Society is supporting an extension to measure results of a clinical trial at seven centers, funded by PCORI, to compare the effectiveness of a supervised exercise program done at home or in person in people with MS.

Feng Yang, Ph.D.
Georgia State University
Atlanta, Georgia
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
“Adaptive motor learning of fall resistance skills through slip exposure in multiple sclerosis” Georgia State researchers are testing whether training people with MS with controlled falling experiences can build skills around how to react against fall situations to prevent them.
**ILLINOIS**

**Charles Abrams, M.D.**
University of Illinois at Chicago
Chicago, Illinois
Award: Research Grants
Term: 10/1/2019-9/30/2021

"Role of Connexin 47 in oligodendrocytes" University of Illinois researchers are developing a new model for studying strategies for reducing MS severity.

**Brynn Adamson, PhD**
University of Illinois at Urbana-Champaign
Champaign, Illinois
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020

"MOVE MS: Group Exercise Program" Researchers at the University of Illinois-Urbana Champaign are testing a novel community-based exercise program that may help to increase physical activity in people who have MS.

**Chung-Yi Chiu, C.R.C., Ph.D.**
University of Illinois at Urbana-Champaign
Champaign, Illinois
Award: Research Grants
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.

**Douglas Feinstein, Ph.D.**
University of Illinois at Chicago
Chicago, Illinois
Award: Research Grants
Term: 10/1/2015-12/31/2019

"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.
**Igal Ifergan, M.Sc., Ph.D.**
Northwestern University  
Evanston, Illinois  
Award: Pilot Research Grants  
Term: 10/1/2019-9/30/2020  
Category: Immunology  
Strategic Area: Restore  
Research Priority: Neuroprotection/Repair  
Approx. Funding: $55000

**“Induction of immunoregulatory microglia by the Wnt pathway during neuroinflammation”**  
Northwestern University scientists are exploring cell interactions in the brain in search of molecular triggers for promoting natural myelin repair.

**Dominique Kinnett-Hopkins, Ph.D.**
Northwestern University  
Evanston, Illinois  
Award: Postdoctoral Fellowships  
Term: 7/1/2019-6/30/2020  
Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Research Priority: Risk Factors  
Approx. Funding: $58476

**“Disease characteristics and healthcare utilization patterns in advantaged and disadvantaged patients with multiple sclerosis”**  
Researchers at Northwestern are examining how people with MS access healthcare and if residing in a disadvantaged area, racial identity, and distance to medical services impact their use of the healthcare system.

**Sherri LaVela, M.B.A., M.P.H., Ph.D.**
CARES - Chicago Association for Research and Education in Science  
Chicago, Illinois  
Award: Pilot Research Grants  
Term: 11/1/2017-10/31/2019  
Category: Rehabilitation  
Strategic Area: Restore  
Research Priority: Symptoms, Rehab, Wellness  
Approx. Funding: $43993

**“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, Ph.D.**
University of Chicago  
Chicago, Illinois  
Award: Research Grants  
Term: 4/1/2019-3/31/2022  
Category: Biology of Glia  
Strategic Area: Restore  
Research Priority: Neuroprotection/Repair  
Approx. Funding: $718842

**“ZFP24 Control of the myelination program of oligodendrocytes”**  
University of Chicago scientists are exploring molecules that may play a key role in the development and function of myelin-making cells, for clues to promoting myelin repair in MS.

*Funded in part by a gift from a generous donor*
Laura Rice, Ph.D., P.T.
University of Illinois at Urbana-Champaign
Champaign, Illinois
Award: Research Grants
Term: 10/1/2017-9/30/2020
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $570217

“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.

Steven Roth, M.D.
University of Illinois at Chicago
Chicago, Illinois
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
Category: CNS Repair
Strategic Area: Stop
Research Priority: Neuroprotection/Repair
Approx. Funding: $55000

“Stopping Multiple Sclerosis with Functionally Engineered Exosomes (FEEs)” University of Illinois researchers are engineering a novel approach to reducing damaging inflammation in the brain to prevent damage to nerve tissues in a model of MS.

Jacob Sosnoff, Ph.D.
University of Illinois at Urbana-Champaign
Champaign, Illinois
Award: Mentor-Based Postdoctoral Fellowships
Term: 7/1/2019-6/30/2024
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $424446

“Cognitive Motor Interference Rehabilitation in Multiple Sclerosis” Experienced mentors/researchers at the University of Illinois Urbana-Champaign are training promising rehabilitation professionals to conduct MS rehabilitation research.

Andrew Steelman, Ph.D.
University of Illinois at Urbana-Champaign
Champaign, Illinois
Award: Research Grants
Term: 4/1/2019-3/31/2022
Category: Biology of Glia
Strategic Area: Stop
Research Priority: Risk Factors
Approx. Funding: $566732

“Upper-respiratory infection, glial activation and disease exacerbation” Researchers at the University of Illinois are exploring how upper respiratory infections may trigger MS attacks, by studying immune reactions to infection in mice with an MS-like disease.
IOWA
Terry Wahls, M.D.
The University of Iowa
Iowa City, Iowa
Award: Research Grants
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
Steven LeVine, Ph.D.
University of Kansas Medical Center
Kansas City, Kansas
Award: Pilot Research Grants
Term: 11/1/2017-11/30/2019

“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.

MARYLAND
Omar Al-Louzi, M.D.
NINDS, NIH
Bethesda, Maryland
Award: NMSS-ABF Clinician Scientist Awards
Term: 7/1/2019-6/30/2023

“Characterizing the central vein sign in multiple sclerosis using advanced magnetic resonance imaging techniques and pathology correlations” NIH imaging specialists are using advanced MRI techniques to determine whether a central blood vessel in brain lesions (areas of damage) can distinguish MS from similar disorders, and thus expedite the process of diagnosing MS.

Erin Beck, M.D., Ph.D.
National Institute of Neurological Disorders and Stroke
Bethesda, Maryland
Award: Career Transition Fellowships
Term: 7/1/2019-6/30/2024

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

Funded in part by Daniel and Anita Schwab
**Meghan Beier, Ph.D.**
Johns Hopkins University
Baltimore, Maryland
Award: Mentor-Based Postdoctoral Fellowships
Term: 4/1/2017-12/31/2020

Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $242512

“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, M.B.B.S., M.D.**
Johns Hopkins University
Baltimore, Maryland
Award: Career Transition Fellowships
Term: 7/1/2016-6/30/2021

Category: Immunology
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $457540

“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, M.B.B.S., M.D.**
Johns Hopkins University
Baltimore, Maryland
Award: Research Grants
Term: 4/1/2018-3/31/2020

Category: Human Therapy
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $355455

“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.

**Jeff Bulte, Ph.D.**
Johns Hopkins University
Baltimore, Maryland
Award: Pilot Research Grants
Term: 6/1/2019-5/31/2020

Category: Diagnostic Methods
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $55000

“OnVDMP CEST MRI Detection of Primary CNS Metabolites as a Novel Imaging Biomarker for EAE Disease Progression” Johns Hopkins researchers are testing a novel method of imaging molecules in the spinal cord that may link to disease course in MS.
**Kathryn Fitzgerald, D.Sc., M.Sc.**
Johns Hopkins University
Baltimore, Maryland
Award: Career Transition Fellowships
Term: 7/1/2019-6/30/2022
Category: Epidemiology
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $412500

“**The Melanopsin Pathway, Changes to Brain Structure and Depression in People with Multiple Sclerosis**” Because depression is common in MS, Johns Hopkins researchers are looking for early signs of brain and eye changes that may signal depression, for clues to identifying and preventing this symptom.

*Paid by the Marilyn Hilton MS Research Fund*

---

**Emily Harrington, M.D., Ph.D.**
Johns Hopkins University
Baltimore, Maryland
Award: NMSS-ABF Clinician Scientist Awards
Term: 7/1/2018-6/30/2021
Category: Biology of Glia
Strategic Area: Stop
Research Priority: Neuroprotection/Repair
Approx. Funding: $276697

“**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.

---

**Muhammad Taimur Malik, M.D.**
Johns Hopkins University
Baltimore, Maryland
Award: Sylvia Lawry Physician Fellowships
Term: 7/1/2018-6/30/2020
Category: Human Therapy
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $130000

“**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.

---

**Sarah Minden, M.D.**
Gryphon Scientific
Tacoma Park, Maryland
Award: Health Care Delivery and Policy Research Contracts
Term: 11/1/2009-12/31/2019
Category: Health Care Delivery/ Policy
Strategic Area: Stop
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $78639

“**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, M.D.
Gryphon Scientific
Tacoma Park, Maryland
Award: Health Care Delivery and Policy Research Contracts
Term: 10/1/2011-12/31/2019
“Health Care Delivery/ Policy” 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, M.D.
Gryphon Scientific
Tacoma Park, Maryland
Award: Health Care Delivery and Policy Research Contracts
Term: 10/1/2012-12/31/2019
“Financial implications of informal (unpaid) caregiving” The economic impacts for family members who provide care to people with MS.

Sarah Minden, M.D.
Gryphon Scientific
Tacoma Park, Maryland
Award: Health Care Delivery and Policy Research Contracts
Term: 10/1/2013-12/31/2019
“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.

Yevgeniya Mironova, Ph.D.
Johns Hopkins University
Baltimore, Maryland
Award: Postdoctoral Fellowships
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, M.D., M.C.R.
Johns Hopkins University
Baltimore, Maryland
Award: Research Grants
Term: 4/1/2011-3/31/2021
Category: Human Therapy
Trials/Management of MS
Strategic Area: Stop
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $1728703

“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, M.D., M.C.R.
Johns Hopkins University
Baltimore, Maryland
Award: Harry Weaver Neuroscience Scholarships
Term: 7/1/2015-6/30/2020
Category: Human Therapy
Trials/Management of MS
Strategic Area: Stop
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $781377

“A pilot study of intermittent calorie restriction in multiple sclerosis” Researchers at Johns Hopkins University in Baltimore are doing a pilot trial testing the safety and tolerability of a diet that intermittently restricts calorie intake as a treatment for disease activity in people with MS.

Ellen Mowry, M.D., M.C.R.
Johns Hopkins University
Baltimore, Maryland
Award: Strategic Initiatives
Term: 4/1/2019-3/31/2022
Category: Tissue/DNA Banks
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $534669

“Traditional versus Early Aggressive Therapy for Multiple Sclerosis (TREAT-MS)” The Society is leveraging PCORI-funded clinical trials to support an MS biobank as a shared resource for researchers searching for biomarkers that will help elucidate predictors of long-term disability and treatment response.

Bardia Nourbakhsh, M.D.
Johns Hopkins University
Baltimore, Maryland
Award: Research Grants
Term: 4/1/2019-3/31/2022
Category: Human Therapy
Trials/Management of MS
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $397249

“Evaluating the effects of short-term B-cell depletion on long-term disease activity and immune tolerance in relapsing multiple sclerosis” Johns Hopkins researchers are exploring the longer-term impacts of short-term use of B-cell depleting therapy on the immune system and MS disease activity.
“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.

“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.

“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.

“Describing Demyelinating Disease in Zambia”  
Researchers at Johns Hopkins are working with healthcare providers in sub-Saharan Africa to improve diagnosis and tracking of MS, for clues to factors that lead to development of this disease worldwide.

“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.
**Barbara Slusher, Ph.D.**  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants  
Term: 4/1/2016-3/31/2020  
Category: Preclinical Drug Development  
Strategic Area: Restore  
Research Priority: Symptoms, Rehab, Wellness  
Approx. Funding: $654166

“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, M.D.**  
Johns Hopkins University  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships  
Term: 7/1/2017-6/30/2020  
Category: Human Therapy  
Trials/Management of MS  
Strategic Area: Stop  
Research Priority: Progression  
Approx. Funding: $195000

“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.

**Chuan Wu, M.D., Ph.D.**  
National Cancer Institute, National Institutes of Health  
Bethesda, Maryland  
Award: Research Grants  
Term: 7/1/2017-6/30/2020  
Category: Immunology  
Strategic Area: End  
Research Priority: Pathology  
Approx. Funding: $375000

“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?

**MASSACHUSETTS**  
**Onur Afacan, Ph.D.**  
Boston Children’s Hospital  
Boston, Massachusetts  
Award: Pilot Research Grants  
Term: 10/1/2019-9/30/2020  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Research Priority: Pathology  
Approx. Funding: $51990

“Impoved cortical lesion detection with high field MRI in Pediatric Onset Multiple Sclerosis patients” Boston Children’s Hospital researchers are testing novel MR scanning and analysis techniques to improve the ability to non-invasively diagnose and monitor MS in children.

**Clare Baecher-Allan, Ph.D.**  
Brigham and Women’s Hospital  
Boston, Massachusetts  
Award: Research Grants  
Term: 4/1/2019-3/31/2022  
Category: Immunology  
Strategic Area: Stop  
Research Priority: Pathology  
Approx. Funding: $625788

“Are CD20+ T cells dysfunctional in Multiple Sclerosis?” A team at Brigham and Women’s Hospital is studying blood samples from people with MS to determine whether a novel set of immune cells drives MS, for clues to developing a therapeutic strategy for stopping the disease.
**John Chen, M.D., Ph.D.**  
Massachusetts General Hospital  
Boston, Massachusetts  
Award: Research Grants  
Term: 10/1/2019-9/30/2022  
Category: Diagnostic Methods  
Strategic Area: Stop  
Research Priority: Pathology  
Approx. Funding: $764936  

**Targeting the ubiquitous oxidative aldehyde acrolein in MS**" Massachusetts General researchers are testing advanced imaging to track changes in MS disease activity, and test a novel treatment strategy targeting inflammation and oxidative stress.  
*Funded in part by a gift from a generous donor*

---

**Christopher Hemond, M.D.**  
University of Massachusetts Medical School  
Amherst, Massachusetts  
Award: Pilot Research Grants  
Term: 3/1/2019-2/29/2020  
Category: Immunology  
Strategic Area: Stop  
Research Priority: Pathology  
Approx. Funding: $52930  

**The role of memory B-cells in multiple sclerosis pathology and disease monitoring**" A team at UMass is investigating a specific subset of immune cells that may characterize highly inflammatory disease activity in people with MS.

---

**Kevin Hodgetts, Ph.D.**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Fast Forward  
Term: 11/1/2018-11/1/2020  
Category: Preclinical Drug Development  
Strategic Area: Stop  
Research Priority: Neuroprotection/Repair  
Approx. Funding: $318170  

**Development of an Improved Etifoxine Analog for the Treatment of Multiple Sclerosis**" Researchers at Brigham and Women's Hospital are creating and evaluating chemical cousins of an anti-anxiety drug to develop a therapy that can slow MS disease activity and promote repair.  
*Funded in part by Richard & Robin Kelly*

---

**Amir-Hadi Maghzi, M.D.**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: NMSS-ABF Clinician Scientist Awards  
Term: 7/1/2018-6/30/2021  
Category: Immunology  
Strategic Area: Stop  
Research Priority: Risk Factors  
Approx. Funding: $206246  

**Investigation of the microbiome in multiple sclerosis and its relationship to immunologic and clinical features of disease**" Investigators are researching gut bacteria in MS and its relationship to immune activity and other features of the disease.

---

**Caterina Mainero, M.D., Ph.D.**  
Massachusetts General Hospital  
Boston, Massachusetts  
Award: Research Grants  
Term: 10/1/2018-9/30/2021  
Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Research Priority: Risk Factors  
Approx. Funding: $916046  

**Multimodal imaging of neuroinflammation and its contribution to cortical demyelination and regeneration in multiple sclerosis**" Researchers at Massachusetts General Hospital are developing methods to monitor cells called microglia that likely play a role in myelin repair in people with MS.
Caterina Mainero, M.D., Ph.D.
Massachusetts General Hospital
Boston, Massachusetts
Award: Pilot Research Grants
Term: 6/1/2019-6/30/2020
Category: Measuring MS Disease Activity
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $55000
“**In vivo imaging of fibrin deposition in multiple sclerosis by 64Cu-FBP8 MR-PET**” A team at Massachusetts General Hospital is testing the ability of advanced technology to determine the role of a blood protein in causing damage to nerve tissue and inflammation in people with MS.

Farrah Mateen, M.D., Ph.D.
Massachusetts General Hospital
Boston, Massachusetts
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
Category: Psychosocial Aspects of MS
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $55000
“**Electronic Pill Bottle Monitoring to Promote Medication Adherence for People with MS**”
Researchers at Massachusetts General Hospital are testing if an electronic pill bottle cap can monitor and remind people with MS about taking their medications.

Robert McBurney, Ph.D.
Accelerated Cure Project for MS
Waltham, Massachusetts
Award: Strategic Initiatives
Term: 10/1/2018-9/30/2021
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $1014881
“**Pathways to Cures Project Collaboration**” Collaborating with iConquerMS patient powered platform to gain input on research priorities and impacts.

Nikos Patsopoulos, M.D., Ph.D.
Brigham and Women’s Hospital
Boston, Massachusetts
Award: Research Grants
Term: 4/1/2018-3/31/2021
Category: Human Genetics
Strategic Area: End
Research Priority: Risk Factors
Approx. Funding: $599277
“**Sex specific genetics of multiple sclerosis**” Researchers at Brigham and Women’s Hospital are analyzing large sets of genetic data to identify genes that explain why women are more susceptible to MS than men.

*Funded in part by the CFMS Foundation and the Al Otaiba Family*

Nikos Patsopoulos, M.D., Ph.D.
Brigham and Women’s Hospital
Boston, Massachusetts
Award: Harry Weaver Neuroscience Scholarships
Term: 7/1/2019-6/30/2024
Category: Human Genetics
Strategic Area: End
Research Priority: Risk Factors
Approx. Funding: $779428
“**Omic-based precision medicine strategies in multiple sclerosis**” MS genetics researchers at Brigham & Women’s Hospital are using data from more than 100,000 people with MS to determine whether they can refine “genetic risk scores” so that these can be used to truly predict who may develop MS.
Nikos Patsopoulos, M.D., Ph.D.
Brigham and Women’s Hospital  Boston, Massachusetts
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
Category: Human Genetics
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $55000

“In-depth multi-omic characterization of lesion and lesion-free brain tissue” Researchers at Brigham and Women’s Hospital testing the use of cutting-edge technologies to study brain cell mechanisms to understand MS.

Francisco Quintana, Ph.D.
Brigham and Women’s Hospital  Boston, Massachusetts
Award: International Progressive MS Alliance - Collaborative Network Center
Term: 1/1/2017-12/23/2020
Category: Biology of Glia
Strategic Area: Restore
Research Priority: Progression
Approx. Funding: $4000000

“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

Francisco Quintana, Ph.D.
Brigham and Women’s Hospital  Boston, Massachusetts
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: Biology of Glia
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $642070

“Molecular control of astrocytes in CNS inflammation” Brigham and Women’s researchers are seeking to Identify a role for “astrocyte” brain cells in MS progression, for clues to stopping progression in its tracks.

Liisa Selin, M.D., Ph.D.
University of Massachusetts Medical School  Amherst, Massachusetts
Award: Pilot Research Grants
Term: 6/1/2019-5/31/2020
Category: Immunology
Strategic Area: End
Research Priority: Pathology
Approx. Funding: $55000

“EBV-specific CD8+T cell response in multiple sclerosis” A team at the University of Massachusetts is studying the immune cell responses to the Epstein-Barr virus in people with MS to determine whether these responses contribute to the development of MS.
**Jacob Sloane, M.D., Ph.D.**  
Beth Israel Deaconess Medical Center  
Boston, Massachusetts  
Award: Research Grants  
Term: 4/1/2019-3/31/2022

**Category:** Human Therapy  
**Strategic Area:** Restore  
**Research Priority:** Symptoms, Rehab, Wellness

**Approx. Funding:** $218605

“The Role of Sleep Apnea in MS Fatigue and Disability” Researchers at Beth Israel Deaconess Medical Center are exploring the prevalence of sleep apnea in people with MS and whether treating apnea can reduce MS-related fatigue.

**Richard Van Emmerik, Ph.D.**  
University of Massachusetts  
Amherest, Massachusetts  
Award: Pilot Research Grants  
Term: 3/1/2019-2/28/2020

**Category:** Rehabilitation  
**Strategic Area:** Restore  
**Research Priority:** Symptoms, Rehab, Wellness

**Approx. Funding:** $54973

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

**Chao Wang, Ph.D.**  
Brigham and Women’s Hospital  
Boston, Massachusetts  
Award: Career Transition Fellowships  
Term: 7/1/2017-6/30/2022

**Category:** Immunology  
**Strategic Area:** Stop  
**Research Priority:** Progression

**Approx. Funding:** $587079

“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, M.D.**  
Brigham and Women’s Hospital  
Boston, Massachusetts  
Award: Research Grants  
Term: 10/1/2016-9/30/2021

**Category:** Measuring MS Disease Activity  
**Strategic Area:** Stop  
**Research Priority:** Progression

**Approx. Funding:** $1375000

“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, M.D.
Brigham and Women's Hospital
Boston, Massachusetts
Award: Research Grants
Term: 4/1/2018-3/31/2021
Category: Immunology
Strategic Area: Stop
Research Priority: Risk Factors
Approx. Funding: $551752
“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, M.D., M.S.
Regents of the University of Michigan
Ann Arbor, Michigan
Award: Research Grants
Term: 4/1/2015-3/31/2020
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $827967
“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.

Shailendra Giri, Ph.D.
Henry Ford Health System
Detroit, Michigan
Award: Research Grants
Term: 4/1/2019-3/31/2022
Category: Physiology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $577673
“Impaired DHA metabolism in multiple sclerosis” Researchers at Henry Ford Health System are looking at whether people with MS have abnormalities in their ability to process polyunsaturated fatty acids -- dietary components that may fight inflammation.

Anna Kratz, Ph.D.
Regents of the University of Michigan
Ann Arbor, Michigan
Award: Mentor-Based Postdoctoral Fellowships
Term: 7/1/2019-6/30/2024
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $421202
“Training to Advance Rehabilitation Research in Multiple Sclerosis” Experienced mentors/researchers at the University of Michigan are training promising rehabilitation professionals to conduct MS rehabilitation research.
MINNESOTA
Ben Clarkson, Ph.D.
Mayo Clinic Rochester
Rochester, Minnesota
Award: Postdoctoral Fellowships
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.

Claudia Lucchinetti, M.D.
Mayo Clinic College of Medicine-M
Rochester, Minnesota
Award: Collaborative Research Center Awards
Term: 4/1/2016-3/31/2021
“Metabolic Dysfunction in MS Pathogenesis and Disease Progression: The Donald C. McGraw Foundation Collaborative MS Research Center” A multi-center team at Mayo Clinic is taking a novel approach to studying nerve cells and possible ways to protect them from injury in MS and stopping MS progression. 
Funded by the Donald C. McGraw Foundation

Isobel Scarisbrick, Ph.D.
Mayo Clinic Rochester
Rochester, Minnesota
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
“Regulatory Role of Kallikrein 6 in Myelin Integrity and Regeneration in the Adult CNS” Mayo Clinic scientists are investigating the role of a protein in the repair of nerve-insulating myelin, and how to promote repair to speed recovery for people with MS.

Isobel Scarisbrick, Ph.D.
Rochester, Minnesota
Award: Research Grants
Term: 10/1/2019-9/30/2022
“Protease Activated Receptor Targets for Myelin Regeneration” A Mayo Clinic team is exploring whether specific molecules can be “switched off” to promote nervous system repair in MS.
**MISSOURI**

**Jared Bruce, Ph.D.**  
University of Missouri- Kansas City  
Kansas City, Missouri  
Award: Research Grants  
Term: 10/1/2019-9/30/2020  
"Development of a telehealth obesity intervention for patients with MS"  
A team at the University of Missouri is taking initial steps to develop a phone-delivered weight loss program for people with MS, to see if weight loss improves MS symptoms.

**Claudia Cantoni, Ph.D.**  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: Career Transition Fellowships  
Term: 7/1/2019-6/30/2024  
"MiR-223: a new potential therapeutic target to modulate myeloid cells in multiple sclerosis"  
Researchers at Washington University are exploring the possibility that a subset of immune cells in the blood may be impaired in MS, for clues to how these cells might be manipulated to suppress disease activity.

**Emily Evans, M.D.**  
Washington University School of Medicine-M  
St. Louis, Missouri  
Award: Sylvia Lawry Physician Fellowships  
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.

**Daniel Hawiger, M.D., Ph.D.**  
Saint Louis University  
St. Louis, Missouri  
Award: Research Grants  
Term: 10/1/2019-9/30/2022  
"Dendritic cells-orchestrated and Hopx-mediated homeostasis of regulatory T cells blocking autoimmune neuroinflammation"  
Scientists at Saint Louis University are exploring the mechanisms by which certain cells can regulate immune attacks in MS, for clues to developing targeted therapies to stop MS.
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Award</th>
<th>Category</th>
<th>Strategic Area</th>
<th>Research Priority</th>
<th>Approx. Funding</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robyn Klein, M.D., Ph.D.</td>
<td>Washington University School of Medicine-M St. Louis, Missouri</td>
<td>Research Grants</td>
<td>Immunology</td>
<td>Stop</td>
<td>Progression</td>
<td>$736586</td>
<td>“Interferon lambda as a biomarker and target for Diseases Progression in MS” Researchers at Washington University School of Medicine are investigating the role of a molecule called interferon lambda in progressive forms of MS.</td>
</tr>
<tr>
<td>Soe Mar, M.D.</td>
<td>Washington University School of Medicine-M St. Louis, Missouri</td>
<td>Pilot Research Grants</td>
<td>Psychosocial Aspects of MS</td>
<td>Restore</td>
<td>Symptoms, Rehab, Wellness</td>
<td>$43370</td>
<td>“Development of the disease-specific PedsQL™ for Pediatric Patients with MS” To develop and validate a measure for evaluating quality of life in children and adolescents with MS.</td>
</tr>
<tr>
<td>Laura Piccio, M.D., Ph.D.</td>
<td>Washington University School of Medicine-M St. Louis, Missouri</td>
<td>Research Grants</td>
<td>Immunology</td>
<td>Stop</td>
<td>Symptoms, Rehab, Wellness</td>
<td>$777853</td>
<td>“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.</td>
</tr>
<tr>
<td>Amber Salter, Ph.D., M.P.H.</td>
<td>Washington University St. Louis, Missouri</td>
<td>Strategic Initiatives</td>
<td>Measuring MS Disease Activity</td>
<td>Stop</td>
<td>Progression</td>
<td>$113691</td>
<td>“Metadata Catalogue Project” A WashU team is aiming to establish a metadata catalogue and to increase the feasibility of harmonizing disability measures across registries.</td>
</tr>
<tr>
<td>Afsaneh Shirani, M.D.</td>
<td>University of Nebraska Medical Center St. Louis, Missouri</td>
<td>NMSS-ABF Clinician Scientist Awards</td>
<td>Measuring MS Disease Activity</td>
<td>Stop</td>
<td>Pathology</td>
<td>$100078</td>
<td>“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.</td>
</tr>
</tbody>
</table>
Sheng-Kwei Song, Ph.D.
Washington University School of Medicine-M St. Louis, Missouri
Award: Research Grants 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.

Gregory Wu, M.D., Ph.D.
Washington University School of Medicine-M St. Louis, Missouri
Award: Research Grants Term: 4/1/2019-3/31/2022
“Formation of ectopic lymphoid tissue in autoimmune encephalomyelitis and MS” Washington University researchers are exploring a novel feature of the immune system that may prevent therapies that target immune B cells from being effective in some people with progressive MS, for clues to better management of MS progression.

NEW JERSEY
Vikram Bhise, M.D.
Rutgers, The State University of New Jersey Piscataway, New Jersey
Award: Pilot Research Grants Term: 6/1/2018-11/30/2019
“Childhood Radiologically Isolated Syndrome Study” Studying children with evidence of MS-like damage on MRI, but no symptoms, for ways of predicting MS.

Nancy Chiaravalloti, Ph.D.
Kessler Foundation Research Center West Orange, New Jersey
Award: Research Grants Term: 4/1/2014-3/31/2020
“Speed of Processing Training to Improve Cognition in MS: A Randomized Clinical Trial” Can a training program to improve the speed of processing information help people with MS?

Evan Cohen, P.T., Ph.D.
Rutgers, The State University of New Jersey Piscataway, New Jersey
“Interval vs. continuous walking training for people with multiple sclerosis: a comparison of effectiveness” Rutgers researchers are testing whether providing rest intervals throughout walking rehabilitation efforts improves their effectiveness.
Silvana Costa, Ph.D.
Kessler Foundation Research Center
West Orange, New Jersey
Award: Research Grants
Term: 10/1/2018-9/30/2022
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $476610

“Keep an eye on the Symbol Digit Modalities Test”
Kessler Foundation investigators are analyzing aspects of a cognitive test commonly used in MS, to develop more comprehensive and specific rehabilitation strategies.

John DeLuca, A.B.P.P., Ph.D.
Kessler Foundation Research Center
West Orange, New Jersey
Award: Collaborative Research Center Awards
Term: 4/1/2014-3/31/2020
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $821585

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

John DeLuca, A.B.P.P., Ph.D.
Kessler Foundation Research Center
West Orange, New Jersey
Award: Mentor-Based Postdoctoral Fellowships
Term: 7/1/2017-6/30/2022
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $404698

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

Kouichi Ito, Ph.D.
Rutgers, The State University of New Jersey
Piscataway, New Jersey
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: Immunology
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $673908

“Gut dysbiosis-mediated CNS autoimmunity” Rutgers University scientists are examining whether a specially designed high-fiber supplement can reduce changes in gut bacteria associated with MS.

Michael Matise, Ph.D.
Rutgers, The State University of New Jersey
Piscataway, New Jersey
Award: Research Grants
Term: 10/1/2018-9/30/2021
Category: Biology of Glia
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $523635

“Role of Shh-responsive astrocytes in blood-brain barrier integrity” Researchers at Rutgers University are exploring the role of a molecule in maintaining and repairing the blood-brain barrier, which malfunctions in MS.
Joshua Sandry, Ph.D.
Montclair, New Jersey
Award: Research Grants
Term: 10/1/2019-9/30/2020
Category: Measuring MS Disease Activity
Strategic Area: Stop
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $200,783

“Neuroimaging of Hippocampally Mediated Memory Dysfunction in Multiple Sclerosis”
Montclair State University researchers are measuring memory-related abilities in individuals with and without MS for clues to how such cognitive processes change in MS.

Teresa Wood, Ph.D.
Rutgers, The State University of New Jersey
Piscataway, New Jersey
Award: Research Grants
Term: 10/1/2018-9/30/2021
Category: Biology of Glia
Strategic Area: Restore
Research Priority: Risk Factors
Approx. Funding: $788,614

“Cooperative Functions of mTOR and TrkB/Erk Signaling in Remyelination” Researchers at Rutgers University are studying two molecular pathways that may work together to maintain and repair myelin following injury to myelin in mice.

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

“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, Ph.D.
University of New Mexico
Albuquerque, New Mexico
Award: Pilot Research Grants
Term: 3/1/2019-2/29/2020
Category: Preclinical Drug Development
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $55,000

“Prophylactic and Therapeutic Effects of Liproxstatin-1 in EAE” Investigators at the University of New Mexico are looking to inhibit a specific type of cell death in mice with MS-like disease, for clues to developing a strategy that might minimize damage and improve function in MS.
NEW YORK

Dritan Agalliu, Ph.D.  
Columbia University Medical Center  
New York, New York  
Award: Research Grants  
Term: 10/1/2019-9/30/2022  
“Endothelial Wnt signaling in CNS neo-angiogenesis and blood-brain barrier in EAE/MS”  
Columbia University researchers are exploring blood vessel abnormalities in MS to develop therapies that can prevent the influx of immune cells and protect the nervous system in MS.

Category: Neuropathology  
Strategic Area: Stop  
Research Priority: Pathology  
Approx. Funding: $625264

Ralph Benedict, Ph.D.  
The State University of New York at Buffalo  
Buffalo, New York  
Award: Research Grants  
Term: 4/1/2015-5/31/2020  
“The Role of Cognitive Dysfunction in Defining MS Relapses and Freedom from Disease Activity”  
Researchers at the State University of New York at Buffalo are investigating the importance of cognitive problems in MS relapses to more precisely define disease activity during relapses and the absence of disease activity during periods of remission.

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Research Priority: Pathology  
Approx. Funding: $1063919

Korhan Buyukturkoglu, Ph.D.  
Columbia University  
New York, New York  
Award: Postdoctoral Fellowships  
Term: 7/1/2019-6/30/2022  
“Building a Pattern Classifier to Distinguish Cognitive Phenotypes in MS”  
Columbia University researchers are bringing several different MRI methods together to see the ‘big picture’ of cognitive impairment in MS, to better evaluate and overcome this problem.

Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Research Priority: Symptoms, Rehab, Wellness  
Approx. Funding: $194456

Leigh Charvet, Ph.D.  
New York University Langone Medical Center  
New York, New York  
Award: Research Grants  
Term: 10/1/2018-9/30/2021  
“A randomized controlled trial of remotely-supervised transcranial direct current stimulation (RS-tDCS) for the treatment of fatigue in multiple sclerosis”  
New York University researchers are conducting a small clinical trial of transcranial direct current stimulation to assess its effectiveness for treating MS-related fatigue.

Category: Rehabilitation  
Strategic Area: Restore  
Research Priority: Symptoms, Rehab, Wellness  
Approx. Funding: $532862
Virtual Reality Pain Management: A Nonpharmacological Tool to Manage Pain in MS” NYU researchers are testing whether virtual reality techniques can reduce pain in people with MS.

“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.

“Novel Neuroimaging Techniques for the Differentiation of Acute and Chronic MS Lesions Without Gadolinium: T1-Rho and Quantitative Susceptibility Mapping” A New York team is exploring a possible alternative to using the tracing agent gadolinium in MRI scans, which can accumulate in the brain over time.

“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.

“In Vivo Metabolomics of Oxidative Stress with 7 Tesla Magnetic Resonance Spectroscopy” Researchers at Yale are using two imaging techniques to determine the distribution and importance of the antioxidant glutathione in the brains of people with MS.
**Herbert Karpatkin, D.Sc.**  
Hunter College  
New York, New York  
Award: Pilot Research Grants  
Term: 9/1/2016-12/31/2019  

Category: Rehabilitation  
Strategic Area: Restore  
Research Priority: Symptoms, Rehab, Wellness  
Approx. Funding: $43991

**“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, M.D.**  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Research Grants  
Term: 10/1/2019-9/30/2021  

Category: Human Therapy  
Strategic Area: Trials/Management of MS  
Research Priority: Symptoms, Rehab, Wellness  
Approx. Funding: $299680

**“The Effect of Dietary Factors on Disease Outcomes in Multiple Sclerosis”** Researchers at Icahn School of Medicine at Mount Sinai in New York are following up on a previous study of diet in people with MS, to validate their findings and determine whether additional dietary factors are important.

---

**Joo-won Kim, Ph.D.**  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Postdoctoral Fellowships  
Term: 7/1/2017-6/30/2020  

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Research Priority: Pathology  
Approx. Funding: $184654

**“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, M.D.**  
New York University Langone Medical Center  
New York, New York  
Award: Research Grants  
Term: 4/1/2016-3/31/2020  

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Research Priority: Symptoms, Rehab, Wellness  
Approx. Funding: $1046676

**“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, M.D.
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Sylvia Lawry Physician Fellowships
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, Ph.D.
Columbia University
New York, New York
Award: Research Grants
Term: 8/1/2014-3/31/2020
“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, Ph.D.
Columbia University
New York, New York
Award: Mentor-Based Postdoctoral Fellowships
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, Ph.D.
Columbia University
New York, New York
Award: Pilot Research Grants
Term: 3/1/2018-2/28/2020
“A Randomized Controlled Trial of e-Support as a Social Network Intervention in MS” Using an online format to deliver the benefits of support groups to people with MS.

Jennifer Linden, Ph.D.
Weill Cornell Medical College
New York, New York
Award: Career Transition Fellowships
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 bra
Leandro Marziali, Ph.D.
The State University of New York at Buffalo
Buffalo, New York
Award: Postdoctoral Fellowships
Term: 7/1/2019-6/30/2022
Category: CNS Repair
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $188067
“p38MAPKγ signaling in myelin biology: a novel molecular target to promote myelination and remyelination” A team at SUNY Buffalo is studying a protein that may inhibit myelin repair in people with MS, for clues to promoting myelin repair and recovery.
Funded in part by a gift from a generous donor

Mia Minen, M.D., M.P.H.
New York University Langone Medical Center
New York, New York
Award: Pilot Research Grants
Term: 9/1/2017-4/1/2020
Category: Health Care Delivery/ Policy
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $44000
“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.

Thanh Nguyen, Ph.D.
Weill Cornell Medical College
New York, New York
Award: Research Grants
Term: 10/1/2016-9/30/2020
Category: Measuring MS Disease Activity
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $897375
“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.

Hiroko Nobuta, Ph.D.
Albert Einstein College of Medicine
Bronx, New York
Award: Career Transition Fellowships
Term: 7/1/2018-6/30/2023
Category: Biology of Glia
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $562908
“Development of a Human Compatible Platform to Study Oligodendrocyte Biology” Researchers at the Albert Einstein College of Medicine, New York, are optimizing ways of producing human myelin-making cells to speed efforts to find strategies to repair nerve-insulating myelin and restore function in MS.
**Pablo Paez, M.D., Ph.D.**
The State University of New York at Buffalo  
Buffalo, New York  
Award: Research Grants  
Term: 4/1/2019-3/31/2022  
Approx. Funding: $492,314

*Voltage-gated calcium channels in reactive astrocytes, a possible therapeutic target to reduce brain inflammation and promote remyelination in MS.* SUNY Buffalo scientists are studying whether deleting tiny molecules that monitor calcium regulation in brain cells can reduce inflammation and possibly promote myelin repair.

---

**Saud Sadiq, M.D.**
Tisch MS Research Center of New York  
NEW YORK, New York  
Award: Strategic Initiatives  
Term: 4/1/2019-3/30/2023  
Approx. Funding: $1,000,000

*Phase 2, Randomized, Double Blind, Placebo Controlled Study of Intrathecal autologous MSC-NP Cells in Patients With MS* The Tisch MS Research Center of New York is conducting a phase II clinical trial to see whether stem cells derived from individuals' own bone marrow can inhibit immune mechanisms and augment tissue repair in progressive MS.

---

**James Salzer, M.D., Ph.D.**
New York University School of Medicine  
New York, New York  
Award: Fast Forward  
Term: 9/23/2015-7/1/2020  
Approx. Funding: $598,950

*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*

---

**Janet Shucard, Ph.D.**
The State University of New York at Buffalo  
Buffalo, New York  
Award: Research Grants  
Term: 4/1/2017-3/31/2020  
Approx. Funding: $608,859

*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, Ph.D.
The State University of New York at Buffalo
Buffalo, New York
Award: Research Grants
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 nerve-insulating myelin.

Rebecca Straus Farber, M.D.
Columbia University
New York, New York
Award: Pilot Research Grants
Term: 3/1/2019-8/31/2020
"Immunologic Effects of Prebiotics (Fermentable Dietary Fiber) as Compared to Probiotics in Multiple Sclerosis" New York researchers are testing two strategies for altering the gut microbiome in people with MS, in an effort to stop MS in its tracks.

TG Therapeutics,
New York, New York
Award: Fast Forward
Term: 9/1/2017-1/6/2020
"TGR-1202" Pre-clinical testing of an 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.

Caila Vaughn, Ph.D., M.P.H.
The State University of New York at Buffalo
Buffalo, New York
Award: Pilot Research Grants
Term: 11/1/2017-10/31/2019
"The Usefulness of the Talkitt Speech Recognition Technology in Improving Quality of Life for Individuals with Multiple Sclerosis and Dysarthria" Researchers at the State University of New York at Buffalo are conducting a trial to determine whether an application for smart devices improves communication-related quality of life in people with MS and speech disorders.

Prevalence Workgroup,
National Multiple Sclerosis Society
New York, New York
Award: Health Care Delivery and Policy Research Contracts
Term: 7/1/2013-12/31/2019
"Prevalence Workgroup" Special initiative to ascertain the prevalence of MS in the United States.
Yinan Zhang, M.D.
Icahn School of Medicine at Mount Sinai
New York, New York
Award: Sylvia Lawry Physician Fellowships
Term: 7/1/2019-6/30/2021
“Sylvia Lawry Fellowship” Under the mentorship of Dr. Fred Lublin, Dr. Yinan Zhang at Mount Sinai will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Category: Human Therapy
Trials/Management of MS
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $130000

NORTH CAROLINA
Glenn Matsushima, Ph.D.
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina
Award: Research Grants
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.

Category: CNS Repair
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $500259

Mari Shinohara, Ph.D.
Duke University Medical Center
Charlotte, North Carolina
Award: Research Grants
Term: 10/1/2018-9/30/2021
“Study on innate immune inflammation that enhances EAE” Duke University researchers are exploring how immune system activity leads to nerve degeneration, for insights into ways to prevent nerve loss and MS progression.

Category: Immunology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $638584

Jenny Ting, Ph.D.
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina
Award: Collaborative Research Center Awards
Term: 4/1/2014-3/31/2020
“Preclinical Therapeutic Development for Multiple Sclerosis” Testing therapies to stop the immune attack and protect the nervous system.

Category: Preclinical Drug Development
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $825000

Yisong Wan, Ph.D.
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina
Award: Research Grants
Term: 10/1/2018-9/30/2021
“Targeting T cell function to halt MS/EAE development” Researchers at the University of North Carolina at Chapel Hill are studying a factor that appears to be important in abnormal activation of immune cells that are harmful in MS.

Category: Immunology
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $621352
OHIO

Drew Adams, Ph.D.
Case Western Reserve University
Cleveland, Ohio
Award: Pilot Research Grants
Term: 3/1/2019-2/29/2020
“How do 8,9-unsaturated sterols promote oligodendrocyte formation and remyelination?”
Case Western scientists are exploring how cholesterol-like molecules may act to promote myelin repair, for clues to targeting these molecules in MS repair strategies.

Cashel Neural Inc
Cleveland, Ohio
Award: Fast Forward
Term: 1/1/2019-10/1/2020
“Optimization of a remyelination candidate” Cashel Neural scientists are conducting laboratory studies to advance a compound that may promote the development of cells that make nerve-insulating myelin, which is destroyed in MS.

Hod Dana, Ph.D.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Pilot Research Grants
Term: 6/1/2019-5/31/2020
“Optical recording of neuronal activity during demyelination and remyelination processes with cellular resolution” A Cleveland Clinic team is developing a novel method for determining the effects of MS and potential treatments on nerve cells.

Dimitrios Davalos, Ph.D.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Research Grants
Term: 4/1/2019-3/31/2022
“Gliovascular Mechanisms of Blood-Brain Barrier Disruption in Multiple Sclerosis” Cleveland Clinic researchers are using novel techniques to explore mechanisms involved in early immune cell infiltration into the central nervous system in MS-like disease, for clues to stopping immune attacks in MS.

Jordon Dunham, M.S., Ph.D.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Postdoctoral Fellowships
Term: 7/1/2019-6/30/2022
“Neuronal morphology and expression profiles in a novel sub-variant of MS” Scientists at the Cleveland Clinic are studying how nerve cells are damaged in some people with MS in whom there seems to be damage to nerve cells but not to nerve-insulating myelin typically seen in MS.
Kirsten Evonuk, Ph.D.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Postdoctoral Fellowships
Term: 7/1/2019-6/30/2022
“Selective deletion of AMPA-type glutamate receptors on oligodendrocytes is neuroprotective in autoimmune demyelination” Cleveland Clinic researchers are seeking to discover how dysfunctional of the nerve signaling chemical glutamate may block myelin repair in mice, for clues to promoting myelin repair in MS.

Jenny Feng, M.D.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Sylvia Lawry Physician Fellowships
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.

Carolyn Goldschmidt, D.O.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Sylvia Lawry Physician Fellowships
Term: 7/1/2019-6/30/2022
“Training in multiple sclerosis diagnosis, management, and clinical trials” Under the mentorship of Dr. Jeff Cohen, Dr. Carolyn Goldschmidt at the Cleveland Clinic will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

Xiaoxia Li, Ph.D.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Research Grants
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.
Qing Lu, Ph.D.
Children’s Hospital Medical Center - Cincinnati
Cincinnati, Ohio
Award: Research Grants
Term: 4/1/2016-3/31/2020
Approx. Funding: $698640
“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.

Booki Min, D.V.M., Ph.D.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Research Grants
Term: 4/1/2019-3/31/2022
Approx. Funding: $667710
“The role of Foxp3+ regulatory T cells during glucocorticoid treatment of autoimmunity” Cleveland Clinic researchers are exploring how high-dose steroids to treat acute MS attacks influence the activity of immune cells and how this approach to reducing inflammation may be improved.

Funded in part by a gift from a generous donor

Daniel Ontaneda, M.D., M.S.
Cleveland Clinic Foundation
Cleveland, Ohio
Award: Strategic Initiatives
Term: 4/1/2019-3/31/2022
Approx. Funding: $378797
“Determining the Effectiveness of early Intensive Versus Escalation approaches for the treatment of Relapsing-Remitting Multiple Sclerosis (DELIVER-MS)” The Society is leveraging PCORI-funded clinical trials to support an MS biobank as a shared resource for researchers searching for biomarkers that will help elucidate predictors of long-term disability and treatment response.

Ruchika Prakash, Ph.D.
Ohio State University
Columbus, Ohio
Award: Research Grants
Term: 10/1/2016-9/30/2020
Approx. Funding: $631261
“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.
Phillip Rumrill, Ph.D.
Kent State University
Kent, Ohio
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: Health Care Delivery/ Policy
Strategic Area: Stop
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $657842
“A Two-Phase Examination of Labor Force Participation, Employment Concerns, and Workplace Discrimination among Latinas/os and African Americans with Multiple Sclerosis” Researchers at Kent State are investigating the employment experiences of the growing numbers of Hispanic/Latinos and African Americans with MS.

Paul Tesar, Ph.D.
Case Western Reserve University
Cleveland, Ohio
Award: Research Grants
Term: 10/1/2017-9/30/2020
Category: Human Genetics
Strategic Area: Restore
Research Priority: Pathology
Approx. Funding: $654443
“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.

OKLAHOMA
Michael Bemben, Ph.D.
University of Oklahoma
Norman, Oklahoma
Award: Pilot Research Grants
Term: 3/1/2019-2/29/2020
Category: Physiology
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $53547
“Acute Physiological Responses To Low-Load Resistance Exercise With Blood Flow Restriction Compared To Traditional High-Load Resistance Exercise in Multiple Sclerosis Patients” A team in Oklahoma is testing a modified weight training program for clues to increasing physical function and improving quality of life in people with MS.

OREGON
Dennis Bourdette, M.D.
Oregon Health & Science University
Portland, Oregon
Award: Collaborative Research Center Awards
Term: 4/1/2015-3/31/2020
Category: Human Therapy
Trials/Management of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $825000
“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, M.D.
Oregon Health & Science University
Portland, Oregon
Award: Research Grants
Term: 4/1/2017-3/31/2020
Category: Immunology
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $598082

“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.

Michelle Cameron, M.D., P.T.
Oregon Health & Science University
Portland, Oregon
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $534358

“A Randomized Controlled Trial of a Multicomponent Walking Aid Program for People with MS” Oregon Health & Science University researchers are testing whether a standardized program provided by physical therapists, that helps to select, fit, and train in using walking aids, can prevent falls in people with MS.

Gregory Duncan, Ph.D.
Oregon Health & Science University
Portland, Oregon
Award: Postdoctoral Fellowships
Term: 7/1/2019-6/30/2022
Category: Biology of Glia
Strategic Area: Stop
Research Priority: Neuroprotection/Repair
Approx. Funding: $177243

“Mechanisms of neuronal adaptation to chronic demyelination” An Oregon team is determining whether nerve cells and fibers adapt to prevent themselves from being damaged in MS models, for clues to reducing damage and disease progression in people with MS.

Fay Horak, P.T., Ph.D.
Oregon Health & Science University
Portland, Oregon
Award: Mentor-Based Postdoctoral Fellowships
Term: 7/1/2014-6/30/2020
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $432457

“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, Ph.D.
Oregon Health & Science University
Portland, Oregon
Award: Harry Weaver Neuroscience Scholarships
Term: 12/1/2017-11/30/2021
Category: Biology of Glia
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $379895

“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.
Kelly Monk, Ph.D.
Oregon Health & Science University
Portland, Oregon
Award: Research Grants
Term: 10/1/2019-9/30/2022
“Molecular and Genetic Regulation of Myelin Capacity in the CNS” Researchers at Oregon Health & Science University are studying how two genes function so that they may be targeted to promote myelin repair in MS.

Larry Sherman, Ph.D.
Oregon Health & Science University
Portland, Oregon
Award: Research Grants
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, M.D.
Oregon Health & Science University
Portland, Oregon
Award: Sylvia Lawry Physician Fellowships
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, M.D., M.S.P.H.
Oregon Health & Science University
Portland, Oregon
Award: Strategic Initiatives
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.

Brenda Banwell, F.R.C.P., M.D.
Children’s Hospital of Philadelphia
Philadelphia, Pennsylvania
Award: Research Grants
Term: 10/1/2019-9/30/2022
“Does Recreational Marijuana Exposure Increase Cognitive Impairment and MRI Measures of Brain Injury in Youth and Young Adults with Multiple Sclerosis?” A team at CHOP is studying the effect of recreational marijuana use on the brain and cognition in teenagers with MS.
**Bogoljub Ciric, Ph.D.**
Thomas Jefferson University
Philadelphia, Pennsylvania
Award: Research Grants
Term: 10/1/2018-9/30/2021
"The role of CSF-1R and its ligands, CSF-1 and IL-34, in CNS autoimmunity." Researchers at Thomas Jefferson University are investigating regulators of specific immune cells involved in nervous system tissue damage in MS.

**Bogoljub Ciric, Ph.D.**
Thomas Jefferson University
Philadelphia, Pennsylvania
Award: Pilot Research Grants
Term: 6/1/2019-5/31/2020
"The therapeutic effect of D-mannose in EAE" Scientists at Thomas Jefferson University are testing whether D-mannose, a simple sugar, may stop the immune attack in lab models of MS.

**Ritobrato Datta, Ph.D.**
Children's Hospital of Philadelphia
Philadelphia, Pennsylvania
Award: Pilot Research Grants
Term: 6/1/2019-5/31/2020
"Glutamate Toxicity as a Component of Progressive Thalamic Damage in Multiple Sclerosis." Researchers at Children’s Hospital of Philadelphia are developing imaging technology that may identify an early contributor to nerve cell damage in MS, for clues to developing therapies that protect the nervous system.

**Longevity Biotech, Inc**
Philadelphia, Pennsylvania
Award: Fast Forward
Term: 9/27/2017-2/1/2021
"Evaluation of a Parkinson’s Disease Drug Candidate in Myelination Events Associated with Multiple Sclerosis" Pre-clinical testing of the ability of a drug being tested in Parkinson’s to protect and repair damaged nerve cells while also restoring balance to the immune system. 
*Funded in Collaboration with the MS Society of Canada*

**A.M. Rostami, M.D., Ph.D.**
Thomas Jefferson University
Philadelphia, Pennsylvania
Award: Research Grants
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, Ph.D.
University of Pennsylvania, Philadelphia, Pennsylvania
Award: Research Grants
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.

Russell Shinohara, PhD
University of Pennsylvania, Philadelphia, Pennsylvania
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
“**Impact of insurance status on MRI phenotypes in MS**”
Researchers at the University of Pennsylvania are exploring whether having public or private insurance impacts MS progression or disease activity.

Rodolfo Thome, Ph.D.
Thomas Jefferson University, Philadelphia, Pennsylvania
Award: Postdoctoral Fellowships
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.

**TENNESSEE**

Francesca Bagnato, M.D., Ph.D.
Vanderbilt University Medical Center, Nashville, Tennessee
Award: Pilot Research Grants
Term: 6/1/2018-11/30/2019
“**Imaging axons in multiple sclerosis using Spherical Mean Technique**”
Testing a new type of imaging to capture the extent of nerve fiber loss in the brains of people with MS.

Francesca Bagnato, M.D., Ph.D.
Vanderbilt University Medical Center, Nashville, Tennessee
Award: Research Grants
Term: 10/1/2019-9/30/2023
“**7T-rings as a biomarker of disease severity in multiple sclerosis: cross-sectional and longitudinal validation**”
Vanderbilt University researchers are testing whether an indicator found using powerful imaging tools can – if found early – serve to predict and ultimately prevent a more severe course of MS.
Hongbo Chi, Ph.D.
St. Jude Children's Research Hospital
Memphis, Tennessee
Award: Research Grants
Term: 4/1/2017-3/31/2020
"Metabolic control of TH17 cell plasticity and pathogenicity in neuroinflammation"
Researchers at St. Jude Children's Research Hospital in Memphis, TN, are studying a novel immune pathway that may help to protect mice from developing MS-like disease, for clues to stopping the attack in MS.

Ipek Oguz, Ph.D.
Vanderbilt University
Nashville, Tennessee
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
"Automated Segmentation of Cortical Lesions in Multiple Sclerosis" Vanderbilt University researchers are developing an approach that would enable computerized recognition of types of MS brain lesions to improve accuracy for studying MS and monitoring people's conditions.

TEXAS
Teng-Wei Huang, B.S, M.S., Ph.D.
Baylor College of Medicine
Houston, Texas
Award: Postdoctoral Fellowships
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.

Jianrong Li, Ph.D.
Texas A&M AgriLife Research
College Station, Texas
Award: Research Grants
Term: 10/1/2017-9/30/2020
"Role of Galectin-9 in CNS Inflammation, Demyelination and Myelin Repair" Researchers at Texas A&M University are investigating a target for developing biomarkers and treatment strategies for progressive MS.
**Bart Rypma, Ph.D.**  
The University of Texas at Dallas  
Dallas, Texas  
Award: Research Grants  
Term: 4/1/2016-3/31/2020  

**Category:** Neurophysiology  
**Strategic Area:** Restore  
**Research Priority:** Symptoms, Rehab, Wellness  
**Approx. Funding:** $522792

**“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.

---

**UTAH**  
**Theron Casper, Ph.D.**  
University of Utah  
Salt Lake City, Utah  
Award: Strategic Initiatives  
Term: 7/1/2019-6/30/2022  

**Category:** Human Therapy  
**Strategic Area:** Trials/Management of MS  
**Research Priority:** Progression  
**Approx. Funding:** $3490520

**“Renewal of Pediatric MS Network”**  
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.

---

**Mingnan Chen, M.Sc., Ph.D.**  
University of Utah  
Salt Lake City, Utah  
Award: Research Grants  
Term: 4/1/2019-3/31/2022  

**Category:** Preclinical Drug Development  
**Strategic Area:** Stop  
**Research Priority:** Progression  
**Approx. Funding:** $463892

**“Understanding and utilizing the role of programmed death 1-positive (PD-1+) cells in multiple sclerosis”**  
A team at the University of Utah is developing a therapy that targets specific immune cells, and testing it in MS mouse models to see if it can stop MS-like attacks without affecting normal immune function.

---

**Clene Nanomedicine Inc.**  
Salt Lake City, Utah  
Award: Fast Forward  
Term: 9/30/2019-9/29/2021  

**Category:** Measuring MS Disease Activity  
**Strategic Area:** Restore  
**Research Priority:** Neuroprotection/Repair  
**Approx. Funding:** $339232

**“A Biomarker Analysis of Patients with RRMS Treated with Biocatalytic Nanocrystalline Gold (CNM-Au8)”**  
Clene Nanomedicine scientists are leveraging an ongoing clinical trial to measure blood biomarkers that may help detect nervous system protection and myelin repair in MS.
Lee Dibble, P.T., Ph.D.
University of Utah
Salt Lake City, Utah
Award: Research Grants
Term: 10/1/2017-9/30/2020
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $436220

“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.

Thomas Lane, Ph.D.
University of Utah
Salt Lake City, Utah
Award: Collaborative Research Center Awards
Term: 7/1/2017-6/30/2022
Category: Neuropathology
Strategic Area: Restore
Research Priority: Neuroprotection/Repair
Approx. Funding: $825000

“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.

VERMONT
Dimitry Krementsov, Ph.D.
University of Vermont and State Agricultural College
Burlington, Vermont
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: Immunology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $312877

“Next generation systems analysis of pathogenetic mechanisms underlying CNS autoimmunity using the Collaborative Cross” A University of Vermont team is seeking to identify and validate genes that may underlie a person’s susceptibility to MS.

VIRGINIA
Elizabeth Frost, Ph.D.
University of Virginia
Charlottesville, Virginia
Award: Postdoctoral Fellowships
Term: 7/1/2018-6/30/2020
Category: Biology of Glia
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $181754

“Spleen tyrosine kinase regulation of microglial functions in experimental autoimmune encephalomyelitis” Researchers are investigating whether an enzyme plays helpful roles in regulating the function of a cell type called microglia in MS.
Myla Goldman, M.D., M.Sc.
University of Virginia
Charlottesville, Virginia
Award: Research Grants
Term: 10/1/2016-9/30/2020
Category: Human Therapy
Trials/Management of MS
Strategic Area: Stop
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $624604

“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.

WASHINGTON
Dagmar Amtmann, Ph.D.
University of Washington
Seattle, Washington
Award: Pilot Research Grants
Term: 10/1/2018-9/30/2020
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $55000

“Developing measures of sexual function and satisfaction with sex life for persons with Multiple Sclerosis” Improving questionnaires about sexual function so that they include relevant aspects of sexual function for people with MS.

Estelle Bettelli, Ph.D.
Benaroya Research Institute
Seattle, Washington
Award: Research Grants
Term: 10/1/2017-9/30/2020
Category: Immunology
Strategic Area: Stop
Research Priority: Pathology
Approx. Funding: $497819

“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, Ph.D.
University of Washington
Seattle, Washington
Award: Research Grants
Term: 10/1/2013-9/30/2020
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $1466730

“The effect of aerobic exercise on cognition in multiple sclerosis” Can aerobic exercise improve cognitive impairment in people with MS?
Dawn Ehde, Ph.D.
University of Washington
Seattle, Washington
Award: Strategic Initiatives
Term: 4/1/2018-3/31/2021
Category: Rehabilitation
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $83450

“A Randomized Controlled Trial of Telephone-Delivered Cognitive Behavioral Therapy, Modafinil, and Combination Therapy of Both Interventions for Fatigue in Multiple Sclerosis”
The National MS Society is providing supplemental funding to a PCORI-funded trial to enhance results.

Dawn Ehde, Ph.D.
University of Washington
Seattle, Washington
Award: Research Grants
Term: 4/1/2018-3/31/2022
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $879991

“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.

Maria Mendoza, Ph.D.
University of Washington
Seattle, Washington
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $54998

“Waking hypnosis in the treatment of MS-related fatigue: pilot and feasibility study”
University of Washington are testing two hypnosis techniques for their ability to reduce fatigue in people with MS, including Spanish speakers.

Ivan Molton, Ph.D.
University of Washington
Seattle, Washington
Award: Research Grants
Term: 4/1/2019-3/31/2023
Category: Psychosocial Aspects of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $1147728

“Efficacy of a psychological intervention to improve ability to cope with uncertainty in MS.”
University of Washington researchers are comparing traditional behavioral therapy with briefer counseling to determine how to better help people newly diagnosed with MS to cope with the uncertainty of the disease.
Mohamed Oukka, Ph.D.
Seattle Children’s Hospital
Seattle, Washington
Award: Research Grants
Term: 10/1/2018-9/30/2021
“Effects of Fingolimod on T cells” Researchers at Seattle Children’s Hospital are exploring immune regulators to refine attempts to stop MS disease activity.

Aaron Turner, Ph.D.
University of Washington
Seattle, Washington
Award: Mentor-Based Postdoctoral Fellowships
Term: 7/1/2013-6/30/2020
“The Seattle collaborative post-doctoral fellowship in MS rehabilitation research” A training program to provide fellows research skills that will enable them to conduct studies aimed at improving quality of life for people with MS.

Aaron Turner, Ph.D.
University of Washington
Seattle, Washington
Award: Mentor-Based Postdoctoral Fellowships
Term: 7/1/2018-6/30/2023
“The Seattle Collaborative Fellowship” Researchers at the University of Washington and VA Puget Sound are training a series of promising professionals in how to conduct MS rehabilitation research.

Aaron Turner, PhD
Seattle Institute for Biomedical and Clinical Research
Seattle, Washington
Award: Pilot Research Grants
Term: 10/1/2019-9/30/2020
“Chronic Opioid Use in MS” A Seattle team is examining opioid use in veterans with MS for clues to determining the risks involved in administering opioids for MS-related pain.

WISCONSIN
Malachy Bishop, Ph.D.
University of Wisconsin-Madison
Madison, Wisconsin
Award: Health Care Delivery and Policy Research Contracts
Term: 9/1/2018-12/31/2019
“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.
Bonnie Dittel, Ph.D.
Versiti Wisconsin, Inc
Milwaukee, Wisconsin
Award: Research Grants
Term: 10/1/2019-9/30/2022
Category: Immunology
Strategic Area: Stop
Research Priority: Progression
Approx. Funding: $723642
“B cell regulation in EAE/MS” A Wisconsin team is exploring a newly identified subset of immune cells for clues to developing a cell-based therapy to stop the immune attack in MS.

Jeri-Anne Lyons, Ph.D.
University of Wisconsin-Milwaukee
Milwaukee, Wisconsin
Award: Pilot Research Grants
Term: 11/1/2017-10/31/2019
Category: Human Therapy
Trials/Management of MS
Strategic Area: Restore
Research Priority: Symptoms, Rehab, Wellness
Approx. Funding: $44000
“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