



National  
Multiple Sclerosis  
Society

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

Sorted by Topic

January 2017

**Advocacy, Services and Research Department  
National Multiple Sclerosis Society  
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## **Introduction**

The vision of the National MS Society is a world free of MS, with a key objective to drive change so that people have effective treatment choices and solutions to the challenges of living with MS. To achieve these goals, the Society supports a comprehensive strategy to 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. The National MS Society is recognized as a catalyst for all major advances in MS, and we fund more MS research than any other MS organization in the world.

This document lists all current MS research projects being funded by the National Multiple Sclerosis Society (USA) sorted by topic, as of January 2017.

## **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. The research awards we fund are indicated for each project in the following list:

- **Career Transition Fellowships** – awards up to five years to facilitate the advancement of promising young investigators into full faculty positions
- **Collaborative MS Research Center Awards** – 5-year awards to help stimulate creativity and interaction among investigators working within and outside MS fields
- **Fast Forward Commercial/Drug Development** – Commercial partnerships aim at specific strategies to drive the discovery of new therapies for people with MS
- **Daniel Haughton Senior Faculty Award** – awards for established investigators to provide specialized training in new areas of MS research
- **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 Academy of Neurology Clinician Scientist Development Award** -- to train physicians in MS clinical research
- **Pilot Research Grants** – aimed at exploring new, untested ideas
- **Postdoctoral Fellowships** – research projects by young investigators working under the mentorship of senior scientists, to provide training in MS research
- **Research Grants** – full grants for basic, clinical and rehabilitation research
- **Strategic Initiatives** – special projects that focus on core resources or other important unmet research needs
- **Sylvia Lawry Physician Fellowships** – young doctors working under the mentorship of seasoned clinicians, to provide training and experience in conducting clinical trials in people with MS

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

TBD = to be determined

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## STOPPING MS IN ITS TRACKS

### Human Therapy Trials/Management of MS - Investigations into treatments for all forms of MS, and training physicians in MS clinical research and trials

**Riley Bove, M.D., M.Sc.**

University of California, San Francisco  
San Francisco, California  
Award: Pilot Research Grants

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$42,299

Term: 10/1/15-3/31/17

**“Effect of a tissue selective estrogen complex on menopausal symptoms in women with MS: A pilot trial”** Assessing whether an FDA-approved hormonal therapy is beneficial to menopausal women with MS.

**Justine Brink, D.O.**

Thomas Jefferson University  
Philadelphia, Pennsylvania  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$195,000

Term: 7/1/15-6/30/18

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

**Jeremy Chataway, M.D.**

University College London  
London, United Kingdom  
Award: Strategic Initiatives

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: TBD

Term: TBD-TBD

**“MS-STAT2 Clinical Trial of simvastatin for the treatment of secondary progressive MS”** Testing the ability of a repurposed drug to protect the nervous system in people with secondary progressive MS.  
*The Society is co-funding this in collaboration with other agencies and organizations*

**John Corboy, M.D.**

University of Colorado Denver  
Aurora, Colorado  
Award: Strategic Initiatives

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$326,464

Term: 10/1/16-TBD

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

*The Society is providing co-funding to this PCORI-funded trial*

**Robert Fox, M.D.**

Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Strategic Initiatives

Category: Human Therapy Trials/Management of MS

Strategic Area: Stop

Funding: \$592,151

Term: 10/1/13-9/30/18

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

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

**Carla Francisco, M.D.**  
University of California, San Francisco  
San Francisco, California  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/15-6/30/18

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

**Meredith Frederick, M.D.**  
Oregon Health & Science University  
Portland, Oregon  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/15-6/30/18

**“Multiple Sclerosis Clinical Research Fellowship”** A promising neurologist at the Oregon Health & Science University in Portland will develop the skills involved in the design, implementation, and analysis of clinical trials in MS.

**Myla Goldman, M.D., M.Sc.**  
University of Virginia School of Medicine  
Charlottesville, Virginia  
Award: Research Grants

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$624,604  
Term: 10/1/16-9/30/20

**“Assessment of the clinical importance of insulin resistance & steroid-associated hyperglycemia in relapsing MS”** 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.

**Erin Longbrake, M.D., Ph.D.**  
Washington University School of Medicine  
St. Louis, Missouri  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/13-2/28/17

**“Clinical and Translational Research Training in Multiple Sclerosis”** Developing the skills involved in the design, implementation, and analysis of clinical trials in MS.  
*Funded by a gift from an Anonymous Donor*

**Gianvito Martino, M.D.**  
Fondazione Centro San Raffaele  
Milan, Italy  
Award: International Progressive MS Alliance

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: OVER\$4M TBD  
Term: 1/1/17-12/31/20

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

*Joint commitment with other Progressive MS Alliance members*

**Robert McBurney, Ph.D.**  
Accelerated Cure Project for MS  
Waltham, Massachusetts  
Award: Strategic Initiatives

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$375,000  
Term: 4/1/15-3/31/18

**“The Optimizing Treatment - Understanding Progression (OPT-UP) Clinical Research Study”**

Testing a way to recruit participants in a study integrated with clinical care to investigate factors that influence the risk of MS progression.

**Marisa McGinley, D.O.**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/16-6/30/19

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

**Ellen Mowry, M.D., M.P.H.**  
Johns Hopkins University  
Baltimore, Maryland  
Award: Harry Weaver Neuroscience Scholar Award

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$781,377  
Term: 7/1/15-6/30/20

**“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.P.H.**  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$1,728,703  
Term: 4/1/11-3/31/19

**“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*

**Bardia Nourbakhsh, M.D.**  
University of California, San Francisco  
San Francisco, California  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/14-6/30/17

**“MS Clinical research fellowship at UCSF”** Training to design and conduct MS clinical trials.

**Daniel Ontaneda, M.D.**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Pilot Research Grants

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$43,999  
Term: 9/1/16-8/31/17

**“Vitamin D levels in Progressive Multiple Sclerosis”** Exploring extensive data to determine the feasibility of a trial testing vitamin D in people with progressive MS.

**Francisco Quintana, Ph.D.**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: International Progressive MS Alliance

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: OVER\$4M TBD  
Term: 1/1/17-12/31/20

**“Development of a drug discovery pipeline for secondary progressive MS”** Exploring mechanisms underlying MS and identifying existing and new therapies that could be repurposed for treating progressive MS.

*Funded by an anonymous donor*

**Thomas Shoemaker, M.D.**  
Johns Hopkins University School of Medicine  
Baltimore, Maryland  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$130,000  
Term: 7/1/16-6/30/18

**“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.

**Andrew Smith, M.D.**  
University of Rochester  
Rochester, New York  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/15-6/30/18

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

**Andrew Smith, M.D.**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Sylvia Lawry Physician Fellowships

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$195,000  
Term: 7/1/15-6/30/18

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

**E. Yeh, M.D.**  
The Hospital for Sick Children  
Toronto, Canada  
Award: Health Care Delivery and Policy Research Contracts

Category: Human Therapy Trials/Management of MS  
Strategic Area: Stop  
Funding: \$565,925  
Term: 10/1/12-9/30/17

**“Treatment adherence in pediatric multiple sclerosis”** Finding ways to improve the rate at which children and adolescents with MS take their medications as prescribed.



## **Preclinical Drug Development - Laboratory research to collect data needed before an experimental therapy can be tested in people**

### **Annexon Biosciences, Inc.,**

Annexon Biosciences, Inc.

South San Francisco, California

Award: Fast Forward/Commercial Drug Development

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$693,113

Term: 12/5/16-TBD

**“Development and Validation of Complement-Associated Biomarkers to Support Clinical Development of a Novel MS Therapeutic”** Validating the applicability of a new neuroprotective compound to prevent or delay neurodegeneration in progressive MS.

### **Stefano Morara, Other**

Consiglio Nazionale delle Ricerche - CNR

Milan, Italy

Award: Pilot Research Grants

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$40,000

Term: 4/1/16-3/31/17

**“Role of CGRP neuropeptide in a progressive model of experimental autoimmune encephalomyelitis”** Studying a strategy for stopping progression in a mouse model of progressive MS.

### **Jenny Ting, Ph.D.**

University of North Carolina at Chapel Hill

Chapel Hill, North Carolina

Award: Collaborative Research Center Awards

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$825,000

Term: 4/1/14-3/31/19

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

### **UCL Business,**

University College London

London, United Kingdom

Award: Fast Forward Commercial/Drug Development

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$804,767

Term: 11/23/15-TBD

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

### **UCL Business,**

University College London

London, United Kingdom

Award: Fast Forward Commercial/Drug Development

Category: Preclinical Drug Development

Strategic Area: Stop

Funding: \$551,726

Term: 9/27/16-TBD

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

## **Measuring MS Disease Activity - Using sophisticated tools to track MS activity over time**

### **Douglas Arnold, M.D.**

McGill University

Montreal, Canada

Award: International Progressive MS Alliance

Category: Measuring MS Disease Activity

Strategic Area: Stop

Funding: OVER\$4M TBD

Term: 1/1/17-12/31/20

**“An MRI biomarker for disability progression for use in clinical trials”** Developing a composite MRI signature for disability progression for use in clinical trials.

*Joint commitment with other Progressive MS Alliance members*

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

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$130,000  
Term: 7/1/16-6/30/18

**Laura Balcer, M.D.**  
New York University School of Medicine  
New York, New York  
Award: Research Grants  
**“Mechanisms of retinal neurodegeneration and visual pathway axonal loss in MS”** Scanning the eye for clues to understanding nervous system damage and to track repair in MS.

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$374,381  
Term: 10/1/12-9/30/17

**Lisa Barcellos, Ph.D.**  
University of California, Berkeley  
Berkeley, California  
Award: Research Grants  
**“Longitudinal Assessment of Disease Progression and Cognitive Status in Multiple Sclerosis: A Comprehensive Web-Based Approach for Clinical Research and Translation to Care”** Research collaborators in California and Buffalo are designing a web-based tool to collect data regarding individuals’ MS disease progression, mood and cognitive symptoms over time to improve understanding of the disease and clinical care.

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$403,767  
Term: 4/1/15-3/31/17

**Erin Beck, M.D., Ph.D.**  
National Institute of Neurological Disorders and Stroke  
Bethesda, Maryland  
Award: NMSS-AAN Clinician Scientist Development Awards  
**“Characterization of the pathophysiology, dynamics, and clinical implications of cortical demyelination in MS”** Researchers at the National Institute of Neurological Disorders and Stroke are improving magnetic resonance imaging to allow better monitoring of disease progression in people with MS.

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$194,394  
Term: 7/1/16-6/30/19

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

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$1,053,919  
Term: 4/1/15-3/31/20

**Riley Bove, M.D., M.Sc.**  
University of California, San Francisco  
San Francisco, California  
Award: Career Transition Fellowships  
**“Mechanisms underlying the effect of menopause on multiple sclerosis course”** Researchers at UCSF are investigating the effects of menopause on the brain in women with MS.

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$406,791  
Term: 10/1/15-9/30/18

**John Chen, M.D., Ph.D.**

Massachusetts General Hospital  
Boston, Massachusetts  
Award: Research Grants

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$591,389  
Term: 4/1/16-3/31/19

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

**Veronica Cipriani, M.D.**

University of Chicago Medical Center  
Chicago, Illinois  
Award: Sylvia Lawry Physician Fellowships

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$130,000  
Term: 7/1/16-6/30/18

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

**Anne Cross, M.D.**

Washington University School of Medicine  
St. Louis, Missouri  
Award: Research Grants

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$576,380  
Term: 7/1/12-6/30/17

**“Gradient Echo Plural Contrast Imaging to Better Understand MS”** Evaluating the potential of a new MRI technique as a more sensitive measure of MS disease activity.

**William Culpepper, Ph.D.**

Veterans Administration Medical Center - Baltimore  
Baltimore, Maryland  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$343,719  
Term: 10/1/14-TBD

**“A Rasch-Based Comorbidity Measure for use in Patients with Multiple Sclerosis”** Developing a tool for determining the impact of additional health conditions on outcomes for people with MS.

**Leorah Freeman, M.D.**

University of Texas Health Science Center at Houston  
Houston, Texas  
Award: Research Grants

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$114,124  
Term: 2/1/16-6/30/17

**“Cerebral white matter hypoperfusion and its relationship to lesion formation and repair in MS: a longitudinal multimodal MRI study.”** Imaging blood flow in MS lesions in the brain to understand damage to nerve fibers.

**Yulin Ge, M.D.**

New York University School of Medicine  
Boston, Massachusetts  
Award: Pilot Research Grants

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$44,000  
Term: 7/1/16-6/30/17

**“pH-weighted MRI in multiple sclerosis: A surrogate marker of tissue metabolic stress”** Investigating whether measuring pH levels in the brain is linked to MS progression or tissue injury for clues to stopping MS.

<p><b>GE Healthcare Limited</b> Amersham, United Kingdom Award: Fast Forward/Commercial Drug Development</p>	<p>Category: Measuring MS Disease Activity Strategic Area: Stop Funding: \$300,000 Term: 7/25/13-TBD</p>
<p><b>“Clinical Evaluation of the ability of a TSPO-targeting PET imaging agent to enable monitoring of disease modifying therapy in MS”</b> Evaluating the ability of a PET imaging agent (GE180) as a tracer to monitor/detect neuroinflammation and response to disease modifying treatment in MS.</p>	
<p><b>Daniel Harrison, M.D.</b> University of Maryland, Baltimore Baltimore, Maryland Award: Pilot Research Grants</p>	<p>Category: Measuring MS Disease Activity Strategic Area: Stop Funding: \$43,958 Term: 10/1/15-9/30/17</p>
<p><b>“Is leptomeningeal contrast enhancement on 7 Tesla FLAIR MRI related to meningeal lymphoid follicles?”</b> Exploring whether inflammation is present in progressive MS using high field MRI.</p>	
<p><b>Stephen Hauser, M.D.</b> University of California, San Francisco San Francisco, California Award: Strategic Initiatives</p>	<p>Category: Measuring MS Disease Activity Strategic Area: Stop Funding: TBD Term: TBD-TBD</p>
<p><b>“SUMMIT: Stopping Progressive MS”</b> 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.</p>	
<p><b>Elena Hernandez Martinez de Lapiscina, M.D., Ph.D.</b> University of California, San Francisco San Francisco, California Award: Postdoctoral Fellowships</p>	<p>Category: Measuring MS Disease Activity Strategic Area: Stop Funding: \$202,635 Term: 7/1/16-6/30/19</p>
<p><b>“Retinal Molecular Imaging in MS by Raman Spectroscopy: towards a molecular biomarker for monitoring neuroinflammation and degeneration in MS”</b> Exploring whether a novel imaging technique of the eyes can track MS inflammation and disease activity.</p>	
<p><b>Elena Herranz Muelas, Ph.D.</b> Massachusetts General Hospital Boston, Massachusetts Award: Postdoctoral Fellowships</p>	<p>Category: Measuring MS Disease Activity Strategic Area: Stop Funding: \$111,145 Term: 7/1/16-6/30/18</p>
<p><b>“In vivo MR-PET imaging of glial activation and its correlates in MS”</b> Researchers at Massachusetts General Hospital and Harvard Medical School are investigating new brain imaging methods for inflammation to increase understanding of MS disease progression and response to treatment.</p>	
<p><b>Lynn Hudson, Ph.D.</b> Critical Path Institute Tucson, Arizona Award: Strategic Initiatives</p>	<p>Category: Measuring MS Disease Activity Strategic Area: Stop Funding: \$3,000,000 Term: 10/1/12-9/30/17</p>
<p><b>“Qualifying Clinical Outcome Assessments through a Multiple Sclerosis Consortium (MSC)”</b> Analyzing data from MS clinical trials to develop a more sensitive tool for evaluating the benefits of treatments on clinical symptoms and progression of MS.</p>	

**Matilde Inglese, M.D.**  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$664,214  
Term: 4/1/14-3/31/17  
**“Multimodal longitudinal imaging in progressive MS”** Using advanced imaging to track and understand nervous system changes that lead to progression in people with primary-progressive MS.

**Hong Jiang, M.D., Ph.D.**  
University of Miami  
Miami, Florida  
Award: Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$540,835  
Term: 4/1/16-3/31/19  
**“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.

**Ilana Katz Sand, M.D., Ph.D.**  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Pilot Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$44,000  
Term: 10/1/15-TBD  
**“Effect of Amiloride on Brain Sodium and Neurodegeneration in MS”** Exploring whether detecting salt levels in the brain can serve as an outcome measure of disease activity and recovery in clinical trials involving people with MS.

**Mark Lowe, Ph.D.**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$658,575  
Term: 10/1/13-9/30/17  
**“MRI-DTI and Functional Connectivity as Measures of Disease Progression in MS”** Using powerful brain MRI to develop a better way to track MS disease progression.

**Caterina Mainero, M.D., Ph.D.**  
Massachusetts General Hospital  
Boston, Massachusetts  
Award: Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$705,149  
Term: 4/1/13-3/31/17  
**“Cortical Inflammation and Demyelination in Multiple Sclerosis by Combined PET and MRI”**  
Developing better ways to visualize nervous system damage in people with secondary-progressive MS.

**Deborah Miller, Ph.D.**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Health Care Delivery and Policy Research Contracts  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$444,120  
Term: 10/1/12-9/30/17  
**“INFORMS:Improving Neuro-QOLs Functionality for Outcomes Research in Multiple Sclerosis”**  
Developing a way to assess MS symptoms with a standardized patient-reported questionnaire.

**Jiwon Oh, M.D., Ph.D.**  
Johns Hopkins University  
Baltimore, Maryland  
Award: Research Grants  
Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$500,000  
Term: 10/1/16-9/30/19  
**“Leptomeningeal Inflammation in Multiple Sclerosis: A Prospective MRI Study”** Johns Hopkin University researchers are exploring a novel imaging finding that may yield clues to understanding and stopping the progression of MS.

<p><b>Steven Patrie, Ph.D.</b>  University of Texas Southwestern Medical Center  Dallas, Texas  Award: Pilot Research Grants</p>	<p>Category: Measuring MS Disease Activity  Strategic Area: Stop  Funding: \$44,000  Term: 10/1/15-9/30/17</p>
<p><b>“Multiple Sclerosis Biomarker Discovery by Proteoform Network Analysis”</b> Using advanced technology to monitor proteins over time to determine their role in MS progression.</p>	
<p><b>Dzung Pham, Ph.D.</b>  Henry M. Jackson Foundation  Bethesda, Maryland  Award: Research Grants</p>	<p>Category: Measuring MS Disease Activity  Strategic Area: Stop  Funding: \$576,675  Term: 4/1/16-3/31/19</p>
<p><b>“Imaging Biomarker Discovery With Advanced Brain Segmentation Algorithms”</b> 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.</p>	
<p><b>Alexander Rauscher, M.Sc., Ph.D.</b>  University of British Columbia  Vancouver, Canada  Award: Research Grants</p>	<p>Category: Measuring MS Disease Activity  Strategic Area: Stop  Funding: \$309,320  Term: 4/1/16-3/31/19</p>
<p><b>“Imaging markers for tissue damage and repair in MS”</b> 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.</p>	
<p><b>Matthew Schindler, M.D., Ph.D.</b>  National Institute of Neurological Disorders and Stroke  Bethesda, Maryland  Award: NMSS-AAN Clinician Scientist Award</p>	<p>Category: Measuring MS Disease Activity  Strategic Area: Stop  Funding: \$263,622  Term: 7/1/14-6/30/17</p>
<p><b>“Advanced imaging of acute lesion formation and repair in patients with relapse remitting multiple sclerosis”</b> Improving MRI to allow more rapid assessment of disease progression and to improve drug discovery.</p>	
<p><b>Yong Wang, Ph.D.</b>  Washington University School of Medicine  St. Louis, Missouri  Award: Research Grants</p>	<p>Category: Measuring MS Disease Activity  Strategic Area: Stop  Funding: \$201,549  Term: 10/1/14-9/30/17</p>
<p><b>“Correlating MS cervical spinal cord pathologies defined by novel diffusion MRI with clinical measures”</b> Improving imaging techniques to detect changes in the brain and spinal cord of people with MS.</p>	
<p><b>Howard Weiner, M.D.</b>  Brigham and Women's Hospital  Boston, Massachusetts  Award: Strategic Initiatives</p>	<p>Category: Measuring MS Disease Activity  Strategic Area: Stop  Funding: TBD  Term: TBD-TBD</p>
<p><b>“SUMMIT: Stopping Progressive MS”</b> 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.</p>	

**Jie Wen, Ph.D.**

Washington University School of Medicine  
St. Louis, Missouri  
Award: Research Grants

Category: Measuring MS Disease Activity  
Strategic Area: Stop  
Funding: \$64,133  
Term: 7/1/16-6/30/17

**“Quantification of MS Tissue damage in both brain and spinal cord by using tissue specific quantitative parameters on MRI”** Using novel imaging to understand mechanisms underlying the damage of nerve tissue in MS.

**Psychosocial Aspects of MS - Understanding how MS effects cognitive functioning and other aspects of quality of life and wellness****Stefan Gold, Ph.D.**

Charité - Universitätsmedizin Berlin  
Berlin, Germany  
Award: Research Grants

Category: Psychosocial Aspects of MS  
Strategic Area: Stop  
Funding: \$490,935  
Term: 4/1/15-3/31/18

**“Molecular mechanisms of T cell dysfunction in multiple sclerosis-associated major depression”**  
Researchers at Charité University Medical Center in Berlin, Germany are investigating the possible link between immune system dysfunction and depression in people with MS.

**Jodie Haselkorn, M.D.,M.P.H.**

Seattle Institute for Biomedical and Clinical Research  
Seattle, Washington  
Award: Pilot Research Grants

Category: Psychosocial Aspects of MS  
Strategic Area: Stop  
Funding: \$44,000  
Term: 12/1/16-11/30/17

**“Multiple Sclerosis-Specific Health Services Utilization Model”** Evaluating psychological risk factors, other risk factors and healthcare use among people with MS.

**Diagnostic Methods - Investigating ways to improve the detection and diagnosis of MS****Carlos Duarte, Ph.D.**

University of Coimbra  
Coimbra, Portugal  
Award: Research Grants

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$175,000  
Term: 10/1/16-9/30/19

**“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.

**Goetz Ehrhardt, Ph.D.**

University of Toronto  
Toronto, Canada  
Award: Pilot Research Grants

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$22,220  
Term: 11/1/16-10/31/17

**“Biomarker Discovery in Multiple Sclerosis Using Non-Conventional VLR Antibodies”** Testing the ability of a biological marker to help differentiate between types of MS and responses to therapies.

**Caroline Guglielmetti, Ph.D.**

University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$107,466  
Term: 7/1/16-6/30/18

**“MR imaging of oxidative stress in multiple sclerosis”** Examining the role of oxidative stress in MS using advanced imaging techniques at different stages of disease.

**Eun-Kee (E.K.) Jeong, Ph.D.**

University of Utah  
Salt Lake City, Utah  
Award: Research Grants

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$455,492  
Term: 10/1/14-9/30/17

**“Quantitation of axonal damage by diffusion and Bound-Pool-Fraction MRI”** Exploring a new type of imaging to visualize nervous system damage in people with MS.

**Varghese John, Ph.D.**

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

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$44,000  
Term: 9/1/16-8/31/17

**“Analysis of Bloodborne Neuronal Exosomes for Preventing Multiple Sclerosis Relapse Events”**  
Developing a quick test for assessing treatment success in people with relapsing MS.

**Batia Kaplan, Ph.D.**

Sheba Medical Center  
Tel-Hashomer, Israel  
Award: Pilot Research Grants

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$39,820  
Term: 7/1/16-6/30/17

**“Analysis of immunoglobulin free light chain monomers and dimers in saliva of MS patients: implications for diagnosis of MS and monitoring of response to treatment”** Determining whether immunologic analysis of saliva samples can prove to be a noninvasive method of diagnosing and tracking MS.

**Kedar Mahajan, M.D., Ph.D.**

Cleveland Clinic  
Cleveland, Ohio  
Award: NMSS-AAN Clinician Scientist Development  
Awards

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$194,394  
Term: 7/1/16-6/30/19

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

**Robert Naismith, M.D.**

Washington University School of Medicine  
St. Louis, Missouri  
Award: Pilot Research Grants

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$40,658  
Term: 10/1/15-12/31/16

**“Retinal Dysfunction in Acute and Chronic Optic Neuritis by Electroretinography”** Using a variety of imaging techniques and testing of the eyes to track MS inflammation and disease activity.

**Seth Smith, Ph.D.**

Vanderbilt University Medical Center  
Nashville, Tennessee  
Award: Research Grants

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$397,117  
Term: 10/1/15-9/30/17

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

**Sheng-Kwei Song, Ph.D.**

Washington University School of Medicine  
St. Louis, Missouri  
Award: Research Grants

Category: Diagnostic Methods  
Strategic Area: Stop  
Funding: \$578,247  
Term: 10/1/14-9/30/17

**“Understanding the pathophysiology underlying MS progression”** Improving the visualization of damage to the optic nerve in an MS model to better understand MS progression.



## **Epidemiology - Investigating who gets MS in search of the cause and risk/ protective factors**

**Stephen Buka, Sc.D.**

Brown University  
Providence, Rhode Island  
Award: Research Grants

Category: Epidemiology  
Strategic Area: Stop  
Funding: \$753,335  
Term: 4/9/16-12/31/17

**“Multiple sclerosis: prevalence & social functioning by disease duration & subtype”** A comprehensive study of the impact of MS on employment, interpersonal relations and daily living.

**Helen Tremlett, B.S.Pharm., Ph.D.**

University of British Columbia  
Vancouver, Canada  
Award: Research Grants

Category: Epidemiology  
Strategic Area: Stop  
Funding: \$300,362  
Term: 7/1/12-TBD

**“Adherence to Immunomodulators in Multiple Sclerosis: Prevalence and Clinical Impact (The AIMS Study)”** Examining how following the recommendations for taking MS drugs affects the course of the disease.

**Helen Tremlett, B.S.Pharm., Ph.D.**

University of British Columbia  
Vancouver, Canada  
Award: Research Grants

Category: Epidemiology  
Strategic Area: Stop  
Funding: \$1,051,047  
Term: 4/1/14-3/31/18

**“Prodromal Multiple Sclerosis: The ProOMS Study”** How early before its diagnosis can MS be detected?

**Prevalence Workgroup,**

Multiple Institutions  
New York, New York  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Epidemiology  
Strategic Area: Stop  
Funding: \$1,483,804  
Term: 7/1/13-12/31/17

**“Prevalence Workgroup”** Special initiative to ascertain the prevalence of multiple sclerosis in the United States

## **Health Care Delivery/ Policy - Studying how people with MS utilize health-care services and how health-care delivery can be improved**

**Malachy Bishop, Ph.D.**

University of Kentucky  
Lexington, Kentucky  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$329,341  
Term: 10/1/14-12/31/16

**“Optimizing MS Care: Multiple Sclerosis Patients’ Perspectives and Priorities for Their MS Care”** Understanding the healthcare priorities and preferences of people with MS.

**Jared Bruce, Ph.D.**

University of Missouri - Kansas City  
Kansas, Missouri  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$315,341  
Term: 10/1/15-9/30/17

**“Development of a treatment decision model in MS”** Researchers at the University of Missouri are developing a model that will explain how people with MS weigh risks and benefits when deciding whether or not to take a disease-modifying therapy.

**Tanuja Chitnis, M.D.**

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

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$492,718  
Term: 10/1/15-9/30/18

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

**Marcia Finlayson, Ph.D.**

Queen's University  
Kinston, Canada  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$100,000  
Term: 10/1/15-3/31/17

**“Bone Mineral Density Screening and Fracture Risks in People with MS”** Researchers at Queen’s University are seeking to expand understanding of bone health in people with MS to develop programs and guidance to reduce osteoporosis and bone fractures.

**Robert Fox, M.D.**

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

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$416,686  
Term: 10/1/15-9/30/17

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

**Michael Halpern, M.D., Ph.D.**

RTI International  
Raleigh, North Carolina  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$86,492  
Term: 7/1/13-6/30/17

**“Secondary Analysis of Existing Data Sets: Level of Care and Cost Differences between MS Patients Receiving Care at MS Centers versus at Neurology Outpatient Practices”** Understanding the care received by people with MS at MS centers vs. private practice to ensure quality care for all people with MS

**Michael Halpern, M.D., Ph.D., M.P.H.**

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

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$99,402  
Term: 7/15/16-9/15/17

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

**Daniel Hartung, M.P.H., Pharm.D.**

Oregon State University

Portland, Oregon

Award: Health Care Delivery and Policy Research

Contracts

Category: Health Care Delivery/ Policy

Strategic Area: Stop

Funding: \$411,151

Term: 10/1/16-9/30/18

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

**Heather Kane, Ph.D.**

RTI International

Raleigh, North Carolina

Award: Health Care Delivery and Policy Research

Contracts

Category: Health Care Delivery/ Policy

Strategic Area: Stop

Funding: \$214,840

Term: 10/1/15-9/30/18

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

**Deborah Miller, Ph.D.**

Cleveland Clinic Foundation

Cleveland, Ohio

Award: Health Care Delivery and Policy Research

Contracts

Category: Health Care Delivery/ Policy

Strategic Area: Stop

Funding: \$545,144

Term: 10/1/15-9/30/17

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

**Sarah Minden, M.D.**

Brigham and Women's Hospital

Boston, Massachusetts

Award: Health Care Delivery and Policy Research

Contracts

Category: Health Care Delivery/ Policy

Strategic Area: Stop

Funding: \$622,531

Term: 11/1/09-10/31/17

**“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.**

Brigham and Women's Hospital

Boston, Massachusetts

Award: Health Care Delivery and Policy Research

Contracts

Category: Health Care Delivery/ Policy

Strategic Area: Stop

Funding: \$698,337

Term: 10/1/12-9/30/17

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

**Sarah Minden, M.D.**

Brigham and Women's Hospital

Boston, Massachusetts

Award: Health Care Delivery and Policy Research

Contracts

Category: Health Care Delivery/ Policy

Strategic Area: Stop

Funding: \$316,266

Term: 10/1/13-9/30/17

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

**Sarah Minden, M.D.**

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

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$329,613  
Term: 10/1/11-9/30/17

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

**Surachat Ngorsuraches, M.Sc., Ph.D.**

South Dakota State University  
Brookings, South Dakota  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$117,878  
Term: 10/1/16-9/30/17

**“Examining the cost-escalation and patient valuation of disease-modifying therapies for multiple sclerosis”** Researchers at South Dakota State University are investigating patient valuation of MS treatments.

**Brant Oliver, Ph.D., M.P.H.**

MGH Institute of Health Professions  
Boston, Massachusetts  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$244,175  
Term: 10/1/15-9/30/17

**“Understanding the impact of nurse practitioners and physician assistants in multiple sclerosis care: A three part study of utilization, quality, and patient experience.”** Researchers at Massachusetts General Hospital are exploring how nurse practitioners and physician assistants may be able to assist neurologist in providing access to care for individuals with MS.

**Bianca Weinstock-Guttman, M.D.**

State University of New York at Buffalo  
Buffalo, New York  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Stop  
Funding: \$99,468  
Term: 10/1/15-TBD

**“Investigation of factors related to stable disease in an aging MS sample as indicators of reduced burden of disease.”** Researchers at the University of Buffalo are investigating what factors contribute to disability progression in people with MS who are age 60 or over.

**William Culpepper, Ph.D.**

Veterans Administration Medical Center - Baltimore  
Baltimore, Maryland  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/Policy  
Strategic Area: Stop  
Funding: \$281,874  
Term: 10/1/14-TBD

**“What is the comparative effectiveness of comprehensive care vs. usual care for patients with multiple sclerosis?”** Exploring whether comprehensive care results in better outcomes for people with MS.

## **Infectious Triggers - Examining the possibility that viruses or bacteria could act as disease triggers in MS**

**Ashlee Moses, Ph.D.**

Oregon Health & Science University  
Portland, Oregon

Award: Pilot Research Grants

Category: Infectious Triggers

Strategic Area: Stop

Funding: \$43,999

Term: 4/1/16-3/31/17

**“The Use of HIV-1 Integrase Inhibitors for the Treatment of Multiple Sclerosis”** Testing a novel strategy for stopping infection from triggering an immune attack in a model of MS.

**Stanley Perlman, M.D., Ph.D.**

University of Iowa

Iowa City, Iowa

Award: Research Grants

Category: Infectious Triggers

Strategic Area: Stop

Funding: \$562,612

Term: 4/1/15-3/31/18

**“Pathogenesis of Demyelination in Mice Infected with a Neurotropic Coronavirus”** University of Iowa researchers are investigating ways to manipulate the immune system in a way that turns off the harmful effects and maintains the helpful effects as a strategy for treating MS.

**Katharine Whartenby, Ph.D.**

Johns Hopkins University

Baltimore, Maryland

Award: Research Grants

Category: Infectious Triggers

Strategic Area: Stop

Funding: \$731,878

Term: 10/1/15-9/30/18

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

## **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**

**Justin Rubio, Ph.D.**

University of Melbourne

Melbourne, Australia

Award: Pilot Research Grants

Category: Human Genetics

Strategic Area: Stop

Funding: \$40,000

Term: 11/1/16-10/31/17

**“Does neuronal somatic mutation influence the progression of MS?”** Investigating whether abnormalities in nerve cells influence the course of MS.

## **Neuropathology - Exploring how nerve fibers and cells are damaged during the course of MS**

**Martina Absinta, M.D.**

National Institutes of Health

Bethesda, Maryland

Award: Postdoctoral Fellowships

Category: Neuropathology

Strategic Area: Stop

Funding: \$191,042

Term: 1/1/16-12/31/18

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

**Oscar Bizzozero, Ph.D.**

University of New Mexico  
Albuquerque, New Mexico  
Award: Research Grants

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$374,695  
Term: 10/1/13-3/31/17

**“Impaired activity of the proteasome activator PA28 in multiple sclerosis”** Is impaired removal of damaged proteins a possible contributor to the development of MS?

**Shing-yan Chiu, Ph.D.**

University of Wisconsin-Madison  
Madison, Wisconsin  
Award: Research Grants

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$612,977  
Term: 4/1/15-3/31/18

**“A Novel Specific Treatment for Progressive MS: Elimination of Mitochondrial Anchoring”**

Researchers at the University of Wisconsin in Madison are studying mouse models with features similar to progressive MS to investigate possible new approaches to stopping MS progression.

**Shing-yan Chiu, Ph.D.**

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

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 7/1/16-6/30/17

**“Stop Progressive Multiple Sclerosis by Blocking Mitochondria Anchoring”** Exploring a strategy for stopping a toxic process that damages nerves and contributes to MS progression.

**Ranjan Dutta, Ph.D.**

Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$464,151  
Term: 4/1/15-3/31/18

**“Pathogenesis of cortical demyelination underlying progressive disability in multiple sclerosis”**

Researchers at the Cleveland Clinic are examining the brains of people with MS to understand differences between the damage caused by primary-progressive and secondary-progressive MS in search of ways to stop progression.

**Douglas Feinstein, Ph.D.**

University of Illinois at Chicago  
Chicago, Illinois  
Award: Research Grants

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$651,000  
Term: 10/1/15-9/30/18

**“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.

*Paid by special funds provided by the Illinois Lottery*

**Shailendra Giri, Ph.D.**

Henry Ford Health Sciences Center  
Detroit, Michigan  
Award: Research Grants

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$387,621  
Term: 4/1/15-3/31/17

**“A Metabolomics approach for identifying metabolite signature in disease progression”** Researchers at the Henry Ford Health Science Center in Detroit are analyzing blood samples from people with progressive MS to develop a blood test that may be useful for predicting disease course.

**Ari Green, M.D.**

University of California, San Francisco  
San Francisco, California

Award: Harry Weaver Neuroscience Scholar Award

Category: Neuropathology

Strategic Area: Stop

Funding: \$771,772

Term: 7/1/12-6/30/17

**“In vivo neuronal imaging after demyelinating injury to the visual pathway”** Developing a technique to measure the health and injury of nerve cells, as a potential tool for quickly evaluating the potential of therapies to protect the nervous system in MS.

**Yang Hu, M.D., Ph.D.**

Temple University  
Philadelphia, Pennsylvania

Award: Research Grants

Category: Neuropathology

Strategic Area: Stop

Funding: \$165,000

Term: 4/1/15-3/31/17

**“Targeting Neuronal ER Stress for Neuroprotection in EAE”** Researchers at Temple University in Philadelphia are investigating a way to protect nerve cells from stress in an animal model of visual problems sometimes seen in MS.

*Funded by a gift from a generous donor*

**Christoph Juchem, Ph.D.**

Columbia University  
New York, New York

Award: Research Grants

Category: Neuropathology

Strategic Area: Stop

Funding: \$390,031

Term: 9/1/16-3/31/18

**“In Vivo Metabolomics of Oxidative Stress with 7 Tesla Magnetic Resonance Spectroscopy”**

Researchers at Columbia are using two imaging techniques to determine the distribution and importance of the antioxidant glutathione in the brains of people with MS.

**Jae Lee, Ph.D.**

University of Miami  
Miami, Florida

Award: Pilot Research Grants

Category: Neuropathology

Strategic Area: Stop

Funding: \$44,000

Term: 4/1/16-3/31/17

**“Mechanisms of fibrosis after experimental autoimmune encephalomyelitis”** Investigating a novel strategy in mice that may yield a solution for primary progressive MS.

**Wensheng Lin, M.D., Ph.D.**

University of Minnesota  
Minneapolis, Minnesota

Award: Research Grants

Category: Neuropathology

Strategic Area: Stop

Funding: \$561,891

Term: 10/1/14-9/30/17

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

**Tsen-Hsuan (Abby) Lin, Ph.D.**

Washington University School of Medicine  
St. Louis, Missouri

Award: Postdoctoral Fellowships

Category: Neuropathology

Strategic Area: Stop

Funding: \$114,963

Term: 7/1/16-6/30/18

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

- Don Mahad, M.D., Ph.D.**  
 University of Edinburgh  
 Edinburgh, United Kingdom  
 Award: Research Grants  
 Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$551,702  
 Term: 10/1/14-9/30/17  
**“Mitochondria and mechanisms of axon degeneration in progressive MS”** Exploring energy failure in cells as one possible cause of progressive MS.
- Priya Narayanan, Ph.D.**  
 Georgia Regents University  
 Augusta, Georgia  
 Award: Pilot Research Grants  
 Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$44,000  
 Term: 11/1/16-10/31/17  
**“Role of Arginase in Multiple Sclerosis Mediated Retinal Neuronal Injury”** Exploring mechanisms that underlie damage to the eyes in people with MS.
- Kevin O'Connor, Ph.D.**  
 Yale University School of Medicine  
 New Haven, Connecticut  
 Award: Pilot Research Grants  
 Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$43,752  
 Term: 4/1/16-3/31/17  
**“Defining how a novel B cell population contributes to MS pathology”** Exploring components of the immune system that may age prematurely in people with MS, for clues to stopping the immune attack in this disease.
- Quasar Padiath, M.B.B.S., Ph.D.**  
 University of Pittsburgh  
 Pittsburgh, Pennsylvania  
 Award: Research Grants  
 Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$362,380  
 Term: 4/1/14-3/31/17  
**“The role of the nuclear lamina in myelin regulation and demyelination”** Exploring the possible role of a protein that may control genes involved in the repair of nerve-insulating myelin.
- Richard Reynolds, Ph.D.**  
 Imperial College London  
 London, United Kingdom  
 Award: Research Grants  
 Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$646,187  
 Term: 10/1/16-9/30/19  
**“The role of meningeal inflammation induced cytokine signalling and mitochondrial dysfunction in neurodegeneration in progressive MS”** Researchers at Imperial College, London, have pinpointed a molecule that may signal nerve cell death, and are investigating how to alter these signals to stop MS progression.
- Kenneth Smith, Ph.D.**  
 University College London  
 London, United Kingdom  
 Award: Research Grants  
 Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$606,444  
 Term: 4/1/14-3/31/17  
**“Towards a greater understanding of multiple sclerosis: recognising the importance of hypoxia, and new opportunities for therapy.”** Can damage to the nervous system be reduced by therapeutically increasing tissue oxygen concentrations?
- Rhonda Voskuhl, M.D.**  
 University of California, Los Angeles  
 Los Angeles, California  
 Award: Research Grants  
 Category: Neuropathology  
 Strategic Area: Stop  
 Funding: \$505,994  
 Term: 4/1/13-3/31/17  
**“Sex Chromosome Effects in the CNS during EAE”** Looking at how genes on the chromosomes that determine gender may influence the severity of MS.



**James Waschek, Ph.D.**

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

Category: Neuropathology  
Strategic Area: Stop  
Funding: \$496,965  
Term: 10/1/15-9/30/18

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

**Biochem./Biophysics - Understanding basic cell processes to enhance knowledge of factors underlying MS**

**Michael Kornberg, M.D., Ph.D.**

Johns Hopkins University  
Baltimore, Maryland  
Award: NMSS-AAN Clinician Scientist Award

Category: Biochem./Biophysics  
Strategic Area: Stop  
Funding: \$259,590  
Term: 7/1/15-6/30/18

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

**Hao Zhang, Ph.D.**

Medical College of Wisconsin  
Milwaukee, Wisconsin  
Award: Research Grants

Category: Biochem./Biophysics  
Strategic Area: Stop  
Funding: \$646,763  
Term: 10/1/14-9/30/17

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

**Biology of Glia/Myelin - Investigating how myelin is formed and the role played by oligodendrocytes and other nervous system support cells in MS**

**Charles Abrams, M.D.**

University of Illinois at Chicago  
Chicago, Illinois  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Stop  
Funding: \$255,625  
Term: 4/1/16-9/30/17

**“Roles of Cx32 and Cx47 in oligodendrocytes.”** Does the loss of connexins, molecules that mediate communication between brain cells, make the animal model of MS worse?

**Katerina Akassoglou, Ph.D.**

The J. David Gladstone Institutes  
San Francisco, California  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Stop  
Funding: \$567,422  
Term: 4/1/14-3/31/17

**“Role of fibrinogen in the inhibition of oligodendrocyte differentiation”** Can a blood protein that may inhibit myelin repair in MS be overridden to spur repair?

*Funded by a gift from an Anonymous Donor in honor of JoAnn LeMaistre, PhD*

**Oleg Butovsky, Ph.D.**

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

Category: Biology of Glia/Myelin  
Strategic Area: Stop  
Funding: \$248,010  
Term: 10/1/14-9/30/17

**“Mechanism of regulation of CNS inflammation by microglia”** Exploring how one type of brain cell is both harmful and helpful in MS.

**Richard Daneman, Ph.D.**

University of California, San Diego  
La Jolla, California

Award: Research Grants

Category: Biology of Glia/Myelin

Strategic Area: Stop

Funding: \$103,125

Term: 10/1/15-9/30/18

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

**Cheryl Dreyfus, Ph.D.**

Rutgers, The State University of New Jersey

Piscataway, New Jersey

Award: Research Grants

Category: Biology of Glia/Myelin

Strategic Area: Stop

Funding: \$607,161

Term: 4/1/15-3/31/18

**“The role of glial cell-derived factors in a cuprizone model of MS”** Rutgers University researchers are investigating new molecules that may be capable of protecting cells that make nerve-insulating myelin, with the goal of preventing degeneration of myelin and enhancing its repair in people with MS.

**Alexander Gow, Ph.D.**

Wayne State University

Detroit, Michigan

Award: Research Grants

Category: Biology of Glia/Myelin

Strategic Area: Stop

Funding: \$663,959

Term: 4/1/15-3/31/18

**“Neurodegeneration associated with metabolic stress in oligodendrocytes”** Wayne State University researchers in Detroit are determining whether processes beyond immune attacks are responsible for nervous system damage in an MS-like disease in mice, for novel approaches to stop MS.

**Gareth John, D.V.M., Ph.D.**

Icahn School of Medicine at Mount Sinai

New York, New York

Award: Research Grants

Category: Biology of Glia/Myelin

Strategic Area: Stop

Funding: \$103,125

Term: 10/1/15-9/30/18

**“Reactive astrocytes control leukocyte and humoral trafficking into the CNS”** Mount Sinai researchers are investigating cells and proteins that control entry of harmful immune cells and molecules into the brain for clues to stopping this influx in MS.

**Gordon Meares, Ph.D.**

West Virginia University

Morgantown, West Virginia

Award: Career Transition Fellowships

Category: Biology of Glia/Myelin

Strategic Area: Stop

Funding: \$380,636

Term: 1/1/15-12/31/17

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

**Jennifer Orthmann-Murphy, M.D., Ph.D.**

Johns Hopkins University

Baltimore, Maryland

Award: NMSS-AAN Clinician Scientist Award

Category: Biology of Glia/Myelin

Strategic Area: Stop

Funding: \$263,622

Term: 9/1/14-8/31/17

**“The role of reactive astrocytes in cortical demyelinating lesions”** How do brain cells called astrocytes contribute to destructive processes active in MS?

## **CNS Repair - Searching for ways to stop and reverse tissue damage in MS**

**Andres Cruz-Herranz, M.D.**

University of California, San Francisco  
San Francisco, California  
Award: Postdoctoral Fellowships

Category: CNS Repair  
Strategic Area: Stop  
Funding: \$195,427  
Term: 7/1/15-6/30/18

**“Longitudinal Screening of Neuroprotective Therapies in Experimental Autoimmune Encephalomyelitis with Optical Coherence Tomography”**

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

*The Jeveli Family Postdoctoral Fellow*

**Claudia Lucchinetti, M.D., Ph.D.**

Mayo Clinic College of Medicine  
Rochester, Minnesota  
Award: Collaborative Research Center Awards

Category: CNS Repair  
Strategic Area: Stop  
Funding: \$825,000  
Term: 4/1/16-3/31/21

**“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*

## **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**

**Dorina Avram, Ph.D.**

University of Florida  
Gainesville, Florida  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$515,536  
Term: 5/1/15-3/31/17

**“A novel ubiquitin ligase with role in EAE severity”** Can understanding a regulator of immune cell function translate into the development of a treatment to stop immune attacks in MS?

**Robert Axtell, Ph.D.**

Oklahoma Medical Research Foundation  
Oklahoma City, Oklahoma  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$422,400  
Term: 10/1/16-9/30/18

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

**Clare Baecher-Allan, Ph.D.**

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

Category: Immunology  
Strategic Area: Stop  
Funding: \$593,988  
Term: 4/1/16-3/31/19

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

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

**Sophia Bardehle, Ph.D.**

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

Category: Immunology  
Strategic Area: Stop  
Funding: \$175,431  
Term: 7/1/16-6/30/19

**“Study of the role of fibrinogen in T-cell recruitment and activation in neuroinflammatory disease.”**

Investigators at the University of California, San Francisco are examining the role of a protein called fibrinogen in the damaging activation of the immune system in MS.

**Pavan Bhargava, M.D.**

Johns Hopkins University  
Baltimore, Maryland  
Award: Career Transition Fellowships

Category: Immunology  
Strategic Area: Stop  
Funding: \$457,540  
Term: 7/1/16-6/30/21

**“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.

**Alexander Boyden, Ph.D.**

University of Iowa  
Iowa City, Iowa  
Award: Postdoctoral Fellowships

Category: Immunology  
Strategic Area: Stop  
Funding: \$161,218  
Term: 7/1/15-6/30/18

**“The role of CD8+ regulatory T cells in modulating B cell function during EAE”**

Researchers at the University of Iowa are investigating the influence of two types of immune cells on each other to better understand and treat MS.

**Melissa Brown, Ph.D.**

Northwestern University  
Evanston, Illinois  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$589,722  
Term: 4/1/15-3/31/18

**“c-kit differentially regulates EAE susceptibility in male and female SJL mice”**

Northwestern University researchers are testing the role of a molecule called c-kit in sex-specific differences in the immune response and protection of neurons in a rodent model of MS called EAE.

*Paid by special funds provided by the Illinois Lottery*

**Claudia Cantoni, Ph.D.**

Washington University School of Medicine  
St. Louis, Missouri  
Award: Postdoctoral Fellowships

Category: Immunology  
Strategic Area: Stop  
Funding: \$172,444  
Term: 7/1/15-6/30/18

**“Role of miR-223 in multiple sclerosis and its animal model”**

Researchers at Washington University in St. Louis are examining the role of a molecule that may play a role in regulating immune attacks in MS.

**Youhai Chen, M.D.**

University of Pennsylvania  
Philadelphia, Pennsylvania  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$664,366  
Term: 9/30/16-9/30/18

**“Multiple Sclerosis and the Transcription Factor c-Rel”**

Researchers from the University of Pennsylvania are testing whether compounds that block a key molecule in the MS immune attack are effective in blocking disease activity in cells obtained from people with MS.

**Maria Ciofani, Ph.D.**

Duke University Medical Center  
Charlotte, North Carolina  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$629,860  
Term: 4/1/15-3/31/18

**“Network approach to dissecting genetic mediators of Multiple Sclerosis”** Duke University Medical Center researchers are using new technologies to identify genes that are expressed in certain types of cells and that may contribute to causing MS.

**Bogoljub Ciric, M.Sc., Ph.D.**

Thomas Jefferson University  
Philadelphia, Pennsylvania  
Award: Pilot Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 10/1/15-12/30/16

**“The Pro-inflammatory Role of IL-3 in EAE”** Exploring an immune protein's role in driving the immune attack in MS-like disease in mice.

**Gabriela Constantin, M.D., Ph.D.**

University of Verona  
Verona, Italy  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$140,000  
Term: 10/1/15-9/30/17

**“The role of neutrophil trafficking mechanisms in the pathogenesis of animal models of multiple sclerosis”** Researchers at the University of Verona are examining immune cells called neutrophils in mice with an MS-like disease for clues to their possible role in MS inflammation and progression.

**Michael David, Ph.D., Pharm.D.**

University of California San Diego  
La Jolla, California  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$660,000  
Term: 4/1/14-3/31/17

**“The IRF - type I interferon system in autoimmunity and immune tolerance”** Studying the delicate balance of the immune system to understand the causes of MS.

**Paola De Candia, Ph.D.**

Fondazione MultiMedica ONLUS  
Milan, Italy  
Award: Pilot Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$40,000  
Term: 11/1/16-10/31/17

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

**Alessandra De Paula Alves Sousa, Ph.D.**

National Institute of Neurological Disorders and Stroke  
Bethesda, Maryland  
Award: Postdoctoral Fellowships

Category: Immunology  
Strategic Area: Stop  
Funding: \$161,040  
Term: 7/1/15-6/30/18

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

**Bonnie Dittel, Ph.D.** Category: Immunology  
 BloodCenter of Wisconsin Strategic Area: Stop  
 Milwaukee, Wisconsin Funding: \$681,791  
 Award: Research Grants Term: 10/1/15-9/30/18  
**“Characterization of a novel regulatory B cell subset that attenuates EAE”** Researchers at the BloodCenter of Wisconsin are investigating how a subset of immune “B cells” reduces inflammation, for clues to harnessing this power to stop MS.  
*2016 Stephen C. Reingold Research Award for most outstanding research proposal*

**Thomas Forsthuber, M.D., Ph.D.** Category: Immunology  
 University of Texas at San Antonio Strategic Area: Stop  
 San Antonio, Texas Funding: \$591,566  
 Award: Research Grants Term: 4/1/14-3/31/17  
**“M2 proteomics of the EAE model of multiple sclerosis”** Working on a blood test that may ultimately be used to monitor disease progression in people with MS.

**Thomas Forsthuber, M.D., Ph.D.** Category: Immunology  
 University of Texas at San Antonio Strategic Area: Stop  
 San Antonio, Texas Funding: \$660,270  
 Award: Research Grants Term: 10/1/16-9/30/19  
**“NETs and lipid peroxidation as drivers of progressive EAE”** University of Texas at San Antonio researchers are exploring how to stop nervous system damage, for clues to developing treatments that stop MS progression.

**Murugaiyan Gopal, Ph.D.** Category: Immunology  
 Brigham and Women's Hospital Strategic Area: Stop  
 Boston, Massachusetts Funding: \$539,320  
 Award: Research Grants Term: 4/1/16-3/31/19  
**“MicroRNA Control of Inflammatory T cells in EAE and MS”** Researchers at Harvard Medical School are investigating how a small, naturally occurring molecule regulates the function of harmful types of immune cells in MS.

**Murugaiyan Gopal, Ph.D.** Category: Immunology  
 Brigham and Women's Hospital Strategic Area: Stop  
 Boston, Massachusetts Funding: \$44,000  
 Award: Pilot Research Grants Term: 7/1/16-6/30/17  
**“MicroRNA control of myeloid cell function in EAE”** Investigating a novel strategy for stopping the immune attack in MS.

**Ariele Greenfield, M.D.** Category: Immunology  
 University of California, San Francisco Strategic Area: Stop  
 San Francisco, California Funding: \$198,867  
 Award: NMSS-AAN Clinician Scientist Development Awards Term: 7/1/16-6/30/19  
**“Antigen Targets of CNS-Infiltrating B Cells in Early, Untreated Multiple Sclerosis”** Researchers at the University of California, San Francisco are determining the targets of harmful immune cells called B cells in MS, which may lead to earlier, more effective treatment of MS or prevention.  
*The Kathleen C. Moore Postdoctoral Fellowship*

**Judith Greer, Ph.D.**

University of Queensland  
Brisbane, Australia

Award: Pilot Research Grants

**“Glutamate transporters as potential targets of autoimmune attack in multiple sclerosis”**

Investigating a novel target for stopping the immune attack in MS.

Category: Immunology

Strategic Area: Stop

Funding: \$39,968

Term: 4/1/16-3/31/17

**David Hafler, M.D.**

Yale University  
New Haven, Connecticut

Award: Research Grants

**“Can a High Salt Diet Drive Induction of Pathogenic T Cells in Humans?”** Yale University

researchers are studying the possibility that high salt content in diets may contribute to the development and severity of MS.

Category: Immunology

Strategic Area: Stop

Funding: \$545,399

Term: 4/1/14-4/1/17

**Daniel Hawiger, M.D., Ph.D.**

Saint Louis University

St. Louis, Missouri

Award: Research Grants

**“Hopx-dependent immunoregulation of EAE by dendritic cell-induced regulatory T cells”** What role does a protein called Hopx play in determining whether the immune system will attack the brain and spinal cord in MS?

Category: Immunology

Strategic Area: Stop

Funding: \$608,376

Term: 4/1/14-3/31/17

**Brad Hoffman, Ph.D.**

University of Florida

Gainesville, Florida

Award: Research Grants

**“In Vivo Induction of Antigen Specific T-Cell Tolerance to a Neuro-Antigen by AAV Hepatic Gene Therapy”** University of Florida researchers are exploring a way to prevent or treat MS, using the EAE model, by inducing immune tolerance.

Category: Immunology

Strategic Area: Stop

Funding: \$569,647

Term: 4/1/15-3/31/18

**Amanda Huber, Ph.D.**

University of Michigan

Ann Arbor, Michigan

Award: Postdoctoral Fellowships

**“Type-I Interferon regulation of lymphoid chemokines in MS and EAE.”** Developing an approach to predicting a persons response to interferon beta therapy.

Category: Immunology

Strategic Area: Stop

Funding: \$175,804

Term: 7/1/14-6/30/17

**Igal Ifergan, M.Sc., Ph.D.**

Northwestern University

Evanston, Illinois

Award: Postdoctoral Fellowships

**“The Wnt Pathway as a Modulator of Tolerogenic APCs in MS”** Exploring a molecular switch to turn on helpful immune system activity for leads to new treatment approaches to stop MS.

Category: Immunology

Strategic Area: Stop

Funding: \$169,946

Term: 7/1/14-6/30/17

**Christopher Jewell, Ph.D.**

University of Maryland - College Park

College Park, Maryland

Award: Research Grants

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

Category: Immunology

Strategic Area: Stop

Funding: \$598,715

Term: 10/1/15-9/30/18

**Nitin Karandikar, M.D., Ph.D.**

University of Iowa  
Iowa City, Iowa

Award: Research Grants

Category: Immunology

Strategic Area: Stop

Funding: \$712,800

Term: 4/1/13-3/31/17

**“Role of CNS-specific autoreactive CD8+ T cells in MS”** Looking for ways to treat MS by improving the action of cells that control the immune system attack on myelin.

*The 2012 Stephen C. Reingold Award for most outstanding research proposal*

**Lloyd Kasper, M.D.**

Trustees of Dartmouth College

Hanover, New Hampshire

Award: Research Grants

Category: Immunology

Strategic Area: Stop

Funding: \$719,852

Term: 7/1/12-6/30/17

**“Regulation of immunity by gut commensal bacteria in multiple sclerosis”** Looking at whether a molecule produced by common bacteria in the intestines may hold promise for treating MS or provide clues to how MS is triggered.

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

**Samia Khoury, M.D.**

Brigham and Women's Hospital

Boston, Massachusetts

Award: Research Grants

Category: Immunology

Strategic Area: Stop

Funding: \$619,990

Term: 10/1/13-9/30/17

**“Transcriptional Regulation of the Resistance of Memory T Cells in EAE”** Can the behavior of a type of immune system cell be altered to treat MS?

**Jonathan Kipnis, Ph.D.**

University of Virginia

Charlottesville, Virginia

Award: Research Grants

Category: Immunology

Strategic Area: Stop

Funding: \$660,000

Term: 10/1/15-9/30/18

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

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

**Alexandra Kitz, Ph.D.**

Yale University School of Medicine

New Haven, Connecticut

Award: Postdoctoral Fellowships

Category: Immunology

Strategic Area: Stop

Funding: \$175,431

Term: 7/1/16-6/30/19

**“Role of Akt kinases in regulating high-salt induced Treg dysfunction”** Yale researchers are using immune cells from the blood of healthy people and people with newly diagnosed MS to investigate how high salt may alter immune activity.

**Robyn Klein, M.D., Ph.D.**

Washington University School of Medicine

St. Louis, Missouri

Award: Research Grants

Category: Immunology

Strategic Area: Stop

Funding: \$662,812

Term: 4/1/16-3/31/19

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



- Robyn Klein, M.D., Ph.D.**  
Washington University School of Medicine  
St. Louis, Missouri  
Award: Pilot Research Grants  
Category: Immunology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 7/1/16-6/30/17  
**“IFN-λ signaling and regulation of leukocyte entry into the central nervous system (CNS)”**  
Exploring a strategy for promoting recovery from the immune attack in a mouse model of MS.
- Dimitry Kremetsov, Ph.D.**  
University of Vermont  
Burlington, Vermont  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Funding: \$552,845  
Term: 10/1/16-9/30/19  
**“Mechanisms of Sex-Specific p38 MAPK-Mediated Pathogenesis in CNS Autoimmunity”** University of Vermont researchers are exploring immune system activity that may explain why MS affects women more than men, and may yield a strategy for stopping the immune attack.
- Juan Lafaille, Ph.D.**  
New York University Langone Medical Center  
New York, New York  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Funding: \$676,900  
Term: 4/1/14-3/31/17  
**“The role of the innate immune system in Experimental Autoimmune Encephalomyelitis”** Do specific immune cells hold the key to stopping MS?
- Klaus Lehmann-Horn, M.D.**  
Technical University of Munich  
Munich, Germany  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Funding: \$130,422  
Term: 1/1/16-12/31/17  
**“Role of B cells in spontaneous chronic CNS autoimmune disease”** Exploring the role of immune B cells in MS disease progression.  
*Funded by a gift from an Anonymous Donor in honor of JoAnn LeMaistre, Ph*
- Xiaoxia Li, Ph.D.**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Funding: \$636,194  
Term: 10/1/14-9/30/17  
**“Cellular and molecular mechanisms of the inflammasome in CNS inflammation”** Identifying potential targets for turning off immune attacks in MS.
- Jianrong Li, Ph.D.**  
Texas A&M AgriLife Research  
College Station, Texas  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Funding: \$554,289  
Term: 4/1/16-3/31/19  
**“Stat3 in myeloid cells: a regulator of autoimmune demyelination”** Texas A&M University researchers are targeting a molecule whose signals may be crucial to stopping the immune attack on the brain and spinal cord in MS.
- Robert Lisak, M.D.**  
Wayne State University  
Detroit, Michigan  
Award: Research Grants  
Category: Immunology  
Strategic Area: Stop  
Funding: \$710,556  
Term: 10/1/14-9/30/17  
**“B Cell Secretory Factors and Neuronal and Oligodendroglial Toxicity”** Studying toxic substances made by immune cells that may cause nervous system damage in MS.

**Amy Lovett-Racke, Ph.D.**

Ohio State University  
Columbus, Ohio

Award: Research Grants

**“Role of miRNA in defective Tregs in Multiple Sclerosis”** Exploring ways to alter the immune responses to stop MS in its tracks.

Category: Immunology

Strategic Area: Stop

Funding: \$584,726

Term: 10/1/14-9/30/17

**Nancie MacIver, M.D., Ph.D.**

Duke University Medical Center  
Charlotte, North Carolina

Award: Research Grants

**“Identifying molecular mechanisms by which leptin and nutrition target T cell immunity in multiple sclerosis”** Duke University Medical Center researchers are exploring whether a nutrition-regulated hormone called leptin may contribute to immune-system activity in MS.

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

Category: Immunology

Strategic Area: Stop

Funding: \$473,018

Term: 4/1/15-3/31/18

**Charlotte Madore, Ph.D.**

Brigham and Women's Hospital  
Boston, Massachusetts

Award: Postdoctoral Fellowships

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

Category: Immunology

Strategic Area: Stop

Funding: \$161,218

Term: 7/1/15-6/30/18

**Ashutosh Mangalam, Ph.D.**

University of Iowa  
Iowa City, Iowa

Award: Research Grants

**“Therapeutic potential of combination therapy using Human Gut-derived commensal bacteria and conventional MS drugs”** Testing the beneficial effects of gut bacteria in MS models.

Category: Immunology

Strategic Area: Stop

Funding: \$563,531

Term: 4/1/15-3/31/18

**Lior Mayo, Ph.D.**

Tel Aviv University  
Tel Aviv, Israel

Award: Career Transition Fellowships

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

Category: Immunology

Strategic Area: Stop

Funding: \$589,849

Term: 7/1/16-4/1/21

**Booki Min, D.V.M., Ph.D.**

Cleveland Clinic Foundation  
Cleveland, Ohio

Award: Research Grants

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

Category: Immunology

Strategic Area: Stop

Funding: \$610,718

Term: 10/1/15-9/30/18

**Barbara Osborne, Ph.D.**  
University of Massachusetts Amherst  
Amherst, Massachusetts  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$462,000  
Term: 10/1/14-9/30/17

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

**David Pleasure, M.D.**  
University of California, Davis  
W. Sacramento, California  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$519,547  
Term: 10/1/14-9/30/17

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

**Francisco Quintana, Ph.D.**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Harry Weaver Neuroscience Scholar Award

Category: Immunology  
Strategic Area: Stop  
Funding: \$766,186  
Term: 7/1/14-6/30/19

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

**Francisco Quintana, Ph.D.**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$624,082  
Term: 10/1/16-9/30/19

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

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

Category: Immunology  
Strategic Area: Stop  
Funding: \$619,270  
Term: 4/1/14-3/31/17

**“IL-9 in the pathogenesis of CNS autoimmune inflammation”** Will targeting a specific immune molecule be a promising path for stopping MS immune attacks?

**John Russell, Ph.D.**  
Washington University School of Medicine  
St. Louis, Missouri  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$657,878  
Term: 10/1/13-3/31/17

**“Regulation of CNS lesion localization by T cell/APC interactions”** What determines the location of lesions in MS?

**David Sabatini, M.D., Ph.D.**

Whitehead Institute for Biomedical Research  
Cambridge, Massachusetts  
Award: Pilot Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 4/1/16-3/31/17

**“Uncovering the mechanism of dimethyl fumarate and the molecular pathways of autoimmunity using CRISPR-based functional genomics”** Exploring the mechanism of action of one therapy approved to treat people with MS.

**Joseph Sabatino, M.D., Ph.D.**

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

Category: Immunology  
Strategic Area: Stop  
Funding: \$213,981  
Term: 7/1/16-6/30/19

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

**Naresha Saligrama, Ph.D.**

Stanford University  
Stanford, California  
Award: Postdoctoral Fellowships

Category: Immunology  
Strategic Area: Stop  
Funding: \$163,103  
Term: 7/1/14-6/30/17

**“Immunophenotypic Analysis, Determination of Clonal Diversity, and Specificity of T cell Repertoire in MS and EAE”** Determining which type of immune cells tend to make MS worse.

**Frank Schildberg, Ph.D.**

Harvard Medical School  
Boston, Massachusetts  
Award: Postdoctoral Fellowships

Category: Immunology  
Strategic Area: Stop  
Funding: \$178,391  
Term: 7/1/15-6/30/18

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

**David Scott, Ph.D.**

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

Category: Immunology  
Strategic Area: Stop  
Funding: \$163,909  
Term: 4/1/16-3/31/17

**“Generation and function of engineered CNS-specific human and murine T regulatory cells”** Investigators at Uniformed Services University of Health Sciences in Bethesda are engineering novel cells and molecules aimed at stopping MS immune attacks and progression.

**Bridget Shafit-Zagardo, Ph.D.**

Albert Einstein College of Medicine  
Bronx, New York  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$683,959  
Term: 4/1/15-3/31/18

**“Functional Consequences of Altered AKT3 Signaling”** Researchers at the Albert Einstein College of Medicine are examining the role of a molecule called AKT3, which may be capable of protecting against MS immune attacks.

**Mari Shinohara, Ph.D.**  
Duke University Medical Center  
Charlotte, North Carolina  
Award: Research Grants  
**“Study on innate immune inflammation that enhances EAE”** Understanding differences in response to MS treatment by looking at MS models.

Category: Immunology  
Strategic Area: Stop  
Funding: \$660,554  
Term: 10/1/14-9/30/17

**Mari Shinohara, Ph.D.**  
Duke University Medical Center  
Charlotte, North Carolina  
Award: Pilot Research Grants  
**“Unexpected role of a C-type lectin receptor to protect animals from EAE”** Exploring an immune system molecule that protects mice from developing MS-like disease, for clues to stopping the attack in MS.

Category: Immunology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 4/1/16-3/31/17

**Lawrence Steinman, M.D.**  
Stanford University  
Stanford, California  
Award: Research Grants  
**“Recombinant Crystallins for Treatment of Multiple Sclerosis-Tip of an Iceberg of Guardian Amyloids Including Crystallins, Prion, Tau, Amyloid Beta and Others”** Developing a new class of therapeutics for possible application in MS.

Category: Immunology  
Strategic Area: Stop  
Funding: \$445,000  
Term: 4/1/14-3/31/17

*Funded by a gift from an Anonymous Donor in honor of JoAnn LeMaistre, PhD*

**Olaf Stuve, M.D., Ph.D.**  
University of Texas Southwestern Medical Center  
Dallas, Texas  
Award: Pilot Research Grants  
**“Determining the role of PDCB in CNS autoimmunity”** Investigating the role of a possible environmental trigger in worsening MS.

Category: Immunology  
Strategic Area: Stop  
Funding: \$44,000  
Term: 10/1/15-9/30/17

**Stephanie Tankou, M.D., Ph.D.**  
Brigham and Women's Hospital  
Boston, Massachusetts  
Award: NMSS-AAN Clinician Scientist Award  
**“Investigation of the role of elevated archaea species in the microbiome of patients with MS.”** Researchers at The Brigham and Women's Hospital are studying the relationship between a specific type of gut microbe and immune function and disease severity in people with MS.

Category: Immunology  
Strategic Area: Stop  
Funding: \$191,042  
Term: 7/1/15-6/30/18

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

**Anette van Boxel-Dezaire, M.Sc., Ph.D.**  
Cleveland Clinic Foundation  
Cleveland, Ohio  
Award: Research Grants  
**“The gut-brain axis and blood-brain barrier damage in patients with multiple sclerosis”** Exploring how the brain and gut barriers are disrupted in MS.

Category: Immunology  
Strategic Area: Stop  
Funding: \$440,000  
Term: 10/1/14-9/30/17

**Luc Van Kaer, Ph.D.**

Vanderbilt University Medical Center  
Nashville, Tennessee  
Award: Research Grants

Category: Immunology  
Strategic Area: Stop  
Funding: \$665,000  
Term: 4/1/15-3/31/18

**“Promoting regulatory interactions between iNKT cells, MDSCs and Tregs as a therapeutic approach for MS”** Researchers at Vanderbilt University in Nashville are seeking ways to regulate the immune system to retain its helpful functions and turn off its harmful functions to develop a novel way of treating MS with fewer side effects.

**Howard Weiner, M.D.**

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

Category: Immunology  
Strategic Area: Stop  
Funding: \$528,624  
Term: 4/1/16-3/31/19

**“Investigation of Pathogenic Gene Signature of Human TH17 cells in Multiple Sclerosis”**

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

**Lin Wu, Ph.D.**

New York University School of Medicine  
New York, New York  
Award: Postdoctoral Fellowships

Category: Immunology  
Strategic Area: Stop  
Funding: \$169,946  
Term: 7/1/14-6/30/17

**“Characterization of protein dynamics and function in Th17 cell differentiation”** Investigating how immune cells control disease for clues to developing new therapies for MS.

**Scott Zamvil, M.D., Ph.D.**

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

Category: Immunology  
Strategic Area: Stop  
Funding: \$545,065  
Term: 10/1/14-9/30/17

**“Characterization of novel MOG T cell epitopes shared in EAE and MS”** Studying how harmful immune cells involved in MS attacks recognize proteins in nerve-insulating myelin.

**Scott Zamvil, M.D., Ph.D.**

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

Category: Immunology  
Strategic Area: Stop  
Funding: \$633,840  
Term: 4/1/15-3/31/18

**“Nrf2-dependent and –independent immune modulation by dimethyl fumarate in CNS autoimmunity”** University of California, San Francisco researchers are investigating how an approved MS therapy called Tecfidera works to dampen the harmful effects of the immune system.

**Ai-Hong Zhang, Ph.D.**

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

Category: Immunology  
Strategic Area: Stop  
Funding: 44000PENDING  
Term: 11/1/16-10/31/17

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

## **Neuropharmacology - Studying how potential therapies impact the nervous system**

**Francesca Fallarino, Ph.D.**

University of Perugia

Perugia, Italy

Award: Pilot Research Grants

Category: Neuropharmacology

Strategic Area: Stop

Funding: \$40,000

Term: 9/1/16-8/31/17

**“Targeting cellular prion protein in multiple sclerosis”** Investigating a novel target for stopping the immune attack in MS.

**Fang Liu, M.D., Ph.D.**

Centre for Addiction and Mental Health

Toronto, Canada

Award: Research Grants

Category: Neuropharmacology

Strategic Area: Stop

Funding: \$450,000

Term: 10/1/12-3/31/17

**“Development of novel therapeutics for the treatment of Multiple Sclerosis”** Studying whether an experimental therapy can limit damage to nerve cells as a first step to develop a new treatment for MS.

## **Neurophysiology - Exploring how nerve fibers and cells work normally and in the disease state**

**Alexandr Klistorner, Ph.D.**

Macquarie University

North Ryde, Australia

Award: Research Grants

Category: Neurophysiology

Strategic Area: Stop

Funding: \$1,124,000

Term: 7/1/14-10/1/18

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

**Maarten Kole, M.Sc., Ph.D.**

Netherlands Institute for Neuroscience

Amsterdam, Netherlands

Award: Research Grants

Category: Neurophysiology

Strategic Area: Stop

Funding: \$449,340

Term: 10/1/16-9/30/20

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

**Amy Lovett-Racke, Ph.D.**

Ohio State University

Columbus, Ohio

Award: Research Grants

Category: Neurophysiology

Strategic Area: Stop

Funding: \$273,122

Term: 4/1/16-3/31/19

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

## RESTORING FUNCTION

### **Human Therapy Trials/Management of MS - Investigations into treatments for all forms of MS, and training physicians in MS clinical research and trials**

**Dennis Bourdette, M.D.**

Oregon Health & Science University

Portland, Oregon

Award: Collaborative Research Center Awards

Category: Human Therapy Trials/Management of MS

Strategic Area: Restore

Funding: \$825,000

Term: 4/1/15-3/31/20

#### **“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.

**Leigh Charvet, Ph.D.**

New York University School of Medicine

New York, New York

Award: Pilot Research Grants

Category: Human Therapy Trials/Management of MS

Strategic Area: Restore

Funding: \$43,486

Term: 10/1/15-9/30/17

**“A pilot study of remotely-supervised transcranial direct current stimulation (tDCS) in adults with multiple sclerosis (MS)”** Testing an at-home method of delivering mild electrical stimulation to improve MS symptoms.

**K. Bo Foreman, P.T., Ph.D.**

University of Utah

Salt Lake City, Utah

Award: Pilot Research Grants

Category: Human Therapy Trials/Management of MS

Strategic Area: Restore

Funding: \$43,910

Term: 9/1/16-8/31/17

#### **“Compensatory Step Training in Persons with MS: Characterizing Postural Motor Learning”**

Studying the effectiveness of balance training to improve the ability of people with MS to prevent themselves from falling.

**Ilana Katz Sand, M.D., Ph.D.**

Icahn School of Medicine at Mount Sinai

New York, New York

Award: Research Grants

Category: Human Therapy Trials/Management of MS

Strategic Area: Restore

Funding: \$161,975

Term: 10/1/16-9/30/18

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

**Scott Newsome, D.O.**

Johns Hopkins University

Baltimore, Maryland

Award: Research Grants

Category: Human Therapy Trials/Management of MS

Strategic Area: Restore

Funding: \$266,907

Term: 4/1/15-3/31/17

**“A Phase 1b, open-label study to evaluate the safety and tolerability of the putative remyelinating agent, liothyronine, in individuals with MS”** Johns Hopkins University researchers are performing a pilot clinical trial of people with MS to test a new therapy called liothyronine for its potential to improve repair of nerve-insulating myelin and protect nerve fibers.



**Lynne Shinto, N.D., M.P.H.**  
Oregon Health & Science University  
Portland, Oregon  
Award: Pilot Research Grants

Category: Human Therapy Trials/Management of MS  
Strategic Area: Restore  
Funding: \$44,000  
Term: 4/1/14-TBD

**“Lipoic Acid and Omega-3 Fatty Acids for Cognitive Impairment in Multiple Sclerosis”** Determining whether oral dietary supplements can help address cognitive problems.

**University of Miami,**  
University of Miami  
Miami, Florida  
Award: Fast Forward Commercial/Drug Development

Category: Human Therapy Trials/Management of MS  
Strategic Area: Restore  
Funding: \$564,750  
Term: 9/28/12-TBD

**“A Randomized Double-Blind Placebo-Controlled Trial of Axona for Cognitive Impairment in Patients with Multiple Sclerosis”** A study to examine the safety, tolerability, and efficacy of Axona, a medical food, for the treatment of cognitive dysfunction in MS.

**Terry Wahls, M.D.**  
University of Iowa  
Iowa City, Iowa  
Award: Research Grants

Category: Human Therapy Trials/Management of MS  
Strategic Area: Restore  
Funding: \$1,098,981  
Term: 7/1/16-6/30/20

**“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.

## **Psychosocial Aspects of MS - Understanding how MS effects cognitive functioning and other aspects of quality of life and wellness**

**Kevin Alschuler, Ph.D.**  
University of Washington  
Seattle, Washington  
Award: Research Grants

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$794,769  
Term: 4/1/14-3/31/18

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

**Ellen Bassuk, M.D.**  
Center for Social Innovation  
Newton Centre, Massachusetts  
Award: Health Care Delivery and Policy Research Contracts

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$297,016  
Term: 7/1/09-12/31/16

**“Qualitative research in care giver abuse”** Developing instruments for people with MS and their caregivers that will detect abuse by caregivers with the aim of better detecting and preventing this problem in people with MS.

**Tiffany Braley, M.D.**  
University of Michigan  
Ann Arbor, Michigan  
Award: Research Grants

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$827,967  
Term: 4/1/15-3/31/19

**“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.

- Stefan Gold, Ph.D.**  
Charité - Universitätsmedizin Berlin  
Berlin, Germany  
Award: Pilot Research Grants  
**“Neural substrates of social cognition deficits in MS”** Exploring how MS affects brain circuits that are important for the processing of emotional and social information.
- Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$40,000  
Term: 10/1/15-TBD
- Lana Harder, Ph.D.**  
University of Texas Southwestern Medical Center  
Dallas, Texas  
Award: Pilot Research Grants  
**“Examining the Feasibility, Validity, & Patient Satisfaction of Pediatric Teleneuropsychological Assessment vs. Traditional Face-to-Face Assessment in Pediatric Multiple Sclerosis”** Using an online system to ensure neuropsychological care of children and teens with MS.
- Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$39,444  
Term: 4/1/16-3/31/17
- Lauren Krupp, M.D.**  
New York University Langone Medical Center  
New York, New York  
Award: Research Grants  
**“The neurodevelopmental influence of pediatric versus adult onset MS on cognition”** Researchers at New York University are studying how MS affects cognitive abilities in children and adolescents, to help guide interventions.
- Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$1,046,676  
Term: 4/1/16-3/31/20
- Eun-Jeong Lee, Ph.D.**  
Illinois Institute of Technology  
Chicago, Illinois  
Award: Pilot Research Grants  
**“Microaggressions experienced by people with MS in the workplace: an exploratory study”** Examining the impact of a possible source of workplace discrimination for clues to improving employment among people with MS.
- Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$42,316  
Term: 9/1/16-8/31/17
- Ivan Molton, Ph.D.**  
University of Washington  
Seattle, Washington  
Award: Pilot Research Grants  
**“Psychological intervention to improve coping with uncertainty in persons recently diagnosed with MS”** Exploring whether a specific type of counseling can help people newly diagnosed with MS to cope with the unpredictable nature of the disease.
- Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$43,998  
Term: 4/1/16-3/31/17
- Kevin Patel, M.D.**  
Massachusetts General Hospital  
Boston, Massachusetts  
Award: NMSS-AAN Clinician Scientist Award  
**“Functional connectivity changes underlying cognitive decline in early multiple sclerosis - evidence of compensatory function or sequelae of structural compromise?”** Researchers at Massachusetts General Hospital are using imaging to understand the relationship between cognitive problems in people with MS and differences in connections between various parts of the brain.  
*Funded in part by a gift from a generous donor*
- Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$184,890  
Term: 7/1/15-6/30/18

**Lauren Strober, Ph.D.**

Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Pilot Research Grants

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$44,000  
Term: 9/1/16-8/31/17

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

**Aaron Turner, Ph.D.**

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

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$382,459  
Term: 7/1/13-6/30/18

**“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.

**Wendy Vargas, M.D.**

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

Category: Psychosocial Aspects of MS  
Strategic Area: Restore  
Funding: \$44,000  
Term: 4/1/15-3/31/17

**“Educational Outcomes of Cognitive Dysfunction in Pediatric Multiple Sclerosis”** Studying academic performance in children with MS for clues to early intervention to address cognitive problems.

**Rehabilitation/Wellness - Seeking ways to maximize physical and mental abilities and reduce symptoms and increase wellbeing**

**Peter Altenburger, P.T., Ph.D.**

Indiana University  
Indianapolis, Indiana  
Award: Pilot Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$33,000  
Term: 9/1/16-8/31/17

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

**Alexander Aruin, D.Sc., Ph.D.**

University of Illinois at Chicago  
Chicago, Illinois  
Award: Pilot Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,900  
Term: 4/1/16-3/31/17

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

**Alexander Aruin, D.Sc., Ph.D.**

University of Illinois at Chicago  
Chicago, Illinois  
Award: Mentor-Based Postdoctoral Fellowships

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$405,990  
Term: 7/1/12-6/30/17

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

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

**Deborah Backus, P.T., Ph.D.**

Shepherd Center  
Atlanta, Georgia  
Award: Pilot Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,579  
Term: 4/1/15-3/31/17

**“Pilot study evaluating the impact of functional electrical stimulation cycling on fatigue in people with moderate to severe MS”** A trial testing whether FES cycling improves fatigue in people with fatigue who depend on wheelchairs for mobility.

**Michael Basso, Ph.D.**

University of Tulsa  
Tulsa, Oklahoma  
Award: Pilot Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$39,873  
Term: 2/1/12-9/30/17

**“A manualized cognitive rehabilitation program for Multiple Sclerosis”** Testing the ability of a rehabilitation program to improve cognitive function in people with MS.

**Charles Bombardier, Ph.D.**

University of Washington  
Seattle, Washington  
Award: Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$1,466,730  
Term: 10/1/13-9/30/18

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

**Shuo-Hsiu Chang, P.T., Ph.D.**

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

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$44,000  
Term: 4/1/15-3/31/17

**“Wearable lower extremity exoskeleton to promote walking in persons with multiple sclerosis”** Studying the effectiveness of a wearable exoskeleton to improve walking in people with MS.

**Leigh Charvet, Ph.D.**

New York University Langone Medical Center  
New York, New York  
Award: Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$210,208  
Term: 4/1/13-3/31/17

**“Plasticity-based, adaptive, computerized cognitive remediation treatment (PACR) for adults with Multiple Sclerosis (MS)”** Evaluating a web-based program to help improve memory and learning in people with MS.

**Nancy Chiaravalloti, Ph.D.**

Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$748,576  
Term: 4/1/14-3/31/18

**“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?

**John DeLuca, Ph.D.**

Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Collaborative Research Center Awards

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$821,585  
Term: 4/1/14-3/31/19

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

**John DeLuca, Ph.D.**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Mentor-Based Postdoctoral Fellowships  
**“MS Fellowship in Neuropsychological Rehabilitation”** Training postdoctoral fellows for success in careers dedicated to research in cognitive rehabilitation to improve the lives of people with MS.

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$382,865  
Term: 7/1/12-6/30/17

**John DeLuca, Ph.D.**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Pilot Research Grants  
**“Testing the Effects of Methylphenidate on Cognitive Fatigue in MS: a Double-Blind, Placebo-Controlled, Randomized Clinical Trial”** Testing the Effects of Methylphenidate on Cognitive Fatigue in MS: a Double-Blind, Placebo-Controlled, Randomized Clinical Trial

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,947  
Term: 9/1/14-8/31/17

**Nandini Deshpande, M.Sc., P.T., Ph.D.**  
Queen's University  
Kinston, Canada  
Award: Pilot Research Grants  
**“Adaptive locomotor performance in the early stages of multiple sclerosis: a pilot study”** Adaptive locomotor performance in the early stages of multiple sclerosis: a pilot study

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$40,000  
Term: 4/1/15-3/31/17

**Ekaterina Dobryakova, Ph.D.**  
Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Research Grants  
**“The Effect of Feedback Presentation on the Fronto-Striatal Network Activity and Fatigue in Individuals with MS.”** Researchers at the Kessler Foundation are investigating whether a rehabilitation technique known as “feedback presentation” can relieve fatigue experienced by people with MS.

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$407,888  
Term: 10/1/15-9/30/18

**Geetanjali Dutta, P.T., Ph.D.**  
Oregon Health & Science University  
Portland, Oregon  
Award: Postdoctoral Fellowships  
**“Effect of balance training on postural responses in people with multiple sclerosis”** What type of balance training can improve stability in people with MS?

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$163,103  
Term: 7/1/14-6/30/17

**Bo Fernhall, Ph.D.**  
University of Illinois at Chicago  
Chicago, Illinois  
Award: Research Grants  
**“Exercise, Subclinical Atherosclerosis and Walking Mobility in Multiple Sclerosis”** Evaluating a home-based exercise program with the potential to improve mobility and cardiovascular health in people with MS.  
*Paid in part by special funds provided by the Illinois Lottery*

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$685,183  
Term: 10/1/12-TBD

**Marcia Finlayson, Ph.D.**

Queen's University  
Kinston, Canada

Award: Mentor-Based Postdoctoral Fellowships

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

Category: Rehabilitation/Wellness

Strategic Area: Restore

Funding: \$382,724

Term: 7/1/14-6/30/19

**Helen Genova, Ph.D.**

Kessler Foundation Research Center  
West Orange, New Jersey

Award: Research Grants

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

Category: Rehabilitation/Wellness

Strategic Area: Restore

Funding: \$479,784

Term: 4/1/16-3/31/19

**Bonnie Glanz, Ph.D.**

Brigham and Women's Hospital  
Boston, Massachusetts

Award: Pilot Research Grants

**“A Phase I Randomized Controlled Trial to Improve Speed of Information Processing in Patients with Multiple Sclerosis”** A trial testing a method of computerized cognitive rehabilitation in MS.

Category: Rehabilitation/Wellness

Strategic Area: Restore

Funding: \$44,000

Term: 4/1/15-3/31/17

**Stefan Gold, Ph.D.**

Charité - Universitätsmedizin Berlin  
Berlin, Germany

Award: Research Grants

**“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.

Category: Rehabilitation/Wellness

Strategic Area: Restore

Funding: \$1,397,712

Term: 4/1/16-3/31/20

**Jeffrey Hausdorff, Ph.D.**

Tel Aviv Sourasky Medical Center  
Tel Aviv, Israel

Award: Research Grants

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

Category: Rehabilitation/Wellness

Strategic Area: Restore

Funding: \$938,522

Term: 4/1/16-3/31/20

**Jeffrey Hebert, P.T., Ph.D.**

University of Colorado Denver  
Denver, Colorado

Award: Pilot Research Grants

**“Falls, balance and utility of head-shake computerized dynamic posturography in persons with MS”** Determining whether a computerized test is able to predict falls in persons with MS.

Category: Rehabilitation/Wellness

Strategic Area: Restore

Funding: \$44,000

Term: 10/1/15-TBD

- Jeffrey Hebert, P.T., Ph.D.**  
University of Colorado Denver  
Denver, Colorado  
Award: Research Grants  
Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$536,295  
Term: 10/1/12-TBD  
**“Vestibular rehabilitation for persons with multiple sclerosis: who benefits the most?”** The potential of balance and eye movement training for improving mobility in people with MS.
- Christoph Heesen, M.D.**  
University Medical Center Hamburg-Eppendorf  
Hamburg, Germany  
Award: Mentor-Based Postdoctoral Fellowships  
Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$396,392  
Term: 7/1/13-6/30/18  
**“Development and validation of behavioural interventions to enhance self-management in MS”**  
Training in research aimed at developing ways to help people with MS enhance their knowledge and ability for managing their disease.
- Fay Horak, Ph.D., P.T**  
Oregon Health & Science University  
Portland, Oregon  
Award: Mentor-Based Postdoctoral Fellowships  
Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$432,457  
Term: 7/1/14-6/30/19  
**“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.
- Jessie Huisinga, Ph.D.**  
University of Kansas Medical Center - Kansas City  
Kansas City, Kansas  
Award: Research Grants  
Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$458,959  
Term: 4/1/14-3/31/17  
**“Identification of gait and balance deficits in patients with multiple sclerosis using wireless sensors”**  
Testing new methods to rapidly assess walking and balance problems in people with MS.
- Mark Jensen, Ph.D.**  
University of Washington  
Seattle, Washington  
Award: Research Grants  
Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$180,866  
Term: 10/1/14-TBD  
**“Enhancing the Benefits of Pain and Fatigue Treatment in MS”** Researchers at the University of Washington are investigating ways to reduce pain and fatigue in people with MS using mindfulness meditation and biofeedback to improve self-hypnosis.
- Herbert Karpatkin, D.Sc., P.T.**  
Hunter College  
New York, New York  
Award: Pilot Research Grants  
Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,991  
Term: 9/1/16-8/31/17  
**“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.
- Jane Kent, Ph.D.**  
University of Massachusetts Amherst  
Amherst, Massachusetts  
Award: Pilot Research Grants  
Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,421  
Term: 4/1/15-3/31/17  
**“Foot Tap Speed: A Biomarker for Mobility in MS?”** Evaluating the usefulness of foot tap speed as a way of predicting changes in mobility in people with MS.

- Albert Lo, M.D., Ph.D.** Category: Rehabilitation/Wellness  
 Mount Sinai Rehabilitation Hospital Strategic Area: Restore  
 Hartford, Connecticut Funding: \$22,788  
 Award: Pilot Research Grants Term: 4/1/14-3/31/17  
**“Backwards Walking for Early Detection of Gait Disability and for Rehabilitation”** Testing whether backward walking can improve gait problems and the detection of these problems in people with MS.
- Citlali Lopez-Ortiz, Ph.D.** Category: Rehabilitation/Wellness  
 University of Illinois at Urbana-Champaign Strategic Area: Restore  
 Champaign, Illinois Funding: \$42,849  
 Award: Pilot Research Grants Term: 4/1/15-3/31/17  
**“Targeted dance program for improved mobility in multiple sclerosis”** Testing a dance program for improving MS symptoms.
- Robert Motl, Ph.D.** Category: Rehabilitation/Wellness  
 University of Alabama at Birmingham Strategic Area: Restore  
 Birmingham, Alabama Funding: TBD  
 Award: Research Grants Term: 10/1/14-9/30/18  
**“Project BIPAMS: Behavioral Intervention for increasing Physical Activity in MS”** Researchers are testing an internet-based behavioral intervention with people with MS to increase their physical activity and alleviate symptoms.
- Robert Motl, Ph.D.** Category: Rehabilitation/Wellness  
 University of Alabama at Birmingham (Transfer Pending) Strategic Area: Restore  
 Birmingham, Alabama Funding: \$235,424  
 Award: Mentor-Based Postdoctoral Fellowships Term: 7/1/14-6/30/19  
**“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
- Lara Pilutti, Ph.D.** Category: Rehabilitation/Wellness  
 University of Ottawa Strategic Area: Restore  
 Ottawa, Canada Funding: \$351,620  
 Award: Research Grants Term: TBD-TBD  
**“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.
- Matthew Plow, Ph.D.** Category: Rehabilitation/Wellness  
 Case Western Reserve University Strategic Area: Restore  
 Cleveland, Ohio Funding: \$287,941  
 Award: Research Grants Term: 2/1/14-TBD  
**“Evaluating the effects of physical activity and fatigue management strategies”** Developing methods for teleconferencing based support to help people with MS manage fatigue and improve physical activity.  
*Funded by a gift from the National MS Society South Central Region*



**Prudence Plummer, P.T., Ph.D.**

University of North Carolina at Chapel Hill  
Atlanta, Georgia  
Award: Pilot Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,805  
Term: 10/1/15-9/30/17

**“Combining dalfampridine and physical therapy for gait rehabilitation in multiple sclerosis”** A clinical trial of Ampyra combined with physical therapy for improving walking and cognition in MS.

**Ruchika Prakash, Ph.D.**

Ohio State University  
Columbus, Ohio  
Award: Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$631,261  
Term: 10/1/16-9/30/19

**“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.

**Manning Sabatier, Ph.D.**

Emory University  
Atlanta, Georgia  
Award: Pilot Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,980  
Term: 9/1/14-TBD

**“The effect of downslope walking on spinal excitability in people with multiple sclerosis”**

Determining if slope walking exercise affects spinal function in a way that has the potential to improve spasticity and quality of life in people with MS.

**Maria Schultheis, Ph.D.**

Drexel University  
Philadelphia, Pennsylvania  
Award: Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$572,652  
Term: 4/1/15-3/31/18

**“Multitasking and MS: A cognitively-based approach to vocational rehabilitation”** Drexel University researchers are studying multitasking in people with MS to find solutions for cognitive problems that affect employment.

**Emerson Sebastião, M.Sc., Ph.D.**

University of Illinois at Urbana-Champaign  
Champaign, Illinois  
Award: Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: Pending  
Term: 10/1/14-9/30/18

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

*Paid by special funds provided by the Illinois Lottery*

**Emerson Sebastião, M.Sc., Ph.D.**

University of Illinois at Urbana-Champaign  
Champaign, Illinois  
Award: Pilot Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,230  
Term: 10/1/15-3/31/17

**“Functional Electrical Stimulation Cycling in Severe Multiple Sclerosis”** Testing a cycling program for reducing vascular conditions that affect people with MS.

**Janet Shucard, Ph.D.**

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

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$44,000  
Term: 6/1/14-TBD

**“Does working memory training improve brain function and cognition in MS?”** Testing a training program for improving cognitive function in MS.

**Jacob Sosnoff, Ph.D.**

University of Illinois at Urbana-Champaign  
Champaign, Illinois  
Award: Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$627,770  
Term: 10/1/14-9/30/17

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

*Paid by special funds provided by the Illinois Lottery*

**James Sumowski, Ph.D.**

Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Pilot Research Grants

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$43,999  
Term: 11/1/16-10/31/17

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

**E. Yeh, M.D.**

The Hospital for Sick Children  
Toronto, Canada  
Award: Mentor-Based Postdoctoral Fellowships

Category: Rehabilitation/Wellness  
Strategic Area: Restore  
Funding: \$352,950  
Term: 7/1/15-6/30/20

**“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.

**Health Care Delivery/ Policy - Studying how people with MS utilize health-care services and how health-care delivery can be improved**

**Joe Gasper, Ph.D.**

Westat  
Rockville, Maryland  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Funding: \$989,434  
Term: 10/1/15-9/30/18

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

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

**Robert Motl, Ph.D.**

University of Alabama at Birmingham  
Champaign, Illinois  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Funding: \$403,312  
Term: 7/1/15-9/30/18

**“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.

**Theresa Shireman, Ph.D.**

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

Category: Health Care Delivery/ Policy  
Strategic Area: Restore  
Funding: \$560,862  
Term: 10/1/14-9/30/17

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

**Measuring MS Disease Activity - Using sophisticated tools to track MS activity over time**

**Charles Guttman, M.D.**

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

Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Funding: \$651,000  
Term: 10/1/15-9/30/18

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

**Thanh Nguyen, Ph.D.**

Weill Cornell Medical College  
New York, New York  
Award: Research Grants

Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Funding: \$897,375  
Term: 10/1/16-9/30/20

**“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.

**Lauren Strober, Ph.D.**

Kessler Foundation Research Center  
West Orange, New Jersey  
Award: Health Care Delivery and Policy Research  
Contracts

Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Funding: \$513,495  
Term: 10/1/14-3/31/18

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

**Yanming Wang, Ph.D.**

Case Western Reserve University  
Cleveland, Ohio  
Award: Research Grants

Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Funding: \$641,605  
Term: 4/1/14-3/31/17

**“Myelin Imaging in Multiple Sclerosis”** Developing a technique to measure the success of treatments to restore myelin.

**Heather Wishart, Ph.D.**

Trustees of Dartmouth College  
Hanover, New Hampshire  
Award: Research Grants

Category: Measuring MS Disease Activity  
Strategic Area: Restore  
Funding: \$315,248  
Term: 7/1/12-9/30/17

**“Imaging the neural basis of pain in patients with MS”** Using advanced MRI analysis to determine how the brain regions associated with pain are affected by MS.

## **Preclinical Drug Development - Laboratory research to collect data needed before an experimental therapy can be tested in people**

### **Glialogix, Inc.,**

Glialogix, Inc.

Greenbrae, California

Award: Fast Forward/Commercial Drug Development

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$503,753

Term: 8/29/14-TBD

**“Preclinical and Formulation Work on a Sulfasalazine Compound”** Reformulation and efficacy studies of GLX1112 for neuroprotection to treat progressive forms of multiple sclerosis.

### **Kadimastem LTD.,**

Kadimastem LTD.

Nes-Ziona, Israel

Award: Fast Forward Commercial/Drug Development

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$174,400

Term: 9/25/15-TBD

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

### **Trevor Kilpatrick, M.B.B.S., Ph.D.**

Florey Institute of Neuroscience and Mental Health

Melbourne, Australia

Award: Pilot Research Grants

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$37,208

Term: 9/1/17-8/31/17

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

### **New York University School of Medicine,**

New York University School of Medicine

New York, New York

Award: Fast Forward Commercial/Drug Development

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$598,950

Term: 9/23/15-TBD

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

### **Barbara Slusher, Ph.D.**

The Johns Hopkins University

Baltimore, Maryland

Award: Research Grants

Category: Preclinical Drug Development

Strategic Area: Restore

Funding: \$654,166

Term: 4/1/16-3/31/19

**“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.

## **CNS Repair - Searching for ways to stop and reverse tissue damage in MS**

### **Sue Barnett, Ph.D.**

University of Glasgow

Glasgow, United Kingdom

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$126,533

Term: 9/30/15-5/31/17

**“Mesenchymal stem cells (MSCs) isolated from the olfactory mucosa as a source of cells for treatment of MS”** University of Glasgow, Scotland researchers are investigating if adult stem cells from the nose can dampen harmful aspects of the immune system and improve myelin repair in rodent models of myelin loss.

**Anne Simone Baron-Van Evercooren, Ph.D.**

INSERM - Institut National de la Santé et de la Recherche Médicale  
Paris, France

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$407,613

Term: 4/1/14-3/31/17

**“Molecular and cellular analysis of the PNS/CNS boundary”** Using myelin-making cells from outside the brain and spinal cord to repair MS lesions.

**Dennis Bourdette, M.D.**

Oregon Health & Science University  
Portland, Oregon

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$440,000

Term: 4/1/15-3/31/17

**“Promoting remyelination in animal models of multiple sclerosis with a selective thromimetic drug”** Researchers at Oregon Health & Science University in Portland are testing a drug called sobetirome that may promote myelin repair in animal models of myelin loss.

**Jeff Bulte, Ph.D.**

Johns Hopkins University  
Baltimore, Maryland

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$681,654

Term: 4/1/14-3/31/17

**“Immunomodulation and Remyelination by Transplanted Stem Cells and Progenitors: A Two-Prong Approach”** Can cell therapy reduce immune attacks and at the same time also stimulate the repair of nerve-insulating myelin in an MS model?

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

**Peter Calabresi, M.D.**

Johns Hopkins University  
Baltimore, Maryland

Award: Collaborative Research Center Awards

Category: CNS Repair

Strategic Area: Restore

Funding: \$825,000

Term: 7/1/12-6/30/17

**“Factors Regulating Oligodendroglioneogenesis and Myelination in Multiple Sclerosis and Animal Models”** Collaborators from different fields identifying factors that help to increase myelin-making cells, and using this knowledge to develop myelin repair strategies.

*2011 Stephen C. Reingold Research Award for most outstanding research proposal*

**Benjamin Deneen, Ph.D.**

Baylor College of Medicine  
Houston, Texas

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$610,418

Term: 9/30/15-9/30/18

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

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

**Laura Dickey, Ph.D.**

University of Utah  
Salt Lake City, Utah

Award: Postdoctoral Fellowships

Category: CNS Repair

Strategic Area: Restore

Funding: \$166,724

Term: 7/1/15-6/30/18

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

*The McCarthy Family Postdoctoral Fellow*

**Paula Dore-Duffy (RPAC), Ph.D.**

Wayne State University  
Detroit, Michigan

Award: Pilot Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$44,000

Term: 4/1/15-12/31/16

**“Human Fat Pericytes induce repair in the Cuprizone Model of chemically induced demyelination”**

Determining whether a novel type of adult stem cell can promote repair in MS models.

**Ian Duncan, D.V.M., Ph.D.**

University of Wisconsin-Madison  
Madison, Wisconsin

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$763,055

Term: 10/1/15-9/30/18

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

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

**Ben Emery, Ph.D.**

Oregon Health & Science University  
Portland, Oregon

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$502,237

Term: 4/1/15-3/31/18

**“A transcriptional approach to myelin repair”** Testing a strategy for increasing myelin repair in MS by manipulating a major gene in myelin formation.

**Stephen Fancy, D.V.M., Ph.D.**

University of California, San Francisco  
San Francisco, California

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$516,621

Term: 10/1/14-9/30/17

**“Remyelination failure in MS- Mediators and control mechanisms of Pathological Wnt activity.”**

Exploring why myelin is not well repaired in MS and targeting a protein as a strategy to promote myelin repair.

**Meredith Hartley, Ph.D.**

Oregon Health & Science University  
Portland, Oregon

Award: Postdoctoral Fellowships

Category: CNS Repair

Strategic Area: Restore

Funding: \$178,391

Term: 7/1/15-6/30/18

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

*Funded in part by the Dave Tomlinson Research Fund*

**Jeffrey Huang, Ph.D.**

Georgetown University  
Washington, District of Columbia

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$620,386

Term: 10/1/14-9/30/17

**“Role of retinoic acid synthesis in CNS remyelination”** Exploring the role of a molecule in myelin repair and its potential as a target for restoring function in people with MS.

- Jeffrey Huang, Ph.D.**  
Georgetown University  
Washington, District of Columbia  
Award: Pilot Research Grants
- Category: CNS Repair  
Strategic Area: Restore  
Funding: 44000PENDING  
Term: 11/1/16-10/31/17
- “Analysis of the creatine synthesis enzyme, guanidinoacetate-methyltransferase (GAMT) in CNS remyelination”** Understanding the importance of a natural protein to the function of myelin-making cells for clues to promoting myelin repair in MS
- Gareth John, D.V.M., Ph.D.**  
Icahn School of Medicine at Mount Sinai  
New York, New York  
Award: Research Grants
- Category: CNS Repair  
Strategic Area: Restore  
Funding: \$103,125  
Term: 10/1/14-9/30/17
- “Kruppel-like factor-6 signaling in myelin formation and repair.”** Exploring the importance of a protein called Klf6 in the repair of nerve-insulating myelin in MS.
- Jeffery Kocsis, Ph.D.**  
Yale University  
New Haven, Connecticut  
Award: Research Grants
- Category: CNS Repair  
Strategic Area: Restore  
Funding: \$614,593  
Term: 7/1/12-6/30/17
- “Transplantation of OPCs into the demyelinated spinal cord”** Evaluating the transplantation of myelin-producing cells to repair damaged myelin in an animal model, for clues to the possible safety and benefit in people with MS.
- Netta Levin, M.D., Ph.D.**  
Medical Research Fund of Hadassah Medical Organization  
Jerusalem, Israel  
Award: Research Grants
- Category: CNS Repair  
Strategic Area: Restore  
Funding: \$362,150  
Term: 4/1/14-3/31/17
- “Temporal reorganization to overcome monocular demyelination – unique plasticity mechanism in MS”** Understanding how the brain compensates for damage to restore visual function in people with MS.
- Glenn Matsushima, Ph.D.**  
University of North Carolina at Chapel Hill  
Atlanta, Georgia  
Award: Research Grants
- Category: CNS Repair  
Strategic Area: Restore  
Funding: \$587,310  
Term: 10/1/13-9/30/17
- “Targeting Repair of Demyelinating Lesions”** Searching for therapies to prevent progressive disability in MS.  
*2013 Stephen C. Reingold Research Award for most outstanding research proposal*
- Brahim Nait-Oumesmar, Ph.D.**  
INSERM - Institut National de la Santé et de la Recherche Médicale  
Paris, France  
Award: Pilot Research Grants
- Category: CNS Repair  
Strategic Area: Restore  
Funding: \$40,000  
Term: 7/1/16-6/30/17
- “Generation of a new pre-clinical model for bioluminescence imaging of remyelination”** Developing a novel mouse model for evaluating myelin repair strategies in MS.

**Brian Popko, Ph.D.**

University of Chicago  
Chicago, Illinois

Award: Pilot Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$41,676

Term: 9/1/17-8/31/17

**“Exploring the role that reversible RNA methylation plays in regulating oligodendrocyte function”**

Using advanced genetic tools to understand how myelin-making cells develop and are affected in MS, for clues to repair strategies.

**James Salzer, M.D., Ph.D.**

New York University School of Medicine  
New York, New York

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$610,536

Term: 10/1/16-9/30/19

**“Role of Adult Neural Stem Cells in Remyelination”** Researchers at New York University are exploring how to stimulate the brain’s own stem cells to promote the repair of nerve-insulating myelin.

**Fu-Dong Shi, M.D., Ph.D.**

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

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$438,900

Term: 4/1/16-3/31/19

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

**Fraser Sim, Ph.D.**

State University of New York at Buffalo  
Buffalo, New York

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$554,974

Term: 10/1/13-9/30/17

**“Muscarinic receptor regulation of oligodendrocyte differentiation”** Can an FDA-approved therapy promote the repair of nerve-insulating myelin?

**Haley Titus, Ph.D.**

Northwestern University Feinberg School of Medicine  
Evanston, Illinois

Award: Postdoctoral Fellowships

Category: CNS Repair

Strategic Area: Restore

Funding: \$161,218

Term: 7/1/15-6/30/18

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

*Paid by special funds provided by the Illinois Lottery*

**Marius Wernig, Ph.D.**

Stanford University  
Stanford, California

Award: Research Grants

Category: CNS Repair

Strategic Area: Restore

Funding: \$605,088

Term: 10/1/14-9/30/17

**“Generation of transplantable myelinating glia from human fibroblasts”** Can skin cells be used to produce cells that will repair damaged myelin in MS?

*Funded by The National Stem Cell Foundation and The Donald C. McGraw Foundation*



**Jessica Williams, Ph.D.**

Washington University School of Medicine  
St. Louis, Missouri

Award: Postdoctoral Fellowships

**“Mechanisms of CXCL12-mediated remyelination”** The role of a family of molecules called chemokines in brain repair.

Category: CNS Repair

Strategic Area: Restore

Funding: \$169,946

Term: 7/1/14-6/30/17

**Biology of Glia/Myelin - Investigating how myelin is formed and the role played by oligodendrocytes and other nervous system support cells in MS**

**Adan Aguirre, Ph.D.**

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

Award: Research Grants

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

Category: Biology of Glia/Myelin

Strategic Area: Restore

Funding: \$446,025

Term: 10/1/16-9/30/19

**Patrizia Casaccia, M.D., Ph.D.**

Icahn School of Medicine at Mount Sinai  
New York, New York

Award: Research Grants

**“Understanding the role of gene/environment interaction in oligodendrocytes”** Mount Sinai School of Medicine researchers are exploring how environmental factors can be harmful or protective to the cells that maintain myelin and are damaged in the course of MS.

Category: Biology of Glia/Myelin

Strategic Area: Restore

Funding: \$548,483

Term: 4/1/15-3/31/18

**Jonah Chan, Ph.D.**

University of California, San Francisco  
San Francisco, California

Award: Research Grants

**“A Functional High-throughput Screen for Remyelination: Muscarinic Receptors Regulate Oligodendrocyte Differentiation and Myelination”** Screening large numbers of molecules that may be useful for stimulating myelin repair in MS.

Category: Biology of Glia/Myelin

Strategic Area: Restore

Funding: \$594,652

Term: 10/1/14-9/30/17

**Kae-Jiun Chang, Ph.D.**

University of California, San Francisco  
San Francisco, California

Award: Postdoctoral Fellowships

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

Category: Biology of Glia/Myelin

Strategic Area: Restore

Funding: \$175,431

Term: 7/1/16-6/30/19

**M. Laura Feltri, M.D.**

State University of New York at Buffalo  
Buffalo, New York

Award: Research Grants

**“Characterization of a novel inhibitor of myelination: MAPK12/P38MAPKgamma.”** Does a natural inhibitor of nerve-insulating myelin have potential as a target for myelin repair in MS?

Category: Biology of Glia/Myelin

Strategic Area: Restore

Funding: \$596,537

Term: 10/1/14-9/30/17

**Valentina Fossati, Ph.D.**

The New York Stem Cell Foundation  
 New York, New York  
 Award: Pilot Research Grants

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$43,607  
 Term: 4/1/16-3/31/17

**“In vitro human myelination platform based on stem cell-derived oligodendrocyte progenitor cells”**

Using novel technology to generate human myelin-making cells in the laboratory, for clues to stimulating repair in MS.

**Meng-meng Fu, Ph.D.**

Stanford University  
 Stanford, California  
 Award: Postdoctoral Fellowships

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$166,724  
 Term: 7/1/15-6/30/18

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

**Babette Fuss, Ph.D.**

Virginia Commonwealth University  
 Richmond, Virginia  
 Award: Research Grants

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$196,705  
 Term: 10/1/16-9/30/19

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

**Vittorio Gallo, Ph.D.**

The Children's National Medical Center  
 Washington, District of Columbia  
 Award: Research Grants

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$672,838  
 Term: 4/1/13-3/31/17

**“Role of Sox17 in developmental myelination and remyelination”** Investigating a protein that helps regulate the activity of myelin forming cells and its role in nervous system repair.

**Vittorio Gallo, Ph.D.**

The Children's National Medical Center  
 Washington, District of Columbia  
 Award: Research Grants

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$538,351  
 Term: 10/1/16-9/30/19

**“Signaling mechanisms underlying Sox17-mediated oligodendrocyte generation and repair”**

Reseachers at Children’s National Medical Cente in Washington, DC, are investigating a molecule that influences the development of cells that make nerve-insulating myelin, for clues to promoting nervous system repair in MS.

**Stefanie Giera, Ph.D.**

Boston Children's Hospital  
 Boston, Massachusetts  
 Award: Postdoctoral Fellowships

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$178,391  
 Term: 7/1/15-6/30/18

**“Characterization of a novel G protein-coupled receptor in oligodendrocyte development”**

Researchers at Boston Children’s Hospital are investigating the importance of a specific molecule in the ability of myelin-making cells to mature and make nerve-insulating myelin, for clues to promoting myelin repair in MS.

*The Thorsten Eickenhorst Postdoctoral Fellowship*

**Judith Grinspan, Ph.D.**

Children's Hospital of Philadelphia  
Philadelphia, Pennsylvania  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$583,760  
Term: 4/1/16-3/31/19

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

**Jaime Grutzendler, M.D.**

Yale University  
New Haven, Connecticut  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$330,000  
Term: 10/1/16-9/30/19

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

**Jacob Hines, Ph.D.**

Winona State University  
Aurora, Minnesota  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$104,162  
Term: 8/1/14-6/30/17

**“Activity-dependent regulation of oligodendrocyte gene expression and myelination”** Studying signals that control the growth of nerve-insulating myelin, for clues to finding a way to repair myelin to restore function in MS.

**Hyun Kyoung Lee, Ph.D.**

Baylor College of Medicine  
Houston, Texas  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$476,812  
Term: 3/1/16-2/28/19

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

**Qing Lu, Ph.D.**

Children's Hospital Medical Center - Cincinnati  
Cincinnati, Ohio  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$750,051  
Term: 4/1/15-3/31/18

**“Histone deacetylase control of CNS myelination and remyelination”** Cincinnati Children's Hospital Medical Center researchers are focusing on how an enzyme controls myelin growth and repair, with a future possibility of stimulating this enzyme to repair myelin in people with MS.

**Qing Lu, Ph.D.**

Children's Hospital Medical Center - Cincinnati  
Cincinnati, Ohio  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$698,640  
Term: 4/1/16-3/31/19

**“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.

**Wendy Macklin, Ph.D.**

University of Colorado Denver  
 Denver, Colorado  
 Award: Research Grants

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$628,325  
 Term: 4/1/15-3/31/18

**“Developing zebrafish as a drug screen model”** University of Colorado researchers are investigating the usefulness of a type of fish called zebrafish to rapidly screen drugs that may someday be useful for stimulating repair of nerve-insulating myelin in people with MS.

**Wendy Macklin, Ph.D.**

University of Colorado Denver  
 Denver, Colorado  
 Award: Collaborative Research Center Awards

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$742,500  
 Term: 4/1/13-3/30/17

**“Mechanisms of glial injury in demyelinating disorders”** Exploring brain cell interactions to shed new light on how damage occurs in MS and how to reverse the process to restore function to people with MS.  
*Funded jointly by the Hackstock Family Foundation and the National MS Society Colorado-Wyoming Chapter*

**Kelly Monk, Ph.D.**

Washington University School of Medicine  
 St. Louis, Missouri  
 Award: Harry Weaver Neuroscience Scholar Award

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$521,023  
 Term: 7/1/16-6/30/21

**“Molecular mechanisms that govern oligodendrocyte biology”** compound to prevent or delay neurodegeneration in progressive MS.

**Sarah Moyon, Ph.D.**

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

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$175,431  
 Term: 7/1/16-6/30/19

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

**Carlos Parras, Ph.D.**

INSERM - Institut National de la Santé et de la Recherche  
 Médicale  
 Paris, France  
 Award: Research Grants

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$586,502  
 Term: 10/1/15-9/30/18

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

**Julia Patzig, Ph.D.**

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

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$182,327  
 Term: 7/1/16-6/30/19

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

**Xianhua Piao, M.D., Ph.D.**

Boston Children's Hospital  
Boston, Massachusetts  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$660,000  
Term: 10/1/15-9/30/18

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

**Mary (Marnie) Preston, Ph.D.**

University of Colorado Denver  
Denver, Colorado  
Award: Postdoctoral Fellowships

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$169,946  
Term: 7/1/14-6/30/17

**“Integration of Nuclear Receptor signaling cascades during myelination in zebrafish.”** Searching for clues to promoting myelin repair by exploring details of the myelin-making process.

**David Rowitch, M.D., Ph.D.**

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

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$529,904  
Term: 4/1/14-3/31/17

**“Oligodendrocyte-mediated vascular remodeling of white matter in development and remyelination”**  
How do cells that form myelin obtain the oxygen supply they need to ramp up myelin repair?

**Carmen Sato-Bigbee, Ph.D.**

Virginia Commonwealth University  
Richmond, Virginia  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$587,785  
Term: 10/1/15-9/30/18

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

**Isobel Scarisbrick, Ph.D.**

Mayo Clinic Rochester  
Rochester, Minnesota  
Award: Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$607,111  
Term: 4/1/15-3/31/18

**“Targeting Protease Activated Receptor 1 to Promote Myelin Repair”** Researchers at the Mayo Clinic are investigating the importance of a molecule called PAR1 in myelin protection and repair to determine if currently approved drugs that target PAR1 for treatment of other diseases could be used to treat people with MS.

**Styliani-Anna (Stella) Tsirka, Ph.D.**

State University of New York at Stony Brook  
Stony Brook, New York  
Award: Pilot Research Grants

Category: Biology of Glia/Myelin  
Strategic Area: Restore  
Funding: \$44,000  
Term: 10/1/15-9/30/17

**“Enhancing myelination in EAE/MS”** Investigating a strategy for both battling inflammation and improving repair in MS.

**Teresa Wood, Ph.D.**

Rutgers, The State University of New Jersey  
 Piscataway, New Jersey  
 Award: Research Grants

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$706,998  
 Term: 4/1/15-3/31/18

**“mTOR Signaling Targets and Pathway Intersections in Oligodendrocyte Differentiation and Myelination”** Researchers at Rutgers, the State University of New Jersey, are investigating the role of a molecule called mTOR and associated molecules in enhancing myelin repair.

**J. Bradley Zuchero, Ph.D.**

Stanford University  
 Stanford, California  
 Award: Career Transition Fellowships

Category: Biology of Glia/Myelin  
 Strategic Area: Restore  
 Funding: \$581,647  
 Term: 7/1/14-6/30/19

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

**Diagnostic Methods - Investigating ways to improve the detection and diagnosis of MS****Victoria Leavitt, Ph.D.**

Columbia University  
 New York, New York  
 Award: Research Grants

Category: Diagnostic Methods  
 Strategic Area: Restore  
 Funding: \$558,130  
 Term: 8/1/14-3/31/19

**“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.

**Ameer Taha, M.Sc., Ph.D.**

University of California, Davis  
 W. Sacramento, California  
 Award: Pilot Research Grants

Category: Diagnostic Methods  
 Strategic Area: Restore  
 Funding: \$29,834  
 Term: 11/1/16-10/31/17

**“Establishing quantitative lipidomic biomarkers for multiple sclerosis patients and their relationship with cognitive impairment”** Determining whether specific lipids can serve as indicators and predictors of MS and cognitive issues.

**Epidemiology - Investigating who gets MS in search of the cause and risk/ protective factors****Helen Tremlett, Ph.D.**

University of British Columbia  
 Vancouver, Canada  
 Award: Research Grants

Category: Epidemiology  
 Strategic Area: Restore  
 Funding: \$246,433  
 Term: 10/1/13-9/30/17

**“Do the beta-interferons prolong life in people with multiple sclerosis?”** Investigating if the beta interferons can extend the survival of people with MS.

## Neuropathology - Exploring how nerve fibers and cells are damaged during the course of MS

**Victoria Leavitt, Ph.D.**

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

Category: Neuropathology  
Strategic Area: Restore  
Funding: \$43,771  
Term: 10/1/15-3/31/17

**“Brain Temperature in Multiple Sclerosis: Advancing Our Understanding and Treatment of Fatigue”** Administering aspirin to people with relapsing MS, to see if treatment can lower brain temperature, and reduce fatigue.

**Alex Strongin, Ph.D.**

Sanford-Burnham Medical Research Institute  
La Jolla, California  
Award: Pilot Research Grants

Category: Neuropathology  
Strategic Area: Restore  
Funding: \$39,550  
Term: 12/1/15-11/30/17

**“Neuropathic pain in Multiple Sclerosis”** Exploring whether a specific molecule is related to pain levels in people with MS.

## Neurophysiology - Exploring how nerve fibers and cells work normally and in the disease state

**Pierfilippo De Sanctis, Ph.D.**

Albert Einstein College of Medicine  
Bronx, New York  
Award: Pilot Research Grants

Category: Neurophysiology  
Strategic Area: Restore  
Funding: \$43,015  
Term: 4/1/15-3/31/17

**“Biomarkers of impaired dual-task walking abilities in multiple sclerosis: A Mobile Brain-Body Imaging (MOBI) Study”** Biomarkers of impaired dual-task walking abilities in multiple sclerosis: A Mobile Brain-Body Imaging (MOBI) Study

**Brett Fling, Ph.D.**

Colorado State University  
Fort Collins, Colorado  
Award: Research Grants

Category: Neurophysiology  
Strategic Area: Restore  
Funding: \$131,820  
Term: 4/1/14-9/30/17

**“The neural characteristics of proprioceptive-related balance deficits in Multiple Sclerosis”**  
Understanding factors that influence balance control in people with MS for clues to improving function.

**John Hart, M.D.**

University of Texas at Dallas  
Richardson, Texas  
Award: Research Grants

Category: Neurophysiology  
Strategic Area: Restore  
Funding: \$692,330  
Term: 4/1/14-3/31/17

**“Identifying and Characterizing Auditory Processing Disruptions in Multiple Sclerosis”** Developing a better way to track the problem of understanding spoken language in people with MS.

**Bart Rypma, Ph.D.**

University of Texas at Dallas  
Dallas, Texas  
Award: Research Grants

Category: Neurophysiology  
Strategic Area: Restore  
Funding: \$492,792  
Term: 4/1/16-3/31/19

**“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.

## **Physiology - Understanding how MS may impact functions of the body**

**Scott Davis, Ph.D.**

Southern Methodist University

Dallas, Texas

Award: Research Grants

Category: Physiology

Strategic Area: Restore

Funding: \$235,973

Term: 4/1/13-3/31/17

### **“Clinical outcomes and autonomic mechanisms associated with cardiovascular regulation in MS”**

Studying how MS affects the regulation of blood pressure in response to exercise for clues to potential strategies to improve function.

## **ENDING MS FOREVER**

### **Human Therapy Trials/Management of MS - Investigations into treatments for all forms of MS, and training physicians in MS clinical research and trials**

**Theron Casper, Ph.D.**

University of Utah

Salt Lake City, Utah

Award: Health Care Delivery and Policy Research

Contracts

Category: Human Therapy Trials/Management of MS

Strategic Area: End

Funding: \$3,000,000

Term: 7/1/16-6/30/19

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

### **Infectious Triggers - Examining the possibility that viruses or bacteria could act as disease triggers in MS**

**Marc Horwitz, Ph.D.**

University of British Columbia

Vancouver, Canada

Award: Research Grants

Category: Infectious Triggers

Strategic Area: End

Funding: \$608,493

Term: 10/1/14-9/30/17

**“How latent gammaherpesvirus enhances EAE pathology: implications on EBV's role in the etiology of MS”** Studying the role of Epstein-Barr virus in a model of MS for clues to a possible MS trigger.

**John Kriesel, M.D.**

University of Utah

Salt Lake City, Utah

Award: Research Grants

Category: Infectious Triggers

Strategic Area: End

Funding: \$633,361

Term: 10/1/13-9/30/17

**“Deep Sequencing for the Detection of Microbes in the Brains of Patients with Acute Demyelinating Disease”** Searching for hints of a possible virus in the brain that may trigger MS.

**Howard Lipton, M.D.**

University of Illinois at Chicago

Chicago, Illinois

Award: Research Grants

Category: Infectious Triggers

Strategic Area: End

Funding: \$383,139

Term: 4/1/15-3/31/18

**“Generic approaches for detecting a virus in MS in acute demyelinating lesions”** University of Illinois at Chicago researchers are devising a method to detect the presence of viruses in newly forming MS lesions, in hopes of identifying the cause of MS and preventing its development.

*Paid by special funds provided by the Illinois Lottery*



## **Biology of Glia/Myelin - Investigating how myelin is formed and the role played by oligodendrocytes and other nervous system support cells in MS**

**Timothy Vartanian, M.D., Ph.D.**

Weill Cornell Medical College

New York, New York

Award: Research Grants

Category: Biology of Glia/Myelin

Strategic Area: End

Funding: \$495,000

Term: 10/1/14-9/30/17

**“Modeling Nascent Lesion Formation in Multiple Sclerosis”** Does a toxin derived from bacteria play a role in early MS damage?

## **Epidemiology - Investigating who gets MS in search of the cause and risk/ protective factors**

**Kathryn Fitzgerald, D.Sc., M.Sc.**

Johns Hopkins University

Baltimore, Maryland

Award: Postdoctoral Fellowships

Category: Epidemiology

Strategic Area: End

Funding: \$187,527

Term: 7/1/16-6/30/19

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

**Kassandra Munger, D.Sc.**

Harvard School of Public Health

Boston, Massachusetts

Award: Research Grants

Category: Epidemiology

Strategic Area: End

Funding: \$259,711

Term: 4/1/14-3/31/17

**“Sodium intake and multiple sclerosis risk and progression”** Does a high-salt diet contribute to causing MS or making it worse?

**Natalia Palacios, Ph.D.**

Harvard School of Public Health

Boston, Massachusetts

Award: Research Grants

Category: Epidemiology

Strategic Area: End

Funding: \$76,553

Term: 10/1/15-TBD

**“Air Pollution and Risk of Multiple Sclerosis”** Investigators at the Harvard T.H. Chan School of Public Health and Harvard Medical School are exploring whether exposure to air pollution is associated with risk of MS.

**Brent Richards, M.D.**

Jewish General Hospital

Montreal, Canada

Award: Research Grants

Category: Epidemiology

Strategic Area: End

Funding: \$128,000

Term: 10/1/16-9/30/18

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

*Co-funded with the MS Society of Canada*

**Christina Wolfson, Ph.D.**

Research Institute of the McGill University Health Centre

Montreal, Canada

Award: Research Grants

Category: Epidemiology

Strategic Area: End

Funding: \$145,715

Term: 4/1/13-TBD

**“Developing a Tool-Kit of epidemiological resources for etiological research in pediatric MS”**

Identifying high-quality questionnaires and other resources to allow researchers to search for factors that trigger MS in children and adults.

## **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**

**David Hafler, M.D.**

Yale University  
New Haven, Connecticut

Award: Collaborative Research Center Awards

Category: Human Genetics

Strategic Area: End

Funding: \$825,000

Term: 4/1/15-3/31/20

**“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.

**Trevor Kilpatrick, M.B.B.S., Ph.D.**

Florey Institute of Neuroscience and Mental Health  
Melbourne, Australia

Award: Research Grants

Category: Human Genetics

Strategic Area: End

Funding: \$384,098

Term: 10/1/15-9/30/18

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

*Funded by a gift from a generous donor*

**Gang Li, Ph.D.**

Brigham and Women's Hospital  
Boston, Massachusetts

Award: Pilot Research Grants

Category: Human Genetics

Strategic Area: End

Funding: \$44,000

Term: 9/1/16-8/31/17

**“High throughput screen to identify functional SNPs on MS-associated loci revealed by GWAS”** Pinpointing precisely the genetic variations associated with the cause of MS.

**Jorge Oksenberg, Ph.D.**

University of California, San Francisco  
San Francisco, California

Award: Research Grants

Category: Human Genetics

Strategic Area: End

Funding: \$165,000

Term: 4/1/16-3/31/17

**“Cell-specific microRNA profiling and function in experimental autoimmune encephalomyelitis”** University of California, San Francisco investigators are using new methods to study a group of molecules called miRNAs specifically in myelin-making cells to understand if they may be useful targets for gene therapy to treat MS.

**Nikolaos Patsopoulos, M.D., Ph.D.**

Brigham and Women's Hospital  
Boston, Massachusetts

Award: Career Transition Fellowships

Category: Human Genetics

Strategic Area: End

Funding: \$511,121

Term: 7/1/14-3/31/18

**“Identification of the MS specific and the shared with other autoimmune diseases genetic component and their functional impact”** What can we learn by comparing genetic risk factors between MS and other immune-mediated and autoimmune diseases?

*Funded in part by a gift from the CFMS Foundation*

## **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**

**Sergio Baranzini, Ph.D.**

University of California, San Francisco  
San Francisco, California

Award: Collaborative Research Center Awards

Category: Immunology

Strategic Area: End

Funding: \$800,898

Term: 4/1/15-3/31/20

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

**Cory Teuscher, Ph.D.**

University of Vermont  
Burlington, Vermont

Award: Research Grants

Category: Immunology

Strategic Area: End

Funding: \$413,347

Term: 4/1/15-3/31/18

**“Identification of gene-by-environment interactions contributing to CNS autoimmune disease”**

University of Vermont researchers are using mice with MS-like disease to look at interactions between genes and the environmental factors Vitamin D and exposure to UV/sunlight for clues to preventing or treating MS.

**Chuan Wu, M.D., Ph.D.**

Brigham and Women's Hospital  
Boston, Massachusetts

Award: Career Transition Fellowships

Category: Immunology

Strategic Area: End

Funding: \$492,287

Term: 7/1/14-6/30/19

**“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?

## **Tissue/DNA Banks - Shared resource of tissues and DNA banks that accumulate and store specimens for use by MS investigators**

**John Corboy, M.D.**

University of Colorado Denver  
Aurora, Colorado

Award: Research Grants

Category: Tissue/DNA Banks

Strategic Area: End

Funding: \$214,607

Term: 10/1/13-9/30/19

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

**Rashed Nagra, Ph.D.**

Brentwood Biomedical Research Institute  
Los Angeles, California

Award: Research Grants

Category: Tissue/DNA Banks

Strategic Area: End

Funding: \$1,268,602

Term: 11/1/09-3/31/17

**“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: Research Grants

Category: Tissue/DNA Banks

Strategic Area: End

Funding: \$1,560,377

Term: 7/1/12-6/30/17

**“Establishment of a Core DNA Repository for Multiple Sclerosis”** Banking genetic material from individuals and families with MS as a shared resource for studies searching for genes that confer susceptibility to MS.