List of Current Research Projects Funded by the National MS Society, Sorted by Topic

Fall 2007

Research and Clinical Programs Department
National Multiple Sclerosis Society
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New York, NY 10017-3288
(212) 476-0417

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**Introduction**

This document lists, by research topic, all current MS research projects being funded by the National Multiple Sclerosis Society (USA) as of October 1, 2007.

**Key to Abbreviations**

The project number for each project is preceded by a program code, as follows:

- **RG** – full grants for basic, clinical and rehabilitation research;
- **RD** – full grants co-funded by a collaborative funding agreement with NIH to support a targeted research initiative on gender differences in MS;
- **CA** – Collaborative MS Research Center Awards - five-year awards to help stimulate creativity and interaction among investigators working within and outside MS fields;
- **TA** – Career Transition Fellowships – awards up to five years to facilitate the advancement of promising young investigators into full faculty positions;
- **TR** – Translational Research Partnership on Nervous System Repair & Protection in MS.
- **FG & FA** – postdoctoral fellowships, advanced postdoctoral fellowships, respectively – research projects by young or more advanced investigators, working under the mentorship of senior scientists, to provide training and experience in MS research;
- **FP** – physician fellowships, young doctors working under the mentorship of seasoned clinicians, to provide training and experience in conducting clinical trials in people with MS;
- **JF** – Harry Weaver Neuroscience Scholarships – special five-year projects by promising young investigators just starting their careers as independent researchers;
- **FAN** – NMSS/American Academy of Neurology Clinician Scientist Development Award to train physicians in MS clinical research;
- **MB** – Mentor-based postdoctoral fellowships to enhance research into MS rehabilitation;
- **PP** – high-risk pilot research grants, aimed at exploring new, untested ideas;
- **HC** – health care delivery and policy contracts initiated by the Society and awarded on a competitive basis to investigators studying subjects identified as mission priorities.

You will find for selected projects an indication of restricted support that has been provided from individuals, groups, families, or chapters to underwrite the project. This is listed in italic typeface directly beneath the project title.

**NOTE:** Details about each of these projects are available on the Society’s Web site at [http://www.nationalmssociety.org/FundedResearch](http://www.nationalmssociety.org/FundedResearch)
THERAPY/MANAGEMENT OF MS

Investigations into treatments of possible value in fighting or improving symptoms in all forms of MS

Mark Agius, M.D.  
University of California, Davis  
Davis, CA  
Northern California Chapter  
Area: Therapy/Management of MS  
“Cannabis for spasticity in multiple sclerosis: placebo-controlled study”  
Conducting a clinical trial to test the safety and effectiveness of smoked marijuana and an oral form of marijuana to treat spasticity in people with MS.

Michelle Apperson, M.D., Ph.D.  
University of California, Davis  
Sacramento, CA  
Northern California Chapter  
Term: 8/1/2006-9/30/2008  
Area: Therapy/Management of MS  
“Sylvia Lawry Physician Fellowship”  
Receiving training on the proper ways to conduct clinical treatment trials in MS.

Atif Awad, Ph.D.  
State University of New York at Buffalo  
Buffalo, NY  
W. New York/N.W. Penn. Chapter  
Area: Therapy/Management of MS  
“Dietary phytosterols and macrophage immunomodulation in multiple sclerosis”  
Exploring the ability of plant-derived chemicals to reduce inflammation in people with MS.

Claude Bernard, D.Sc., Ph.D.  
Monash University  
Clayton/Melbourne  
Area: Therapy/Management of MS  
“Reversal of MS like disease by immune stem cell strategies”  
Testing novel approaches to re-set the immune system in mouse models to pave the way for new avenues to treat MS.

Malachy Bishop, Ph.D.  
University of Kentucky  
Lexington, KY  
Kentucky Southeastern Indiana Chapter  
Term: 9/1/2007-8/31/2008  
Area: Therapy/Management of MS  
“Adherence to disease modifying therapy in multiple sclerosis”  
Understanding how information about MS treatment can most effectively be distributed so as to ensure informed decision-making.
<table>
<thead>
<tr>
<th><strong>Adrienne Boissy, M.D.</strong></th>
<th>Project Number: FP 1748-A-1</th>
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</thead>
<tbody>
<tr>
<td>Cleveland Clinic Foundation</td>
<td>Funding: $150,000</td>
</tr>
<tr>
<td>Cleveland, OH</td>
<td>Term: 8/1/2006-7/31/2009</td>
</tr>
<tr>
<td>Ohio Buckeye Chapter</td>
<td>Area: Therapy/Management of MS</td>
</tr>
<tr>
<td><strong>“Sylvia Lawry Physician Fellowship”</strong></td>
<td>Receiving training on the proper ways to conduct clinical treatment trials in MS.</td>
</tr>
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<tr>
<th><strong>Anne Cross, M.D.</strong></th>
<th>Project Number: RG 3292A9/1</th>
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<tbody>
<tr>
<td>Washington University</td>
<td>Funding: $627,832</td>
</tr>
<tr>
<td>Saint Louis, MO</td>
<td>Term: 4/1/2002-9/30/2008</td>
</tr>
<tr>
<td>Gateway Area Chapter</td>
<td>Area: Therapy/Management of MS</td>
</tr>
<tr>
<td><strong>“A phase II trial of Rituxan in multiple sclerosis”</strong></td>
<td>A clinical trial of an immune-based therapy for treatment of relapsing-remitting MS.</td>
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<tr>
<th><strong>John Fleming, M.D.</strong></th>
<th>Project Number: RG 3613A4/1</th>
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<tr>
<td>University of Wisconsin</td>
<td>Funding: $358,660</td>
</tr>
<tr>
<td>Wisconsin Chapter</td>
<td>Area: Therapy/Management of MS</td>
</tr>
<tr>
<td><strong>“Helminth-induced immunomodulation therapy (HINT) in relapsing-remitting MS”</strong></td>
<td>A novel, pilot clinical trial testing whether ingestion of worm eggs has the potential to alter the immune attack in MS.</td>
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<tr>
<th><strong>Robert Fox, M.D.</strong></th>
<th>Project Number: RG 3548A2/1</th>
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<tr>
<td>Cleveland Clinic Foundation</td>
<td>Funding: $567,434</td>
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<tr>
<td>Cleveland, OH</td>
<td>Term: 10/1/2004-9/30/2008</td>
</tr>
<tr>
<td>Ohio Buckeye Chapter</td>
<td>Area: Therapy/Management of MS</td>
</tr>
<tr>
<td><strong>“Defining the impact of methylprednisolone on brain tissue integrity in MS”</strong></td>
<td>Testing whether advanced magnetic imaging can accurately track steroid treatment-related changes in nerve tissue and disease activity in MS.</td>
</tr>
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<tr>
<th><strong>Stefan Gold, Ph.D.</strong></th>
<th>Project Number: FG 1702-A-1</th>
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<tbody>
<tr>
<td>University of California, Los Angeles</td>
<td>Funding: $98,747</td>
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<tr>
<td>Los Angeles, CA</td>
<td>Term: 8/1/2006-7/31/2008</td>
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<tr>
<td>Southern California Chapter</td>
<td>Area: Therapy/Management of MS</td>
</tr>
<tr>
<td><strong>“Immunomodulatory and neuroprotective effects of testosterone treatment in MS”</strong></td>
<td>Understanding how a male sex hormone, testosterone, may be beneficial in treating men with MS.</td>
</tr>
</tbody>
</table>
Stephen Krieger, M.D.  Project Number: FP 1750-A-1
Mt. Sinai School of Medicine  Funding: $100,000
New York, NY  Term: 8/1/2006-7/31/2008
New York City Chapter  Area: Therapy/Management of MS
“Sylvia Lawry Physician Fellowship”  Receiving training on the proper ways to conduct clinical treatment trials in MS.

Lahar Mehta, M.D.  Project Number: FP 1751A1/1
University of Rochester Medical Center  Funding: $125,000
Upstate New York Chapter  Area: Therapy/Management of MS
“Sylvia Lawry Physician Fellowship”  Training in designing and conducting clinical trials in people with MS.

Richard Nash, M.D.  Project Number: PP1251
Fred Hutchinson Cancer Research Center  Funding: $44,000
Seattle, WA  Term: 5/1/2006-4/30/2008
Greater Washington Chapter  Area: Therapy/Management of MS
“Effect of allogeneic hematopoietic cell transplantation on the activity and progression of MS”  Evaluating bone marrow transplantation in people with MS who underwent this procedure for a concurrent disease.

Andrew Pachner, M.D.  Project Number: RG 3402A3/1
UMDNJ-New Jersey Medical School  Funding: $279,844
Greater North Jersey Chapter  Area: Therapy/Management of MS
“Effect of anti-interferon antibodies on interferon bioavailability in people with multiple sclerosis”  Determining whether immune antibodies impede the effectiveness of treating MS with interferon beta.

Kottil Rammohan, M.D.  Project Number: PP1378
Ohio State University  Funding: $44,000
Columbus, OH  Term: 5/1/2007-4/30/2008
Ohio Buckeye Chapter  Area: Therapy/Management of MS
“Induction of B cell tolerance to interferon using Ig - interferon complexes”  Exploring a novel method for improving the efficacy of current MS treatments.
**Steven Schwid, M.D.**  
University of Rochester Medical Center  
Rochester, NY  
Upstate New York Chapter  
Project Number: RG 3571-A-3  
Funding: $219,955  
Area: Therapy/Management of MS  
**“Establishing a Multiple Sclerosis cooperative research group - a planning grant proposal”** Planning the creation of a research team to conduct multi-center clinical research related to MS.

**Jacob Sosnoff, Ph.D.**  
University of Illinois at Urbana-Champaign  
Urbana, IL  
Greater Illinois Chapter  
Project Number: PP1303  
Funding: $44,000  
Term: 9/30/2006-3/31/2008  
Area: Therapy/Management of MS  
**“Alleviating spasticity with chronic cycling exercise”** Testing the ability of a cycling program to improve MS-related spasticity.

**Rhonda Voskuhl, M.D.**  
University of California, Los Angeles  
Los Angeles, CA  
Southern California Chapter  
Project Number: RG 3915-A-15  
Funding: $3,284,181  
Term: 1/12/2007-1/11/2010  
Area: Therapy/Management of MS  
**“A combination trial of Copaxone and Estriol in relapsing remitting MS”** Testing the ability of the sex hormone estriol to slow disease course and activity in women with MS.

**Emmanuelle Waubant, M.D., Ph.D.**  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
Project Number: RG 3932-A-2  
Funding: $748,466  
Area: Therapy/Management of MS  
**“Neuroprotection with riluzole in patients with early MS”** Clinical trial to determine if a drug approved for ALS can protect brain and spinal cord tissues in MS.

**Fanglin Zhang, M.D., Ph.D.**  
Vanderbilt University  
Nashville, TN  
Mid-South Chapter  
Project Number: FG 1737A1/1  
Funding: $156,515  
Term: 7/1/2007-6/30/2010  
Area: Therapy/Management of MS  
**“Regulation of expression and function of P53 by interferon”** Determining how interferons alter MS-related immune activity for clues to improving current treatments for MS.
PSYCHOSOCIAL ASPECTS OF MS
Understanding how MS effects cognitive functioning and other aspects of quality of life.

Robert Buchanan, Ph.D.
Mississippi State University
Mississippi State, MS
Mississippi Division
“Younger adults with multiple sclerosis” Exploring the health care and other needs of younger adults who have multiple sclerosis.

Bonnie Chakravorty, Ph.D.
Tennessee State University
Nashville, TN
Mid-South Chapter
“Psychosocial aspects of multiple sclerosis among African Americans” Exploring the mental health needs of African Americans with MS.

Christopher Christodoulou, Ph.D.
SUNY at Stony Brook
Stony Brook, NY
Long Island Chapter
“Impact of donepezil on cerebral activation and cognition in multiple sclerosis” Using novel imaging technology to determine whether a treatment under study for improving memory can affect patterns of brain activation.

Susan Courtney, Ph.D.
Johns Hopkins University
Baltimore, MD
Maryland Chapter
“Combining DTI, MTR, and fMRI to understand cognitive function in MS” Developing a method for correlating brain tissue damage with cognitive dysfunction in MS. This study is funded by a grant from the Brodsky Family Foundation.

George Demakis, Ph.D.
University of North Carolina at Charlotte
Charlotte, NC
Mid-Atlantic Chapter
“Cognitive impairment in nursing home residents with MS” Determining the factors associated with cognitive problems in MS using a database of extensive information on nursing home residents.
Marcia Finlayson, MSc, OTR, PhD
University of Illinois at Chicago
Chicago, IL
Greater Illinois Chapter
Project Number: PP1299
Funding: $44,000
Term: 10/1/2006-9/30/2008
Area: Psychosocial Aspects of MS
“Meeting the challenges of MS: A program for family and friends”
Evaluating the success of a program created to increase the confidence, preparedness and well-being of caregivers of people with MS.

Lauren Krupp, M.D.
State University of New York at Stony Brook
Stony Brook, NY
Long Island Chapter
Project Number: RG 3315A4/1
Funding: $784,201
Term: 4/1/2002-3/31/2008
Area: Psychosocial Aspects of MS
“A longitudinal study of mild cognitive impairment in multiple sclerosis”
Following a group of individuals with MS who have mild cognitive problems to evaluate whether this symptom becomes worse over time.

Sarah Minden, M.D.
Brigham and Women's Hospital
Boston, MA
Central New England Chapter
Project Number: PP1146
Funding: $44,000
Term: 8/1/2005-1/31/2008
Area: Psychosocial Aspects of MS
“Analysis of mental health data from the Sonya Slifka Longitudinal Multiple Sclerosis study”
Evaluating the prevalence of mood disorders in MS and factors that influence mental health and access to mental health care.

Glenn Wylie, Ph.D.
Kessler Medical Rehabilitation Res. & Educ. Corp.
West Orange, NJ
Greater North Jersey Chapter
Project Number: PP1364
Funding: $44,000
Area: Psychosocial Aspects of MS
“The neuropsychology of executive control: an FMRI and DTI study”
Determining the effects of MS on certain aspects of cognitive function.

Feng Zhou, Ph.D.
The Johns Hopkins University
Baltimore, MD
Maryland Chapter
Project Number: FG 1786-A-1
Funding: $98,747
Term: 7/1/2007-6/30/2009
Area: Psychosocial Aspects of MS
“Neural basis of short-term memory and cognitive control dysfunction in multiple sclerosis”
Understanding tissue damage that accompanies cognitive dysfunction in MS for clues to rehabilitating or preventing them
**REHABILITATION**

Seeking ways to maximize physical and mental abilities and reduce symptoms to improve quality of life.

**Alexander Aruin, Ph.D.**  
Project Number: PP1330  
University of Illinois at Chicago  
Funding: $44,000  
Chicago, IL  
Greater Illinois Chapter  
Area: Rehabilitation  
“Enhancement of grip force control in individuals with multiple sclerosis”  
Testing the ability of a simple technique to improve the ability of people with MS to grip objects.

**Pradip Bose, M.D., Ph.D.**  
Project Number: PP1247  
University of Florida  
Funding: $44,000  
Gainesville, FL  
Term: 5/1/2006-4/30/2008  
North Florida Chapter  
Area: Rehabilitation  
“EAE rat model of spasticity and locomotor training”  
Developing a model for determining the effects of spasticity on MS and to evaluate a method of managing this symptom.

**Nancy Chiaravalloti, Ph.D.**  
Project Number: RG 3330A1/3  
Kessler Medical Rehabilitation Res. & Educ. Corp.  
Funding: $428,372  
West Orange, NJ  
Greater North Jersey Chapter  
Area: Rehabilitation  
“Working memory in MS: Using fMRI to identify the deficit”  
Correlating memory difficulties with brain activity to understand how to overcome such difficulties in MS.

**John Corboy, M.D.**  
Project Number: PP1166  
University of Colorado Health Science Center  
Funding: $44,000  
Denver, CO  
Term: 1/1/2006-12/31/2007  
Colorado Chapter  
Area: Rehabilitation  
“Uric acid and the oxidative stress of exercise in multiple sclerosis”  
Investigating whether exercise can increase levels of an antioxidant that is decreased in people with MS.

**Scott Davis, Ph.D.**  
Project Number: PP1440  
University of Texas Southwestern Medical School  
Funding: $44,000  
Dallas, TX  
Term: 9/1/2007-8/31/2008  
Lone Star Chapter  
Area: Rehabilitation  
“Baroreflex modulation of sympathetic nerve activity in MS patients”  
Investigating the source of dizziness in people with MS, for clues to treating this symptom.
**John DeLuca, Ph.D. ABPP**
Kessler Medical Rehabilitation Res. & Educ. Corp.
West Orange, NJ
Greater North Jersey Chapter

**“Actual reality: advancing functional assessment for individuals with MS”** Testing a novel method of assessing the ability of people with MS to perform activities of everyday life.

**Funding:** $44,000
**Term:** 10/1/2006-3/31/2008
**Area:** Rehabilitation

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**John DeLuca, Ph.D. ABPP**
Kessler Medical Rehabilitation Res. & Educ. Corp.
West Orange, NJ
Greater North Jersey Chapter

**“MS fellowship in neuropsychological rehabilitation”** Training in ways to help people cope with cognitive problems associated with MS.

**Funding:** $365,133
**Term:** 7/1/2007-6/30/2012
**Area:** Rehabilitation

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**Barbara Giesser, M.D.**
University of California, Los Angeles
Los Angeles, CA
Southern California Chapter

**“Locomotor training in persons with multiple sclerosis”** Testing a new way to improve walking ability in people with MS.

**Funding:** $602,629
**Term:** 4/1/2006-3/31/2009
**Area:** Rehabilitation

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**Christoph Heesen, M.D., Ph.D.**
University Medical Center Hamburg-Eppendorf
Hamburg, Germany

**“Development and validation of patient education modules on immune and symptomatic treatment in MS”** Training focused on developing patient education materials related to MS treatments.

**Funding:** $384,005
**Term:** 7/1/2007-6/30/2012
**Area:** Rehabilitation

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**Cinda Hugos, M.S.**
Oregon Health & Science University
Portland, OR
Oregon Chapter

**“Efficacy of fatigue: Take control for persons with multiple sclerosis”** Testing the effectiveness of a program created by the National MS Society to improve fatigue in people with MS.

**Funding:** $44,000
**Term:** 10/1/2006-9/30/2008
**Area:** Rehabilitation
Lisa Iezzoni, M.D., M.Sc.  
Massachusetts General Hospital  
Boston, MA  
Central New England Chapter  
“Mobility aids for persons with multiple sclerosis”  
Exploring why more people with MS do not use motility aids, for clues to fulfilling this unmet need.

Slobodan Jaric, Ph.D.  
University of Delaware  
Newark, DE  
Delaware Chapter  
“A novel device to test hand function in multiple sclerosis”  
Testing a measuring tool for its ability to assess hand function in people with MS.

George Kraft, M.D.  
University of Washington  
Seattle, WA  
Greater Washington Chapter  
“Effects of cognitive demand on functional mobility in MS”  
To examine the effects of cognitive function on mobility in people with MS.

Victor Mark, M.D.  
University of Alabama at Birmingham  
Birmingham, AL  
Alabama Chapter  
“Constraint-induced movement therapy trial for progressive multiple sclerosis”  
Investigating a method of improving motor problems in people with MS.

Robert Motl, Ph.D.  
University of Illinois at Urbana-Champaign  
Urbana, IL  
Greater Illinois Chapter  
“Do symptoms predict reduction of physical activity across time in MS?”  
Understanding factors that may lead to reduced physical activity in persons with MS.

Carol Sames, Ph.D.  
SUNY Upstate Medical University  
Syracuse, NY  
Upstate New York Chapter  
“Impact of a 10 week aquatic exercise program on functional and QOL outcomes in MS”  
Investigating whether working out in water improves the exercise capabilities of people with MS and moderate disability.
Andrew Slifkin, Ph.D.  
Cleveland State University  
Cleveland, OH  
Ohio Buckeye Chapter  
Project Number: PP1184  
Funding: $44,000  
Term: 9/30/2005-12/31/2007  
Area: Rehabilitation  
“Mental practice of action as a novel tool for rehabilitation in MS”  
Exploring a method for improving motor function in MS.

Richard Van Emmerik, Ph.D.  
University of Massachusetts  
Amherst, MA  
Central New England Chapter  
Project Number: RG 3974A2/1  
Funding: $474,269  
Term: 10/1/2007-9/30/2011  
Area: Rehabilitation  
“Dynamic balance control and fatigue in multiple sclerosis”  
Identifying factors involved in balance problems in posture and walking experienced by people with MS to find better ways to intervene.

Rhonda Voskuhl, M.D.  
University of California, Los Angeles  
Los Angeles, CA  
Southern California Chapter  
Project Number: PP1279  
Funding: $44,000  
Term: 7/1/2006-6/30/2008  
Area: Rehabilitation  
“Neuroprotective effects of exercise training in MS”  
Determining whether exercise can protect people with MS from nervous system damage.

Lesley White, Ph.D.  
University of Georgia  
Athens, GA  
Georgia Chapter  
Project Number: RG 3726A2/T  
Funding: $166,926  
Term: 7/1/2007-6/30/2009  
Area: Rehabilitation  
“Neuromuscular adaptations to resistance training in multiple sclerosis”  
Determining whether progressive resistance training can enhance mobility and quality of life in people with MS

Ruth Whitham, M.D.  
Veterans Administration Medical Center  
Portland, OR  
Oregon Chapter  
Project Number: PP1307  
Funding: $44,000  
Term: 9/1/2006-8/31/2008  
Area: Rehabilitation  
“Ginseng treatment for MS-related fatigue”  
Conducting a clinical trial testing the ability of ginseng to improve fatigue and quality of life in people with MS.

Dean Wingerchuk, M.D.  
Mayo Clinic Scottsdale  
Scottsdale, AZ  
Arizona Chapter  
Project Number: RG 3806A1/1  
Funding: $549,520  
Term: 10/1/2006-9/30/2009  
Area: Rehabilitation  
“Aspirin for treatment of multiple sclerosis-related fatigue”  
Conducting a clinical trial of aspirin to improve fatigue in people with MS.
**Epidemiology**

Investigating who gets MS in search of the cause and risk/protective factors.

**Miguel Hernan, MD, DrPH**  
Harvard School of Public Health  
Boston, MA  
Central New England Chapter  
Project Number: PP1243  
Funding: $44,000  
Area: Epidemiology  
“**Epstein Barr virus infection and the risk of MS**”  
Evaluating the potential association between infectious agents and the risk of developing MS.

**Ilya Kister, M.D.**  
New York University  
New York, NY  
New York City Chapter  
Project Number: PP1471  
Funding: $44,000  
Term: 9/30/2007-9/30/2008  
Area: Epidemiology  
“**Prevalence and significance of migraines and other headaches in MS**”  
Why are headaches common in MS and what are their significance and best treatment.

**Lauren Krupp, M.D.**  
State University of New York at Stony Brook  
Stony Brook, NY  
Long Island Chapter  
Project Number: PP1017  
Funding: $44,000  
Term: 7/1/2004-6/30/2008  
Area: Epidemiology  
“**Prevalence of pediatric MS on Long Island**”  
Identifying cases and characteristics of MS in children under 18 in a region of New York, to lay the groundwork for future studies of this rare condition.

**Anthony McMichael, M.B.B.S., Ph.D.**  
The Australian National University  
Canberra  
Project Number: RG 3364A1/2  
Funding: $617,717  
Area: Epidemiology  
“**A case control study of past sun exposure and first demyelinating events**”  
Investigating whether sunlight exposure reduces the risk of developing MS.

**John Neuberger, Dr.P.H.**  
University of Kansas Medical Center  
Kansas City, KS  
Mid-America Chapter  
Project Number: PP1212  
Funding: $44,000  
Area: Epidemiology  
“**Residential radon exposure and multiple sclerosis: A pilot study**”  
Evaluating the relationship between an environmental factor and the prevalence of MS.
Walter Royal, M.D.  
University of Maryland at Baltimore  
Baltimore, MD  
Maryland Chapter  
“Vitamin D and multiple sclerosis” Examining the association between vitamin D levels and immune system activity in people with MS.

Helen Tremlett, Ph.D.  
University of British Columbia  
Vancouver  
Canada  
“Do relapses affect disease progression in multiple sclerosis?” Evaluating the long-term relationship between relapses and disability in a large group of individuals with MS.

**HEALTH CARE DELIVERY/POLICY**

Studying how people with MS utilize health-care services and how health-care delivery can be improved.

Robert Buchanan, Ph.D.  
Mississippi State University  
Mississippi State, MS  
Mississippi Division  
“The long-term care needs of people with multiple sclerosis” Exploring the long-term care needs of people with MS and the services they receive in care facilities.

Sarah Minden, M.D.  
Abt Associates Inc.  
Cambridge, MA  
Central New England Chapter  
“Extension of the Sonya Slifka longitudinal multiple sclerosis study” Maintaining and investigating a research-oriented repository of in-depth information about a nationwide group of people with MS over time.

Katia Noyes, Ph.D.  
University of Rochester  
Rochester, NY  
Upstate New York Chapter  
“Cost-effectiveness of treatments in multiple sclerosis (COSTRIMS)” Investigating the most appropriate methodology for assessing the cost-effectiveness of MS treatments.
Carol Simon, Ph.D.  Project Number: HC 0090
Abt Associates Inc.  Funding: $384,233
Cambridge, MA  Term: 7/1/2007-6/30/2009
Central New England Chapter  Area: Health Care Delivery/Policy
“Financial modeling of multiple sclerosis medical care”  Analyzing how the costs and financing of MS health care influences the quality of that care and the ability of people to access care.

Michael Trisolini, MBA, PhD  Project Number: HC 0070
RTI International  Funding: $466,148
Waltham, MA  Term: 7/1/2004-6/30/2008
Central New England Chapter  Area: Health Care Delivery/Policy
“Comprehensive evaluation of multiple sclerosis adult day programs”  Defining the impact of MS adult day programs in terms of quality of life, costs, health and functional status, and identifying optimal practices and funding sources.

Barbara Vickrey, M.D.,M.P.H.  Project Number: HC 0094
VA Greater Los Angeles Healthcare System  Funding: $487,570
Los Angeles, CA  Term: 7/1/2007-6/30/2010
Southern California Chapter  Area: Health Care Delivery/Policy
“Development of indicators for multiple sclerosis”  Defining what constitutes quality MS health care and how to measure it to establish better standards of medical care for people with MS.

**BIOCHEMISTRY/BIOPHYSICS**
Basic research into molecules and cell interactions that may impact MS.

Glyn Dawson, Ph.D.  Project Number: PP1319
University of Chicago  Funding: $44,000
Chicago, IL  Term: 11/1/2006-10/31/2007
Greater Illinois Chapter  Area: Biochemistry/Biophysics
“OxPC: Novel therapeutic target and diagnostic marker for multiple sclerosis”  Investigating whether a specific molecule can be used to diagnose MS and whether blocking it has potential benefits for fighting MS.

Gary Matthews, Ph.D.  Project Number: PP1382
State University of New York at Stony Brook  Funding: $44,000
Long Island Chapter  Area: Biochemistry/Biophysics
“Novel mechanisms of ion channel targeting in myelinated axons”  Exploring ways of improving nerve impulse signaling disrupted by MS.

Sean Ryder, Ph.D.  University of Massachusetts  Worcester, MA  Central New England Chapter  Project Number: PP1418  Funding: $44,000  Term: 7/1/2007-6/30/2008  Area: Biochemistry/Biophysics  “Regulation of alternative splicing in oligodendrocytes by QKI”  Exploring myelin formation for clues to how to stimulate myelin repair in MS.

CENTRAL NERVOUS SYSTEM REPAIR
Searching for ways to reverse tissue damage in MS.

Regina Armstrong, Ph.D.  Uniformed Services Univ of the Health Sciences  Bethesda, MD  National Capital Chapter  Project Number: RG 3515A3/1  Funding: $609,660  Term: 10/1/2004-9/30/2008  Area: Central Nervous System Repair  “Growth factor regulation of CNS remyelination”  Investigating natural molecules that can stimulate the repair of nerve-insulating myelin, for leads to new treatment approaches for MS.

Clare Baecher-Allan, Ph.D.  Brigham and Women’s Hospital  Boston, MA  Central New England Chapter  Project Number: RG 3825A1/1  Funding: $526,918  Term: 10/1/2006-9/30/2009  Area: Central Nervous System Repair  “Elucidating the deficiency in T cell regulation in multiple sclerosis”  Studying regulatory immune cells that might be useful in developing strategies to suppress the immune attack in MS.

Ernesto Bongarzone, Ph.D.  University of Illinois at Chicago  Chicago, IL  Greater Illinois Chapter  Project Number: PP1407  Funding: $44,000  Term: 6/1/2007-5/31/2008  Area: Central Nervous System Repair  “Mobilization of neural precursor cells in the blood of MS patients”  Examining the potential for stem cells to repair damage in MS.
Dennis Bourdette, M.D.  
Oregon Health & Science University  
Portland, OR  
Oregon Chapter  
Project Number: RG 3964-A-2  
Funding: $514,388  
Area: Central Nervous System Repair  
“Mitochondrial modulation for neuroprotection in a model of multiple sclerosis”  
Exploring the role of a protein in nerve cells and whether inhibiting it can protects axons from damage, for clues to a treatment approach in MS.

David Brown, M.B.B.S.  
University of New South Wales  
Darlinghurst  
Australia  
Project Number: RG 3989A1/T  
Funding: $69,251  
Term: 7/1/2006-6/30/2008  
Area: Central Nervous System Repair  
“Molecular and cellular mechanisms of neurodegeneration in EAE”  
Determining the possible role of a specific protein in the destruction of nerve fibers in MS.

Jeff Bulte, Ph.D.  
The Johns Hopkins University  
Baltimore, MD  
Maryland Chapter  
Project Number: RG 3630A2/3  
Funding: $514,236  
Term: 10/1/2006-9/30/2009  
Area: Central Nervous System Repair  
“MR monitoring of cell therapy in a mouse EAE model”  
Improving the techniques involved in transplanting cells as a strategy for repairing tissue damage in MS.

Peter Calabresi, M.D.  
The Johns Hopkins Hospital  
Baltimore, MD  
Maryland Chapter  
Project Number: CA 1029-A-2  
Funding: $825,000  
Area: Central Nervous System Repair  
“Collaborative MS Research Center Award”  
An interdisciplinary effort to define how nerve fibers are damaged in MS and to search for ways to protect them.

Peter Calabresi, M.D.  
The Johns Hopkins Hospital  
Baltimore, MD  
Maryland Chapter  
Project Number: TR 3760-A-3  
Funding: $4,840,000  
Term: 10/1/2005-9/30/2010  
Area: Central Nervous System Repair  
“Mechanisms of neurodegeneration and strategies for neuroprotection in MS”  
Searching for better ways to detect and quantify nerve fiber injury in MS and testing agents that may protect the nervous system from further damage.
Patrizia Casaccia, M.D., Ph.D.  
UMDNJ-Robert Wood Johnson Medical School  
Piscataway, NJ  
Mid-Jersey Chapter  
“Role of histone deacetylases (HDAC) in remyelination”  
Identifying molecules involved in myelin repair for leads to designing therapeutic approaches to restore nerve function in MS.

Patrizia Casaccia, M.D., Ph.D.  
UMDNJ-Robert Wood Johnson Medical School  
Piscataway, NJ  
Mid-Jersey Chapter  
“Gender specific role of p53 in remyelination”  
Exploring how gender differences may impact the development of a novel strategy to replace myelin-making cells lost in MS.

Gabriel Corfas, Ph.D.  
The Children's Hospital  
Boston, MA  
Central New England Chapter  
“ErbB signaling in oligodendrocyte development, demyelination and remyelination”  
Studying the role of a particular growth factor in myelin development and health, for clues to enhancing myelin repair in MS.

Massimilliano Cristofanilli, Ph.D.  
Rutgers University  
Piscataway, NJ  
Mid-Jersey Chapter  
“Therapeutic potential of stem cells from animals transplanted in shiverer mice”  
Evaluating a method of improving cell transplantation strategies for future treatment of MS.

Kristen Drescher, Ph.D.  
Creighton University  
Omaha, NE  
Nebraska Chapter  
“Role of neuregulins and their receptors in limiting TMEV-induced damage to the CNS”  
Determining whether signaling proteins from nerve fibers can enhance myelin repair in the brain and spinal cord in MS.
Ian Duncan, BVMS, Ph.D.  
University of Wisconsin-Madison  
Madison, WI  
Wisconsin Chapter  
“Remyelination and neuroprotective strategies for lesions in multiple sclerosis”  
Developing better imaging technologies to visualize myelin and nerve fiber damage, and to detect its repair, and exploring repair cell transplantation techniques.

Jeffrey Dupree, Ph.D.  
Virginia Commonwealth University  
Richmond, VA  
Central Virginia Chapter  
“Altered sodium channel expression in normal-appearing-white-matter in MS”  
Investigating how the interaction between nerve fibers and their insulating myelin contributes to tissue damage in MS.

Douglas Feinstein, Ph.D.  
University of Illinois at Chicago  
Chicago, IL  
Greater Illinois Chapter  
“Regulation of BMPs and noggin in astrocytes”  
Exploring a novel strategy for inducing myelin repair in MS.

Charles ffrench-Constant, Ph.D.  
University of Cambridge  
Cambridge  
United Kingdom  
“Cellular and molecular therapies for myelin repair and axonal protection in MS”  
Restoring myelin by identifying and amplifying natural repair factors in the brain and by attempting transplantation of replacement cells.

Marie Filbin, Ph.D.  
Hunter College  
New York, NY  
New York City Chapter  
“Blocking the inhibition of axonal regeneration by MAG/myelin”  
Reversing the action of a protein that prohibits the regeneration of damaged nerve fibers, to find ways to re-grow nerve fibers that are lost in MS.  
*Funded in part by a gift from the Manhattan Society of the NMSS New York City chapter*
Marie Filbin, Ph.D.  
Hunter College  
New York, NY  
New York City Chapter  
Project Number: PP1447  
Funding: $44,000  
Term: 8/1/2007-7/31/2008  
Area: Central Nervous System Repair  
“MAG and myelin inhibit Schwann cell migration”  
Investigating roadblocks to a possible therapeutic strategy for MS, and ways to overcome them.

Terra Frederick, Ph.D.  
Northwestern University  
Chicago, IL  
Greater Illinois Chapter  
Project Number: FG 1648A1/1  
Funding: $154,745  
Term: 8/1/2006-7/31/2009  
Area: Central Nervous System Repair  
“Combinatorial therapies to enhance myelin repair and clinical recovery in animal models of MS”  
Investigating the potential of a compound that may prevent stimulation of the immune cells that attack the brain and spinal cord in MS.  
*Fund in part by a gift from Edwin and Shirley Schiffer to the NMSS Georgia chapter*

Gavin Giovannoni, MB,BCh,(MD),PhD  
Queen Mary University of London  
London  
Project Number: TR 3763-A-1  
Funding: $3,559,904  
Term: 10/1/2005-9/30/2010  
Area: Central Nervous System Repair  
“Novel strategies to deliver growth factors to sites of inflammation in MS”  
Attempting to turn cells into vehicles that will deliver repair molecules to sites of injury in the brain, and screening molecules for their protective properties as a prelude to clinical testing in persons with MS.  
*Fund in part by the MS Society of Great Britain and Northern Ireland*

Steven Goldman, M.D., Ph.D.  
University of Rochester Medical Center  
Rochester, NY  
Upstate New York Chapter  
Project Number: RG 2898-C-3  
Funding: $589,736  
Term: 10/1/2004-9/30/2008  
Area: Central Nervous System Repair  
“Progenitor cell-based myelination of demyelinated brain”  
Attempting to restore the myelin coating of nerve fibers by cell transplantation, to explore its potential for repairing MS damage.  
*Fund in full by gifts from the Charles and Margery Barancik Foundation and the Alan Buegeleisen Research Fund*

Martin Grumet, Ph.D.  
Rutgers University  
Piscataway, NJ  
Mid-Jersey Chapter  
Project Number: PP1350  
Funding: $44,000  
Area: Central Nervous System Repair  
“Functions of olfactory ensheathing cells and their precursors”  
Exploring the potential of adult stem cells to repair myelin.
Zhigang He, Ph.D.  
The Children's Hospital  
Boston, MA  
Central New England Chapter  
“Stimulating axon regeneration by blocking nogo receptor activity”  
Testing a strategy for regenerating nerve fibers in MS-like disease.

Charles Howe, Ph.D.  
Mayo Clinic College of Medicine  
Rochester, MN  
Minnesota Chapter  
“Immune mediators of axon damage during chronic demyelination”  
Investigating whether a pro-inflammatory molecule is involved in nerve fiber damage in MS.

Heather Iocca, Ph.D.  
University of North Carolina at Chapel Hill  
Chapel Hill, NC  
Eastern No. Carolina Chapter  
“Effects of cytokines of the TNF family on CNS remyelination”  
Clarifying the activities of an immune messenger protein that seems to play both destructive and protective roles in MS.

Walid Jalabi, Ph.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
“Neuroprotection in an animal model of cortical inflammation”  
Exploring a possible protective mechanism by which certain brain cells may protect nerve cells, for clues to neuroprotective strategies for MS.

Gareth John, VetMB, PhD  
Mount Sinai School of Medicine  
New York, NY  
New York City Chapter  
“Astrocyte regulation of CNS remyelination”  
Studying a new role for brain cells called astrocytes, which may contribute to myelin repair in MS.
Jennifer Kanter, Ph.D.  
The Children's Hospital  
Boston, MA  
Central New England Chapter  
Project Number: FG 1754-A-1  
Funding: $142,971  
Term: 7/1/2007-6/30/2010  
Area: Central Nervous System Repair  
“Genetic analysis of NAD-mediated protection of axon degeneration in EAE models”  
Exploring the ability of a molecule to protect brain tissues from MS damage.  
*The Paul, Hastings, Janofsky & Walker Research Fellow*

Samia Khoury, M.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
Project Number: RG 3945-A-10  
Funding: $380,688  
Area: Central Nervous System Repair  
“Impact of IFN-gamma on neural stem cell repair potential in EAE”  
Investigating whether resident brain stem cells are damaged by immune activity in MS.

Trevor Kilpatrick, M.B.B.S., Ph.D.  
Howard Florey Inst of Exptal Physiology & Medicine  
Victoria  
Project Number: RG 3850A3/1  
Funding: $448,608  
Area: Central Nervous System Repair  
“Testing the efficacy of LIF and of galanin as its potential effector in central demyelinating disease”  
Testing advanced imaging as a method of evaluating neuroprotective therapies in people with MS.

Jeffery Kocsis, Ph.D.  
Yale University  
New Haven, CT  
Greater Connecticut Chapter  
Project Number: RG 4028-A-11  
Funding: $463,696  
Term: 10/1/2007-9/30/2010  
Area: Central Nervous System Repair  
“Therapeutic potential of cellular transplantation into a focal model of EAE”  
Determining the relative value of two types of adult stem cells in protecting and repairing MS-like injuries to the spinal cord.

Jeffery Kocsis, Ph.D.  
Yale University School of Medicine  
New Haven, CT  
Greater Connecticut Chapter  
Project Number: CA 1009A10/1  
Funding: $825,000  
Area: Central Nervous System Repair  
“Collaborative MS Research Center Award”  
Exploring tissue damage in MS and testing ways to protect and repair central nervous system tissue.
Thomas Lane, Ph.D.  
University of California, Irvine  
Irvine, CA  
Pacific South Coast  
Project Number: RG 3857A5/1  
Funding: $495,551  
Area: Central Nervous System Repair  
“Progenitor cell-induced remyelination following viral infection of the CNS”  
Exploring cell implantation as a potential therapy for repairing nervous system damage.

Guy LeBreton, Ph.D.  
University of Illinois at Chicago  
Chicago, IL  
Greater Illinois Chapter  
Project Number: RG 3054B2/1  
Funding: $660,387  
Term: 10/1/2003-3/31/2008  
Area: Central Nervous System Repair  
“Thromboxane A2 modulation of oligodendrocyte development and myelin synthesis”  
Exploring a natural molecule that may be involved in stimulating the growth and repair of nerve-insulating myelin.  
Funded in part through gifts from the Dan Family through the NMSS Greater Illinois Chapter

Joel Levine, Ph.D.  
SUNY at Stony Brook  
Stony Brook, NY  
Long Island Chapter  
Project Number: CA 1044-A-1  
Funding: $825,000  
Area: Central Nervous System Repair  
“Collaborative MS Research Center Award”  
Characterizing resident cells in the brain capable of repairing myelin and developing techniques and molecules to induce them to rebuild damaged tissues in MS and restore function.

Joel Levine, Ph.D.  
SUNY at Stony Brook  
Stony Brook, NY  
Long Island Chapter  
Project Number: PP1329  
Funding: $44,000  
Area: Central Nervous System Repair  
“Neuronal cell death following chronic demyelination”  
Investigating mechanisms that lead to nervous system damage for clues to protecting nerve tissues in MS.

Glenn Matsushima, Ph.D.  
University of North Carolina at Chapel Hill  
Chapel Hill, NC  
Eastern No. Carolina Chapter  
Project Number: RG 3898A3/1  
Funding: $166,310  
Area: Central Nervous System Repair  
“The role of MHC II in mediating remyelination”  
The possible influence of immune activity on how brain tissues are repaired in MS
Joshua Murtie, Ph.D.  
The Children's Hospital  
Boston, MA  
Central New England Chapter  
Project Number: FG 1662-A-1  
Funding: $143,971  
Term: 8/1/2005-7/31/2008  
Area: Central Nervous System Repair  
“Regulation of demyelination and remyelination by NRG1/erbB signaling”  
Exploring the role of a molecule that may be critical to myelin repair in MS.

Jacqueline Orian, Ph.D.  
La Trobe University  
Bundoora  
Project Number: RG 3642A3/1  
Funding: $372,300  
Term: 10/1/2005-9/30/2008  
Area: Central Nervous System Repair  
“Pathological events in pre-clinical stages of murine multiple sclerosis”  
Investigating novel origins of nerve fiber damage in MS-like disease.

Clara Pelfrey, Ph.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
Project Number: PP1067  
Funding: $44,000  
Area: Central Nervous System Repair  
“Neuroprotection by estrogens and neurotrophins”  
Investigating whether female sex hormones and nervous system proteins interact to protect brain cells from damage, forming the basis of a therapeutic strategy for MS.

David Pitt, M.D.  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
Project Number: FG 1666-A-1  
Funding: $175,920  
Term: 8/1/2005-7/31/2008  
Area: Central Nervous System Repair  
“Restoring glutamate homeostasis in EAE”  
Testing the ability of drugs to block possibly harmful effects of glutamate as a way of protecting brain tissues in MS-like disease.

Stefano Pluchino, M.D., Ph.D.  
Fondazione Centro San Raffaele del Monte  
Tabor  
Milano  
Project Number: RG 4000-A-1  
Funding: $278,452  
Term: 10/1/2007-9/30/2009  
Area: Central Nervous System Repair  
“Central vs peripheral immunomodulation in neural stem cell transplant for MS”  
Exploring mechanisms at work in the phenomenon in which cell transplants can reduce brain inflammation and enhance nervous system tissue repair.
Cedric Raine, D.Sc., Ph.D.  
Albert Einstein College of Medicine  
Bronx, NY  
New York City Chapter  
Project Number: RG 1001K11/1  
Funding: $509,517  
Area: Central Nervous System Repair  
“Remyelination in multiple sclerosis: influence of immune mediators”  
Investigating the roles of immune-modulating chemicals in the destruction of myelin-making cells in MS.

Murali Ramanathan, Ph.D.  
State University of New York at Buffalo  
Buffalo, NY  
W. New York/N.W. Penn. Chapter  
Project Number: RG 3743-A-3  
Funding: $646,755  
Term: 10/1/2005-9/30/2008  
Area: Central Nervous System Repair  
“Brain-derived neurotrophic factor in multiple sclerosis”  
The possible role of a protein in susceptibility to cognitive deficits in persons with MS.

Barbara Ranscht, Ph.D.  
The Burnham Institute  
La Jolla, CA  
Pacific South Coast  
Project Number: RG 3567-A-1  
Funding: $419,918  
Area: Central Nervous System Repair  
“Formation and maintenance of paranodal axoglial junctions in myelinated nerve”  
Molecular interactions between nerve fibers and myelin which are crucial to the health of both and which may be future targets for MS therapy.

Steven Reeves, Ph.D.  
Massachusetts General Hospital  
Charlestown, MA  
Central New England Chapter  
Project Number: PP1359  
Funding: $44,000  
Area: Central Nervous System Repair  
“Mouse cerebellar slice culture for MS studies”  
Developing a tool that will permit enhanced study of brain cells that are targeted by MS.

Moses Rodriguez, M.D.  
Mayo Clinic College of Medicine  
Rochester, MN  
Minnesota Chapter  
Project Number: RG 3172B8/1  
Funding: $554,511  
Term: 10/1/2004-9/30/2008  
Area: Central Nervous System Repair  
“Optimization of antibody enhanced remyelination”  
Using immune-system antibodies to encourage myelin regeneration and repair in MS-like disease.

Moses Rodriguez, M.D.  
Mayo Clinic College of Medicine  
Rochester, MN  
Minnesota Chapter  
Project Number: PP1391  
Funding: $44,000  
Term: 5/1/2007-4/30/2008  
Area: Central Nervous System Repair  
“Effect of statins on central nervous system remyelination”  
Exploring possible negative effects of an experimental MS treatment.
Moses Rodriguez, M.D.  
Mayo Clinic College of Medicine  
Rochester, MN  
Minnesota Chapter  
“Collaborative MS Research Center Award” Screening small molecules for their potential to help define functions of myelin-making cells, and their potential to stimulate myelin repair in MS

James Salzer, M.D., Ph.D.  
New York University Medical Center  
New York, NY  
New York City Chapter  
“Collaborative MS Research Center Award” Investigating mechanisms that are critical for the initial events of immune-mediated myelin damage in MS and clarifying the sources of cells that might repair such damage to rebuild the nervous system.

Nicole Schaeren-Wiemers, Ph.D.  
University of Basel, Klingelbergstrasse  
Basel  
“Characterization of autoprotective mechanisms in an animal model for MS” Exploring whether genes that instruct defense mechanisms in the brain can protect against the development of MS-like disease.

Charles Stiles, Ph.D.  
Dana Farber Cancer Institute  
Boston, MA  
Central New England Chapter  
“Collaborative MS Research Center Award” Joining forces to develop strategies for tissue repair and identify new therapeutic targets in MS.  
*Funded in full by the NMSS New York City Chapter*

Bruce Trapp, Ph.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
“Collaborative MS Research Center Award” Searching for ways to stimulate immature cells that may generate new nerve-insulating myelin after it is destroyed by MS.  
*Funded in part through gifts from the Dan Family through the NMSS Greater Illinois Chapter*
Bruce Trapp, Ph.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
“Neurogenesis in the lesions of MS” Seeking evidence that nerve cells in the brain and spinal cord have some capacity to regenerate in MS.

Timothy Vartanian, M.D., Ph.D.  
Beth Israel Deaconess Medical Center  
Boston, MA  
Central New England Chapter  
“Innate immune mechanisms of axonal injury in MS” Exploring a novel approach to why nerve fibers are damaged and why natural repair mechanisms eventually fail in MS.

Rhonda Voskuhl, M.D.  
University of California, Los Angeles  
Los Angeles, CA  
Southern California Chapter  
“Collaborative MS Research Center Award” Using cutting-edge techniques to characterize the nerve fiber damage that occurs in MS and developing candidates for neuroprotective therapies.

Rhonda Voskuhl, M.D.  
University of California, Los Angeles  
Los Angeles, CA  
Southern California Chapter  
“The etiology of permanent disability in EAE” Investigating factors involved in the transition from relapsing to progressive disease, for clues to the cause of progressive disability in MS.

Howard Weiner, M.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
“Neuroprotection in EAE using novel fullerene based compounds” Preclinical testing of a novel compound that has potential to protect nervous system tissues from MS inflammation.
Chuanshen Wu, M.D., Ph.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
“Characterization of adult central nervous system stem cells”  
The potential of immature cells in the adult brain to produce myelin repair cells in MS.

Yueting Zhang, Ph.D.  
Mount Sinai School of Medicine  
New York, NY  
New York City Chapter  
“IL-11 potentiates oligodendrocyte survival and myelination”  
Evaluating an immune messenger chemical for its ability to promote repair of MS-damaged myelin.

**HUMAN GENETICS**

Searching for genes that make people susceptible to MS or otherwise influence the disease, for clues to its cause and better treatment.

David Hafler, M.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
“Palmer Collaborative MS Research Center Award: MS Targeted Haplotype Project”  
A multi-disciplinary effort to take the next big step to finding MS genes and correlate them with clinical findings, to find the cause of MS.  
*Funded in full by a gift from Barbara Palmer to the NMSS Central New England Chapter*

David Hafler, M.D.  
Harvard Medical School  
Boston, MA  
Central New England Chapter  
“A whole genome 500,000 SNP association scan in persons with multiple sclerosis”  
Speeding up the search for MS genes using cutting edge technology and an international collaboration.
David Hafler, M.D.  
Whitehead Institute for Biomedical Research  
Cambridge, MA  
Central New England Chapter  
“**A whole genome admixture scan for the multiple sclerosis genes**” Scanning for MS genes in genetic material from patients whose ancestry contain a mix of populations at high risk and at low risk for MS.  
*Funded by the NMSS Central New England chapter, in part by gifts from Barbara Palmer*

Brigitte Huber, Ph.D.  
Tufts University  
Boston, MA  
Central New England Chapter  
“**HERV-K18 as risk factor in multiple sclerosis**” Exploring a possible role for infection in activating the immune attack underlying multiple sclerosis.

Bernadette Kalman, M.D., Ph.D.  
Syracuse VA Medical Center  
Syracuse, NY  
Upstate New York Chapter  
“**Mitochondrial DNA deletions in MS brains**” Exploring a possible mechanism for the neurological damage that occurs in MS.

Bernadette Kalman, M.D., Ph.D.  
Syracuse VA Medical Center  
Syracuse, NY  
Upstate New York Chapter  
“**Variants of beta-chemokines within chromosome 17q11 in MS**” Searching for possible gene variations in a specific chromosome region that may account for increased susceptibility to MS.

Jacob McCauley, Ph.D.  
Vanderbilt University  
Nashville, TN  
Mid-South Chapter  
“**Genome-wide association studies of multiple sclerosis**” Analyzing data from an international effort to map genes that contribute to MS susceptibility and ensuring the quality of this data.
Ariel Miller, M.D., Ph.D.  
Technion-Israel Institute of Technology  
Haifa  
Project Number: RG 3520A1/1  
Funding: $589,569  
Term: 10/1/2004-9/30/2008  
Area: Human Genetics  

“Genetics of multiple sclerosis in the Israeli Arab population”  
Studying a close-knit population to identify genes that increase susceptibility to MS and to specific symptoms.

Jorge Oksenberg, Ph.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
Project Number: PP1390  
Funding: $44,000  
Area: Human Genetics  

“Copy number polymorphisms in the MS genome”  
Determining whether a sample of people with MS share information that may yield clues to the location of a gene for MS.

Jorge Oksenberg, Ph.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
Project Number: RG 3060C8/1  
Funding: $558,770  
Term: 10/1/2006-9/30/2009  
Area: Human Genetics  

“Family based genetic studies in ethnically distinct populations”  
Identifying genes that contribute to MS susceptibility.

**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.

Katerina Akassoglou, Ph.D.  
University of California, San Diego  
La Jolla, CA  
Pacific South Coast  
Project Number: RG 3782-A-2  
Funding: $369,570  
Area: Immunology  

“A strategy to inhibit microglia activation in inflammatory demyelination”  
Studying a molecule that may activate brain cells that participate in the immune attack in MS, and testing a strategy for inhibiting this molecule.

Barry Arnason, M.D.  
University of Chicago  
Chicago, IL  
Greater Illinois Chapter  
Project Number: RG 3563A22/1  
Funding: $419,612  
Term: 10/1/2004-3/31/2008  
Area: Immunology  

“Mechanism of EAE suppression by Fc receptor ligands: implications for MS therapy”  
Testing the ability of specific proteins to limit the activation of immune cells involved in MS-like disease, as a prelude to their possible use against the MS immune attack.
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<td>Brigham and Women's Hospital</td>
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<td>How do key immune T cells influence each other's function to start or stop the immune attack in MS?</td>
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<td>Xue-Feng Bai, M.D., Ph.D.</td>
<td>RG 3638A2/1</td>
<td>$272,953</td>
<td>10/1/2005-9/30/2008</td>
<td>Immunology</td>
<td>“CD24 and experimental autoimmune encephalomyelitis” Exploring the role of a molecule in stimulating the immune attack in MS-like disease.</td>
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<td>Ohio State University</td>
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<td>Columbus, OH</td>
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<td>Konstantin Balashov, M.D., Ph.D.</td>
<td>RG 3953A2/1</td>
<td>$445,220</td>
<td>10/1/2007-9/30/2010</td>
<td>Immunology</td>
<td>“Plasmacytoid dendritic cells in MS” Understanding how viral infections may trigger immune attacks in MS by exploring immune cells that monitor for viruses in the body.</td>
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<td>UMDNJ-Robert Wood Johnson Medical School</td>
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<td>Burkhard Becher, Ph.D.</td>
<td>RG 3765A3/1</td>
<td>$409,305</td>
<td>4/1/2007-3/31/2010</td>
<td>Immunology</td>
<td>“The role of IL-18-independent IL-18-Receptor signaling in EAE” Unmasking a suspected immune messenger that may play a previously unsuspected role in MS.</td>
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<td>University of Zurich</td>
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<td>Alvin Beitz, Ph.D.</td>
<td>PP1125</td>
<td>$44,000</td>
<td>4/1/2005-3/31/2008</td>
<td>Immunology</td>
<td>“Effect of opiates on autoimmunity associated with MS” Exploring pain in MS and its possible relationship to underlying disease activity, in order to develop treatments that may address both this symptom and MS itself.</td>
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<td>University of Minnesota</td>
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<td>Minnesota Chapter</td>
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Avraham Ben-Nun, Ph.D.
Weizmann Institute of Science
Rehovot
Israel
Project Number: RG 3195B8/2
Funding: $358,170
Term: 10/1/2005-9/30/2008
Area: Immunology
“Multi-targeting approach to immunospecific modulation of complex EAE”
Developing a therapeutic approach that targets multiple molecules that may contribute to MS-like disease.

Etty (Tika) Benveniste, Ph.D.
University of Alabama at Birmingham
Birmingham, AL
Alabama Chapter
Project Number: RG 3661-A-10
Funding: $148,485
Area: Immunology
“TRADD as a regulator of cytokine signaling in macrophages and microglia”
Understanding how specific brain cells may participate in the inflammatory activity that occurs in MS.

Etty (Tika) Benveniste, Ph.D.
University of Alabama at Birmingham
Birmingham, AL
Alabama Chapter
Project Number: RG 3892-A-12
Funding: $466,838
Term: 10/1/2006-9/30/2009
Area: Immunology
“Expression and function of SOCS proteins in glia”
Investigating signaling proteins that may help immune cells to recruit brain cells for the immune attack that occurs in MS.

Gaelle Beriou, Ph.D.
Brigham and Women’s Hospital
Boston, MA
Central New England Chapter
Project Number: FG 1744-A-1
Funding: $142,471
Term: 7/1/2007-6/30/2010
Area: Immunology
“Human regulatory T cells and multiple sclerosis”
Investigating immune dysfunction in MS for clues to developing therapies that restore function and prevent the disease.

Estelle Bettelli, Ph.D.
Brigham and Women’s Hospital
Boston, MA
Central New England Chapter
Project Number: TA 3014A1/1
Funding: $568,744
Term: 8/1/2006-7/31/2011
Area: Immunology
“Cooperation between autoreactive T and B cells in a novel model of spontaneous EAE”
Investigating the role of immune B cells in the early stages of the immune attack in MS.
Roopa Bhat, M.D., Ph.D.  Project Number: FAN 1747-A-1
Stanford Medical Center  Funding: $114,877
Northern California Chapter  Area: Immunology
“The role of gamma amino butyric acid in EAE and MS”  Understanding the potential of a molecule for protecting against MS damage to brain tissues

Elizabeth Blankenhorn, Ph.D.  Project Number: RG 3575A5/1
Drexel University  Funding: $783,134
Grtr. Delaware Valley Chapter  Area: Immunology
“Genetic basis for gender differences in EAE susceptibility”  Identifying genes that may be responsible for differences in the susceptibility of male and female mice to MS-like disease, for clues to human MS genes.

Celia Brosnan, Ph.D.  Project Number: RG 3827A5/1
Albert Einstein College of Medicine  Funding: $469,663
Bronx, NY  Term: 10/1/2006-9/30/2009
New York City Chapter  Area: Immunology
“Astrocyte connexins and demyelinating diseases”  Determining whether loss of cell-to-cell communication in the brain and spinal cord is a factor in nervous system damage in MS.

Mark Burgoon, Ph.D.  Project Number: RG 3897A2/1
University of Colorado  Funding: $527,345
Colorado Chapter  Area: Immunology
“Antigen identification in MS”  Attempting to identify the target of immune antibodies typically found in MS spinal fluid for clues to the disease trigger

Astrid Cardona, Ph.D.  Project Number: TA 3021-A-1
Cleveland Clinic Foundation  Funding: $568,744
Cleveland, OH  Term: 8/1/2006-7/31/2011
Ohio Buckeye Chapter  Area: Immunology
“Role of CX3CL1/CX3CR1 in neuroinflammation”  Exploring an immune messenger chemical that may play a role in the immune attack that occurs in MS.
Michael Carrithers, M.D., Ph.D.  Project Number: RG 3888-A-2
Yale University  Funding: $415,718
New Haven, CT  Term: 10/1/2006-9/30/2009
Greater Connecticut Chapter  Area: Immunology
“T lymphocyte surveillance & the neuroprotective barriers in MS” Studying the factors that affect the migration of T cells into the brain and spinal cord during the immune attack in MS.

Robert Clark, M.D.  Project Number: PP1322
University of Connecticut Health Center  Funding: $44,000
Farmington, CT  Term: 11/1/2006-10/31/2007
Greater Connecticut Chapter  Area: Immunology
“Novel bacterial lipids of commensal organisms promote EAE” Exploring a possible mechanism whereby bacteria could trigger an immune attack in MS.

Stephen Crocker, Ph.D.  Project Number: TA 3021A1/1
The Scripps Research Institute  Funding: $550,000
La Jolla, CA  Term: 7/1/2007-6/30/2012
Pacific South Coast  Area: Immunology
“Investigating the roles of TIMP-1 in CNS demyelination and repair” How the nervous system responds to myelin injury and how it repairs myelin damage, for clues to stimulating brain repair in MS.

Dyana Dalton, Ph.D.  Project Number: RG 3820A2/1
Trudeau Institute  Funding: $469,240
Saranac Lake, NY  Term: 10/1/2006-9/30/2009
Upstate New York Chapter  Area: Immunology
“Regulation of apoptotic genes by IFN-g in autoreactive peripheral CD4 T cells” Studying why the normal self-limiting mechanism of immune cells may fail in MS, leading to an immune attack on the brain and spinal cord.

Valerie Dardalhon, Ph.D.  Project Number: FG 1642-A-1
Brigham and Women's Hospital  Funding: $150,800
Boston, MA  Term: 8/1/2005-7/31/2008
Central New England Chapter  Area: Immunology
“Molecular mechanisms of encephalitogenic T cells” Understanding the possible role of a newly discovered protein in the aggressive immune attack in MS.
Michael David, Ph.D.  
University of California, San Diego  
La Jolla, CA  
Pacific South Coast  
Project Number: RG 3948-A-2  
Funding: $455,885  
Area: Immunology  

“Type I interferon suppression of IL-2 production”  
How interferons reduce relapses in MS, to improve their use and to identify new therapeutic targets.

Cynthia DeBoy, Ph.D.  
The Johns Hopkins Hospital  
Baltimore, MD  
Maryland Chapter  
Project Number: FG 1695-A-1  
Funding: $142,471  
Term: 8/1/2006-7/31/2009  
Area: Immunology  

“FLT-3 expression and function on microglia in EAE”  
Determining whether an agent that inhibits a molecule involved in inflammation can be of use in treating MS.

Cinzia Dello Russo, M.D., Ph.D.  
Catholic University Medical School  
Rome  
Italy  
Project Number: RG 3838A1/T  
Funding: $49,427  
Term: 10/10/2005-3/31/2008  
Area: Immunology  

“Noradrenergic Regulation of Microglial Activation”  
Analyzing complex mechanisms by which certain brain cells are activated to participate in the immune attack in an MS-like disease in rats.

Michael Demetriou, M.D., Ph.D.  
University of California, Irvine  
Irvine, CA  
Pacific South Coast  
Project Number: RG 3801-A-1  
Funding: $519,948  
Area: Immunology  

“Regulation of autoimmune demyelinating disease by gene Mgat5”  
Investigating the mechanisms by which a specific enzyme directs T cells in the immune attack in MS.

Patrizia DeSarno, Ph.D.  
University of Alabama at Birmingham  
Birmingham, AL  
Alabama Chapter  
Project Number: PP1335  
Funding: $44,000  
Area: Immunology  

“The role of glycogen synthase kinase-3 (GSK3) in EAE”  
Investigating whether an enzyme plays a role in MS inflammation, and whether inhibiting the enzyme is a potential target for MS therapy.
Bonnie Dittel, Ph.D.  
Blood Center of Wisconsin  
Milwaukee, WI  
Wisconsin Chapter  
Project Number: PP1434  
Funding: $44,000  
Term: 8/1/2007-7/31/2008  
Area: Immunology  
“Regulation of autoreactive T cell effector function in the CNS by the cannabinoid system”  
Investigating how cannabinoids, compounds similar to marijuana, influence the activity of immune cells responsible for disease activity in MS.

Martin Dorf, Ph.D.  
Harvard Medical School  
Boston, MA  
Central New England Chapter  
Project Number: RG 3871A4/1  
Funding: $459,575  
Area: Immunology  
“Regulation of cytokine signaling in astrocytes”  
Teasing out beneficial versus harmful responses by brain cells to refine therapies for MS.

Britta Engelhardt, Ph.D.  
University of Berne  
Bern  
Project Number: RG 3721A1/1  
Funding: $503,399  
Area: Immunology  
“Molecular mechanisms of leukocyte migration across the blood-brain barrier”  
Exploring how immune cells enter the brain in MS, in order to develop strategies to stop this influx.

Brian Evavold, Ph.D.  
Emory University  
Atlanta, GA  
Georgia Chapter  
Project Number: RG 3683-A-2  
Funding: $462,224  
Area: Immunology  
“Targeting T cell receptor expression as a therapy for autoimmunity”  
Developing a potential therapy that targets molecules that stimulate the immune attack in MS-like disease.

Brian Evavold, Ph.D.  
Emory University  
Atlanta, GA  
Georgia Chapter  
Project Number: RG 4047-A-3  
Funding: $489,426  
Term: 10/1/2007-9/30/2010  
Area: Immunology  
“Mechanisms of tolerance against autoimmune disease using MHC variant peptides”  
Administering altered pieces of myelin proteins to mice with MS-like disease in efforts to turn off the immune attack.
<table>
<thead>
<tr>
<th>Name</th>
<th>University</th>
<th>Chapter</th>
<th>Project Number</th>
<th>Funding</th>
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<td><strong>Zsuzsanna Fabry, Ph.D.</strong></td>
<td>University of Wisconsin-Madison</td>
<td>Wisconsin Chapter</td>
<td>PP1429</td>
<td>$44,000</td>
<td>8/1/2007-7/31/2008</td>
<td>Immunology</td>
<td>“Cerebral trauma and CNS autoimmunity” Investigating a possible trigger for the immune attack in MS.</td>
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<td><strong>Ji-Ming Feng, Ph.D.</strong></td>
<td>University of California, Los Angeles</td>
<td>Southern California Chapter</td>
<td>RG 3855-A-2</td>
<td>$432,719</td>
<td>10/1/2006-9/30/2009</td>
<td>Immunology</td>
<td>“The role of golli-myelin basic proteins in EAE” Studying a protein that activates immune cells to attack the brain and spinal cord in MS.</td>
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<td><strong>Denise Fitzgerald, Ph.D.</strong></td>
<td>Thomas Jefferson University</td>
<td>Grtr. Delaware Valley Chapter</td>
<td>FG 1645-A-1</td>
<td>$143,971</td>
<td>8/1/2005-7/31/2008</td>
<td>Immunology</td>
<td>“The role of IL-27 in MS/EAE” Investigating the role of one immune messenger protein in the attack on the brain and spinal cord in MS.</td>
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<td><strong>Thomas Forsthuber, M.D., Ph.D.</strong></td>
<td>University of Texas at San Antonio</td>
<td>Lone Star Chapter</td>
<td>RG 3701A4/1</td>
<td>$510,814</td>
<td>4/1/2006-3/31/2009</td>
<td>Immunology</td>
<td>“Superagonist peptide-mediated T cell tolerance in EAE” Exploring a novel strategy for &quot;turning off&quot; the immune attack against myelin in MS.</td>
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<td><strong>Thomas Forsthuber, M.D., Ph.D.</strong></td>
<td>University of Texas at San Antonio</td>
<td>Lone Star Chapter</td>
<td>RG 3499A3/T</td>
<td>$244,967</td>
<td>6/1/2005-3/31/2008</td>
<td>Immunology</td>
<td>“The role of macrophage migration inhibitory factor (MIF) in EAE” Evaluating the role of an immune messenger protein that may contribute to the immune attack in an MS-like disease in mice by prolonging the life of inflammatory immune cells.</td>
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Robert Fujinami, Ph.D.  
University of Utah  
Salt Lake City, UT  
Utah State Chapter  
Project Number: PP1229  
Funding: $44,000  
Area: Immunology  
“Role of anti-VLA-4 in latent virus reactivation”  
Exploring how a latent virus in mice may be re-awakened with immune-modulating therapy.

Shailendra Giri, Ph.D.  
Medical University of South Carolina  
Charleston, SC  
Mid-Atlantic Chapter  
Project Number: RG 3810-A-1  
Funding: $463,175  
Area: Immunology  
“AMP-activated protein kinase as a key target for EAE disease process”  
Determining the exact role of this enzyme in MS-like inflammation, and testing an agent that inhibits this enzyme.

Joan Goverman, Ph.D.  
University of Washington  
Seattle, WA  
Greater Washington Chapter  
Project Number: RG 3851-A-5  
Funding: $477,635  
Term: 10/1/2006-9/30/2009  
Area: Immunology  
“The role of T cells in shaping the inflammatory response in the CNS”  
Identifying the mechanisms that regulate whether immune cells attack the brain or spinal cord in MS.

Kareem Graham, Ph.D.  
Stanford University  
Palo Alto, CA  
Northern California Chapter  
Project Number: FG 1703-A-1  
Funding: $142,471  
Term: 9/1/2006-8/31/2009  
Area: Immunology  
“The role of the orphan receptor L-CCR in a murine model of multiple sclerosis”  
Identifying immune messenger proteins that may contribute to the immune attack in MS.

David Hafler, M.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
Project Number: RG 3567A15/1  
Funding: $470,890  
Area: Immunology  
“T cell responses in MS”  
Determining the involvement of genetic factors in activating immune cells to attack in MS.

Laurie Harrington, Ph.D.  
University of Alabama at Birmingham  
Birmingham, AL  
Alabama Chapter  
Project Number: TA 3025-A-1  
Funding: $568,744  
Term: 8/1/2006-9/30/2011  
Area: Immunology  
“CD4 T cell functional heterogeneity during multiple sclerosis”  
Exploring the possibility that a newly discovered subset of immune cells may instigate the attack on the brain and spinal cord in MS.
William Hastings, Ph.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
Project Number: FG 1705-A-1  
Funding: $142,471  
Term: 8/1/2006-7/31/2009  
Area: Immunology  
“The role of tim-3 and microglial cells in the pathogenesis of multiple sclerosis”  
Studying a molecule that appears to serve as an activating switch for the immune cells that attack the brain and spinal cord in MS.

Colleen Hayes, Ph.D.  
University of Wisconsin-Madison  
Madison, WI  
Wisconsin Chapter  
Project Number: RG 3107-C-4  
Funding: $540,470  
Term: 10/1/2006-9/30/2009  
Area: Immunology  
“Vitamin D regulation of autoimmune encephalomyelitis”  
Investigating how sex differences and environmental factors may interact to protect against or enhance the nervous system damage caused by MS.

Hua Huang, M.D., Ph.D.  
National Jewish Hospital and Research Center  
Denver, CO  
Colorado Chapter  
Project Number: PP1357  
Funding: $44,000  
Area: Immunology  
“Identification of regulatory regions of the I117 gene”  
Developing a way of studying the complex structure of nerve-insulating myelin, for clues to its damage and repair in MS.

Kouichi Ito, Ph.D.  
University of Medicine and Dentistry of New Jersey  
Piscataway, NJ  
Mid-Jersey Chapter  
Project Number: PP1417  
Funding: $44,000  
Term: 7/1/2007-6/30/2008  
Area: Immunology  
“Generation of MBP-Tg mice to investigate the development of MBP-specific tregs”  
Exploring a novel mechanism for regulating the immune attack in MS.

David Kaplan, M.D., Ph.D.  
Case Western University Hospital  
Cleveland, OH  
Ohio Buckeye Chapter  
Project Number: PP1388  
Funding: $44,000  
Term: 5/1/2007-4/30/2008  
Area: Immunology  
“High resolution immunophenotyping in the study of MS”  
Examining the role that a subset of immune cells plays on the attack on the brain and spinal cord in people with MS.
Nitin Karandikar, M.D., Ph.D.  
University of Texas Southwestern Medical Center  
Dallas, TX  
Lone Star Chapter  
“Therapeutic modulation of autoreactive T cell responses in multiple sclerosis”  
Characterizing specific immune responses mounted by different subtypes of immune cells in people with MS, for clues to stopping the attack.

Samia Khoury, M.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
“Memory T Cells in EAE”  
Testing the possible role of specific immune cells in the ongoing course of MS-like disease.

Robyn Klein, M.D., Ph.D.  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
“Neuroprotective mechanisms of CXCL12 during CNS autoimmune disease”  
Exploring the role of a molecule that may have capabilities of protecting nerve tissues and stimulating repair in MS.

Vijay Kuchroo, Ph.D., D.V.M.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
“Role of TIM-1 in the induction and regulation of EAE”  
Focusing on the complex balance of immune factors that regulate the immune attack that underlies MS.

Vijay Kuchroo, Ph.D., D.V.M.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
“Pathogenic and regulatory mechanisms in EAE”  
Investigating a newly discovered subtype of T cells recently recognized to be involved in MS.
Juan Lafaille, Ph.D.  
New York University Medical Center  
New York, NY  
New York City Chapter  
Project Number: RG 3361-B-3  
Funding: $669,601  
Area: Immunology  
“Sequence of events leading to the development and regulation of spontaneous EAE”  
Using a unique approach to investigate the earliest events that lead to the immune attack in the development of MS-like disease.  
*Funded in part by a gift from the Manhattan Society of the NMSS New York City Chapter*

Juan Lafaille, Ph.D.  
New York University Medical Center  
New York, NY  
New York City Chapter  
Project Number: RG 3755-A-4  
Funding: $473,438  
Term: 10/1/2005-9/30/2008  
Area: Immunology  
“Homing of MBP-specific T cells to different regions of the central nervous system”  
Exploring why immune cells migrate to specific areas of the brain and spinal cord during the course of the attack in an MS-like disease in mice.  
*Funded in part by a gift from the Associates Committee of the NMSS New York City Chapter*

Thomas Lane, Ph.D.  
University of California, Irvine  
Irvine, CA  
Pacific South Coast  
Project Number: RG 3278B4/2  
Funding: $425,456  
Term: 10/1/2005-9/30/2008  
Area: Immunology  
“Chemokines and chemokine receptors and viral-induced demyelination”  
Detecting how an immune chemical contributes to the immune attack in MS, for clues to a new therapeutic strategy.

Andrew Larner, M.D., Ph.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
Project Number: RG 3643A1/1  
Funding: $228,233  
Term: 10/1/2005-9/30/2008  
Area: Immunology  
“Signaling in cells chronically exposed to interferon beta”  
Determining the specific effects of interferon therapy on immune cells in people with MS.

Hans Lassmann, M.D.  
Medical University of Vienna  
Vienna  
Austria  
Project Number: PP1443  
Funding: $40,000  
Term: 8/1/2007-7/31/2008  
Area: Immunology  
“Feasibility of microarray studies in archival paraffin embedded MS tissue”  
Testing a novel technique for studying MS tissue damage for insights into ways to stop it, building on the infrastructure of the MS Lesion Project.
**Terri Laufer, M.D.**  
Hospital of the University of Pennsylvania  
Philadelphia, PA  
Grtr. Delaware Valley Chapter  
*Project Number: PP1294*  
*Funding: $44,000*  
*Term: 9/1/2006-8/31/2008*  
*Area: Immunology*  
*“Antigen presentation requirements for the induction of EAE”*  
Identifying a new type of cell that may help to activate the immune attack in MS.

**Jason Lees, Ph.D.**  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
*Project Number: FG 1757-A-1*  
*Funding: $150,800*  
*Term: 7/1/2007-6/30/2010*  
*Area: Immunology*  
*“Mechanisms of T-cell CNS invasion during initiation of neuroinflammation”*  
Identifying the molecules necessary for immune T cell to enter the brain during the initiation of MS.

**Steven LeVine, Ph.D.**  
University of Kansas Medical Center  
Kansas City, KS  
Mid-America Chapter  
*Project Number: PP1411*  
*Funding: $44,000*  
*Term: 7/1/2007-6/30/2008*  
*Area: Immunology*  
*“The functional role of histamine receptors on lymphocytes from MS patients”*  
Examining whether blocking or enhancing the activity of histamine can influence immune activity in MS.

**Feng Lin, Ph.D.**  
Case Western Reserve University  
Cleveland, OH  
Ohio Buckeye Chapter  
*Project Number: RG 3664-A-1*  
*Funding: $271,594*  
*Term: 4/1/2005-3/31/2008*  
*Area: Immunology*  
*“Concurrent inhibition of T cell injury and complement attack in multiple sclerosis”*  
Testing a strategy that may reduce MS-like disease in mice by inhibiting proteins that contribute to tissue damage.

**Dan Littman, M.D., Ph.D.**  
New York University  
New York, NY  
New York City Chapter  
*Project Number: RG 3912A1/T*  
*Funding: $439,507*  
*Term: 10/1/2006-9/30/2009*  
*Area: Immunology*  
*“Regulation of Th17 cells and regulatory T cells in EAE”*  
Investigating a protein that may help activate immune cells to attack the brain and spinal cord in MS.
**Rocio Lopez-Diego, M.D., Ph.D.**  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
*Project Number: FG 1717-A-1*  
*Funding: $170,068*  
*Term: 8/1/2006-7/31/2009*  
*Area: Immunology*  
*“Role of TGF-beta-expressing dendritic cells in multiple sclerosis”* Using a novel technology to study the effects of an immune messenger protein on activation of the immune attack in MS.

**Amy Lovett-Racke, Ph.D.**  
Ohio State University  
Columbus, OH  
Ohio Buckeye Chapter  
*Project Number: RG 3812A3/T*  
*Funding: $365,547*  
*Term: 10/1/2006-9/30/2009*  
*Area: Immunology*  
*“Characterizing therapeutic targets for multiple sclerosis”* Investigating a molecule that is critical to the development of immune cells that drive the attack in MS.

**Amy Lovett-Racke, Ph.D.**  
Ohio State University  
Columbus, OH  
Ohio Buckeye Chapter  
*Project Number: JF 2116A1/1T*  
*Funding: $318,837*  
*Term: 10/1/2006-9/30/2009*  
*Area: Immunology*  
*“Role of t-bet in immune-mediated demyelinating disease”* Testing a new approach to turning off immune cells specifically involved in the attack against myelin in MS-like disease.

**Charitha Madiraju, Ph.D.**  
The Burnham Institute  
La Jolla, CA  
Pacific South Coast  
*Project Number: FG 1760-A-1*  
*Funding: $133,825*  
*Term: 8/1/2007-7/31/2010*  
*Area: Immunology*  
*“Targeting Ubc13 for treatment of multiple sclerosis”* Drug discovery aimed at developing small molecules that inhibit a critical signaling enzyme implicated in MS.

**Mark Mannie, Ph.D.**  
East Carolina University  
Greenville, NC  
Eastern No. Carolina Chapter  
*Project Number: RG 3524A6/1*  
*Funding: $191,923*  
*Term: 10/1/2004-3/31/2008*  
*Area: Immunology*  
*“Antigen-specific inhibition of EAE”* Developing a unique way to neutralize immune cells that recognize and launch the attack against myelin in MS-like disease.
**Mark Mannie, Ph.D.**  
East Carolina University  
Greenville, NC  
Eastern No. Carolina Chapter  
Project Number: RG 3524B7/2  
Funding: $414,548  
Term: 10/1/2007-9/30/2010  
Area: Immunology

**“Antigen-specific inhibition of EAE”**  
Designing a potential therapy for MS that traps and kills destructive immune cells that target nerve-insulating myelin.

**Roy Mariuzza, Ph.D.**  
University of Maryland Biotech Institute  
Rockville, MD  
National Capital Chapter  
Project Number: RG 2747-D-4  
Funding: $391,142  
Term: 10/1/2006-9/30/2009  
Area: Immunology

**“Structural basis for T cell recognition of myelin antigens in multiple sclerosis”**  
Using high-powered technology to clarify immune cell structures involved in activating the immune attack in MS.

**Brian Martin, Ph.D.**  
The University of Iowa  
Iowa City, IA  
Project Number: RG 3676-A-2  
Funding: $484,523  
Area: Immunology

**“Complement C1q and C3: roles in demyelination and remyelination”**  
Exploring the role of two immune proteins in nervous system damage, for clues to restoring myelin in MS.

**Shaun McColl, Ph.D.**  
University of Adelaide  
Adelaide  
Project Number: RG 3331-B-2  
Funding: $376,890  
Term: 10/1/2005-9/30/2008  
Area: Immunology

**“Evaluation of chemokine receptors as therapeutic targets in multiple sclerosis.”**  
Investigating immune proteins that facilitate the immune attack in MS, and possible ways to block their activity.

**Minnie McMillan, Ph.D.**  
University of Southern California  
Los Angeles, CA  
Southern California Chapter  
Project Number: PP1387  
Funding: $44,000  
Area: Immunology

**“Mass spectrometry study of a toleragenic peptide for treating multiple sclerosis”**  
Using novel technology to evaluate the success of a treatment under study in people with MS.
Stephen Miller, Ph.D.  
Northwestern University  
Chicago, IL  
Greater Illinois Chapter  
**Project Number: RG 3546A1/T**  
Funding: $427,751  
Area: Immunology  
"Understanding the role of gamma/delta T cells in relapsing EAE"  
The potential of specific immune cells for turning off the immune attack in MS-like disease, and their promise for treating human MS.

Stephen Miller, Ph.D.  
Northwestern University  
Chicago, IL  
Greater Illinois Chapter  
**Project Number: RG 3793-A-7**  
Funding: $115,216  
Area: Immunology  
"Pathogenesis and immunoregulation of PLP-induced relapsing EAE"  
Investigating a phenomenon that may play a role in the repeated immune attacks on myelin in MS.

Stephen Miller, Ph.D.  
Northwestern University  
Chicago, IL  
Greater Illinois Chapter  
**Project Number: RG 3965-A-8**  
Funding: $111,982  
Area: Immunology  
"Immunoregulation and pathology of chronic-relapsing EAE"  
Exploring how an experimental therapy blocks relapses in mice and its potential for treating people with MS.

Richard Milner, M.D., Ph.D.  
The Scripps Research Institute  
La Jolla, CA  
Pacific South Coast  
**Project Number: JF 2125A1/1**  
Funding: $626,997  
Term: 8/1/2006-7/31/2011  
Area: Immunology  
"Microglial activation by fibronectin and vitronectin in demyelinating disease"  
Investigating proteins that may induce brain cells to participate in the immune attack and cause damage in MS.

William O'Connor, Ph.D.  
Yale University  
New Haven, CT  
Greater Connecticut Chapter  
**Project Number: FG 1766-A-1**  
Funding: $150,800  
Term: 7/1/2007-6/30/2010  
Area: Immunology  
"Molecular mechanisms underlying the IL-23-IL-17 immune axis"  
Teasing out the function of immune messenger proteins that may play key roles in the MS immune attack.
Kevin O'Connor, Ph.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
**“Characterization of B cells in MS brain lesions”** Identifying the specific molecular target of immune cells in search of clues to what triggers MS.

Halina Offner, Ph.D.  
Oregon Health & Science University  
Portland, OR  
Oregon Chapter  
**“Immunoregulatory effects of estrogen in EAE”** Evaluating the mechanisms underlying the ability of a sex hormone to quell the immune attack in MS.

Halina Offner, Ph.D.  
Oregon Health & Science University  
Portland, OR  
Oregon Chapter  
**“Immunoregulation and neuroprotection by RTLs in EAE”** Investigating a therapeutic strategy that can change the T cell response from inflammatory to non-inflammatory, for possible future treatment of MS.

Julie Olson, Ph.D.  
University of Wisconsin-Madison  
Madison, WI  
Wisconsin Chapter  
**“Role of the innate immune response in a virus-induced model of MS”** Exploring aspects of the body's immune-system reaction to viruses for clues to the underlying immune attack in MS and ways to stop it.

Mohamed Oukka, Ph.D.  
Brigham and Women's Hospital  
Cambridge, MA  
Central New England Chapter  
**“Tracking and functional analysis of regulatory T cells in EAE”** Exploring how regulatory immune cells function, in order to understand how they might be stimulated to suppress the immune attack in MS.
**Joel Pachter, Ph.D.**
University of Connecticut Health Center  
Farmington, CT  
Greater Connecticut Chapter  
*Project Number: PP1215*

Funding: $35,000  
Term: 1/1/2006-6/30/2008  
Area: Immunology

“Selective knockout of MCP-1 expression in astrocytes and endothelial cells in vivo”  
Investigating the role of a molecule that attracts immune cells to attack the brain and spinal cord in MS-like disease.

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**Vrajesh Parekh, Ph.D.**
Vanderbilt University  
Nashville, TN  
Mid-South Chapter  
*Project Number: FG 1725-A-1*

Funding: $150,800  
Term: 8/1/2006-7/31/2009  
Area: Immunology

“Cooperation between iNKT cells and treg cells in controlling EAE”  
Investigating a novel substance that may help to suppress immune responses such as that which occurs in MS.

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**Rosetta Pedotti, M.D.**
National Neurological Institute Carlo Besta  
Milan  
*Project Number: RG 3858-A-2*

Funding: $126,952  
Term: 10/1/2006-9/30/2008  
Area: Immunology

“Histamine immune modulation of CNS autoimmune disease”  
Investigating a novel substance that may help to suppress immune responses such as that which occurs in MS.

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**Clara Pelfrey, Ph.D.**
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
*Project Number: RG 3005-B-4*

Funding: $479,190  
Area: Immunology

“Longitudinal immune- and neurotrophic-cytokine responses in MS”  
Correlating activity of immune cells specific to MS attacks with clinical and MRI measures of MS and its progression.

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**Clara Pelfrey, Ph.D.**
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
*Project Number: PP1383*

Funding: $44,000  
Area: Immunology

“Estrogen regulation on migration across the blood brain barrier”  
Understanding how sex hormones affect the ability of immune cells to enter and attack the brain and spinal cord in MS.
Richard Peterson, Ph.D.  
University of California, Los Angeles  
Los Angeles, CA  
Southern California Chapter  
“**The role of reactive astrocytes in experimental autoimmune encephalomyelitis**”  
Determining whether, in MS, brain cells known as astrocytes contribute to or suppress the immune attack.

Thomas Petro, Ph.D.  
University of Nebraska Medical Center  
Lincoln, NE  
Nebraska Chapter  
“**Effect of resveratrol on development of EAE**”  
Studying a novel therapeutic strategy in MS-like disease, for clues to its use in MS.

Laura Piccio, M.D.  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
“**Pathogenic and potential therapeutic role of TREM2 in CNS autoimmune inflammatory diseases**”  
Determining whether a newly uncovered molecule plays a crucial role in the immune attack in MS.

Vinodh Pillai, M.B.B.S., Ph.D.  
University of Texas Southwestern Medical Center  
Dallas, TX  
Lone Star Chapter  
“**Role of dendritic cells in the dysfunction of CD4+ and CD8+ regulatory T cells in MS**”  
Why normal regulatory immune cells cannot turn off the immune attack in MS and how to fix it.

Joseph Podojil, Ph.D.  
Northwestern University  
Chicago, IL  
Greater Illinois Chapter  
“**Effect of anti-CD80 antibody treatment on encephalogenic T cell survival in EAE**”  
Examining the process by which immune cells are activated to attack in MS, for clues to blocking activation.
Michael Racke, M.D.  
Ohio State University  
Columbus, OH  
Ohio Buckeye Chapter  
Project Number: RG 3427B10/1T  
Funding: $449,576  
Area: Immunology  
“PPARalpha agonists as treatment for autoimmune demyelination”  
Exploring the potential of a compound for MS that already is used to treat cholesterol disorders.

Michael Racke, M.D.  
Ohio State University  
Columbus, OH  
Ohio Buckeye Chapter  
Project Number: RG 3490A9/2T  
Funding: $381,708  
Area: Immunology  
“Multiple sclerosis and infection: molecular mechanisms”  
Examining how infectious agents may trigger the immune attack in MS-like disease.

Chander Raman, Ph.D.  
University of Alabama at Birmingham  
Birmingham, AL  
Alabama Chapter  
Project Number: RG 3891A1/1  
Funding: $451,579  
Area: Immunology  
“CD5 regulation of T-cell pathogenesis in EAE”  
How a key protein functions to keep destructive T cells active, and its implications for stopping the MS immune attack.

Richard Ransohoff, M.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
Project Number: RG 3980-A-5  
Funding: $444,444  
Area: Immunology  
“Chemokines in CNS inflammation”  
The dual role of attractant molecules in the MS immune attack and in tissue repair.

Christine Rohowsky-Kochan, Ph.D.  
University of Medicine and Dentistry of New Jersey  
Newark, NJ  
Greater North Jersey Chapter  
Project Number: PP1432  
Funding: $44,000  
Term: 9/1/2007-8/31/2008  
Area: Immunology  
“Il-17 and SOCS expression in multiple sclerosis”  
Identifying mediators of the immune attack in MS, for clues to turning off this attack.

John Rose, M.D.  
University of Utah  
Salt Lake City, UT  
Utah State Chapter  
Project Number: RG 3411-A-3  
Funding: $614,900  
Area: Immunology  
“The role of cyclooxygenase in multiple sclerosis”  
Understanding how the immune attack in MS might also harm myelin-making cells and exploring ways to overcome this inhibition to repair.
Abdol Rostami, M.D., Ph.D.  
Thomas Jefferson University  
Philadelphia, PA  
Grtr. Delaware Valley Chapter  
Project Number: RG 2991A1/1T  
Funding: $147,890  
Term: 10/1/2004-9/30/2008  
Area: Immunology  
“Mechanisms of tolerance induced by i.v. MBP in EAE”  
Teaching the immune system to tolerate nerve-insulating myelin, with an aim to suppressing the MS-associated immune attack.

Horea Rus, M.D., Ph.D.  
University of Maryland  
Baltimore, MD  
Maryland Chapter  
Project Number: PP1422  
Funding: $44,000  
Term: 9/1/2007-8/31/2008  
Area: Immunology  
“RGC-32 as a potential marker of disease activity in multiple sclerosis”  
Determining the role of a protein that may help escalate the immune attack in MS.

John Russell, Ph.D.  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
Project Number: RG 3314B4/1  
Funding: $459,099  
Term: 10/1/2004-9/30/2008  
Area: Immunology  
“Roles of Fas & tumor necrosis factor receptor in autoimmune demyelinating disease”  
Investigating mechanisms involved in the nerve tissue damage that occurs in MS-like disease for insights into developing new therapies to stop MS.

John Russell, Ph.D.  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
Project Number: RG 3732A5/1  
Funding: $540,022  
Area: Immunology  
“Antigen-dependent and independent events in CNS surveillance and inflammation”  
Identifying the molecular signals that permit immune cells to enter the brain and spinal cord in MS.

Benjamin Segal, M.D.  
University of Rochester  
Rochester, NY  
Upstate New York Chapter  
Project Number: RG 3866-A-3  
Funding: $454,311  
Term: 10/1/2006-9/30/2009  
Area: Immunology  
“Myeloid cell expansion, mobilization and differentiation during EAE”  
Investigating a type of immune cell involved in MS that may damage the nervous system.
Benjamin Segal, M.D.  
University of Rochester  
Rochester, NY  
Upstate New York Chapter  
“Collaborative MS Research Center Award”  
Developing therapeutic vaccines and novel immune-modulating agents to improve the treatment of MS and advance nervous tissue repair.

Arlene Sharpe, M.D., Ph.D.  
Harvard University  
Boston, MA  
Central New England Chapter  
“Manipulation of the B7-CD28/CTLA-4 costimulatory pathway & EAE”  
Attempting to block immune activity in MS-like disease in search of better treatment for human MS.  
*Funded in part by the Estate of Norman Cohn*

Michael Shaw, Ph.D.  
Wayne State University  
Detroit, MI  
Michigan Chapter  
“FoxP3 transduced, antigen-specific T cells as a therapeutic for EAE”  
Investigating a potential treatment strategy for MS that employs immune cells that can regulate the attack on the brain and spinal cord.

Lawrence Sherman, Ph.D.  
Oregon Health & Science University  
Beaverton, OR  
Oregon Chapter  
“Suppression of EAE with progesterone induced blocking factor”  
Investigating whether a factor that may suppress MS relapses during pregnancy can improve MS-like disease in mice.

Fu-Dong Shi, M.D., Ph.D.  
St. Joseph’s Hospital and Medical Center  
Phoenix, AZ  
Arizona Chapter  
“Cytokine-antibody immune complex expanded NK cells in EAE”  
Exploring a possible way to use immune cells to turn off the immune attack that underlies MS.
Teruna Siahaan, Ph.D.  
University of Kansas  
Lawrence, KS  
Mid-America Chapter  
“Suppression of EAE by modulating the immunological synapse” Developing an experimental treatment for MS that may reprogram the immune system to ignore and not attack myelin.

Wenchao Song, Ph.D.  
University of Pennsylvania  
Philadelphia, PA  
Grtr. Delaware Valley Chapter  
“Complement regulatory proteins and experimental autoimmune encephalomyelitis” Investigating a therapeutic strategy for inhibiting immune proteins in MS-like disease.

Mythily Srinivasan, Ph.D.  
Indiana University School of Dentistry  
Indianapolis, IN  
Indiana State Chapter  
“CD80-binding peptide mimics in the treatment of multiple sclerosis” Testing a strategy for preventing the activation of T cells that drive the immune attack in MS.

Lawrence Steinman, M.D.  
Stanford Medical Center  
Palo Alto, CA  
Northern California Chapter  
“Collaborative MS Research Center Award” Using novel technology to study the immune attack in MS on a broad scale to identify targets for therapies aimed at specific components of this attack.

Lawrence Steinman, M.D.  
Stanford Medical Center  
Palo Alto, CA  
Northern California Chapter  
“Antibody to osteopontin for treatment of MS” Testing experimental treatments that target an immune-system protein which may be involved in the progression of MS.
Philip Stork, M.D.  
Oregon Health & Science University  
Portland, OR  
Oregon Chapter  
Project Number: PP1381  
Funding: $44,000  
Term: 5/1/2007-4/30/2008  
Area: Immunology  
“The role of the small G protein Rap1 in the EAE model of MS” Investigating molecules that may play key roles in activating the immune attack in MS, for clues to developing targeted MS therapies.

Jack Strominger, M.D.  
Harvard Medical School  
Cambridge, MA  
Central New England Chapter  
Project Number: RG 3796A3/1  
Funding: $356,050  
Term: 10/1/2006-9/30/2009  
Area: Immunology  
“Copolymers and peptide 15mers in demyelinating diseases” Studying compounds that may improve upon an existing MS therapy.

Olaf Stuve, M.D., Ph.D.  
University of Texas Southwestern Medical Center  
Dallas, TX  
Lone Star Chapter  
Project Number: RG 3427A8/T  
Funding: $85,474  
Term: 7/1/2006-3/31/2008  
Area: Immunology  
“Peroxisome proliferator-activated receptor agonists as treatment for autoimmune demyelination” Testing whether anti-inflammatory molecules can improve an MS-like disease in mice, for clues to a new approach to treating MS in humans.

Carlos Tadokoro, Ph.D.  
New York University  
New York, NY  
New York City Chapter  
Project Number: FG 1733-A-1  
Funding: $162,481  
Term: 8/1/2006-7/31/2009  
Area: Immunology  
“Development and function of regulatory T cells in an EAE model” Investigating why a type of regulatory immune cell fails to suppress the immune attack in MS.

Jenny Ting, Ph.D.  
University of North Carolina at Chapel Hill  
Chapel Hill, NC  
Eastern No. Carolina Chapter  
Project Number: RG 1785-F-6  
Funding: $457,347  
Area: Immunology  
“Effects of immune response in cytokines on remyelination” Exploring the dual role of an immune messenger protein, which seems to promote myelin repair as well as myelin damage.
Vincent Tuohy, Ph.D.
Cleveland Clinic Foundation
Cleveland, OH
Ohio Buckeye Chapter
Project Number: RG 3961A5/1
Funding: $501,105
Term: 10/1/2007-9/30/2010
Area: Immunology
“Regulated gene-based therapy for CNS demyelinating disease” Developing a novel gene therapy that would provide the DNA building blocks of interferon beta so that repeated injections would not be needed.

Anette van Boxel-Dezaire, Ph.D.
Cleveland Clinic Foundation
Cleveland, OH
Ohio Buckeye Chapter
Project Number: TA 3032A1/1
Funding: $569,494
Term: 7/1/2007-6/30/2012
Area: Immunology
“Altered cytokine signaling in multiple sclerosis” Determining how interferons influence immune cell activity in MS, for clues to better treatments

Peter Van den Elzen, M.D.
University of British Columbia
Vancouver, BC
Canada
Project Number: TA 3018A2/T
Funding: $519,162
Term: 9/1/2006-7/31/2010
Area: Immunology
“Immune recognition of myelin lipids: the role of CD1 and apolipoprotein E” Investigating whether the fatty portion of myelin is a target of the immune attack in MS, and mechanisms underlying that attack.

Roel VanderVeen, Ph.D.
University of Southern California
Los Angeles, CA
Southern California Chapter
Project Number: RG 3746A12/1
Funding: $483,117
Area: Immunology
“Extracellular superoxide dismutase in immune suppression” Investigating a novel strategy for modulating the immune attack on the brain and spinal cord in MS.

Hanspeter Waldner, Ph.D.
Brigham and Women's Hospital
Cambridge, MA
Central New England Chapter
Project Number: RG 3688A2/1
Funding: $447,084
Term: 10/1/2005-9/30/2008
Area: Immunology
“The role of innate immunity and toll-like receptors in susceptibility to EAE” Exploring how the body's response to infection may set off an immune attack such as what occurs in MS.
E. Sally Ward, Ph.D.  
University of Texas Southwestern Medical School  
Dallas, TX  
Lone Star Chapter  
“T cell recognition of peptide-MHC conformers in murine EAE” Exploring factors involved when immune T cells become activated against brain and spinal cord tissues in MS, and ways to intervene.

Martin Weber, M.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
“B cells in CNS autoimmune disease” Exploring a role for immune B cells in activating the immune attack in MS.

Caroline Whitacre, Ph.D.  
Ohio State University  
Columbus, OH  
Ohio Buckeye Chapter  
“Migration inhibitory factor in the progression of EAE” Investigating how a protein influences disease progression, for clues to stopping progressive disability in MS.

Gregory Wu, M.D., Ph.D.  
Hospital of the University of Pennsylvania  
Philadelphia, PA  
Grtr. Delaware Valley Chapter  
“Modulation of dendritic cell function and T cell signaling in EAE” Investigating immune cells that may be central to the immune attack in MS, for clues to blocking this attack to stop the disease.

Sheng Xiao, Ph.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
“Role of TIM-1 in the regulation of EAE” Examining a protein on the surface of immune cells that may help to control their attack on the brain and spinal cord in MS.
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<tr>
<th>Name</th>
<th>Project Number</th>
<th>University/Affiliation</th>
<th>Funding</th>
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<td><strong>Sawsan Youssef, Ph.D.</strong></td>
<td></td>
<td>Stanford University Medical Center, Palo Alto, CA</td>
<td>$569,744</td>
<td>8/1/2005-7/31/2010</td>
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<td>“Manipulating HMG-CoA Reductase to regulate CNS autoimmune disease”</td>
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<td>Northern California Chapter</td>
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<td>Exploring how altering a protein involved in making cholesterol may turn off the immune attack in MS-like disease, for clues to better MS treatments.</td>
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<td><strong>Xiaoli Yu, Ph.D.</strong></td>
<td></td>
<td>University of Colorado Health Science Center, Denver, CO</td>
<td>$428,175</td>
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<td>“Identification of peptide epitopes/mimotopes relevant to multiple sclerosis”</td>
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<td>Colorado Chapter</td>
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<td>Attempting to determine the exact targets of immune antibodies found in the spinal fluid of people with MS for insights into its cause.</td>
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<td><strong>Ian Zagon, Ph.D.</strong></td>
<td></td>
<td>Pennsylvania State University, Hershey, PA</td>
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<td>“Role of opioid peptides and receptors in MS”</td>
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<td>Investigating certain nervous system molecules that may inhibit progression of MS.</td>
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<td><strong>Scott Zamvil, M.D., Ph.D.</strong></td>
<td></td>
<td>University of California, San Francisco, CA</td>
<td>$551,915</td>
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<td>“B cells in CNS autoimmune disease”</td>
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<td>Investigating the role of B cells in MS, and testing the therapeutic strategy of depleting them.</td>
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**INFECTIOUS TRIGGERS**

Examining the possibility that viruses or bacteria could act as disease triggers in MS.

<table>
<thead>
<tr>
<th>Name</th>
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<th>Funding</th>
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<td><strong>Walter Atwood, Ph.D.</strong></td>
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<td>Brown University, Providence, RI</td>
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<td>Rhode Island Chapter</td>
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<td>Growing myelin-producing cells in the lab to study the activation of the virus that caused brain disease in some people who were in clinical trials of natalizumab.</td>
</tr>
</tbody>
</table>
“Exploration of extra-neural MS tissue for mycoplasm DNA sequences”  Seeking evidence in areas outside the nervous system that MS is triggered by the mycoplasm bacterium.

“B cell regulation during virus induced demyelination” Investigating the role of immune B cells and the antibodies they produce in the development of MS.

“Infectious triggers of MS” Exploring conditions under which an infectious agent might trigger the autoimmune attack in MS.

“Molecular basis of murine susceptibility to virally induced demyelination” Seeking genes that control mouse susceptibility to MS-like disease which may inform the search for human MS genes

“Viral triggers of multiple sclerosis exacerbations: an expanded clinical trial” Detecting specific viruses involved in colds that are linked to relapses in people with MS.

“Epstein Barr virus infection and autoimmunity in multiple sclerosis” Investigating mechanisms through which a virus could possibly trigger multiple sclerosis.
Stanley Perlman, M.D., Ph.D.
University of Iowa Hospitals and Clinics
Iowa City, IA
Project Number: RG 2864-C-4
Funding: $393,971
Area: Infectious Triggers

“Pathogenesis of MHV-induced demyelination in RAG1-/- mice” Determining immune mechanisms involved in myelin destruction in a viral-induced model of MS, in search improved therapies for MS.

Steven Schutzer, M.D.
University of Medicine and Dentistry of New Jersey
Newark, NJ
Greater North Jersey Chapter
Project Number: PP1049
Funding: $44,000
Term: 10/1/2004-9/30/2008
Area: Infectious Triggers

“Proteomic identification of CSF components in acute MS” Using cutting-edge technology to investigate the possible association between infectious agents and MS.

Susan Weiss, Ph.D.
University of Pennsylvania
Philadelphia, PA
Grtr. Delaware Valley Chapter
Project Number: RG 3843A6/1
Funding: $485,608
Area: Infectious Triggers

“Determinents of murine coronavirus demyelination” Understanding how a viral infection in mice leads to myelin damage to deepen our understanding what might trigger MS.

**MEASURING DISEASE ACTIVITY**
Using sophisticated tools to track MS activity over time.

Rohit Bakshi, M.D.
Brigham and Women's Hospital
Boston, MA
Central New England Chapter
Project Number: RG 3798A2/1
Funding: $507,581
Term: 10/1/2006-9/30/2009
Area: Measuring Disease Activity

“Gray vs. white matter atrophy in MS” Applying novel imaging technology to identify early damage to nerve fibers in MS.

Rohit Bakshi, M.D.
Brigham and Women's Hospital
Boston, MA
Central New England Chapter
Project Number: RG 3705-A-1
Funding: $385,437
Term: 10/1/2005-9/30/2008
Area: Measuring Disease Activity

“Spinal cord atrophy in multiple sclerosis” Studying spinal cord shrinkage in MS and whether it relates to physical disability.
Laura Balcer, M.D.  Project Number: RG 3428A2/1
University of Pennsylvania  Funding: $34,619
Philadelphia, PA  Term: 10/1/2003-9/30/2008
Grtr. Delaware Valley Chapter  Area: Measuring Disease Activity
“Longitudinal assessment of visual function in multiple sclerosis”  Tracking changes in visual function and quality of life over time in people with MS, and identifying the best methods for vision testing in MS clinical trials.

Jeffrey Bennett, M.D., Ph.D.  Project Number: RG 3908-A-1
University of Colorado Health Science Center  Funding: $485,968
Denver, CO  Term: 10/1/2006-9/30/2009
Colorado Chapter  Area: Measuring Disease Activity
“Characterization of the humoral immune response in isolated optic neuritis”  Identifying immune system activity that may help to predict the development of MS in people at high risk for the disease.

Tammie Benzinger, M.D., Ph.D.  Project Number: PP1361
Washington University School of Medicine  Funding: $44,000
Gateway Area Chapter  Area: Measuring Disease Activity
“Directional diffusivity as an MR biomarker in childhood demyelinating disease”  Determining the utility of advanced imaging technology to help determine the diagnosis of MS in children.

Robert Bermel, M.D.  Project Number: FAN 1746-A-1
Cleveland Clinic Foundation  Funding: $110,428
Cleveland, OH  Term: 7/1/2007-6/30/2009
Ohio Buckeye Chapter  Area: Measuring Disease Activity
“Advanced imaging of mechanisms of recovery following optic neuritis”  Determining which imaging methods and vision tests best assess vision recovery after optic neuritis.

Pallab Bhattacharyya, Ph.D.  Project Number: RG 3753A1/2
Cleveland Clinic Foundation  Funding: $131,517
Ohio Buckeye Chapter  Area: Measuring Disease Activity
“Robust assessment of cerebral GABA levels in MS using MRS”  Developing an imaging technique to detect levels of a nerve transmitter that may signify MS-related loss of nerve cells.
**Kailash Chadha, Ph.D.**  
Roswell Park Cancer Institute  
Buffalo, NY  
W. New York/N.W. Penn. Chapter  
Project Number: PP1406  
Funding: $44,000  
Term: 7/1/2007-6/30/2008  
Area: Measuring Disease Activity  
**“Proteomic analyses of interferon-inhibitory protein”** Investigating a protein that may help to predict treatment response in people with MS.

**Han Cheng, Ph.D.**  
University of Houston  
Houston, TX  
Lone Star Chapter  
Project Number: PP1238  
Funding: $44,000  
Term: 5/1/2006-4/30/2008  
Area: Measuring Disease Activity  
**“Structural and functional assessment of optic nerve damage in MS patients”** Developing a test for evaluating nerve fiber damage in the optic nerve as an indicator of MS progression.

**Jill Conway, M.D.**  
University of Pennsylvania  
Philadelphia, PA  
Grtr. Delaware Valley Chapter  
Project Number: FAN 1742-A-1  
Funding: $110,428  
Term: 8/1/2006-7/31/2008  
Area: Measuring Disease Activity  
**“Relation of novel outcomes of vision and axonal loss to cognitive impairment in MS”** Investigating the relationship between cognitive dysfunction and nerve fiber loss in people with MS.

**Anne Cross, M.D.**  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
Project Number: CA 1012-A-13  
Funding: $825,000  
Area: Measuring Disease Activity  
**“Collaborative MS Research Center Award”** A major effort to apply new magnetic resonance technology to tracking brain tissue damage and recovery in MS.  
*Funded in part by a legacy gift from Bruce Young*

**Anne Cross, M.D.**  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
Project Number: RG 4009-A-13  
Funding: $395,562  
Term: 10/1/2007-9/30/2010  
Area: Measuring Disease Activity  
**“Directional diffusivity as a window into the pathology of MS”** Testing a non-invasive imaging method for its ability to detect damage to nerve fibers in MS.
Gary Cutter, Ph.D.  
University of Alabama at Birmingham  
Birmingham, AL  
Alabama Chapter  
Project Number: RG 3603-A-1/TT  
Funding: $178,742  
Area: Measuring Disease Activity  
“Effect of single vs. combination therapy n contrast letter acuity in MS patients”  
Evaluating over time the ability of a vision test to measure treatment-related changes of visual function, to assess the test's value as an outcome measure for clinical trials.

Paula Dore-Duffy, Ph.D.  
Wayne State University  
Detroit, MI  
Michigan Chapter  
Project Number: CA 1042-A-8  
Funding: $822,500  
Area: Measuring Disease Activity  
“Collaborative MS Research Center Award”  
Exploring bioenergetic and metabolic changes in the brain and spinal cord in MS that may hold clues to its destructive nature and provide better ways to predict and track the disease.

Charles Guttmann, M.D.  
Brigham and Women's Hospital  
Boston, MA  
Central New England Chapter  
Project Number: RG 3574-A-1  
Funding: $529,410  
Term: 10/1/2004-9/30/2008  
Area: Measuring Disease Activity  
“MRI characterization of cortical lesions in MS”  
Using novel imaging technology to track, over three years, small brain lesions in the cortex, and correlating with clinical findings in persons with different forms of MS.

Joseph Herbert, M.D.  
Hospital for Joint Diseases  
New York, NY  
New York City Chapter  
Project Number: PP1479  
Funding: $44,000  
Term: 9/1/2007-8/31/2008  
Area: Measuring Disease Activity  
“Validation of a new severity-based MS classification system using the Sylvia Lawry database”  
Testing a new classification system which would be useful in designing clinical trials in MS and in developing different treatment strategies based on aggressiveness of the disease.

Eun-Kee Jeong, Ph.D.  
University of Utah  
Salt Lake City, UT  
Utah State Chapter  
Project Number: PP1365  
Funding: $44,000  
Term: 2/1/2007-1/31/2008  
Area: Measuring Disease Activity  
“High-resolution diffusion tensor MRI of MS spinal cord”  
Evaluating a method of determining damage to the spinal cord in people with MS.
Mark Lowe, Ph.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
**“Functional assessment of white matter in MS”** Using advanced imaging techniques to detect damage to nerve fibers in MS.

Sharon Lynch, M.D.  
University of Kansas Medical Center  
Kansas City, KS  
Mid-America Chapter  
**“Glutathione as a measure of oxidative stress in magnetic resonance spectroscopy (MRS) in brains of multiple sclerosis patients”** Investigating the ability of MRS to detect brain levels of a natural anti-oxidant in people with secondary-progressive MS.

Frederick Munschauer, M.D.  
Buffalo General Hospital  
Buffalo, NY  
W. New York/N.W. Penn. Chapter  
**“The role of advanced glycation end-products in multiple sclerosis”** Exploring the possible role of inflammatory proteins in the loss of nerve fibers in MS.

Jorge Oksenberg, Ph.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
**“Collaborative MS Research Center Award”** Combining novel technological and analytical approaches for the discovery of molecules that may be used as "markers" to predict progression of disease in MS.

Daniel Pelletier, M.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
**“Brain atrophy study using MR markers of axonal, myelin and glial contents”** Tracking MS disease activity over time to determine the contributions of different types of tissue damage to MS progression.
Jai Perumal, M.D.  
Wayne State University  
Detroit, MI  
Michigan Chapter  
“Sylvia Lawry Physician Fellowship” Using a new tool to determine possible differences in MS tissue destruction between African Americans and caucasians

Richard Ransohoff, M.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
Ohio Buckeye Chapter  
“Biomarkers of the therapeutic response to interferon in MS” Developing methods to determine how well an individual with MS is responding to treatment with interferon beta.

William Rooney, Ph.D.  
Oregon Health & Science University  
Portland, OR  
Oregon Chapter  
“Quantitation of blood-brain barrier permeability in MS lesion development” Using magnetic resonance imaging to track and measure MS lesion development in early stages of the disease.

William Ross, Ph.D.  
New York Medical College  
Valhalla, NY  
Southern New York Chapter  
“Imagining axonal function using sodium indicator dyes” Developing novel technology to discern the damage to nerve fibers that occurs in people with MS.

Nancy Ruddle, Ph.D.  
Yale University  
New Haven, CT  
Greater Connecticut Chapter  
“Characterization of pathogenic myelin oligodendrocyte antibodies in multiple sclerosis” Developing a lab method to distinguish different types of antibodies in the blood that may play beneficial or harmful roles in MS.
Nicoline Schiess, M.D.  
Johns Hopkins University  
Baltimore, MD  
Maryland Chapter  
Project Number: FAN 1745-A-1  
Funding: $136,390  
Term: 8/1/2006-9/30/2008  
Area: Measuring Disease Activity  
“The role of cystatin c in the pathogenesis of multiple sclerosis”  
Determining whether a specific protein in body fluids can identify MS early in its development, and with a simple laboratory test.

Nancy Sicotte, M.D.  
University of California, Los Angeles  
Los Angeles, CA  
Southern California Chapter  
Project Number: RG 3914A2/1  
Funding: $277,640  
Area: Measuring Disease Activity  
“Hippocampal volume loss in MS: clinical consequences”  
Exploring how brain tissue loss in specific regions relates to memory functions in MS.

Sheng-Kwei Song, Ph.D.  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
Project Number: RG 3670A3/2  
Funding: $516,691  
Term: 10/1/2006-9/30/2009  
Area: Measuring Disease Activity  
“Quantification of white matter injury via diffusion MRI”  
Using novel imaging technology to differentiate between damage to myelin and damage to nerve fibers in people at high risk for MS.

Radhika Srinivasan, Ph.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
Project Number: PP1182  
Funding: $44,000  
Term: 1/1/2006-12/31/2008  
Area: Measuring Disease Activity  
“Quantitative assessment of glutamate homeostasis in MS using MRSI”  
Investigating triggers that may cause the destruction of nerve cells in MS.

Shu-Wei Sun, Ph.D.  
Washington University  
Saint Louis, MO  
Gateway Area Chapter  
Project Number: RG 3864-A-1  
Funding: $384,440  
Term: 10/1/2006-9/30/2009  
Area: Measuring Disease Activity  
“Characterizing axonal damage in CNS of murine EAE via diffusion tensor Imaging”  
Studying a novel method of imaging damage to nerve fibers in MS.
William Wade, Ph.D.  
Dartmouth College  
Lebanon, NH  
Central New England Chapter  
Project Number: PP1360  
Funding: $44,000  
Term: 2/1/2007-1/31/2008  
Area: Measuring Disease Activity  
“Identification of aquaporin 4 B cell epitopes bound by NMO patient IgG”  
Understanding the immune response in a disease (NMO) that is often mistaken for MS, for clues to similar responses involved in multiple sclerosis.

Amy Waldman, M.D.  
The Children's Hospital of Philadelphia  
Philadelphia, PA  
Grtr. Delaware Valley Chapter  
Project Number: FAN 1750-A-1  
Funding: $164,877  
Term: 7/1/2007-6/30/2009  
Area: Measuring Disease Activity  
“Development of visual and neurologic outcome measures in pediatric MS”  
Investigating tools to track disease activity and effects of therapies in children with MS.

Mitchell Wallin, M.D., M.P.H.  
Veterans Affairs Medical Center  
Washington, DC  
National Capital Chapter  
Project Number: PP1368  
Funding: $44,000  
Area: Measuring Disease Activity  
“Serum protein signatures in pre-symptomatic MS patients”  
Investigating proteins in the blood that could be used to diagnose MS.

Simon Warfield, Ph.D.  
Children's Hospital  
Boston, MA  
Central New England Chapter  
Project Number: RG 3478A2/2T  
Funding: $183,436  
Term: 10/1/2006-3/31/2008  
Area: Measuring Disease Activity  
“Disruption of white matter circuits in multiple sclerosis”  
Using imaging technology to create an "atlas" of brain tissue damage in MS.

Emmanuelle Waubant, M.D., Ph.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
Project Number: RG 3692A1/1  
Funding: $468,338  
Term: 10/1/2005-9/30/2008  
Area: Measuring Disease Activity  
“Predicting factors of the recovery from initial demyelinating event, and time to subsequent clinical event”  
Searching for clues to future disease course by studying early signs and disease factors in a large number of people with MS.
Heather Wishart, Ph.D.  
Dartmouth Medical School  
Lebanon, NH  
Central New England Chapter  
“Genetic predictors of brain imaging in MS”  
Exploring genetic factors that may provide early indications of tissue damage in MS.

Junqian Xu, M.A.  
Washington University School of Medicine  
Saint Louis, MO  
Gateway Area Chapter  
“Quantification of spinal cord injury via diffusion MRI”  
Using advanced imaging techniques to detect damage to spinal cord tissues in MS  
Funded in part by the NMSS Gateway Area Chapter

**MYELIN BIOLOGY**

Investigating how myelin is formed by oligodendrocytes and the role that these and other support cells in the brain play in tissue health and in MS.

Bruce Appel, Ph.D.  
Vanderbilt University  
Nashville, TN  
Mid-South Chapter  
“Genetic analysis of oligodendrocyte differentiation”  
Exploring genes that guide the production of nerve-insulating myelin, for clues to ways to repair myelin damaged by MS.

Roumen Balabanov, M.D.  
Rush University Medical Center  
Chicago, IL  
Greater Illinois Chapter  
“Generation of PLP/dnIRF-1 transgenic mouse”  
Investigating the role of a harmful protein in the immune attack in MS.

Rashmi Bansal, Ph.D.  
University of Connecticut Health Center  
Farmington, CT  
Greater Connecticut Chapter  
“Proteomic mapping of myelin and its membrane subdomains”  
Exploring the identity and function of the numerous proteins in myelin, for clues to development and treatment of MS.
Elisa Barbarese, Ph.D.  
University of Connecticut Health Center  
Farmington, CT  
Greater Connecticut Chapter  
**“Localization of mRNAs in oligodendrocytes”** Molecular mechanisms that underlie the formation and repair of nerve-insulating myelin.  
Project Number: RG 2843C4/2  
Funding: $327,634  
Area: Myelin Biology

Ben Barres, M.D., Ph.D.  
Stanford University Medical Center  
Palo Alto, CA  
Northern California Chapter  
**“Signaling mechanisms that control the blood-brain barrier”** Exploring the early development of the blood-brain barrier, the screen that normally prevents most immune cells from entering the brain but which breaks down in MS.  
Project Number: RG 3936A7/1  
Funding: $535,128  
Term: 10/1/2007-9/30/2010  
Area: Myelin Biology

Joyce Benjamins, Ph.D.  
Wayne State University  
Detroit, MI  
Michigan Chapter  
**“Protection of oligodendroglia by cyclic GMP and metabotropic glutamate receptors”** Exploring a therapeutic strategy in mice that may protect myelin-making cells from destruction.  
Project Number: RG 3595A7/2  
Funding: $442,893  
Term: 10/1/2005-9/30/2008  
Area: Myelin Biology

Manzoor Bhat, Ph.D., Med.ScD.  
University of North Carolina at Chapel Hill  
Chapel Hill, NC  
Eastern No. Carolina Chapter  
**“Disorganization of axonal domains in multiple sclerosis”** Understanding how the interaction between myelin and nerve fibers may go awry in MS.  
Project Number: PP1397  
Funding: $44,000  
Term: 5/1/2007-4/30/2008  
Area: Myelin Biology

Anne Boullerne, Ph.D.  
University of Illinois at Chicago  
Chicago, IL  
Greater Illinois Chapter  
**“Role of nitric oxide synthase type-3 in oligodendrocyte process growth”** Investigating an enzyme that may help myelin-making cells to function, for clues to developing strategies for myelin repair in MS.  
Project Number: PP1366  
Funding: $44,000  
Term: 2/1/2007-1/31/2008  
Area: Myelin Biology
Jonah Chan, Ph.D.  
University of Southern California  
Los Angeles, CA  
Southern California Chapter  
Project Number: TA 3008A1/1T  
Funding: $409,535  
Term: 9/12/2005-8/31/2008  
Area: Myelin Biology  
“Neurotrophins and their receptors: Modulators of myelination”  
Identifying signals from nerve fibers that help control the production of nerve-insulating myelin, for clues to stimulating myelin repair in MS.  
*Funded in part by the Dave Tomlinson Research Fund through the NMSS Mid-America Chapter*

Shing-yan Chiu, Ph.D.  
University of Wisconsin-Madison  
Madison, WI  
Wisconsin Chapter  
Project Number: RG 3058-B-7  
Funding: $558,155  
Term: 10/1/2004-3/31/2008  
Area: Myelin Biology  
“Physiology and pathophysiology of potassium and calcium channels in myelinated axons”  
Exploring tiny pores along nerve fibers whose dysfunction may lead to nerve tissue damage in MS.

Jayasri DasSarma, Ph.D.  
Thomas Jefferson University  
Philadelphia, PA  
Grtr. Delaware Valley Chapter  
Project Number: RG 3774A2/1  
Funding: $469,095  
Term: 10/1/2006-9/30/2009  
Area: Myelin Biology  
“Direct oligodendrocyte infection by mouse hepatitis virus mediates demyelination”  
Studying the pathways by which a virus may play a role in triggering myelin destruction in MS.

Fred De Winter, Ph.D.  
The Salk Institute  
La Jolla, CA  
Pacific South Coast  
Project Number: FG 1643-A-1  
Funding: $142,471  
Term: 8/1/2005-7/31/2008  
Area: Myelin Biology  
“ErbB-receptor signaling in myelin formation and maintenance in adulthood”  
Determining the role of proteins that may be crucial to the development and repair of nerve-insulating myelin.

Wenbin Deng, Ph.D.  
University of California, Davis  
Sacramento, CA  
Northern California Chapter  
Project Number: RG 3999-A-1  
Funding: $453,255  
Term: 10/1/2007-9/30/2010  
Area: Myelin Biology  
“Mechanisms of microglial activation underlying EAE”  
Exploring how the antibiotic minocycline inhibits destructive immune activity of brain cells called microglia for clues to new therapeutic targets to treat MS.
Jameel Dennis, Ph.D.  Project Number: FG 1696-A-1
Virginia Commonwealth University  Funding: $162,481
Richmond, VA  Term: 10/1/2006-9/30/2009
Central Virginia Chapter  Area: Myelin Biology
“PD-Ialpha/ATX functional domains and protein interactions” Studying a molecule that may encourage development of myelin-making cells, as a step toward understanding how to stimulate myelin repair in MS.

Jerome Devaux, Ph.D.  Project Number: RG 3839A1/T
Centre National de la Recherche Scientifique  Funding: $61,629
Marseille cedex 20  Term: 1/1/2005-6/30/2008
France  Area: Myelin Biology
“Visualizing abnormal axonal function at the single cell level” Developing a method of visualizing abnormalities in nerve fibers that may lead to abnormal nerve impulse conduction, for clues to improving nerve conduction in MS.

Paul Drew, Ph.D.  Project Number: RG 3893A2/1
University of Arkansas for Medical Sciences  Funding: $396,330
Arkansas Division  Area: Myelin Biology
“LXR agonists as treatment for autoimmune demyelination” Studying proteins that show promise in suppressing the activation of brain cells that contribute to the immune attack in MS.

Cheryl Dreyfus, Ph.D.  Project Number: RG 3900A2/1
University of Medicine and Dentistry of New Jersey  Funding: $422,760
Mid-Jersey Chapter  Area: Myelin Biology
“The role of BDNF on oligodendrocyte lineage cells in a cuprizone model of MS” Clarifying the potential of a growth factor as the basis of a therapy to repair myelin damage in MS.

Jeffrey Dupree, Ph.D.  Project Number: PP1441
Virginia Commonwealth University  Funding: $44,000
Richmond, VA  Term: 9/1/2007-8/31/2008
Central Virginia Chapter  Area: Myelin Biology
“Differential neurofascin 155 glycosylation in multiple sclerosis” Exploring the possibility of tracking MS damage early in the course of disease.
Catherine Faivre-Sarrailh, Ph.D.  
Jean Roche Institue  
Marseille  

Project Number: RG 3708A1/3  
Funding: $255,000  
Term: 10/1/2007-9/30/2010  
Area: Myelin Biology  

“Role of cell adhesion molecules in building axo-glial junctions”  
Studying glue-like molecules that are vital for proper nerve signaling and whether they are potential targets of the immune attack in MS.

Yue Feng, M.D., Ph.D.  
Emory University  
Atlanta, GA  
Georgia Chapter  

Project Number: RG 4010-A-2  
Funding: $497,317  
Term: 10/1/2007-9/30/2010  
Area: Myelin Biology  

“Regulation of QKI in CNS myelination and repair”  
Studying whether enhancing the presence of a protein in immature myelin-making cells can stimulate their maturity and promote myelin repair.

Vittorio Gallo, Ph.D.  
The Children's National Medical Center  
Washington, DC  
National Capital Chapter  

Project Number: RG 3712A1/1  
Funding: $292,493  
Area: Myelin Biology  

“Characterization of Sox17 as a regulator of oligodendrocyte cell differentiation”  
Investigating a molecule that may play a key role in the maturation of myelin-making cells, for clues to enhancing myelin repair in MS.

Vittorio Gallo, Ph.D.  
The Children's National Medical Center  
Washington, DC  
National Capital Chapter  

Project Number: RG 4019-A-2  
Funding: $501,669  
Term: 10/1/2007-9/30/2010  
Area: Myelin Biology  

“A novel regulator of oligodendrocyte development”  
Exploring factors that influence the development and survival of replacement cells capable of repairing damaged myelin in MS.

James Garbern, M.D., Ph.D.  
Wayne State University  
Detroit, MI  
Michigan Chapter  

Project Number: RG 3204-B-2  
Funding: $497,970  
Term: 10/1/2004-9/30/2008  
Area: Myelin Biology  

“N-acetyl aspartate: characterization of its function and regulation”  
Understanding interactions between nerve-insulating myelin and the nerve fiber, and a nerve fiber molecule that may be critical to myelin function.
Minnetta Gardinier, Ph.D.  
University of Iowa  
Iowa City, IA  
Iowa Chapter  
Project Number: RG 2638-C-3  
Funding: $470,814  
Term: 4/1/2002-9/30/2008  
Area: Myelin Biology  
“Study of myelin/oligodendrocyte glycoprotein - human splice variants”  
Exploring the functions of a protein component of nerve-insulating myelin, which may be an immune-system target in MS.

Steven Gonias, M.D., Ph.D.  
University of California, San Diego  
La Jolla, CA  
Pacific South Coast  
Project Number: PP1341  
Funding: $44,000  
Area: Myelin Biology  
“Determining the role of myelin receptors in MS”  
Identifying nervous system proteins that may protect against the immune attack in MS.

Robert Gould, Ph.D.  
University of Illinois at Chicago  
Chicago, IL  
Greater Illinois Chapter  
Project Number: PP1339  
Funding: $44,000  
Term: 2/1/2007-1/31/2008  
Area: Myelin Biology  
“Kinesin motors that function in myelin sheath assembly and maintenance”  
Investigating proteins that may be crucial to myelin formation, for clues to myelin damage and repair in MS.

Alexander Gow, Ph.D.  
Wayne State University  
Detroit, MI  
Michigan Chapter  
Project Number: PP1372  
Funding: $44,000  
Area: Myelin Biology  
“Modeling tight junction function in CNS myelin”  
Developing a way of studying the complex structure of nerve-insulating myelin, for clues to its damage and repair in MS.

Judith Grinspan, Ph.D.  
Children's Hospital of Philadelphia  
Philadelphia, PA  
Grtr. Delaware Valley Chapter  
Project Number: RG 3662-A-5  
Funding: $493,350  
Area: Myelin Biology  
“Central role for bone morphogenetic protein (BMP) in glial development and regeneration”  
Defining factors that may control the growth of myelin-making cells, for clues to restoring myelin lost in MS.
Martin Grumet, Ph.D.  
Rutgers University  
Piscataway, NJ  
Mid-Jersey Chapter  
“Roles of neurofascin in nerve development and function” Studying the role of a protein in the formation of myelin and in the development of nerve fibers, to add data needed for stimulating tissue repair in MS.

Kleopas Kleopa, M.D.  
The Cyprus Institute of Neurology and Genetics, Nicosia, Cyprus  
“CNS connexins and demyelination in CMTX” Understanding the involvement of a protein that may play a critical role in the health and damage of nerve-insulating myelin and nerve fibers.

Hitoshi Komuro, Ph.D.  
Cleveland Clinic Foundation, Cleveland, OH  
“Role of pituitary adenylate cyclase-activating polypeptides on oligodendrocyte migration” Determining the role of signaling proteins in the development of cell-based therapies for MS.

Jianrong Li, Ph.D.  
Texas A&M University, College Station, TX  
“Mechanisms of inflammatory injury to oligodendrocytes: role of astrocytes” Clarifying the roles of brain cells called microglia and astrocytes in myelin damage occurring in MS.

Wensheng Lin, M.D., Ph.D.  
University of Chicago, Chicago, IL  
“The role of the PERK-eIF2alpha pathway in MS/EAE” Investigating the possible protective role of an immune messenger protein in MS.
Jeffrey Loeb, M.D., Ph.D.  
Wayne State University  
Detroit, MI  
Michigan Chapter  
Project Number: RG 3410-A-2  
Funding: $385,367  
Area: Myelin Biology  
“Axoglial communication through regulated release of neuregulin”  
Understanding the communication and mutual support between nerve fibers and myelin-making cells that maintain the function and structure of both.

Jeffrey Loeb, M.D., Ph.D.  
Wayne State University  
Detroit, MI  
Michigan Chapter  
Project Number: RG 3410B3/1  
Funding: $143,765  
Term: 10/1/2007-9/30/2008  
Area: Myelin Biology  
“Axoglial communication through regulated release of neuregulin”  
Understanding chemical signals and growth factors provided by nerve fibers to the insulating myelin that wraps them, and how this signaling is impacted by MS.

Qing Lu, Ph.D.  
UT Southwestern Medical Center at Dallas  
Dallas, TX  
Lone Star Chapter  
Project Number: JF 2115-A-1  
Funding: $576,760  
Term: 8/1/2003-7/31/2008  
Area: Myelin Biology  
“Genetic mechanisms of oligodendrocyte development”  
Understanding the mechanisms involved in the development of cells that make nerve-insulating myelin, to facilitate therapeutic strategies that will stimulate myelin repair in MS.

Qing Lu, Ph.D.  
UT Southwestern Medical Center at Dallas  
Dallas, TX  
Lone Star Chapter  
Project Number: RG 3978A2/1  
Funding: $158,212  
Term: 10/1/2007-9/30/2008  
Area: Myelin Biology  
“The role of Zfp488 in oligodendrocyte differentiation”  
Exploring the role of molecules that may control the development of myelin-making cells for clues to stimulating repair of nerve-insulating myelin in MS.

Qing Lu, Ph.D.  
UT Southwestern Medical Center at Dallas  
Dallas, TX  
Lone Star Chapter  
Project Number: PP1386  
Funding: $44,000  
Term: 5/1/2007-4/30/2008  
Area: Myelin Biology  
“Genome-wide analysis of transcription factors for CNS myelinogenesis”  
Searching for genetic factors that control myelin formation, for clues to stimulating repair in MS.
Wendy Macklin, Ph.D. | Project Number: RG 3819-A-8
Cleveland Clinic Foundation | Funding: $531,862
Ohio Buckeye Chapter | Area: Myelin Biology
“CNS myelination induced by Akt” Investigating how a molecule in myelin-making cells may promote myelin production, for clues to stimulating myelin repair in MS.

Wendy Macklin, Ph.D. | Project Number: RG 3740-A-7
Cleveland Clinic Foundation | Funding: $507,349
Cleveland, OH | Term: 10/1/2005-9/30/2008
Ohio Buckeye Chapter | Area: Myelin Biology
“Myelination in PLP-enhanced green fluorescent protein in zebrafish” Identifying the genes associated with myelin formation, for clues to restoring it in MS.

Robin Miskimins, Ph.D. | Project Number: RG 3293-B-7
University of South Dakota | Funding: $385,381
Vermillion, SD | Term: 10/1/2004-9/30/2008
North Central States Chapter | Area: Myelin Biology
“Cell cycle control in oligodendrocyte development” Understanding how immature cells develop into myelin-making cells capable of repairing myelin damaged by MS.

Robin Miskimins, Ph.D. | Project Number: RG 2079E8/1
University of South Dakota | Funding: $414,044
Vermillion, SD | Term: 10/1/2006-9/30/2009
North Central States Chapter | Area: Myelin Biology
“Molecular analysis of MBP gene expression” Studying proteins that control genes involved in myelin development, for clues to fostering myelin repair.

Kelly Monk, Ph.D. | Project Number: FG 1719-A-1
Stanford University Medical Center | Funding: $134,325
Palo Alto, CA | Term: 10/1/2006-9/30/2009
Northern California Chapter | Area: Myelin Biology
“Molecular mechanisms governing node of ranvier formation” Examining the development of nerve signals for clues to how this process may go awry in MS.

Jacqueline Morris, Ph.D. | Project Number: RG 3602-A-2
Baldwin Wallace College | Funding: $352,228
Berea, OH | Term: 10/1/2004-9/30/2008
Ohio Buckeye Chapter | Area: Myelin Biology
“Molecular mechanisms of myelination and remyelination” Studying aspects of the growth of nerve-insulating myelin for clues to reasons why myelin repair often fails after damaged by MS.
Klaus-Armin Nave, Ph.D.  
Max Planck Institute of Experimental Medicine  
Gottingen  
“Axonal neuregulin as a regulator of myelination”  
Understanding factors that can contribute to myelin formation and that may help to promote myelin repair in MS.

Lucia Notterpek, Ph.D.  
University of Florida  
Gainesville, FL  
“The effects of chaperones on myelin synthesis by oligodendrocytes”  
Exploring the role of specific molecules in the production of nerve-insulating myelin for clues to stimulating myelin repair.

Yasuhiro Ogawa, Ph.D.  
University of Connecticut Health Center  
Farmington, CT  
“The role of cytoskeletal proteins in pranodal axon-glial interactions”  
Investigating proteins that provide stability between nerve fibers and their myelin sheath, for clues to how this stability is disrupted in MS.

Pablo Paez, Ph.D.  
University of California, Los Angeles  
Los Angeles, CA  
“Golli proteins and calcium homeostasis in oligodendroglial maturation”  
Understanding how myelin fails to repair in MS for clues to new therapies to restore function.

Carlos Pedraza, Ph.D.  
Cleveland Clinic Foundation  
Cleveland, OH  
“In vitro and in vivo induction of oligodendrocyte precursor maturation by small molecules”  
Discovering the potential of small molecules to rebuild myelin lost in MS.
Elior Peles, Ph.D.  
Weizmann Institute of Science  
Rehovot  
ISRAEL  
**“Glial cell adhesion molecules at nodes of Ranvier”**  
Investigating interactions between nerve fibers and myelin making cells that ensure proper placement of tiny pores crucial for nerve signal conduction.

Elior Peles, Ph.D.  
Weizmann Institute of Science  
Rehovot  
**“Cell adhesion molecules in CNS myelination”**  
Examining the crucial role of molecules that influence how nerve fibers are wrapped by insulating myelin to repair damage caused by the MS immune attack.

Mengsheng Qiu, Ph.D.  
University of Louisville  
Louisville, KY  
**“Lineage analysis and signaling mechanism of oligodendrocyte genesis”**  
Investigating signals that regulate development of myelin-making cells, with an eye toward using these signals to develop new therapies for MS.

Matthew Rasband, Ph.D.  
University of Connecticut Health Center  
Farmington, CT  
**“Mechanisms of neuron-glia interactions and regulation of axon function”**  
Studying defects in nerve signaling and how these may lead to pain in MS, in order to develop focused therapies for alleviating pain.

Nancy Ratner, Ph.D.  
Children's Hospital Medical Center  
Cincinnati, OH  
**“The small G-protein Rac1 in axon-gial interactions”**  
Understanding the role of a specific protein in the growth of nerve-insulating myelin.
Jack Rosenbluth, M.D.  
New York University Medical Center  
New York, NY  
New York City Chapter  
“Analysis of a new dysmyelinating mutant”  
Studying a naturally occurring mutant mouse that has abnormal nerve-insulating myelin to better understand how myelin components contribute to normal nerve signaling.

James Salzer, M.D., Ph.D.  
New York University Medical Center  
New York, NY  
New York City Chapter  
“Assembly of CNS nodes of Ranvier”  
How components important to nerve conduction are assembled, for clues to improving function when myelin is damaged in MS.

James Salzer, M.D., Ph.D.  
New York University Medical Center  
New York, NY  
New York City Chapter  
“Regulation of CNS myelination and remyelination by neuregulin”  
Determining the role of a molecule in myelin formation and repair, for clues to developing repair strategies in people with MS.

2005 Stephen C. Reingold Research Award  

Carmen Sato-Bigbee, Ph.D.  
Virginia Commonwealth University  
Richmond, VA  
Central Virginia Chapter  
“Molecular mechanisms of neurotrophin-3 action in oligodendrocytes”  
Investigating factors that may regulate the ability of brain cells to develop into mature cells capable of repairing myelin destroyed by MS.

Bridget Shafit-Zagardo, Ph.D.  
Albert Einstein College of Medicine  
Bronx, NY  
New York City Chapter  
“Survival factors for human oligodendrocytes: implications for MS”  
Studying molecules that may have the power to protect myelin-making cells from destruction in MS.
Bridget Shafit-Zagardo, Ph.D.  Project Number: RG 4046-A-6
Albert Einstein College of Medicine  Funding: $510,665
Bronx, NY  Term: 10/1/2007-9/30/2010
New York City Chapter  Area: Myelin Biology
“The impact of rhgas6 on oligodendrocyte survival and myelination”  Testing the ability of a molecule to stimulate the growth of nerve-insulating myelin for clues to repairing nervous system damage in MS.

Lawrence Sherman, Ph.D.  Project Number: RG 3512A2/1
Oregon Health & Science University  Funding: $395,020
Oregon Chapter  Area: Myelin Biology
“Role of CD44 and hyaluronan in demyelination”  Exploring molecules that may inhibit myelin repair in MS, for clues to developing treatments aimed at restoring damaged myelin.

Jacob Sloane, M.D., Ph.D.  Project Number: FG 1623-A-1
Beth Israel Deaconess Medical Center  Funding: $170,568
Central New England Chapter  Area: Myelin Biology
“Molecular motors of myelination”  Defining how a molecule may play a powerful part in controlling the extension and wrapping of insulating myelin around nerve fibers, for clues to stimulating myelin repair in MS.

Sara Szuchet, Ph.D.  Project Number: PP1437
University of Chicago  Funding: $44,000
Chicago, IL  Term: 9/1/2007-8/31/2008
Greater Illinois Chapter  Area: Myelin Biology
“Is RhoBTB2 a player in the events that stage CNS myelination”  Investigating a protein that may be crucial to the development of myelin, for clues to its repair in MS.

William Talbot, Ph.D.  Project Number: RG 3943-A-2
Stanford University Medical Center  Funding: $493,330
Northern California Chapter  Area: Myelin Biology
“Genetic analysis of the node of Ranvier in zebrafish”  Identifying genes that control structures of major importance to the sending of nerve signals.
Christopher Taylor, Ph.D.  
Dana Farber Cancer Institute  
Boston, MA  
Central New England Chapter  
Project Number: FG 1625-A-1  
Funding: $135,325  
Area: Myelin Biology  
“Biology and molecular biology of Olig1 in the remyelinating brain”  
Investigating how a protein causes myelin-making cells to mature and begin making myelin, for insights into stimulating myelin repair in MS.

Junryo Watanabe, Ph.D.  
Stanford University Medical Center  
Palo Alto, CA  
Northern California Chapter  
Project Number: FG 1734-A-1  
Funding: $142,471  
Term: 8/1/2006-7/31/2009  
Area: Myelin Biology  
“Role of transferrin in promoting oligodendrocyte differentiation and remyelination in multiple sclerosis”  
Investigating a protein that may help myelin-making cells to survive and form myelin, for clues to its potential as a therapeutic strategy for MS.

Patricia Wight, Ph.D.  
University of Arkansas for Medical Sciences  
Little Rock, AR  
Arkansas Division  
Project Number: RG 2705D4/1  
Funding: $348,487  
Term: 10/1/2006-9/30/2009  
Area: Myelin Biology  
“Developmental control of myelin proteolipid protein gene regulation”  
Investigating how genes instruct the formation of a myelin protein, for clues to enhancing myelin formation in MS.

Nada Zecevic, M.D., Ph.D.  
University of Connecticut Health Center  
Farmington, CT  
Greater Connecticut Chapter  
Project Number: RG 3083C4/1  
Funding: $397,215  
Term: 10/1/2006-9/30/2009  
Area: Myelin Biology  
“Development of oligodendrocytes in the human fetal brain: relevance for MS”  
Understanding factors that regulate development of myelin-making cells, for clues to replenishing them to enhance myelin repair in MS.

Yumin Zhang, M.D., Ph.D.  
Uniformed Services Univ of the Health Sciences  
Bethesda, MD  
National Capital Chapter  
Project Number: RG 3741A1/1T  
Funding: $495,132  
Area: Myelin Biology  
“Role of arachidonic acid metabolism in peroxynitrite toxicity to oligodendrocytes”  
Understanding the pathways by which a toxic molecule triggers myelin-making cell death in MS models.
**Yanqing Zhang, M.D., Ph.D.**
New York University Medical Center
New York, NY
New York City Chapter
Project Number: FG 1738-A-1
Funding: $150,300
Term: 8/1/2006-7/31/2009
Area: Myelin Biology
**“In vitro and in vivo examination of the node of Ranvier formation”** Understanding the structures essential to proper nerve impulse conduction and how these may be impacted by the MS immune attack.

**Guang-Xian Zhang, M.D., Ph.D.**
Thomas Jefferson University
Philadelphia, PA
Grtr. Delaware Valley Chapter
Project Number: RG 3809A1/1
Funding: $383,764
Term: 10/1/2006-9/30/2009
Area: Myelin Biology
**“Neural stem cells delivering anti-inflammatory cytokine: A novel therapy in MS/EAE”** Seeking ways of enhancing the ability of adult cells to serve as replacements for potential use in repairing MS tissue damage.

**Chengji Zhou, Ph.D.**
University of California, Davis
Sacramento, CA
Northern California Chapter
Project Number: PP1458
Funding: $44,000
Term: 8/1/2007-7/31/2008
Area: Myelin Biology
**“The role of Wnt signaling in oligodendrocyte lineage”** Determining the role of certain molecules in stimulating the development of cells capable of tissue repair in MS.

**NEUROPATHOLOGY**
Exploring how nerve fibers and cells are damaged during the course of MS.

**Alexander Gow, Ph.D.**
Wayne State University
Detroit, MI
Michigan Chapter
Project Number: RG 2891D5/1
Funding: $464,845
Term: 10/1/2007-9/30/2010
Area: Neuropathology
**“Molecular mechanisms of stress induced oligodendrocyte cell death”** How an immune messenger chemical prominent in MS immune attacks may damage myelin-making cells and impede myelin repair.

**David Herrmann, M.D.**
University of Rochester
Rochester, NY
Upstate New York Chapter
Project Number: PP1377
Funding: $44,000
Term: 5/1/2007-4/30/2008
Area: Neuropathology
**“Is there a peripheral contribution to neuropathic pain in MS? A skin biopsy study”** Exploring the cause of lower limb pain in MS and testing a treatment to relieve pain.
Lori Isom, Ph.D.  
University of Michigan  
Ann Arbor, MI  
Michigan Chapter  
Project Number: PP1416  
Funding: $44,000  
Term: 7/1/2007-6/30/2008  
Area: Neuropathology  
“Expression of Na+ channel B2 subunits in human MS”  
Studying a possible mechanism for tissue damage in people with MS.

Aaron Johnson, Ph.D.  
University of Cincinnati  
Cincinnati, OH  
Ohio Valley Chapter  
Project Number: PP1392  
Funding: $44,000  
Term: 5/1/2007-4/30/2008  
Area: Neuropathology  
“Comprehensive assessment of antigen specific CD8 T cell mediated axonal damage”  
Investigating an immunological basis for nerve loss and mobility problems in people with MS.

Claudia Lucchinetti, M.D.  
Mayo Clinic College of Medicine  
Rochester, MN  
Minnesota Chapter  
Project Number: RG 3185-B-3  
Funding: $1,363,882  
Area: Neuropathology  
“Multiple Sclerosis Lesion Project”  
Studying damaged areas in the brains of individuals with MS for clues to different patterns of destructive immune factors, and correlating findings with clinical manifestations.

Jacqueline Orian, Ph.D.  
La Trobe University  
Bundoora  
Project Number: PP1448  
Funding: $40,000  
Term: 9/1/2007-8/31/2008  
Area: Neuropathology  
“Early grey matter changes in murine multiple sclerosis-like disease”  
Tracking damage to nerve tissues early in the course of MS-like disease for clues to preventing damage in people with MS.

John Rose, M.D.  
VA Medical Center  
Salt Lake City, UT  
Utah State Chapter  
Project Number: RG 3411B4/1  
Funding: $563,475  
Term: 10/1/2007-9/30/2010  
Area: Neuropathology  
“The role of COX-2 in oligodendrocyte death and demyelination”  
Understanding the potential role of an inflammatory protein called COX-2 in the destruction of myelin-making cells in MS.
Isobel Scarisbrick, Ph.D.  
Mayo Clinic College of Medicine  
Rochester, MN  
Minnesota Chapter  
Project Number: RG 3367-B-4  
Funding: $567,452  
Term: 10/1/2005-9/30/2008  
Area: Neuropathology  
“Range of action of the kallikrein gene family in MS pathogenesis”  
Determining the role of molecules that may spur on the inflammation that occurs in the brain and spinal cord in MS.

Betty Soliven, M.D.  
University of Chicago  
Chicago, IL  
Greater Illinois Chapter  
Project Number: RG 3951A7/1  
Funding: $504,577  
Term: 10/1/2007-9/30/2010  
Area: Neuropathology  
“Lysosphingolipid receptors and growth factors in oligodendroglial regeneration”  
Does blocking a molecule present on immune cells, which is the action of the experimental MS therapy FTY720, impact myelin-making cells that also carry this molecule?

**NEUROPHYSIOLOGY**

Exploring how nerve fibers and cells work normally and in the disease state.

Chen Gu, Ph.D.  
Ohio State University  
Columbus, OH  
Ohio Buckeye Chapter  
Project Number: TA 3012A1/T  
Funding: $412,500  
Term: 1/1/2006-12/31/2008  
Area: Neurophysiology  
“Targeting and function of voltage-gated potassium channel in myelinated axons”  
Understanding how tiny pores in the nerve fiber respond to myelin destruction, to find ways to protect nerve fibers from the damage caused by MS.

Martha Miller, M.D., Ph.D.  
Case Western Reserve University  
Cleveland, OH  
Ohio Buckeye Chapter  
Project Number: RG 3669-A-2  
Funding: $538,712  
Area: Neurophysiology  
“Proteolipid protein gene expression and function in the brainstem”  
Exploring whether gene activity related to a myelin protein makes respiratory nerve cells vulnerable in some people with MS.
Martin Paukert, M.D.  
Johns Hopkins University  
Baltimore, MD  
Maryland Chapter  
Project Number: FG 1663-A-1  
Funding: $162,481  
Term: 8/1/2005-7/31/2008  
Area: Neurophysiology  
“Axon - oligodendrocyte precursor cell synaptic signaling in the white matter”  
Exploring communication between nerve cells and myelin-making cells for clues to increasing the number of cells available for myelin repair.

David Shucard, Ph.D.  
Buffalo General Hospital  
Buffalo, NY  
W. New York/N.W. Penn. Chapter  
Project Number: PP1398  
Funding: $44,000  
Term: 5/1/2007-4/30/2008  
Area: Neurophysiology  
“Variability of the ERP as an index of cognitive neural efficiency in MS”  
Developing a novel electrophysiological method of assessing nerve function that may be related to cognitive functioning in people with MS.

Stephen Waxman, M.D., Ph.D.  
Yale University School of Medicine  
New Haven, CT  
Greater Connecticut Chapter  
Project Number: RG 1912E9/1  
Funding: $639,707  
Term: 10/1/2004-9/30/2008  
Area: Neurophysiology  
“Molecular pathophysiology and protection of CNS axons in MS and its models”  
Understanding how tiny pores in nerve fibers are altered by the immune attack on myelin in MS and searching for ways to protect nerve integrity and function.  
2004 Stephen C. Reingold Research Award; Paid in part by the Gerald J. and Dorothy R. Friedman New York Foundation for Medical Research through the NMSS New York City Chapter, in honor of Susan Thomases

**TISSUE/DNA BANKS**

Tissue and DNA banks that accumulate and store specimens for use by MS investigators.

Allen Bowling, M.D., Ph.D.  
Rocky Mountain MS Center  
Englewood, CO  
Colorado Chapter  
Project Number: RG 2859-D-9  
Funding: $806,266  
Term: 10/1/2004-9/30/2009  
Area: Tissue/DNA Banks  
“Rocky Mountain Multiple Sclerosis Center Tissue Bank”  
Developing and maintaining a tissue bank of specimens from people MS for use in research.
Stephen Hauser, M.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
Project Number: RG 2899-D-11  
Funding: $878,962  
Term: 4/1/2008-3/31/2012  
Area: Tissue/DNA Banks  
“Support of a core DNA repository for MS”  
Banking genetic material from individuals and families with MS as a shared resource for studies searching for genes that confer susceptibility to MS.

Stephen Hauser, M.D.  
University of California, San Francisco  
San Francisco, CA  
Northern California Chapter  
Project Number: RG 2899-C-8  
Funding: $181,678  
Area: Tissue/DNA Banks  
“Support of a core DNA repository for MS”  
Banking genetic material from individuals and families with MS as a shared resource for studies searching for genes that confer susceptibility to MS.

Howard Lipton, M.D.  
University of Illinois at Chicago  
Chicago, IL  
Greater Illinois Chapter  
Project Number: RG 4051-A-9  
Funding: $425,958  
Term: 10/1/2007-9/30/2010  
Area: Tissue/DNA Banks  
“Establishing a multiple sclerosis tissue repository at the University of Illinois”  
Gathering and banking MS tissue samples to serve as a resource for MS researchers seeking to understand this disease and how to cure it.

Rashed Nagra, Ph.D.  
Brentwood Biomedical Research Institute  
Los Angeles, CA  
Southern California Chapter  
Project Number: RG 829-O-39  
Funding: $1,308,300  
Term: 10/1/2004-9/30/2009  
Area: Tissue/DNA Banks  
“Human brain and spinal fluid resource center”  
Developing and maintaining a tissue bank of specimens from people MS for use in research.