

## 2014 Alzheimer's Association® Grant Awards Portfolio

—Organized by research categories

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### Molecular Pathogenesis and Pathophysiology of Alzheimer's Disease

Jose Abisambra, Ph.D.  
University of Kentucky  
Lexington, Kentucky

***The Impact of Tau on Ribosomal Function in Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

Does abnormal tau impair the ability of nerve cells to make new proteins and contribute to nerve cell dysfunction in Alzheimer's disease?

Mathew Blurton-Jones, Ph.D.  
University of California - Irvine  
Irvine, California

***Examining the Role of TREM2 in Alzheimer's Disease Pathogenesis with iPSC-Derived Microglia***

2014 Investigator-Initiated Research Grant: Biological Underpinnings of Genetic Risk Factors in Alzheimer's Disease —\$250,000 over 3 years

How does the TREM2 gene alter microglia function in the brain and impact the risk of developing Alzheimer's disease?

Scott Brady, Ph.D.  
University of Illinois - Chicago  
Chicago, Illinois

***Signaling Pathways, Molecular Motors and Cell-Specificity in Alzheimer's Disease***

2014 Zenith Fellows Award —\$450,000 over 3 years

Do alterations in axonal transport contribute to the vulnerability and death of brain cells in Alzheimer's disease?

Qian Cai, M.D., Ph.D.  
Rutgers, The State University of New Jersey  
Piscataway, New Jersey

***Regulation of Synaptic A $\beta$  Generation via BACE1 Retrograde Transport in Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

How do defects in cellular transport affect the accumulation of beta-amyloid in the synapses of nerve cells?

Todd Cohen, Ph.D.  
University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina

***A Pathogenic Role for Tau Acetylation in Alzheimer's Disease***

2014 New Investigator Research Grant —\$99,722 over 2 years

How do abnormal chemical modifications of tau contribute to brain changes associated with Alzheimer's disease?

Rebecca Cunningham, Ph.D.  
University of North Texas Health Science Center  
Fort Worth, Texas

***Sleep Apnea, Oxidative Stress, and Testosterone on Neuroinflammation***

2014 New Investigator Research Grant —\$100,000 over 2 years

Does testosterone amplify sleep apnea-related changes in oxidative stress, brain inflammation and cognitive function?

Radoslaw Dobrowolski, Ph.D.  
Rutgers, The State University – Newark Campus  
Newark, New Jersey

***Dysregulation of Molecular Clearance Pathways in Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

How does malfunction of the lysosomal system in nerve cells affect the accumulation of beta-amyloid and abnormal tau in the brain?

Douglas Fowler, Ph.D.  
University of Washington  
Seattle, Washington

***Large-Scale Mutagenesis to Probe A $\beta$  Aggregation and Chaperone Interactions***

2014 New Investigator Research Grant —\$100,000 over 2 years

What are the molecular mechanisms involved in the formation of amyloid plaques in the brain?

John Gilbert, Ph.D.  
University of Miami  
Miami, Florida

***Identification of Mutations and Transcription in LOAD GWAS Regions***

2014 Investigator-Initiated Research Grant: Biological Underpinnings of Genetic Risk Factors in Alzheimer's Disease —\$249,336 over 3 years

Can genome-wide association studies (GWAS) help identify novel genetic risk factors for Alzheimer's disease?

Jaime Grutzendler, M.D.  
Yale University School of Medicine  
New Haven, Connecticut

***The Role of Angiophagy in Alzheimer's Disease Pathology***

2014 Investigator-Initiated Research Grant: Role of Vascular Metabolic Factors in the Pathogenesis of Alzheimer's Disease and Related Dementia —\$250,000 over 3 years

What are the molecular mechanisms underlying brain microvascular damage and the development of Alzheimer's disease?

Pengcheng Han, Ph.D.  
Barrow Neurological Institute - St. Joseph Medical Center  
Phoenix, Arizona

***PACAP Deficit and the Pathogenesis of Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

Does loss of the neurotrophic factor PACAP contribute to alterations in nerve cell function and other brain changes associated with Alzheimer's disease?

Tsuneya Ikezu, M.D., Ph.D.  
Boston University  
Boston, Massachusetts

***Exosome Pathway as a Novel Therapeutic Target of Tauopathy***

2014 Investigator-Initiated Research Grant: Discovery-Validation of Therapeutic Targets for Developing Novel Interventions for Alzheimer's Disease —\$250,000 over 3 years

What are the molecular mechanisms underlying the movement of abnormal tau throughout the brain and could this be a novel target?

Takahisa Kanekiyo, M.D., Ph.D.  
Mayo Clinic Jacksonville  
Jacksonville, Florida

***ApoE and LRP1 in Neuronal A $\beta$  Clearance***

2014 New Investigator Research Grant —\$99,999 over 2 years

How does the interaction of ApoE and LRP1 proteins impact the development of amyloid plaques in the brain?

Bruce Lamb, Ph.D.  
Cleveland Clinic Foundation  
Cleveland, Ohio

***The Role of TREM2 on Inflammatory Monocytes in Alzheimer's Disease***

2014 Investigator-Initiated Research Grant: Biological Underpinnings of Genetic Risk Factors in Alzheimer's Disease —\$250,000 over 3 years

How does immune cell TREM2 expression in the brain impact inflammation and other brain changes associated with Alzheimer's disease?

Jean-Charles Lambert, Ph.D.  
Institut Pasteur de Lille  
Lille, France

***Involvement of BIN1 in the Alzheimer's Pathophysiological Process***

2014 Investigator-Initiated Research Grant: Biological Underpinnings of Genetic Risk Factors in Alzheimer's Disease —\$250,000 over 3 years

How do variations in the BIN1 gene affect the risk of developing Alzheimer's disease?

Feng Lin, Ph.D.  
University of Rochester  
Rochester, New York

***Differentiating Neurophysiological Stress Regulation in Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

How do brain networks that help regulate the stress response become altered in Alzheimer's disease?

Katie Lunnon, Ph.D.  
University of Exeter  
Exeter, United Kingdom

***The Role of 5-Hydroxymethylation in the Alzheimer's Disease Brain***

2014 New Investigator Research Grant —\$99,072 over 2 years

How do chemical modifications that impact gene expression contribute to dementia-related changes in the brain?

Diego Mastroeni, Ph.D.  
Banner Sun Health Research Institute  
Sun City, Arizona

***Profiling the Gliome in Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

How do genetic changes in glial cells affect their function, and do these changes contribute to the development of Alzheimer's disease?

Erik Musiek, M.D., Ph.D.  
Washington University School of Medicine  
St. Louis, Missouri

***The Circadian Clock as a Therapeutic Target for Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

Can alteration of circadian clock function help protect against the accumulation of beta-amyloid and development of Alzheimer's disease?

Rocio Perez-Gonzalez, Ph.D.  
The Nathan S. Kline Institute for Psychiatric Research  
Orangeburg, New York

***A Pathogenic Role for APP-CTFs-Enriched Exosomes in the Brain***

2014 New Investigator Research Grant —\$100,000 over 2 years

Do exosomes play a role in the movement of beta-amyloid through the brain and the formation of amyloid plaques?

Cristian Ripoli, Ph.D.  
Università Cattolica del Sacro Cuore  
Rome, Italy

***Intraneuronal Binding Partners of Amyloid- $\beta$  Protein***

2014 New Investigator Research Grant —\$96,800 over 2 years

How does the accumulation of beta-amyloid inside of nerve cells affect synaptic transmission and brain function?

Erik Roberson, M.D., Ph.D.  
University of Alabama at Birmingham  
Birmingham, Alabama

***BIN1 and Tau Interactions Regulating Neuronal Calcium***

2014 Investigator-Initiated Research Grant: Biological Underpinnings of Genetic Risk Factors in Alzheimer's Disease —\$249,999 over 3 years

How do alterations in the interaction of BIN1 and tau proteins contribute to brain changes associated with Alzheimer's disease?

Agueda Rostagno, Ph.D.  
New York University School of Medicine  
New York, New York

***CAA, Mitochondrial Dysfunction, and the Neurovascular Unit***

2014 Zenith Fellows Award —\$450,000 over 3 years

How does blood vessel damage in the brain contribute to the progression of brain changes observed in Alzheimer's disease?

Chantelle Sephton, Ph.D.  
Université Laval  
Quebec City, Canada

***FUS in Synaptic Function and Frontotemporal Lobar Degeneration***

2014 New Investigator Research Grant —\$100,000 over 2 years

How do variations in the FUS protein affect nerve cell function and disease progression in frontotemporal lobar degeneration?

Joshua Shulman, M.D., Ph.D.  
Baylor College of Medicine  
Houston, Texas

***Genome Instability as a Novel Link between Aging and Alzheimer's disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

How does increased genetic instability during aging contribute to the development of Alzheimer's disease?

Stephen Strittmatter, M.D., Ph.D.  
Yale University School of Medicine  
New Haven, Connecticut

***Signaling by A $\beta$  Oligomer in the Post-Synaptic Density***

2014 Zenith Fellows Award —\$450,000 over 3 years

How do beta-amyloid oligomers affect the loss of nerve cell synapses in Alzheimer's disease?

Simona Tomaselli, Ph.D.  
CNR Institute for Macromolecular Studies  
Milan, Italy

***Structural Insights on Oligomers of A $\beta$  Peptides in the Presence of PrPC***

2014 New Investigator Research Grant —\$100,000 over 2 years

What are the first steps in the formation of beta-amyloid oligomers and how do they affect nerve cell function?

Alberto Vazquez, Ph.D.  
University of Pittsburgh  
Pittsburgh, Pennsylvania

***Physiological Basis of Brain Connectivity Reductions in Alzheimer's Disease***

2014 Mentored New Investigator Research Grant to Promote Diversity—\$149,998 over 3 years

Are the early stages of Alzheimer's disease associated with reductions in brain cell connectivity?

Xinglong Wang, Ph.D.  
Case Western Reserve University  
Cleveland, Ohio

***The Role of DLP1 Phosphorylation in Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

How do alterations in the protein DLP1 affect mitochondrial-related brain cell loss in Alzheimer's disease?

Daniel Wesson, Ph.D.  
Case Western Reserve University  
Cleveland, Ohio

***Impact of Upstream Neurodegeneration on Downstream Cortical Function***

2014 New Investigator Research Grant —\$100,000 over 2 years

How do changes in the ability to detect odors relate to alterations in brain function and the development of Alzheimer's disease?

Benjamin Wolozin, M.D., Ph.D.  
Boston University  
Boston, Massachusetts

***It Takes TIA to Tangle: The Role of RNA Binding Proteins in Alzheimer's Disease***

2014 Zenith Fellows Award —\$450,000 over 3 years

What are the molecular mechanisms that trigger the formation of tau neurofibrillary tangles in the brain?

Yongjie Zhang, Ph.D.  
Mayo Clinic Jacksonville  
Jacksonville, Florida

***Mechanism of DPR Protein-Induced Cell Death***

2014 New Investigator Research Grant —\$100,000 over 2 years

Does the abnormal clumping of dipeptide-repeat proteins (DPRs) contribute to damage and death of brain cells in neurodegenerative diseases?

## **Diagnosis, Assessment and Disease Monitoring**

Jalayne Arias, J.D.  
Cleveland Clinic Foundation  
Cleveland, Ohio

***Legal, Ethical, & Social Analysis of Preclinical Biomarker Tests in Alzheimer's Disease***

2014 Mentored New Investigator Research Grant to Promote Diversity—\$150,000 over 3 years

What are the legal, ethical, and policy challenges of implementing biomarker testing for Alzheimer's disease?

Barry Boland, Ph.D.  
University College Cork  
Cork, Ireland

***Biomarkers of Impaired Lysosomal Flux in Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

Can biomarkers of impaired lysosomal function in nerve cells help detect the early stages of Alzheimer's disease?

Mallar Chakravarty, Ph.D.  
Centre for Addiction and Mental Health  
Toronto, Canada

***Interpreting Disease Heterogeneity in Alzheimer's and Parkinson's Disease***

2014 Biomarkers Across Neurodegenerative Disease Award —\$149,600 over 2 years

Can advanced brain mapping techniques help detect differences in brain structure in Alzheimer's vs. Parkinson's disease?

Carlos Cruchaga, Ph.D.  
Washington University School of Medicine  
St. Louis, Missouri

***Genetics, Biomarkers and Mendelian Randomization to Identify Common Pathways***

2014 Biomarkers Across Neurodegenerative Disease Award —\$134,059 over 2 years

Can Mendelian Randomization methods help identify new genes associated with increased risk for Alzheimer's and Parkinson's disease?

Alain Dagher, M.D.  
McGill University  
Montreal, Canada

***Brain Networks as Targets of Neurodegeneration in Alzheimer's and Parkinson's Disease***

2014 Biomarkers Across Neurodegenerative Disease Award —\$149,998 over 2 years

How does the movement of abnormal proteins through brain networks affect the progression of Alzheimer's and Parkinson's disease?

Michael Donohue, Ph.D.  
University of California – San Diego  
San Diego, California

***Estimating Long-Term Disease Trajectories***

2014 Biomarkers Across Neurodegenerative Disease Award —\$148,843 over 2 years

Can novel statistical methods help us better understand and predict how Alzheimer's and Parkinson's disease progress over many decades?

Boris Gutman, Ph.D.  
University of Southern California  
Los Angeles, California

***Subcortical Shape Analysis for Joint Biomarker Discovery***

2014 Biomarkers Across Neurodegenerative Disease Award —\$150,000 over 2 years

Can analyzing images of brain shapes be used to help in the early diagnosis Alzheimer's and Parkinson's disease?

Ellen McGough, Ph.D.  
University of Washington  
Seattle, Washington

***Neural Imaging and Function in Early Stages of Alzheimer's Disease***

2014 New Investigator Research Grant —\$99,946 over 2 years

What are the links between certain changes in brain structure and function and mobility impairment in Alzheimer's disease?

Corey McMillan, Ph.D.  
University of Pennsylvania  
Philadelphia, Pennsylvania

***Biomarkers for Personalized Treatment of Neurodegenerative Spectrum Disease***

2014 Biomarkers Across Neurodegenerative Disease Award —\$150,000 over 2 years

Can biomarkers be used to customize individualized treatments for people with Alzheimer's or Parkinson's disease?

Jagan Pillai, Ph.D.  
Cleveland Clinic Foundation  
Cleveland, Ohio

***Inflammatory Biomarkers in Rapidly Progressive Alzheimer's Disease***

2014 New Investigator Research Grant —\$99,983 over 2 years

What role does brain inflammation play in the progression of Alzheimer's disease?

Gautam Prasad, Ph.D.  
University of Southern California  
Los Angeles, California

***Degeneration of the Human Connectome: Brain Networks in ADNI and PPMI***

2014 Biomarkers Across Neurodegenerative Disease Award —\$150,000 over 2 years

Can changes in brain network connectivity help diagnose and distinguish Alzheimer's from Parkinson's disease?

Swati Rane, Ph.D.  
Vanderbilt University Medical Center  
Nashville, Tennessee

***Cortical and Functional Distinctions in Alzheimer's and Parkinson's disease***

2014 Biomarkers Across Neurodegenerative Disease Award —\$150,000 over 2 years

Can advanced analyses of brain structure and function characterize the differences and similarities between Alzheimer's and Parkinson's disease?

Shannon Risacher, Ph.D.  
Indiana University  
Indianapolis, Indiana

***Visual Dysfunction and Amyloid in Preclinical and Prodromal Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

Are detectable changes in the eye linked to the accumulation of beta-amyloid and other brain changes observed in Alzheimer's disease?

Heidi Rossetti, Ph.D.  
UT Southwestern Medical Center  
Dallas, Texas

***Montreal Cognitive Assessment for Detection of MCI in African Americans***

2014 New Investigator Research Grant —\$99,858 over 2 years

Will the development of more appropriate and accurate cognitive assessment methods allow for improved detection and diagnosis of MCI in African Americans?

Norbert Schuff, Ph.D.  
University of California - San Francisco  
San Francisco, California

***Variations in Brain Functional Complexity Across Neurodegeneration***

2014 Biomarkers Across Neurodegenerative Disease Award —\$150,000 over 2 years

How do alterations in brain functional activity relate to changes in disease biomarkers associated with Alzheimer's and Parkinson's disease?

Peter Scott, Ph.D.  
University of Michigan  
Ann Arbor, Michigan

***Lead Optimization of High Affinity Radiotracers for PET Imaging of Tau***

2014 New Investigator Research Grant —\$99,839 over 2 years

Can a novel, longer-lasting tracer for tau PET imaging help improve disease detection and diagnosis?

R. Nathan Spreng, Ph.D.  
Cornell University  
Ithaca, New York

***Dynamic Brain Network Changes in Healthy Aging and Alzheimer's Disease***

2014 New Investigator Research Grant —\$99,997 over 2 years

Can wide-scale changes in brain networks help predict the development of Alzheimer's disease?



Saeid Taheri, Ph.D.

Medical University of South Carolina  
Charleston, South Carolina

***Contribution of BBB Pathologies to Alzheimer's Disease and Dementia***

2014 Investigator-Initiated Research Grant: Role of Vascular Metabolic Factors in the Pathogenesis of Alzheimer's Disease and Related Dementia —\$249,620 over 3 years

Does damage to the blood brain barrier (BBB) contribute to cognitive decline and dementia-related brain changes?

## **Translational Research and Clinical Interventions**

Michelle Arkin, Ph.D.

University of California, San Francisco  
San Francisco, California

***Inhibitors of Caspase-6 as Potential Alzheimer's Disease Therapeutics***

2014 Investigator-Initiated Research Grant: Discovery-Validation of Therapeutic Targets for Developing Novel Interventions for Alzheimer's Disease —\$250,000 over 3 years

Can inhibition of caspase-6 help prevent the formation of neurofibrillary tangles and nerve cell damage associated with Alzheimer's disease?

Patricia Belchior, Ph.D.

McGill University  
Montreal, Canada

***Sustaining and Retraining Attention in Individuals with MCI***

2014 New Investigator Research Grant —\$99,957 over 2 years

Can computer-based brain exercises improve attention skills and daily function in people with mild cognitive impairment?

Elizabeth Bradshaw, Ph.D.

Brigham and Women's Hospital  
Boston, Massachusetts

***Genetics, Function and Small Molecules: Targeting the CD33 Alzheimer's Disease Locus***

2014 Investigator-Initiated Research Grant: Discovery-Validation of Therapeutic Targets for Developing Novel Interventions for Alzheimer's Disease —\$250,000 over 3 years

How do variations in the CD33 gene affect the accumulation of beta-amyloid in the brain?

Dongming Cai, M.D., Ph.D.

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

***Development of Novel Therapies Targeted at A $\beta$  Clearance***

2014 New Investigator Research Grant —\$100,000 over 2 years

Can drug candidates that reduce the levels of SNJ1 in the brain facilitate beta-amyloid clearance?

Laura Colgin, Ph.D.

University of Texas at Austin  
Austin, Texas

***Does Theta-Gamma Stimulation Improve Memory in Alzheimer's Disease Mice?***

2014 New Investigator Research Grant —\$100,000 over 2 years

Can deep-brain stimulation help restore normal brain rhythms and preserve memory function in a mouse model of Alzheimer's?

Jie Cui, Ph.D.  
The Roskamp Institute Inc.  
Sarasota, Florida

***Can Aromatase Inhibitors Increase the Risk of Alzheimer's Disease in Breast Cancer Patients?***

2014 New Investigator Research Grant —\$100,000 over 2 years

How do aromatase inhibitors, and subsequent reduction in brain estrogen, affect nerve cell function, cognition and the risk of Alzheimer's disease?

Kirk Erickson, Ph.D.  
University of Pittsburgh  
Pittsburgh, Pennsylvania

***Influence of African Dance on Neurocognitive Function***

2014 Investigator-Initiated Research Grant: Non-Pharmacological Strategies to Ameliorate Symptoms of Alzheimer's Disease and Dementia —\$250,000 over 3 years

Can an exercise intervention help improve cognitive function and reduce dementia risk in an older African American population?

Angela Gutches, Ph.D.  
Brandeis University  
Waltham, Massachusetts

***Improving Memory in aMCI with Self-Referencing***

2014 New Investigator Research Grant —\$100,000 over 2 years

Does the process of self-referencing, or relating information to one's own life, help people with amnesic mild cognitive impairment (aMCI) learn and remember new information?

Amy Jak, Ph.D.  
University of California - San Diego  
San Diego, California

***Impact of Combined Behavioral Interventions on Cognitive Outcomes in MCI***

2014 Investigator-Initiated Research Grant: Non-Pharmacological Strategies to Ameliorate Symptoms of Alzheimer's Disease and Dementia —\$246,978 over 3 years

Can the combination of physical and cognitive training activities help preserve cognition and daily function in people with mild cognitive impairment?

Roger Lefort, Ph.D.  
Columbia University Medical Center  
New York, New York

***Targeting RhoA Signaling as a Therapeutic Strategy for Alzheimer's Disease***

2014 New Investigator Research Grant to Promote Diversity—\$100,000 over 2 years

Can inhibition of RhoA activity help protect brain cells from the toxic effects of beta-amyloid?

Kun Ping Lu, M.D., Ph.D.  
Beth Israel Deaconess Medical Center  
Boston, Massachusetts

***Validation of cis-Tau as a Therapeutic Target for Alzheimer's Disease***

2014 Investigator-Initiated Research Grant: Discovery-Validation of Therapeutic Targets for Developing Novel Interventions for Alzheimer's Disease —\$249,999 over 3 years

Can an antibody therapy against an abnormally modified version of tau help prevent the formation of neurofibrillary tangles in the brain?

Elena Marcello, Ph.D.  
University of Milan  
Milan, Italy

***Development of Innovative Tools for Alzheimer's Disease Therapy***

2014 New Investigator Research Grant —\$100,000 over 2 years

Can molecules targeting the ADAM10 pathway help prevent amyloid plaque formation and other brain changes associated with Alzheimer's disease?

Charbel Moussa, Ph.D.  
Georgetown University  
Washington DC

***Nilotinib Effects on Parkin-Mediated p-Tau Clearance***

2014 New Investigator Research Grant —\$99,931 over 2 years

Can the drug molecule Nilotinib promote clearance of abnormal tau in the brain and help prevent brain cell damage and death?

Gail Musen, Ph.D.  
Joslin Diabetes Center  
Boston, Massachusetts

***Type 2 Diabetes and Risk for Alzheimer's Disease: Effect of Exercise***

2014 Investigator-Initiated Research Grant: Non-Pharmacological Strategies to Ameliorate Symptoms of Alzheimer's Disease and Dementia —\$250,000 over 3 years

Can an aerobic exercise intervention help improve brain structure and function, and reduce the risk for Alzheimer's disease in individuals with type 2 diabetes?

Ozioma Okonkwo, Ph.D.  
University of Wisconsin – Madison  
Madison, Wisconsin

***Aerobic Exercise for Alzheimer's Disease Prevention in At-Risk Middle-Aged Adults***

2014 New Investigator Research Grant to Promote Diversity—\$100,000 over 2 years

Can aerobic exercise in healthy adults with a parental family history of Alzheimer's help prevent brain changes associated with the disease?

Shauna Yuan, M.D.  
University of California - San Diego  
San Diego, California

***"In-vitro Clinical Trial" with GSM for the Treatment of FAD Carriers***

2014 New Investigator Research Grant —\$100,000 over 2 years

Can a novel model for testing potential drug therapies help in the discovery and development of new treatments for Alzheimer's disease?

## **Epidemiology (Dementia Risk Factors and Prevention)**

Rhoda Au, Ph.D.  
Boston University  
Boston, Massachusetts

### ***Framingham Cognitive Aging Study: Impact of Vascular Metabolic Risk Factors***

2014 Investigator-Initiated Research Grant: Role of Vascular Metabolic Factors in the Pathogenesis of Alzheimer's Disease and Related Dementia —\$249,459 over 3 years

How do midlife vascular risk factors (e.g. high blood pressure) contribute to the development of dementia-related brain changes?

Elizabeth Guerrero-Berroa, Ph.D.  
Icahn School of Medicine at Mount Sinai  
New York, New York

### ***Haptoglobin, Glycemic Control, and Cognitive Decline in Type 2 Diabetes***

2014 Mentored New Investigator Research Grant to Promote Diversity—\$149,998 over 3 years

How do variations in haptoglobin protein influence the risk of cognitive decline and Alzheimer's disease in people with type 2 diabetes?

Mohammad Ikram, M.D., Ph.D.  
Erasmus Medical Center  
Rotterdam, Netherlands

### ***Gait Dysfunction as a Pre-Clinical Sign of Alzheimer's Disease***

2014 New Investigator Research Grant —\$99,971 over 2 years

Can abnormalities in gait help predict subsequent development of brain dysfunction and Alzheimer's disease?

Pei-Jung Lin, Ph.D.  
Tufts Medical Center  
Boston, Massachusetts

### ***Nationwide Frequency and Costs of Preventable Hospitalizations in Alzheimer's Disease***

2014 New Investigator Research Grant —\$100,000 over 2 years

What are the factors that impact cost and quality of care related to preventable hospitalizations among people with dementia?

Kumar Rajan, Ph.D.  
Rush University Medical Center  
Chicago, Illinois

### ***Role of Activities on Genetic Risk of Neurodegeneration by Race/Ethnicity***

2014 New Investigator Research Grant —\$99,914 over 2 years

How do lifestyle factors interact with the genetic risk for developing Alzheimer's disease in African Americans?

Thor Stein, M.D., Ph.D.  
Bedford VA Research Corporation, Inc.  
Bedford, Massachusetts

### ***Genetic Risk Factors Underlying Chronic Trauma and Alzheimer's Disease Pathology***

2014 New Investigator Research Grant —\$99,954 over 2 years

What are the genetic risk factors in individuals with brain trauma that may impact the development or progression of Alzheimer's disease?

Cassandra Szoeki, Ph.D.  
University of Melbourne  
Melbourne, Australia

***The Women's Healthy Ageing Project - Cognition Study***

2014 New Investigator Research Grant —\$100,000 over 2 years

Can minimizing risk factors during midlife help prevent or delay the later development of Alzheimer's disease?

## Care and Support of Alzheimer's Disease

Carrie Ciro, Ph.D.  
University of Oklahoma Health Sciences Center  
Oklahoma City, Oklahoma

***High-Dose, Mass Practice Intervention to Reduce ADL Disability in Dementia***

2014 New Investigator Research Grant —\$99,967 over 2 years

Can an intervention using intense practice of meaningful activities of daily living (ADL) tasks help improve memory and daily function in people with dementia?

Jesse Hoey, Ph.D.  
University of Waterloo  
Waterloo, Canada

***Affective and Cognitive Technologies for AssisTance in the HOME (ACT@HOME)***

2014 Everyday Technologies for Alzheimer's Care—\$199,870 over 2 years

Will an artificially intelligent cognitive assistant with enhanced emotional capabilities allow for improved caregiving assistance?

Eli Puterman, Ph.D.  
University of California – San Francisco  
San Francisco, California

***Improving Caregivers' Daily Lives with Exercise: A Randomized Study***

2014 New Investigator Research Grant —\$100,000 over 2 years

Can aerobic exercise help promote physical and psychological health and resiliency in caregivers?

Carey Sherman, Ph.D.  
University of Michigan  
Ann Arbor, Michigan

***Technology-Assisted Intervention for Remarried and Stepfamily Caregivers***

2014 New Investigator Research Grant —\$99,976 over 2 years

Will an intervention targeted at the needs of remarried caregivers help lower burden and instill a greater sense of self-efficacy in their unique caregiving role?

Katherine Supiano, Ph.D.  
University of Utah  
Salt Lake City, Utah

***Complicated Grief Group Therapy for Bereaved Dementia Caregivers***

2014 New Investigator Research Grant —\$99,999 over 2 years

Can a targeted intervention provided in a group-therapy setting help dementia caregivers with complicated grief?