Biology of disease-related molecules

1. Production of beta-amyloid
   • David Paul Cistola, M.D., Ph.D.
     East Carolina University
     Greenville, North Carolina
     Structural Studies of the APP Transmembrane Domain
     Investigator-Initiated Research Grant—$240,000 over three years
     What structural features of APP and related proteins promote the production of beta-amyloid?
   • Madepalli Krishnappa Lakshmana, Ph.D.
     University of California
     San Diego, California
     Role of Novel LRP-Binding Proteins on the Amyloidogenic Processing of APP
     New Investigator Research Grant—$100,000 over two years
     How do certain protein interactions promote the production of beta-amyloid?
   • Yi Wen, Ph.D.
     Columbia University Medical Center
     New York, New York
     Regulation of APP Processing by Src Family Tyrosine Protein Kinase
     New Investigator Research Grant—$99,993 over two years
     How do certain proteins promote the production of beta-amyloid?
   • Jesse Wiley, Ph.D.
     University of Washington
     Seattle, Washington
     APP Binding-Partner Modulation of Gamma-Secretase–Mediated Proteolysis
     New Investigator Research Grant—$100,000 over two years
     How do certain proteins partner with APP to promote or inhibit beta-amyloid production?

2. Normal function of disease-related proteins
   • Vivian Budnik, Ph.D.
     University of Massachusetts Medical School
     Worcester, Massachusetts
     Genetic Strategies to Elucidate APP Function During Synapse Formation
     Investigator-Initiated Research Grant—$240,000 over three years
     Does APP normally play a role in the development and regulation of cell-to-cell signaling in the brain?
   • Daniela Puzzo, M.D., Ph.D.
     University of Catania
     Catania, Italy
     Functional Role of Beta-Amyloid in Synaptic Plasticity and Memory
     New Investigator Research Grant—$99,880 over two years
     What role does beta-amyloid play in healthy memory formation?

Alzheimer’s disease pathology

1. Properties and toxicity of abnormal protein structures
   • Gal Bitan, Ph.D.
     University of California
     Los Angeles, California
     Investigation of Beta-Amyloid Protein Oligomerization and Neurotoxicity
     Investigator-Initiated Research Grant—$240,000 over three years
     What structural features of beta-amyloid promote aggregation and determine its toxicity?
   • Gail V. W. Johnson, Ph.D.
     University of Rochester
     Rochester, New York
     Tau Oligomerization and Aggregation Analysis: A Novel Approach
     Investigator-Initiated Research Grant—$239,991 over three years
     What type of tau protein structure has a toxic effect on brain cells?
   • Christopher D. Link, Ph.D.
     University of Colorado
     Boulder, Colorado
     Structure/Function Analysis of in Vivo Beta-Amyloid Peptide Toxicity
     Zenith Fellows Award—$249,968 over two years
     What are the structural features and underlying mechanisms of the most toxic forms of beta-amyloid?
   • Melissa Ann Moss, Ph.D.
     University of South Carolina Research Foundation
     Columbia, South Carolina
     Characterization of Membrane Compositions That Promote Beta-Amyloid Assembly
     New Investigator Research Grant—$100,000 over two years
     How do changes in cell membrane composition promote the assembly of toxic beta-amyloid structures?
   • Veronika A. Szalai, Ph.D.
     University of Maryland
     Baltimore, Maryland
     Neurotoxicity and Structure of Copper-Containing Beta-Amyloid
     Investigator-Initiated Research Grant—$239,988 over three years
     What role do copper-containing beta-amyloid structures play in Alzheimer pathology?

2. Synaptic dysfunction: Loss of cell-to-cell communication
   • Shernaz Xerxes Bamji, Ph.D.
     University of British Columbia
     Vancouver, British Columbia, Canada
     Beta-Catenin Stabilization in the Synaptic Pathology of Alzheimer’s Disease
     New Investigator Research Grant—$99,252 over two years
     How does a certain protein disrupt cell-to-cell communication in Alzheimer’s disease?
   • Gerard J. Byrne, M.B.B.S., Ph.D.
     University of Queensland
     Herston, Australia
     Synaptic Dysfunction in Alzheimer’s Disease
     Investigator-Initiated Research Grant—$238,013 over three years
     Do brain cells develop new but disordered connections to compensate for the loss of cell-to-cell communication in Alzheimer’s disease?
• Katherine Conant, M.D.
Johns Hopkins University
Baltimore, Maryland
**MMPs and Synaptic Injury in Alzheimer’s Disease**
Investigator-Initiated Research Grant—$240,000 over three years
What role does a certain protein play in the disruption of cell-to-cell communication?

• Gunnar K. Gouras, M.D.
Weill Medical College of Cornell University
New York, New York
**Mechanism of Beta-Amyloid–Induced Synaptic Dysfunction**
Zenith Fellows Award—$250,000 over two years
What is the mechanism by which beta-amyloid induces dysfunction in cell-to-cell communication?

• Henry W. Querfurth, M.D., Ph.D.
Carias St. Elizabeth’s Medical Center
Boston, Massachusetts
**Intraneuronal Beta-Amyloid and Synaptic Plasticity in the Prefrontal Cortex**
Investigator-Initiated Research Grant—$236,000 over three years
How does beta-amyloid inside neurons affect cell-to-cell communication?

• Keith Vosseller, Ph.D.
Drexel University
Philadelphia, Pennsylvania
**Post-Translational Synaptic Proteomics and Function in Alzheimer’s Disease**
New Investigator Research Grant—$100,000 over two years
How do changes in certain chemical properties of cells affect cell-to-cell communication in Alzheimer’s disease?

3. Factors contributing to cell death

• Hyoung-gon Lee, Ph.D.
Case Western Reserve University
Cleveland, Ohio
**A Novel Transgenic Model for Alzheimer’s Disease**
New Investigator Research Grant—$100,000 over two years
What can a new mouse model reveal about a protein that may induce cell death in Alzheimer’s disease?

• Michael K. Lee, Ph.D.
Johns Hopkins University
Baltimore, Maryland
**Beta-Amyloid and Monoaminergic Neurodegeneration in Alzheimer’s Disease Transgenic Mice**
Investigator-Initiated Research Grant—$240,000 over three years
How does beta-amyloid induce the death of specialized cells in the brain stem?

• Zaibo Li, Ph.D., M.D.
University of Rochester
Rochester, New York
**Beta-Amyloid Elicits Its Neurotoxicity by Activating Fyn/c-Cbl Pathway**
New Investigator Research Grant—$99,738 over two years
How does beta-amyloid activate a chain of events leading to cell death?

• Qianlan Ma, M.D., Ph.D.
Sepulveda Research Corporation
North Hills, California
**Mechanisms of PTEN Signaling Defects in Alzheimer’s Disease**
New Investigator Research Grant—$99,980 over two years
How does beta-amyloid disrupt the function of a protein that promotes cell survival?

• Kalipada Pahan, Ph.D.
Rush University Medical Center
Chicago, Illinois
**Neutral Sphingomyelinase in Beta-Amyloid–Induced Neuronal Death**
Investigator-Initiated Research Grant—$239,662 over three years
How does beta-amyloid initiate a sequence of events leading to cell death?

• Jie Shen, Ph.D.
Brigham and Women’s Hospital
Boston, Massachusetts
**Mechanisms of Neurodegeneration Caused by Loss of Presenilin Function**
Investigator-Initiated Research Grant—$240,000 over three years
How does loss of function in an Alzheimer-related protein contribute to cell death?

4. Disruption of normal brain cell functions and properties

• Ottavia Arancio, M.D.
Columbia University
New York, New York
**CBP Involvement in Alzheimer’s Disease and Its Potential Therapeutic Value**
Zenith Fellows Award—$250,000 over two years
How does Alzheimer pathology affect the function of proteins that help maintain a brain cell’s DNA?

• George S. Bloom, Ph.D.
University of Virginia
Charlottesville, Virginia
**Presenilin-1 and Signaling Through the HIF Pathway**
Investigator-Initiated Research Grant—$240,000 over three years
How does an Alzheimer-related protein affect molecular signals regulating cell growth and metabolism?

• Robia G. Pautler, Ph.D.
Baylor College of Medicine
Houston, Texas
**Neuroimaging Assessment of the Role of GM2 in Alzheimer’s Disease**
New Investigator Research Grant—$99,400 over two years
How does a certain molecule affect nutrient transport in brain cells in Alzheimer’s disease?

• Miguel A. Gama Sosa, Ph.D.
Mount Sinai School of Medicine
Bronx, New York
**Neuroimaging Assessment of the Role of the HIF Pathway**
Investigator-Initiated Research Grant—$240,000 over three years
How does an Alzheimer-related protein disrupt cell’s energy-producing structures?

2007 Grant Portfolio: Trends in Research
5. Cell vulnerability and loss of neuroprotective factors

- Margaret Fahnestock, Ph.D.
  McMaster University
  Hamilton, Ontario, Canada
  **Mechanism of Decreased BDNF in Alzheimer’s Disease Brain**
  Investigator-Initiated Research Grant—$240,000 over three years
  What is the cause and result of a decline in a neuroprotective protein in Alzheimer’s disease?

- Changiz Geula, Ph.D.
  Northwestern University
  Feinberg School of Medicine
  Chicago, Illinois
  **Calbindin, Aging and Vulnerability of Cholinergic Neurons to Degeneration**
  Zenith Fellows Award—$249,998 over two years
  What function does a protein play in regulating cellular calcium levels and protecting brain cells from damage?

- Stephen D. Ginsberg, Ph.D.
  Nathan S. Kline Institute for Psychiatric Research
  Orangeburg, New York
  **Profiling Vulnerable Hippocampal Populations in Mild Cognitive Impairment and Alzheimer’s Disease**
  Investigator-Initiated Research Grant—$240,000 over three years
  What features of cells targeted in Alzheimer’s disease make them vulnerable to damage?

- Rena Li, M.D., Ph.D.
  Sun Health Research Institute
  Sun City, Arizona
  **Studies on Estrogen and DNA Repair in an APP Transgenic Mouse Model**
  Investigator-Initiated Research Grant—$239,992 over three years
  What role does abnormal estrogen repair of DNA play in Alzheimer pathology?

- Karl H. Weisgraber, Ph.D.
  The J. David Gladstone Institutes
  San Francisco, California
  **Association of ApoE4 With Alzheimer’s Disease: A New Paradigm**
  Zenith Fellows Award—$250,000 over two years
  By what mechanism does a certain form of a protein contribute to Alzheimer’s disease?

6. Vascular damage in Alzheimer’s disease

- Anastasios Georgakopoulos, Ph.D.
  Mount Sinai School of Medicine
  New York, New York
  **Role of Presenilin-1/Gamma-Secretase in EphB-Induced Angiogenesis**
  Investigator-Initiated Research Grant—$240,000 over three years
  What effect do Alzheimer-related proteins have on a protein critical for blood vessel development in the brain?

- Chia-Yi Kuan, M.D., Ph.D.
  Cincinnati Children’s Hospital Medical Center
  Cincinnati, Ohio
  **Vascular Effects of Beta-Amyloid Peptide via Rac GTPase in Ischemia-Hypoxia**
  New Investigator Research Grant—$100,000 over two years
  What role does a certain protein play in cellular damage from toxic oxygen molecules?

7. Other factors in Alzheimer pathology

- John Graham Sled, Ph.D.
  Hospital for Sick Children
  Toronto, Ontario, Canada
  **Relating Vascular Pathology to Memory Deficits in APP Overexpressing Mice**
  Investigator-Initiated Research Grant—$198,390 over three years
  How does abnormal blood-flow regulation contribute to Alzheimer’s disease pathology?
Natural defenses vs. Alzheimer pathology

• **Kelly Dineley, Ph.D.**  
  University of Texas Medical Branch  
  Galveston, Texas  
  *Alpha 7 nACHR Protects Against Beta-Amyloid Toxicity in Vivo*  
  Investigator-Initiated Research Grant—$239,581 over three years  
  What role does a cell-surface protein play in protecting cells against beta-amyloid?

• **Pedro Fernandez-Funez, Ph.D.**  
  University of Texas Medical Branch  
  Galveston, Texas  
  *New Genetic Suppressors of Beta-Amyloid Neurotoxicity*  
  New Investigator Research Grant—$100,000 over two years  
  Can certain genes inhibit the assembly of toxic beta-amyloid structures in an animal model?

• **Malcolm A. Leissring, Ph.D.**  
  Scripps Research Institute  
  Jupiter, Florida  
  *Genetic Modulation of Beta-Amyloid Catabolism*  
  Investigator-Initiated Research Grant—$240,000 over three years  
  What proteins are involved in the degradation and removal of beta-amyloid from the brain?

• **Efrat Levy, Ph.D.**  
  Nathan S. Kline Institute for Psychiatric Research  
  Orangeburg, New York  
  *Cystatin C-Derived Peptides as Inhibitors of Beta-Amyloid Aggregation*  
  Investigator-Initiated Research Grant—$240,000 over three years  
  What features of a naturally occurring protein enables it to inhibit the assembly of beta-amyloid into toxic structures?

• **Chien-liang Glenn Lin, Ph.D.**  
  Ohio State University Research Foundation  
  Columbus, Ohio  
  *Glial Glutamate Transporter EAAT2 as a Potential Therapeutic Target*  
  Investigator-Initiated Research Grant—$240,000 over three years  
  Can a naturally occurring “clean-up” molecule be overactivated to clear beta-amyloid from the brains of Alzheimer-like mice?

• **Charles R. Sanders, Ph.D.**  
  Vanderbilt University Medical Center  
  Nashville, Tennessee  
  *Modulation of Beta-Amyloid Production by CD147*  
  Investigator-Initiated Research Grant—$240,000 over three years  
  How does a naturally occurring human protein inhibit the production of beta-amyloid?

• **Meharvan Singh, Ph.D.**  
  University of North Texas Health Science Center  
  Fort Worth, Texas  
  *Progestin-Regulated Neurotrophin Synthesis and Release in Neuroprotection*  
  Investigator-Initiated Research Grant—$240,000 over three years  
  What neuroprotective function does a certain female hormone exhibit in cultured nerve cells?

• **Bart van Berckel, M.D.**  
  VU University Medical Centre  
  Amsterdam, Netherlands  
  *Assessment of Blood-Brain Barrier Integrity in Alzheimer’s Disease*  
  New Investigator Research Grant—$100,000 over two years  
  How does the function of a certain protein affect the clearance of beta-amyloid from the brain?

• **Huaxi Xu, Ph.D.**  
  Burnham Institute for Medical Research  
  La Jolla, California  
  *Characterizing a Novel Gene That Inhibits GSK3 Activity and Beta-Amyloid Generation*  
  Zenith Fellows Award—$250,000 over two years  
  How might the activation of a certain gene inhibit critical processes in Alzheimer pathology?

**Dementia risk factors**

1. **Genetic risk factors**

• **Deborah Blacker, M.D., Sc.D.**  
  Massachusetts General Hospital  
  Charlestown, Massachusetts  
  *Cross Sectional and Longitudinal Analysis of Alzheimer’s Disease Quantitative Phenotypes*  
  Investigator-Initiated Research Grant—$237,893 over three years  
  Can neuropsychological test data help narrow the search for genes related to Alzheimer’s disease risk?

• **Jeremy M. Silverman, Ph.D.**  
  Mount Sinai School of Medicine  
  New York, New York  
  *A Longitudinal Study of Successful Cognitive Aging Phenotypes in Costa Rica*  
  Investigator-Initiated Research Grant—$240,000 over three years  
  What does follow-up data in a population reveal about inherited factors associated with successful cognitive aging?

• **Weixiong Zhang, Ph.D.**  
  Washington University  
  St. Louis, Missouri  
  *Initial Steps Toward Elucidating Gene Expression Regulation of Late-Onset Alzheimer’s Disease*  
  New Investigator Research Grant—$100,000 over two years  
  Can the identification of errors in gene activation lead to the discovery of genetic risk factors for Alzheimer’s disease?

2. **Other risk factors**

• **Orly Lazarov, Ph.D.**  
  University of Illinois  
  Chicago, Illinois  
  *The Effect of Environmental Enrichment on FAD-Linked Pathology*  
  New Investigator Research Grant—$100,000 over two years  
  What impact does environmental enrichment have on the onset or progression of disease in Alzheimer-like mice?

• **Yong Shen, M.D., Ph.D.**  
  Sun Health Research Institute  
  Sun City, Arizona  
  *Elevated BACE1 as a Risk Factor for Progression From MCI to Alzheimer’s Disease*  
  Zenith Fellows Award—$250,000 over two years  
  Can measures of an Alzheimer-related protein in the cerebrospinal fluid be used to predict progression from MCI to Alzheimer’s disease?

• **Zhongceong Xie, M.D., Ph.D.**  
  Massachusetts General Hospital  
  Charlestown, Massachusetts  
  *Inhalation of Anesthetic Isoflurane and Alzheimer’s Disease Neuropathogenesis*  
  Investigator-Initiated Research Grant—$240,000 over three years  
  Does a common anesthetic contribute to the development of Alzheimer pathology?
Other neurodegenerative disorders

- Alison M. Goate, D.Phil.
  Washington University
  St. Louis, Missouri
  Molecular Mechanisms of Neurodegeneration in FTLD-U
  Investigator-Initiated Research Grant—$239,143 over three years
  How does an abnormal protein contribute to the loss of cells in a form of frontotemporal lobar degeneration?

- Edmund C. Jenkins, Ph.D.
  Research Foundation for Mental Hygiene
  Staten Island, New York
  Telomere Shortening in Older Individuals With Down Syndrome and Dementia
  Investigator-Initiated Research Grant—$239,939 over three years
  How do abnormal chromosome features contribute to dementia in people with Down Syndrome?

- Benjamin Wolozin, M.D., Ph.D.
  Boston University
  Boston, Massachusetts
  LRRK2 Interactions With Pathways Linked to Protein Folding and Degradation
  Investigator-Initiated Research Grant—$239,999 over three years
  What mechanism causes a certain protein to lose its protective properties in Parkinson’s disease?

Diagnosis and disease monitoring

1. Brain imaging and biomarkers

- Bradford Dickerson, M.D.
  Massachusetts General Hospital
  Charlestown, Massachusetts
  Ultrahigh-Resolution MRI of Medial Temporal Lobe in MCI: A Pilot Study
  New Investigator Research Grant—$100,000 over two years
  Can an imaging technique reveal minute brain changes indicative of MCI?

- Jorge A. Ghiso, Ph.D.
  New York University School of Medicine
  New York, New York
  Signature Markers of Beta-Amyloid Degradation
  Investigator-Initiated Research Grant—$240,000 over three years
  Can remnants of beta-amyloid degradation serve as markers of disease progression?

- Po-Haong Lu, Psy.D.
  University of California
  Los Angeles, California
  Mapping Prospective Changes in Brain and Cognition in Aging and Disease
  New Investigator Research Grant—$100,000 over two years
  Can a brain mapping technique be used to correlate physiological brain changes and declines in cognition?

- Gil Dan Rabinovici, M.D.
  University of California
  San Francisco, California
  Amyloid PET Imaging in the Differential Diagnosis of Alzheimer’s Disease and Frontotemporal Lobar Degeneration
  New Investigator Research Grant—$100,000 over two years
  Can a PET brain imaging procedure distinguish between Alzheimer’s disease and frontotemporal dementia?

2. Other diagnostic studies

- Gregory A. Jicha, M.D., Ph.D.
  University of Kentucky Research Foundation
  Lexington, Kentucky
  Telemedicine Assessment of Cognition in Rural Kentucky: The TACK Study
  New Investigator Research Grant—$99,675 over two years
  Can a telemedicine resource be used to diagnose and assist people with dementia in isolated rural settings?

- Voyko Kavcic, Ph.D.
  University of Rochester
  Rochester, New York
  Multimodal Approach for Early Detection of Alzheimer’s Disease
  Senator Mark Hatfield Award for Clinical Research
  —$241,511 over three years
  Can measures of impairment in memory, attention and visual perception—combined with imaging techniques—improve early detection of Alzheimer’s disease?

- Scott Roberts, Ph.D.
  University of Michigan
  Ann Arbor, Michigan
  Communicating Diagnostic and Risk Information to People With Mild Cognitive Impairment
  Investigator-Initiated Research Grant—$239,985 over three years
  What is the best method for informing people and family members about a diagnosis of mild cognitive impairment?

Drug development and clinical interventions

1. Anti-amyloid therapies

- Ashley I. Bush, M.D., Ph.D.
  Mental Health Research Institute of Victoria
  Parkville, Australia
  Modulation of Toxic Beta-Amyloid Species by Novel Therapeutics
  Investigator-Initiated Research Grant—$235,188 over three years
  Can a metal-binding compound promote clearance of beta-amyloid from the brains of Alzheimer-like mice?

- Ken-ichiro Fukuchi, M.D., Ph.D.
  University of Illinois
  Peoria, Illinois
  Vectored Vaccines for Alzheimer’s Disease
  Investigator-Initiated Research Grant—$240,000 over three years
  Can a novel Alzheimer “vaccine” safely and effectively treat Alzheimer-like mice?

- Anahit Ghochikyan, Ph.D.
  Institute for Molecular Medicine
  Huntington Beach, California
  Testing of Alzheimer’s Disease DNA Vaccine: Protective Vaccination Versus Therapeutic
  Investigator-Initiated Research Grant—$239,220 over three years
  Can a new type of Alzheimer “vaccine” safely and effectively treat Alzheimer-like mice?
2. Other therapies

- Isabelle Aubert, Ph.D.
  Sunnybrook Health Sciences Centre
  Toronto, Ontario, Canada
  Novel Approaches to Generate Cholinergic Neurons From Progenitor Cells
  Investigator-Initiated Research Grant—$240,000 over three years
  Can cells be generated to replace those lost to an Alzheimer-like pathology in mice?

- Michel Baudry, Ph.D.
  University of Southern California
  Los Angeles, California
  SOD/Catalase Mimetics for the Treatment of Alzheimer’s Disease
  Investigator-Initiated Research Grant—$240,000 over three years
  Can a compound that mimics natural molecular scavengers inhibit toxic molecules that damage cells in Alzheimer’s disease?

- Sang-Pil Lee, Ph.D.
  University of Kansas Medical Center Research Institute
  Kansas City, Kansas
  Quantitative in Vivo Measure of an Alzheimer's Disease Drug Treatment in Transgenic Mice
  New Investigator Research Grant—$100,000 over two years
  Does a potential treatment prevent or slow the development of tau pathology in Alzheimer-like mice?

- Craig Lindsley, Ph.D.
  Vanderbilt University Medical Center
  Nashville, Tennessee
  Novel Approaches for the Treatment of Alzheimer's Disease
  Investigator-Initiated Research Grant—$239,933 over three years
  Can a re-engineered drug-like molecule improve the function and survival of specialized cells affected by Alzheimer’s disease?

- Gang Liu, Ph.D.
  University of Utah
  Salt Lake City, Utah
  Developing Nanoparticulated Iron Chelators to Deplete Brain Excess Metals
  Investigator-Initiated Research Grant—$240,000 over three years
  Can a novel agent clear build-up of toxic metals from the brains of Alzheimer-like mice?

- Leonard Petrucelli, Ph.D.
  Mayo Clinic Jacksonville
  Jacksonville, Florida
  CHIP, Molecular Chaperones and Tau Biology
  Investigator-Initiated Research Grant—$240,000 over three years
  Can a therapy assist in correcting or eliminating malformed, toxic tau proteins in Alzheimer-like mice?

- Steven Scott Schreiber, M.D.
  University of California
  Irvine, California
  Efficacy of Nicotinamide for the Treatment of Alzheimer’s Disease
  Investigator-Initiated Research Grant—$239,947 over three years
  Can a treatment improve memory and learning function in people with mild to moderate Alzheimer’s disease?
3. Cognitive training and behavioral interventions

- Melanie Chandler Greenaway, Ph.D.
  Emory University
  Atlanta, Georgia
  **A Memory Compensation Intervention in Mild Cognitive Impairment**
  New Investigator Research Grant—$99,544 over two years
  Can a memory compensation intervention improve the functional abilities and mood of people with MCI?

- Amy Jak, Ph.D.
  Veterans Medical Research Foundation
  San Diego, California
  **Activity Levels, Cognition and Temporal Lobe Integrity in At-Risk Adults**
  New Investigator Research Grant—$100,000 over two years
  How do physical and cognitively stimulating activities affect brain volume, blood flow to the brain and cognitive performance?

- Elena Festa Martino, Ph.D.
  Brown University
  Providence, Rhode Island
  **Efficacy of qEEG Neurocognitive Training in Early-Stage Alzheimer’s Disease**
  Investigator-Initiated Research Grant—$239,362 over three years
  Can a cognitive training technique improve memory and other cognitive function in people with Alzheimer’s?

- Patricia Pohl, Ph.D.
  University of Kansas Medical Center Research Institute
  Kansas City, Kansas
  **Effects of Delivery Mode of Cognitive Intervention in Early Alzheimer’s Disease**
  Investigator-Initiated Research Grant—$240,000 over three years
  Does an intensive, personalized cognitive training program improve cognitive function in people with mild Alzheimer’s disease?

Care, support and social-behavioral factors

1. Nursing home care

- Gregory W. Arling, Ph.D.
  Indiana University
  Indianapolis, Indiana
  **Developing Comprehensive Dementia-Specific Nursing Home Quality Indicators**
  Investigator-Initiated Research Grant—$238,464 over three years
  What measures of quality of care in nursing homes are relevant for person with dementia?

- Rosalie A. Kane, Ph.D.
  University of Minnesota
  Minneapolis, Minnesota
  **Small-House Nursing Homes and Alzheimer’s Disease**
  Investigator-Initiated Research Grant—$239,992 over three years
  How well do 10-resident, house-style nursing homes serve people with Alzheimer’s disease?

2. Care interventions and quality of life

- Laura N. Gitlin, Ph.D.
  Thomas Jefferson University
  Philadelphia, Pennsylvania
  **Health-Related Quality of Life in Individuals With Dementia Living at Home**
  Investigator-Initiated Research Grant—$240,000 over three years
  What modifiable factors can be identified and addressed to improve the quality of life for people with dementia who live at home?

- Margaret A. Perkinson, Ph.D.
  Saint Louis University
  St. Louis, Missouri
  **Family-Assisted Exercise Programs in a Dementia Care Facility**
  Investigator-Initiated Research Grant—$199,949 over three years
  Can a family-assisted exercise program improve balance, strength, flexibility and general well-being among people with dementia?

- Greg A. Sachs, M.D.
  Indiana University
  Indianapolis, Indiana
  **Alzheimer’s Disease and Access to Palliative Care**
  Investigator-Initiated Research Grant—$193,027 over three years
  What models of end-of-life palliative care may benefit people with Alzheimer’s disease?

- Richard Schulz, Ph.D.
  University of Pittsburgh
  Pittsburgh, Pennsylvania
  **Measuring Suffering in Persons With Alzheimer’s Disease**
  Investigator-Initiated Research Grant—$239,749 over three years
  How can suffering in people with Alzheimer’s disease be measured and characterized?

- Joseph Thomas, Ph.D.
  Purdue University
  West Lafayette, Indiana
  **Medication Use and Functioning in Patients With Dementia**
  Investigator-Initiated Research Grant—$237,054 over three years
  How does general medication use affect the functioning of people with dementia?

3. Technology-assisted care

- Heather Carnahan, Ph.D.
  Toronto Rehabilitation Institute
  Toronto, Ontario, Canada
  **The Application of a Tactile Way-Finding Belt to Facilitate Navigation**
  Everyday Technologies for Alzheimer Care Research Grant—$155,408 over two years
  Can a way-finding belt improve the ability of people with dementia to navigate routes indoors and outdoors?

- Jesse Hoey, Ph.D.
  University of Dundee
  Dundee, Scotland
  **Development of an Automated System to Facilitate Creative Expression**
  Everyday Technologies for Alzheimer Care Research Grant—$199,650 over two years
  Can an automated system promote and facilitate creative activities for people with dementia?

- Harry W. Tyrer, Ph.D.
  University of Missouri
  Columbia, Missouri
  **A Smart Carpet: Technology for Persons With Alzheimer’s Disease**
  Everyday Technologies for Alzheimer Care Research Grant—$200,049 over two years
  Can a pressure-sensitive carpet improve monitoring of people with dementia at risk for falls or unsafe behaviors?
4. Caregiver support

- **Lazelle E. Benefield, Ph.D.**
  University of Oklahoma Health Sciences Center
  Oklahoma City, Oklahoma
  **Distance Family Care Coordination of Home-Dwelling Persons With Dementia**
  Investigator-Initiated Research Grant—$193,864 over three years
  What are the needs of long-distance family caregivers representing a broad spectrum of ethnicities?

- **Rhonda J. V. Montgomery, PhD.**
  University of Wisconsin
  Milwaukee, Wisconsin
  **Assessing a Protocol to Strategically Support Family Caregivers**
  Investigator-Initiated Research Grant—$239,999 over three years
  Does a care management protocol result in appropriate support and services for dementia caregivers?

- **Carey Wexler Sherman, Ph.D.**
  University of Michigan
  Ann Arbor, Michigan
  **Alzheimer Caregiving in the Context of Late-Life Remarriage**
  New Investigator Research Grant—$99,826 over two years
  What are the characteristics, needs and concerns of caregiver spouses who remarried late in life?

- **Kristen H. Sorocco, Ph.D.**
  University of Oklahoma Health Sciences Center
  Oklahoma City, Oklahoma
  **Evaluation of an Internet-Based Caregiver Support System in Rural Settings**
  New Investigator Research Grant—$96,004 over two years
  Does an Internet-based program provide appropriate services and support for dementia caregivers in rural settings?

5. Other social-behavioral factors

- **Jennifer Hagerty Lingler, Ph.D.**
  University of Pittsburgh
  Pittsburgh, Pennsylvania
  **Making Sense of Mild Cognitive Impairment: An Investigation of Patient and Family Perspectives**
  New Investigator Research Grant—$100,000 over two years
  How do individuals with mild cognitive impairment and family members perceive the disease and respond to treatment options?

- **Karen A. Roberto, Ph.D.**
  Virginia Polytechnic Institute and State University
  Blacksburg, Virginia
  **Understanding Mild Cognitive Impairment: Family Dynamics and Diversity**
  Investigator-Initiated Research Grant—$240,000 over three years
  What are the needs and challenges facing people with MCI and their families?