alzheimer's association

2009 Alzheimer's Association Grants Portfolio

—Organized by trends in research

Biology of disease-related molecules

1. Production of beta-amyloid

- **Zhefeng Guo, Ph.D.**
  University of California, Los Angeles
  Los Angeles, California
  EPR Studies of the Early Events in Abeta Aggregation
  2009 New Investigator Research Grant—$80,000 over 2 years
  What is the structure of beta-amyloid during the formation of oligomers?

- **Denise Cortis Park, Ph.D.**
  University of Texas at Dallas
  Dallas, Texas
  Amyloid Deposition, Aging and Neurocognitive Function
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  How does amyloid deposition relate to brain function and cognitive function during aging?

- **Daniela Puzzo, M.D., Ph.D.**
  University of Catania
  Catania, Italy
  Amyloid-Beta is Necessary for Hippocampal Synaptic Plasticity and Memory
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  What is the role of low levels of beta-amyloid in the brain?

- **Leon Reijmers, Ph.D.**
  Tufts University
  Boston, Massachussetts
  Imaging of Memory Circuits in the Presence of Soluble Amyloid-Beta
  2009 New Investigator Research Grant—$80,000 over 2 years
  How does beta-amyloid affect the ability of nerve cells to store memories?

- **Stephen M. Strittmatter, M.D., Ph.D.**
  Yale University
  New Haven, Connecticut
  Neuronal Receptor Mediating the Disease-Causing Effects of A-beta Oligomers
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Do animals lacking a candidate receptor for beta-amyloid oligomers experience fewer Alzheimer-like effects in the brain?

- **William E. Van Nostrand, Ph.D.**
  Stony Brook University
  Stony Brook, New York
  Molecular Seeding of Cerebral Amyloid Angiopathy in Novel Transgenic Mice
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  How do the two forms of beta-amyloid interact to produce amyloid deposits in the blood vessels of the brain, and how do such deposits lead to cognitive impairment and brain hemorrhage?

- **Jun Ming Wang, Ph.D.**
  University of Mississippi Medical Center
  Jackson, Mississippi
  ER-Isoform–Specific Estrogen Therapy in ApoE/Alzheimer Mice
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  What are the biochemical mechanisms by which estrogen may influence the expression of ApoE and beta-amyloid?

- **Yang Xiang, Ph.D.**
  University of Illinois at Urbana-Champaign
  Urbana, Illinois
  Beta-Amyloid Increases AMPAR-Mediated Synaptic Activity via b2AR Activation
  2009 New Investigator Research Grant—$80,000 over 2 years
  What are the effects of beta-amyloid on AMPA receptor activity?

2. Tau phosphorylation

- **Alejandro del-Carmen Alonso, Ph.D.**
  College of Staten Island, City College of New York
  New York, New York
  Tau-Induced Neurodegeneration
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Does hyperphosphorylation of tau cause neurodegeneration during Alzheimer's disease?

- **Eva Yunghua Chi, Ph.D.**
  University of New Mexico Health Science Center
  Albuquerque, New Mexico
  Lipid Membrane–Mediated Tau Aggregation and Toxicity
  2009 New Investigator Research Grant—$80,000 over 2 years
  How does tau interact with the cell membrane, and how does that interaction affect the aggregation of tau and the integrity of the cell membrane?

- **Jianzhi Wang, M.D.**
  Huazhong University of Science and Technology
  Wuhan, China
  Identification of a New Mechanism for Alzheimer-like Neurodegeneration
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Does tau phosphorylation protect nerve cells from death when the cells are exposed to conditions normally causing death?

- **Donna Wilcock, Ph.D.**
  Duke University Medical Center
  Durham, North Carolina
  A Study to Validate Tau as a Therapeutic Target for Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  Is neurodegeneration prevented or slowed by drugs that reduce the hyperphosphorylation of tau?

3. Normal function of disease-related proteins

- **Hiroyasu Furukawa, Ph.D.**
  Cold Spring Harbor Laboratory
  Cold Spring Harbor, New York
  Structural Insight into Allosteric Inhibition of NMDA Receptors
  2009 New Investigator Research Grant—$80,000 over 2 years
  How do allosteric inhibitors bind to the NMDA receptor?

- **Kenneth Norman, Ph.D.**
  Albany Medical College
  Albany, New York
  ***Functional Analysis of SEL-12/Presenilin on Calcium Release in* C. elegans**
  2009 New Investigator Research Grant—$80,000 over 2 years
  How do presenilin proteins regulate calcium signaling in the cells of *C. elegans?*

- **Jack T. Rogers, Ph.D.**
  Massachusetts General Hospital
  Charlestown, Massachusetts
  Post-Transcriptional Control of Alzheimer's APP and Brain Iron Homeostasis
  2009 Zenith Fellows Award—$429,954
  Does iron-regulatory protein-1, the molecule that controls the proper storage of iron in the brain, also help regulate the production of both APP and beta-amyloid?

- **Yong Shen, M.D., Ph.D.**
  Sun Health Research Institute
  Sun City, Arizona
  Abnormal APP Processing in Living Cortical Neurons from Alzheimer Brains
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Does cellular activity affect the expression of enzymes involved in cutting APP, especially an enzyme known as BACE1?

- **Linda J. Van Eldik, Ph.D.**
  Northwestern University, Chicago Campus
  Chicago, Illinois
  Pro-Inflammatory Cytokine Overproduction: A Contributor to Pathophysiology
  2009 Zenith Fellows Award—$441,159
  How is p38alpha MAPK involved in brain disease?

Alzheimer's disease pathology

1. Properties and toxicity of abnormal protein structures

- **Catherine Collins, Ph.D.**
  University of Michigan
  Ann Arbor, Michigan
  The Role of JNK Signaling in APP Transport and Function
  2009 New Investigator Research Grant—$80,000 over 2 years
  Does JNK signaling control the transport of APP, or does excess APP cause activation of the JNKI pathway, leading to cell death?

- **Luciano D'Adamio, M.D.**
  Albert Einstein College of Medicine of Yeshiva University
  New York, New York
  BRI2 and Alzheimer Therapy
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Is it possible for BRI2 fragments to bind to APP and inhibit the cutting of APP into beta-amyloid?

- **Spiros Efthimiopoulos, Ph.D.**
  National and Kapodistrian University of Athens
  Athens, Greece
  The Interrelationship of Ca2+ Homeostasis and APP/Homer Interaction
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  How do APP and homer proteins interact and affect Ca2+ homeostasis, and how do Ca2+ levels inside the cell affect APP-homer interactions?

- **Angela Ho, Ph.D.**
  Boston University
  Boston, Massachusetts
  Physiological Function of APP Proteins in the Adult Mammalian Brain
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  How does the removal of the APP gene affect brain anatomy, biochemistry and function?

- **Bradley T. Hyman, M.D., Ph.D.**
  Massachusetts General Hospital
  Charlestown, Massachusetts
  Untangling Tangles in Alzheimer's Disease
  2009 Zenith Fellows Award—$432,336 over 3 years
  Can carboxy-terminus HSP70 interacting protein (CHIP), which has been shown to inhibit the production of abnormal tau, prevent certain neuronal damage that is thought to be caused by tau?

- **Joanna Pankiewicz, M.D., Ph.D.**
  New York University School of Medicine
  New York, New York
  Passive Immunization for Prion Infections
  2009 New Investigator Research Grant—$80,000 over 2 years
  What antibodies and immunization procedures are aimed at preventing prion infection of the brain?

- **Sameer B. Shah, Ph.D.**
  University of Maryland-College Park
  College Park, Maryland
  Mechanical Determinants of Axonal Transport and Amyloid Processing
  2009 New Investigator Research Grant—$80,000 over 2 years
  How do changes in the osmotic and fluid pressures in the brain affect the shape and function of nerve cells?

2. Mediators of beta-amyloid toxicity

- **Vijay Rangachari, Ph.D.**
  The University of Southern Mississippi
  Hattiesburg, Mississippi
  Understanding the Role of Granulin in Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  How do granulins affect the ability of beta-amyloid to form clusters?

3. Synaptic dysfunction: Loss of cell-to-cell communication

- **Mauro Fa, Ph.D.**
  Columbia University Medical Center
  New York, New York
  LTP and Memory Impairment by Prolonged Exposure to Picomolar Beta-Amyloid
  2009 New Investigator Research Grant—$80,000 over 2 years
  How do the structure and function of synapses change when they are exposed to very low concentrations of beta-amyloid for prolonged periods?

- **William L. Klein, Ph.D.**
  Northwestern University
  Evanston, Illinois
  Therapeutic Protection Against Synapse-Targeting Abeta Oligomers
  2009 Zenith Fellows Award—$432,550 over 3 years
  Is it possible for compounds to block the attachment of oligomers to certain synaptic binding sites?

- **Vitaly Klyachko, Ph.D.**
  Washington University in St. Louis
  St. Louis, Missouri
  Dissecting the Mechanisms of Synaptic Dysfunction in Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  What happens in the processing and recycling of synaptic vesicles?

- **Walter J. Lukiw, Ph.D.**
  Louisiana State University Health Science Center-New Orleans
  New Orleans, Louisiana
  MicroRNA-Mediated Neurotrophic and Synaptic Networks in Alzheimer's Disease
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Is microRNA-125b a key signal leading to the dysfunction of synapses in Alzheimer's disease

4. Disruption of brain cell functions/properties

- **Ottavio Arancio, M.D.**
  Columbia University
  New York, New York
  Dysregulation of Histone Acetylation in Alzheimer's Disease
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Are impairments in histone acetylation or deacetylation involved in the memory impairment caused by beta-amyloid?

- **Chad A. Dickey, Ph.D.**
  University of South Florida
  Tampa, Florida
  Chemical Inhibition of Hsp70 as a Therapeutic Strategy for Alzheimer's Disease
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  What are the cellular effects of Hsp70 inhibitors and stimulators?

- **Hyoung-gon Lee, Ph.D.**
  Case Western Reserve University
  Cleveland, Ohio
  Effect and Mechanism of Cell Cycle Re-entry in Neurodegeneration
  2009 New Investigator Research Grant—$80,000 over 2 years
  How do nerve cells return to the cell division cycle, and what is the role of that process in neurodegeneration?

5. Genetics

- **Allal Boutajangout, Ph.D.**
  New York University School of Medicine
  New York, New York
  Influence of Presenilin Mutation on Tau Pathology
  2009 Mentored New Investigator Research Grant to Promote Diversity—$150,000 over 3 years
  How does the PS1 mutation affect cognitive function and brain pathology at different times?

- **Hiroshi Mori, Ph.D.**
  Osaka City University Medical School
  Osaka, Japan
  Therapeutic Medication Using the Oligomer Abeta With the New AbetaE22Delta
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  How does the AbetaE22delta mutation affect the cognitive function and behavior of animals, as well as the biochemical and electrical properties of their nerve cells?

- **Lisa Mosconi, Ph.D.**
  New York University School of Medicine
  New York, New York
  Maternal History of Alzheimer's Predisposes Children to Brain Hypometabolism
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Is late-onset Alzheimer's disease associated with genetic changes related to metabolism, some of which are passed to descendents through the mother's genes?

6. Cardiovascular factors in Alzheimer's disease

- **Inga Kadish, Ph.D.**
  University of Alabama at Birmingham
  Birmingham, Alabama
  Long-term Hypertension Contributes to the Development of Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  Does high blood pressure in Alzheimer-like mice cause decreases in brain blood flow and worsening of cognitive function and brain pathology?

- **Li Liu, Ph.D.**
  Columbia University
  New York, New York
  Chronic Cerebral Hypoperfusion and Alzheimer's Disease Pathogenesis
  2009 New Investigator Research Grant—$80,000 over 2 years
  Does brain hypoperfusion cause the development of Alzheimer pathology?

7. Other factors in Alzheimer pathology

- **Barbara B. Bendlin, Ph.D.**
  University of Wisconsin-Madison
  Madison, Wisconsin
  White Matter Alterations in Middle-Aged Adults at Risk for Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  How much does metabolic syndrome or the APOE-e4 gene variant affect brain white matter and brain blood flow?

- **Dean M. Hartley, Ph.D.**
  Rush University Medical Center
  Chicago, Illinois
  Hyperexcited Neuro-Networks Drive the Progression of Alzheimer's Disease
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Does disease pathology cause an abnormal increase in brain activity (hyperexcitability) in the neocortex?

- **Anna Krichevsky, Ph.D.**
  Brigham and Women's Hospital, Inc.
  Boston, Massachusetts
  MicroRNA Regulation of Early Events in Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  How do microRNAs function, and how do they contribute to the development of Alzheimer's disease?

- **John J. Lawrence, Ph.D.**
  The University of Montana
  Missoula, Montana
  Acetylcholine and Somatostatin Interactions in Alzheimer's Disease Models
  2009 New Investigator Research Grant—$80,000 over 2 years
  How is the activity of somatostatin-containing nerve cells affected by signals from acetylcholine-containing cells, and what happens when those signals are lost?

- **Stefan Leutgeb, Ph.D.**
  University of California, San Diego
  La Jolla, California
  Neuronal Activity in the Entorhinal-Hippocampal Circuitry in Early Stages
  2009 New Investigator Research Grant—$80,000 over 2 years
  What are the electrical properties of pyramidal cells in the entorhinal cortex?

- **Elena Leznick, Ph.D.**
  Columbia University Medical Center
  New York, New York
  Role of SUMOylation in Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  Can stimulation of SUMOylation reverse some of the detrimental effects of Alzheimer-like pathology on brain plasticity and memory?

- **Juan C. Troncoso, M.D.**
  Johns Hopkins University
  Baltimore, Maryland
  Molecular Mechanisms Underlying Neuronal Hypertrophy in Asymptomatic AD
  2009 Investigator-Initiated Research Grant—$200,000 over three years
  What factors in the brain counteract the detrimental effects of Alzheimer's disease?

Dementia risk factors

- **Amy B. Manning-Bog, Ph.D.**
  The Parkinson's Institute
  Sunnyvale, California
  The Role of DJ-1 in Cognitive Impairment
  2009 New Investigator Research Grant—$80,000 over 2 years
  What is the role of DJ-1, and how does its absence lead to a brain condition exhibiting features of both Parkinson's disease and Alzheimer's disease?

- **Jessie Theuns, Ph.D.**
  VIB
  Antwerpen, Belgium
  Molecular Genetics of Lewy Body Dementia
  2009 New Investigator Research Grant—$80,000 over 2 years
  Are specific genes and gene mutations responsible for Lewy body dementia and Parkinson-like dementia?

Diagnosis and disease monitoring

1. Biomarkers

- **Ren-Hua Chung, Ph.D.**
  Miller School of Medicine of the University of Miami
  Miami, Florida
  A Novel Statistical Method Using Case-Control and Family Data
  2009 New Investigator Research Grant—$80,000 over 2 years
  Will a statistical method known as the Association in the Presence of Linkage allow researchers to analyze genetic variations from multiple datasets with complex data about family history and case-control studies?

- **Lidia Glodzik, M.D.**
  New York University School of Medicine
  New York, New York
  Perfusion Abnormalities in Healthy Subjects at Risk for Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  Do high-risk individuals have reduced blood flow specific to the hippocampus?

- **Lea T. Grinberg, M.D., Ph.D.**
  Medical School of Sao Paulo University
  Sao Paulo, Brazil
  Multi-ethnic Neuropathological Comparison of Alzheimer's Disease: Focus on Control Cases
  2009 New Investigator Research Grant—$80,000 over 2 years
  Are there differences in brain lesions between those of African ancestry and those of southern European and Asian ancestry?

- **Margaret A. Pericak-Vance, Ph.D.**
  University of Miami School of Medicine
  Miami, Florida
  Identification of Rare Variants in Alzheimer's Disease
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  What genetic variations are associated with an increased risk for the disease, and how strongly does each variation affect an individual's risk?

2. Brain imaging

- **Abedelnasser Abulrob, Ph.D.**
  University of Ottawa
  Ottawa, Ontario, Canada
  Development of Agents and Imaging Modalities for Early Detection of Alzheimer's Disease
  2009 Molecular Imaging in Alzheimer's Disease Grant—$373,225 over 3 years
  Can dyes be delivered to the brain that can detect small clusters of beta-amyloid inside nerve cells?

- **Brian M. Austen, Ph.D.**
  St. George's Hospital Medical School
  London, United Kingdom
  Brain Penetration of an MRI Contrast Reagent that Binds Beta-Amyloid
  2009 Molecular Imaging in Alzheimer's Disease Grant—$384,274 over 3years
  Can modified dyes label beta-amyloid in the brain after the dye is injected into the blood stream?

- **Brian J. Bacskai, Ph.D.**
  Massachusetts General Hospital
  Charlestown, Massachusetts
  In Vivo *Imaging of BBB Integrity to Enable CNS Probe Delivery*
  2009 Molecular Imaging in Alzheimer's Disease Grant—$380,732 over 3 years
  How does aging and the onset of Alzheimer pathology change the permeability of the blood-brain barrier (BBB) to several fluorescent dyes?

- **Sean Deoni, Ph.D.**
  Brown University
  Providence, Rhode Island
  Investigation of Myelin Loss Associated with Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  Can magnetic resonance imaging be effective in measuring myelin damage in persons at different stages of Alzheimer's disease?

- **Bradford Dickerson, M.D.**
  Massachusetts General Hospital
  Charlestown, Massachusetts
  Quantitative Neuroanatomic Biomarkers for Dementia Differential Diagnosis
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  How can magnetic resonance imaging reliably and accurately diagnose Alzheimer's disease and distinguish it from other neurodegenerative disorders?

- **Karunya Kandimalla, Ph.D.**
  Florida Agricultural and Mechanical University
  Tallahassee, Florida
  Multifunctional Nanoprobe to Diagnose and Treat Cerebral Amyloid Angiopathy
  2009 New Investigator Research Grant—$80,000 over 2 years
  How well does a nanoparticle label plaques for detection using magnetic resonance imaging?

- **Jin Ryoun Kim, Ph.D.**
  Polytechnic Institute of New York University
  New York, New York
  Design of a Molecular Probe for Rapid* In Situ *Amyloid Aggregation Detection
  2009 New Investigator Research Grant—$80,000 over 2 years
  How will biochemical probes, or dyes, that selectively recognize each of the different aggregate forms of beta-amyloid be developed?

- **Richard D. King, M.D., Ph.D.**
  University of Texas Southwestern Medical Center
  Dallas, Texas
  Complexity Measures of the Cerebral Cortex in Neurodegenerative Disease
  2009 New Investigator Research Grant to Promote Diversity—$80,000 over 2 years
  How can a measure called fractal dimension be used to identify brain structure changes in neurodegenerative disease?

- **Michele L. Ries, Ph.D.**
  University of Wisconsin-Madison
  Madison, Wisconsin
  Multimodal Neuroimaging of Apathy in Amnestic Mild Cognitive Impairment
  2009 New Investigator Research Grant—$80,000 over 2 years
  How can magnetic resonance imaging and positron emission tomography be used to analyze the structure and function of the medial frontal cortex in people with amnestic MCI and apathy?

- **Christina Wierenga, Ph.D.**
  Veterans Medical Research Foundation
  San Diego, California
  Impact of APOE on Cerebral Perfusion and BOLD Response to Word Retrieval
  2009 New Investigator Research Grant—$80,000 over 2 years
  What are the best ways to measure BOLD responses in persons with suspected Alzheimer's disease?

3. Other risk factors

- **Valarie Fleming, Ph.D.**
  Texas State University—San Marcos
  San Marcos, Texas
  Early Detection of Mild Cognitive Impairment: Cognitive-Communicative Change
  2009 New Investigator Research Grant to Promote Diversity—$80,000 over 2 years
  Does performance on spoken communication tasks differentiate individuals with MCI from those with normal cognition?

- **Ingmar Skoog, Ph.D., M.D.**
  Sahlgrenska Academy at University of Gothenburg
  Mölndal, Sweden
  Dementia Among 85-Year-Olds Examined in 1986–87 and 2009
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Are there secular trends in the prevalence of dementia and its subtypes, as well as in the influence of genetic and other risk factors on dementia?

- **Meike W. Vernooij, M.D.**
  Erasmus Medical Center
  Rotterdam, The Netherlands
  Microstructural White Matter Changes and Risk of Cognitive Decline
  2009 New Investigator Research Grant—$80,000 over 2 years
  What risk factors are associated with structural changes in brain white matter, and are such changes associated with declines in cognitive function?

4. Other technologies/diagnostic tools

- **John Houde, Ph.D.**
  The Regents of the University of California, San Francisco
  San Francisco, California
  System for Assessing Speech Feedback Processing in Alzheimer's Disease
  2009 Everyday Technologies for Alzheimer Care Grant—$160,000 over 3 years
  How does an automated tool objectively measure cortical functioning in speech to increase the chances of detecting early, subclinical signs of Alzheimer's disease?

- **Cheryl A. Luis, Ph.D.**
  The Roskamp Institute
  Sarasota, Florida
  Development of a Novel Screening Approach for MCI/Early Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  What is best combination of tests, and the best cutoff values for each measurement, to provide optimal sensitivity and specificity for detection of MCI and early Alzheimer's disease?

Drug development and clinical interventions

1. Drug therapies

- **Paul E. Gold, Ph.D.**
  University of Illinois at Urbana-Champaign
  Champaign, Illinois
  Glucose, K-ATP Channels and Memory in Mouse Models of Alzheimer's Disease and Down Syndrome
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Can drugs that mimic the effect of glucose on the K-ATP channel enhance memory performance in mice?

- **Ling Li, D.V.M., Ph.D.**
  The University of Alabama at Birmingham
  Birmingham, Alabama
  Modulation of Incretins as a Novel Treatment for Alzheimer's Disease
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  What are the effects of incretin treatment on brain function and biochemistry in Alzheimer-like mice?

- **P. Hemachandra Reddy, Ph.D.**
  Oregon Health and Science University
  Beaverton, Oregon
  Neuroprotection and Alzheimer's Disease
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Can drugs that preserve mitochondrial function in cultured nerve cells protect brain function in mice with Alzheimer-like pathology?

- **Mark A. Smith, Ph.D.**
  Case Western Reserve University
  Cleveland, Ohio
  Xanthine Oxidase in Alzheimer's: Mechanistic and Therapeutic Opportunities
  2009 Investigator-Initiated Research Grant—$200,000 over three years
  Do inhibitors of xanthine oxidase warrant further study as potential treatments to slow or halt the progression of Alzheimer's disease?

2. Nutritional therapies

- **Nikolaos Scarmeas, M.D.**
  Columbia University
  New York, New York
  Mediterranean Diet and Alzheimer's Disease in the Mediterranean Region
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Does close adherence to the Mediterranean diet lower a person's risk of Alzheimer's disease?

3. Clinical trial design

- **Marilyn S. Albert, Ph.D.**
  Johns Hopkins University School of Medicine
  Baltimore, Maryland
  Placebo Data Analysis in Alzheimer's Disease and MCI Clinical Trials: Phase II
  The Senator Mark Hatfield Award for Clinical Research in Alzheimer's Disease—$200,000 over 3 years
  How can the design of future clinical trials be improved?

- **Olivia Okereke, M.D.**
  Brigham and Women's Hospital, Inc.
  Boston, Massachusetts
  Planning Large-Scale Alzheimer's Disease QUEstionnaire-Aided Studies (PLAQUES)
  2009 New Investigator Research Grant—$80,000 over 2 years
  Is there a low-cost, efficient method for diagnosing MCI and dementias that will be directly applicable to large-scale trials and longitudinal studies?

4. Clinical interventions

- **Cynthia Stonnington, M.D.**
  Mayo Clinic Arizona
  Scottsdale, Arizona
  Does Zumba Improve Cognition in Healthy APOE4 Epsilon4 Carriers and Noncarriers?
  2009 New Investigator Research Grant—$80,000 over 2 years
  Is physical exercise good for helping elderly persons maintain cognitive function?

Care, support and social-behavioral factors

1. Nursing homes, assisted living residences and dementia care units

- **Elizabeth Galik, Ph.D., C.R.N.P.**
  University of Maryland, Baltimore
  Baltimore, Maryland
  Testing a Function-Focused Nursing Intervention for Residents with Dementia
  2009 New Investigator Research Grant—$80,000 over 2 years
  Does resident exposure to the Res-Care-CI Intervention result in maintenance or improvement of physical function and activity as well as mood and behavior?

2. Care interventions and quality of life

- **Linda L. Buettner, Ph.D.**
  The University of North Carolina at Greensboro
  Greensboro, North Carolina
  Mentally Stimulating Activities to Treat Apathy in Early Stage Alzheimer's Disease
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Can a mentally stimulating activity intervention program reduce symptoms of apathy and improve functional outcomes?

- **Jimmy Choi, Psy.D.**
  Research Foundation for Mental Hygiene, Inc. at New York State Psychiatric Institute
  New York, New York
  Motivational Cognitive Rehabilitation in Mild Cognitive Impairment
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  Could a cognitive therapy and motivational training tool slow cognitive decline in persons with MCI?

- **Lindy Maxted Clemson, Ph.D.**
  The University of Sydney
  Sydney, Australia
  Using Personal and Environmental Resources to Reduce the Risk of Falls
  2009 New Investigator Research Grant—$80,000 over 2 years
  What environmental and behavioral risk factors are associated with a high risk of falling?

3. Technology-assisted care

- **Debra Lieberman, Ph.D.**
  The Regents of the University of California–Santa Barbara
  Santa Barbara, California
  Lifestyle Improvement Game to Delay the Onset of Alzheimer's and Support Treatment
  2009 Everyday Technologies for Alzheimer Care Grant—$160,000 over 3 years
  How do the Facebook social network and online resources motivate people to improve their lifestyles?

- **Louise Nygård, Ph.D.**
  Karolinska Institutet
  Stockholm, Sweden
  Design and Support Based on Knowing the Challenge of Skills and Technology
  2009 Everyday Technologies for Alzheimer Care Grant—$160,000 over 3 years
  Which strategies are effective in helping people with mild cognitive impairment and Alzheimer's disease learn how to use new or customized technology aimed at improving quality of life?

- **Kalpana Padala, M.D.**
  Board of Regents of the University of Nebraska
  University of Nebraska Medical Center
  Omaha, Nebraska
  Wii-Fit for Improving Activity, Gait and Balance in Alzheimer's Disease
  2009 New Investigator Research Grant—$80,000 over 2 years
  Can Wii-Fit improve balance, gait and activities of daily living compared with a walking exercise program?

4. Caregiver support

- **Marie Savundranayagam, Ph.D.**
  University of Wisconsin—Milwaukee
  Milwaukee, Wisconsin
  Caregiver Communication Strategies: Implications for Relational Outcomes
  2009 New Investigator Research Grant—$80,000 over 2 years
  How can communication strategies be used by caregivers to resolve communication breakdowns?

5. Cultural values and beliefs

- **Yu-Ping Chang, Ph.D.**
  The Research Foundation of State University of New York on behalf of the University at Buffalo (SUNY at Buffalo)
  Buffalo, New York
  Medication Use for Dementia in Chinese-American Families
  2009 New Investigator Research Grant—$80,000 over 2 years
  How are multiple medication regimens associated with dementia and what are the culture-specific variables influencing medication use among Chinese immigrants?

- **Margo-Lea Hurwicz, Ph.D.**
  Curators of the University of Missouri on Behalf of the University of Missouri–St. Louis
  St. Louis, Missouri
  Developing a Culturally Appropriate Measure of Alzheimer's Knowledge
  2009 Investigator-Initiated Research Grant—$200,000 over 3 years
  How do people from different cultural backgrounds interpret and respond to late-life illness?

- **Sharon E. McKenzie, Ph.D.**
  New York University School of Medicine
  New York, New York
  Cognitive Health and Perceived Needs Among Minority Older Adults
  2009 Mentored New Investigator Research Grant to Promote Diversity—$150,000 over 3 years
  What are the perspectives, attitudes, values and cultural experiences of African- and Black Caribbean-Americans faced with Alzheimer's and MCI, and what are their reasons for underuse of health services and for low levels of research participation?