

2005 Alzheimer's Association Grant Portfolio

—Organized by trends in research

Biology of Disease-Related Molecules

1. Processing of amyloid precursor protein (APP)

- **Luciano D'Adamio, M.D., Ph.D.**
Albert Einstein College of Medicine
Bronx, New York
Role of Membrane Proteins in APP Processing and Signaling
Investigator-Initiated Research Grant—\$240,000 over three years
What role does a certain protein play in the breakdown of APP?
- **Fabrizio Gardoni, Ph.D.**
University of Milan
Milan, Italy
Molecular Interactors for Alpha-Secretase: Physiopathological Role
New Investigator Research Grant—\$100,000 over two years
What proteins interact with an APP-processing enzyme?
- **Charles R. Sanders, Ph.D.**
Vanderbilt University Medical Center
Nashville, Tennessee
Familial Alzheimer's Disease Mutations in the Amyloid Precursor Protein
Investigator-Initiated Research Grant—\$240,000 over three years
How do APP gene mutations affect the protein's structure?
- **Kulandaivelu Vetrivel, Ph.D.**
University of Chicago
Chicago, Illinois
Exploring Gamma-Secretase Function in Lipid Raft Membrane Microdomains
New Investigator Research Grant—\$100,000 over two years
How does an APP-processing protein interact with cell membrane structures?
- **Xuemin Xu, Ph.D.**
University of Tennessee
Knoxville, Tennessee
Determine the Role of the Long Beta-Amyloid-46 in Alzheimer's Disease Development
Investigator-Initiated Research Grant—\$240,000 over three years
What is the role of a possible intermediate step in APP processing?
- **Yan Zhou, Ph.D.**
Medical University of South Carolina
Charleston, South Carolina
Mevalonate Biosynthetic Pathway in APP Processing
New Investigator Research Grant—\$100,000 over two years
How does a certain fat molecule mediate APP processing?

2. Beta-amyloid aggregation and related molecules

- **Dean M. Hartley, Ph.D.**
Brigham and Women's Hospital
Cambridge, Massachusetts
Transglutaminase's Role in Neurodegeneration
Investigator-Initiated Research Grant—\$240,000 over three years
How does a certain enzyme promote beta-amyloid aggregation?

- **Jens Husemann, M.D.**
Columbia University Medical Center
New York, New York
Role of Astrocytes in Beta-Amyloid Metabolism
Investigator-Initiated Research Grant—\$240,000 over three years
How is beta-amyloid normally broken down in the brain?
 - **Jody L. Lingbeck, Ph.D.**
Washington University
St. Louis, Missouri
LRP-Mediated Intraneuronal Accumulation of Beta-Amyloid
New Investigator Research Grant—\$97,088 over two years
How might a certain protein usher beta-amyloid into cells?
 - **Regina M. Murphy, Ph.D.**
University of Wisconsin
Madison, Wisconsin
The Two Faces of Transthyretin: Transthyretin's Role in Beta-Amyloid Aggregation
Investigator-Initiated Research Grant—239,432 over three years
How might a brain protein disrupt beta-amyloid aggregation?
 - **H. Eugene Stanley, Ph.D.**
Boston University
Boston, Massachusetts
Understanding Formation of Neurotoxic Oligomers in Alzheimer's Disease
Zenith Fellows Award—\$250,000 over two years
What properties of beta-amyloid promote aggregation?
 - **Heather True-Krob, Ph.D.**
Washington University
St. Louis, Missouri
Molecular Misreading: Cause or Consequence of Protein Aggregation?
New Investigator Research Grant—\$100,000 over two years
How might "misreadings" of genetic code contribute to protein aggregation?
 - **Ruben Vidal, Ph.D.**
Indiana University
Indianapolis, Indiana
Biochemical Basis of Phenotypic Variability in Familial Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
How do different mutations in a single Alzheimer-related gene translate into variations in beta-amyloid aggregations?
- ### 3. Tau, neurofibrillary tangles and hyperphosphorylation
- **Ian A. D'Souza, Ph.D.**
Seattle Institute for Biomedical and Clinical Research
Seattle, Washington
Regulators of Tau mRNA and Protein Expression and Axonal Localization
New Investigator Research Grant—\$100,000 over two years
How might mistakes in regulating tau production contribute to neurofibrillary tangles?

- **Cheng-Xin Gong, M.D.**
Research Foundation for Mental Hygiene
New York State Institute for Basic Research
Staten Island, New York
O-GlcNAcylation and Phosphorylation of Tau Protein
Investigator-Initiated Research Grant—\$239,910 over three years
How does a certain protein help “remodel” the chemical properties of tau?

- **Jeffrey Kuret, Ph.D.**
Ohio State University Research Foundation
Columbus, Ohio
Triggers and Enhancers of Tau Filament Formation
Investigator-Initiated Research Grant—\$240,000 over three years
What properties of tau and what molecular events contribute to tangle formation?

- **Xiongwei Zhu, Ph.D.**
Case Western Reserve University
Cleveland, Ohio
Physiological Regulation of Tau Phosphorylation
New Investigator Research Grant—\$100,000 over two years
What can we learn about chemical changes to human tau based on normal changes to tau in the hibernating arctic ground squirrel?

4. Normal functions of disease-related molecules

- **Alfredo Kirkwood, Ph.D.**
Johns Hopkins University School of Medicine
Baltimore, Maryland
Neurophysiological Analysis of Presenilin Function at the Synapse
Investigator-Initiated Research Grant—\$240,000 over three years
What is the normal function of disease-related proteins in sending and receiving messages in the brain?

- **David M. Holtzman, M.D.**
Washington University
St. Louis, Missouri
Effects of Neurotransmitters and Synaptic Activity on Brain ISF Beta-Amyloid
Zenith Fellows Award—\$250,000 over two years
How does the sending and receiving of chemical messages modulate levels of beta-amyloid in the brain?

- **Debmoy K. Lahiri, Ph.D.**
Indiana University School of Medicine
Indianapolis, Indiana
Functional Domains of the BACE Promoter: Implication in Alzheimer’s Disease
Zenith Fellows Award—\$250,000 over two years
How do certain proteins normally regulate the function of a key disease-related protein?

- **Christine Li, Ph.D.**
City College of New York and the Research Foundation
City University of New York
New York, New York
Function of Amyloid Precursor Protein-1, an Amyloid Precursor Protein in Caenorhabditis elegans
Investigator-Initiated Research Grant—\$239,593 over three years
What can we learn about normal human APP function by studying APP function in the roundworm?

- **Alena Savonenko, Ph.D.**
Johns Hopkins University School of Medicine
Baltimore, Maryland
Amyloid Precursor Protein–Dependent and –Independent Effects of BACE1 Knockout on Cognition
Investigator-Initiated Research Grant—\$240,000 over three years
How might a disease-related protein normally contribute to certain kinds of memory and emotions?

Disease Mechanisms

1. Role of beta-amyloid, tau and other aggregated proteins in neurodegeneration

- **Richard E. Brown, Ph.D.**
Dalhousie University
Halifax, Nova Scotia, Canada
Neurobehavioral Analysis of a Double Transgenic Mouse Model of Alzheimer’s Disease
Investigator-Initiated Research Grant—\$237,600 over three years
How well do Alzheimer-like mice replicate the memory and behavioral impairments experienced by humans with Alzheimer’s?
- **Michael E. Calhoun, Ph.D.**
Hertie-Institute for Clinical Brain Research
Tübingen, Germany
Relational Memory and Learning-Related Gene Induction in Alzheimer’s Disease Mouse Models
Investigator-Initiated Research Grant—\$237,282 over three years
How do plaques and tangles affect the work of genes necessary for memory formation?
- **Todd Eliot Golde, M.D., Ph.D.**
Mayo Clinic
Jacksonville, Florida
Novel Animal Models of Amyloid Deposition
Zenith Fellows Award—\$250,000 over two years
Can a new method in animal research lead to mice and guinea pigs that serve as more accurate models of Alzheimer pathology?
- **David E. Kang, Ph.D.**
University of California San Diego
School of Health Sciences
La Jolla, California
Role of Presenilins in Neurodegeneration and Tau Pathology
Investigator-Initiated Research Grant—\$240,000 over three years
How might a protein linked to amyloid plaques also contribute to neurofibrillary tangles?
- **Frank M. LaFerla, Ph.D.**
University of California
Irvine, California
Learning and Memory Deficits in a Mouse Model With Plaques and Tangles
Zenith Fellows Award—\$250,000 over two years
How do early and late stages in disease progression contribute to deficits in memory and learning skills?
- **William C. Mobley, M.D., Ph.D.**
Stanford University
Stanford, California
Role of Amyloid Precursor Protein and Nerve Growth Factor Transport in Down Syndrome and Alzheimer’s Disease
Investigator-Initiated Research Grant—\$239,704 over three years
How might molecules with protective properties be suppressed in Alzheimer’s disease and Down syndrome?

- **Yi E. Sun, Ph.D.**
David Geffen School of Medicine
University of California
Los Angeles, California
Adult Neurogenesis in Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
Is the development of new brain cells thwarted by Alzheimer's disease processes?
 - **Chunyu Wang, M.D., Ph.D.**
Rensselaer Polytechnic Institute
Troy, New York
High Resolution NMR Investigation of Aβ-Abeta Interaction
New Investigator Research Grant—\$100,000 over two years
What properties of both beta-amyloid and another molecule contribute to their possible disease-related interactions?
 - **Shi Du Yan, M.D.**
College of Physicians and Surgeons
Columbia University
New York, New York
Role of Mitochondrial Beta-Amyloid in Alzheimer's Disease
Zenith Fellows Award—\$250,000 over two years
How might beta-amyloid damage cells' energy producing centers?
- ## 2. Immune system response and inflammation
- **Jean-Pierre Changeux, Ph.D.**
Pasteur Institute
Paris, France
Autoantibodies to Nicotinic Receptor in Alzheimer's Disease
Investigator-Initiated Research Grant—\$178,420 over three years
Does the immune system in Alzheimer's disease cause dysfunction in proteins that receive messenger chemicals in the brain?
 - **Chu Chen, Ph.D.**
Louisiana State University Health Sciences Center
New Orleans, Louisiana
COX-2 Regulation of Endocannabinoid Signaling in Neurodegeneration
Investigator-Initiated Research Grant—\$239,999 over three years
Do inflammatory proteins suppress the function of molecules that protect brain cells?
 - **Richard A. Flavell, Ph.D., F.R.S.**
Yale University
New Haven, Connecticut
An Inducible Mouse to Elucidate the Role of Immunity/Inflammation in Alzheimer's Disease
Investigator-Initiated Research Grant—\$237,772 over three years
What can a new mouse model reveal about a link between beta-amyloid and inflammation?
 - **David Loeffler, D.V.M., Ph.D.**
William Beaumont Hospital
Royal Oak, Michigan
Alterations in Complement Activation During Alzheimer's Disease
Investigator-Initiated Research Grant—\$97,036 over three years
How do inflammatory responses play both beneficial and detrimental roles in Alzheimer's disease?
 - **Susan O. McGuire, Ph.D.**
Loyola University Medical Center
Maywood, Illinois
C5L2: A Decoy Complement Receptor With Anti-Inflammatory Properties in Alzheimer's Disease
New Investigator Research Grant—\$100,000 over two years
What is the fate of molecules that normally protect against inflammatory damage?
 - **Anne H. Pereira, Ph.D.**
University of Oklahoma Health Sciences Center
Oklahoma City, Oklahoma
Cationic Antimicrobial Protein-37 (CAP37), a Mediator of Neuronal-Microglial Interactions
Investigator-Initiated Research Grant—\$240,000 over three years
How does a certain protein mediate inflammatory responses?
- ## 3. Other
- **Gabrielle L. Boulianne, Ph.D.**
The Hospital for Sick Children
Toronto, Ontario, Canada
Presenilins, Calcium Homeostasis and Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
How might certain proteins disrupt the balance of calcium levels in brain cells?
 - **Chien-Iiang Glenn Lin, Ph.D.**
Ohio State University Research Center
Columbus, Ohio
RNA Oxidation in Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
How do toxic molecules affect genetic instructions for protein production?
 - **Eric Klann, Ph.D.**
Baylor College of Medicine
Houston, Texas
Identification of Sources of Oxidative Stress in Alzheimer Model Mice
Investigator-Initiated Research Grant—\$240,000 over three years
Do cells' energy-producing compartments produce molecules that contribute to Alzheimer's disease processes?
 - **Bruce Lamb, Ph.D.**
Case Western Reserve University
Cleveland, Ohio
Gene-Environment Interactions in Alzheimer's Disease Mouse Models
Zenith Fellows Award—\$250,000 over two years
How does the interplay of genetic and dietary factors contribute to risk of Alzheimer's disease?
 - **Catherine E. Price, Ph.D.**
University of Florida
Gainesville, Florida
Noncardiac Surgery and Alzheimer's Disease: Cortisol and Cognitive Decline
New Investigator Research Grant—\$99,999 over two years
Does surgery hasten cognitive decline in people with Alzheimer's?

- **Jacob Raber, Ph.D.**
Oregon Health & Science University
Portland, Oregon
Neurogenesis and Cognition in Irradiated Human Apolipoprotein E Mice
Investigator-Initiated Research Grant—\$240,000 over three years
How does radiation exposure during medical treatment affect risk for or progression of dementia?
- **Jun Ming Wang, Ph.D.**
University of Southern California
Los Angeles, California
Differential Regulation of ApoE Expression by Estrogen Receptor Alpha and Beta
New Investigator Research Grant—\$100,000 over two years
How do estrogen-related proteins affect the function of a protein implicated in Alzheimer's disease?
- **Tony Wyss-Coray, Ph.D.**
Stanford University
Stanford, California
Role of Systemic Neurotrophin Deficiency in Alzheimer Pathogenesis
Zenith Fellows Award—\$250,000 over two years
How might a deficit in a protective brain molecule contribute to Alzheimer's disease processes?
- **Christine van Broeckhoven, Ph.D., D.Sc.**
Flanders Interuniversity Institute for Biotechnology
University of Antwerp
Antwerp, Belgium
Frontotemporal Dementia With Ubiquitin-Positive Neuronal Inclusions
Zenith Fellows Award—\$247,350 over two years
Is there a gene that promotes protein aggregation in frontotemporal dementia?
- **Cornelia M. van Duijn, Ph.D.**
Erasmus University Medical Center
Rotterdam, Netherlands
In Search of Genes for Alzheimer's Disease in a Genetically Isolated Population
Investigator-Initiated Research—\$239,850 over three years
How might genetic data from an isolated population benefit the search for Alzheimer-related genes?

Genetics

- **Juan Botas, Ph.D.**
Baylor College of Medicine
Houston, Texas
Screen for Genetic Modifiers in a Drosophila Model of Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
What additional disease related genes might be revealed in studies of fruit flies that are modified to carry human Alzheimer genes?
- **Yi-Ju Li, Ph.D.**
Duke University
Durham, North Carolina
Development of Association Methods for Studying Alzheimer's Disease in African Americans
Investigator-Initiated Research Grant—\$239,696 over three years
How can changes in statistical methods bridge the gap between the amount of genetic data available from African Americans and the amount of data needed for analysis?
- **Margaret A. Pericak-Vance, Ph.D.**
Duke University
Durham, North Carolina
Identifying the Chromosome 12q Gene: Sifting Through the Haystack
Investigator-Initiated Research Grant—\$239,792 over three years
Can a more narrowly defined search lead to the identification of a gene associated with Alzheimer risk?
- **Bryce Chackerian, Ph.D.**
University of New Mexico
Albuquerque, New Mexico
Vaccines Against Beta-Amyloid Using Conjugated Virus-Like Particles
New Investigator Research Grant—\$99,195 over two years
Is a new anti-amyloid vaccine safe and effective in a mouse model?
- **Pritam Das, Ph.D.**
Mayo Clinic
Jacksonville, Florida
Effect of Gamma-Secretase Inhibition on the Anti-Abeta Immune Responses
New Investigator Research Grant—\$99,998 over two years
Is a combination therapy that inhibits production and promotes clearance of beta-amyloid safe and effective in a mouse model?
- **Chih J. Han, Ph.D.**
Northwestern University
Feinberg School of Medicine
Chicago, Illinois
BACE1 Inducible Knockdown for Alzheimer's Disease Rescue
New Investigator Research Grant—\$99,987 over two years
Is a key protein involved beta-amyloid production a reasonable target for a safe anti-amyloid treatment?
- **Bruce L. Kagan, M.D., Ph.D.**
University of California
Los Angeles, California
Beta-Amyloid Channel Blockers
Investigator-Initiated Research Grant—\$239,454 over three years
Can a new treatment block a toxic effect of beta-amyloid on nerve cells in a mouse model?
- **Jeanne F. Loring, Ph.D.**
The Burnham Institute
La Jolla, California
Stem Cells as Delivery Vehicles to Target Amyloid Plaques
Investigator-Initiated Research Grant—\$235,000 over three years
Can neural stem cells be used to deliver an amyloid-degrading protein to appropriate targets in a mouse model?

Therapeutic Interventions and Prevention

1. Anti-amyloid therapies

- **Howard L. Weiner, M.D.**
Brigham and Women's Hospital
Boston, Massachusetts
Antibody-Independent Clearance of Beta-Amyloid in a Mouse Model of Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
Can a multiple sclerosis drug promote immune-system clearance of beta-amyloid in a mouse model of Alzheimer's disease?
 - **Michael S. Wolfe, Ph.D.**
Brigham and Women's Hospital
Boston, Massachusetts
Inhibitors of Amyloid Production Selective for Amyloid Precursor Protein Vis-à-Vis Notch
Investigator-Initiated Research Grant—\$240,000 over three years
Can molecules be identified that inhibit proteins involved in amyloid production but do not inhibit the proteins' other essential functions?
- ## 2. Other therapeutic strategies
- **Marion S. Buckwalter, M.D., Ph.D.**
Stanford University
Stanford, California
Altering TGF-Beta Signaling to Induce Neural Stem Cell Proliferation in Alzheimer's Disease
New Investigator Research Grant—\$100,000 over two years
Can neural stem cells be modified to be resistant to Alzheimer's disease processes in a mouse model?
 - **Kelly Dineley, M.S., Ph.D.**
University of Texas Medical Branch
Galveston, Texas
NF-kappaB Signaling Axis as a Target in Alzheimer's Disease Therapy
New Investigator Research Grant—\$100,000 over two years
Is a certain molecule a valid target for an Alzheimer-specific anti-inflammatory therapy in a mouse model?
 - **Dusica Maysinger, Ph.D.**
McGill University
Montreal, Quebec, Canada
Mechanisms of Nonsteroidal Therapies to Reduce the Risk of Alzheimer's Disease in Menopause
Investigator-Initiated Research Grant—\$237,000 over three years
Can a nonestrogen therapy in a mouse model reduce the risk for Alzheimer's associated with the natural depletion of estrogen?
 - **Mary Sano, Ph.D.**
Mount Sinai School of Medicine
Bronx, New York
Randomized Trial of a Nutritional Supplement in Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
What effect will a nutritional supplement derived from natural antioxidants have on people with Alzheimer's in a 12-month trial?
 - **David V. Schaffer, Ph.D.**
University of California
Berkeley, California
Evolution of AAV Vectors for Efficient Gene Delivery to Astrocytes
New Investigator Research Grant—\$100,000 over two years
Can helper cells in a mouse model brain be genetically enhanced to overproduce protective molecules?
 - **Li Qin Zhao, Ph.D.**
University of Southern California
Los Angeles, California
Estrogen Receptor Subtype-Selective Phytoestrogens for Prevention of Alzheimer's Disease
New Investigator Research Grant—\$100,000 over two years
Can certain plant-derived estrogen-like molecules induce protective events in a mouse model without causing unwanted side effects?
- ## 3. Lifestyle factors and modifiable risk factors
- **Adam M. Brickman, Ph.D.**
Columbia University Medical Center
New York, New York
Cognitive Reserve and Structural MRI in Alzheimer's Disease and Mild Cognitive Impairment
New Investigator Research Grant—\$99,957 over two years
Can a brain scanning method shed light on the hypothesis that a "cognitive reserve" may compensate for loss of brain cells?
 - **Ling Li, D.V.M., Ph.D.**
University of Alabama
Birmingham, Alabama
Excess Intake of Dietary Sugars in the Development of Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
Does excess dietary sugar increase the risk of developing Alzheimer's disease?
 - **Jose A. Luchsinger, M.D.**
Columbia University Medical Center
New York, New York
Cognition in the Informatics for Diabetes Education and Telemedicine (IDEAtel) Diabetes Trial
Investigator-Initiated Research Grant—\$239,394 over three years
How are diabetes and diabetes management associated with an increased Alzheimer risk?
 - **Jennifer J. Manly, Ph.D.**
Columbia University Medical Center
New York, New York
Health and Cognition Among African American Women
Investigator-Initiated Research Grant—\$240,000 over three years
How are cardiovascular risk factors in African American women associated with cognitive health and risk of Alzheimer's?
 - **Suzanne Tyas, Ph.D.**
University of Kentucky Research Foundation
Lexington, Kentucky
Vascular Risk Factors, Vascular Pathology and Alzheimer's Disease
New Investigator Research Grant—\$99,603 over two years
How do vascular risk factors and vascular disease contribute to the progression of dementia?

Diagnosis, Assessment and Disease Monitoring

1. Brain imaging and biomarkers

- **Hans Basun, M.D., Ph.D.**
Uppsala University
Uppsala, Sweden
Amyloid in Brain, CSF and Plasma in Alzheimer Patients: One-Year Follow-Up
Zenith Fellows Award—\$246,400 over two years
How do measures of beta-amyloid in the brain, blood, and spinal fluid correlate with progression of symptoms?
 - **Kent Kirshenbaum, Ph.D.**
New York University
New York, New York
Peptide Mimetic Imaging Agents for Detection of Alzheimer's Disease
New Investigator Research Grant—\$100,000 over two years
Can a safe and effective amyloid-imaging agent be developed for use with MRIs?
 - **Mary M. Machulda, Ph.D.**
Mayo Clinic
Rochester, Minnesota
Functional MRI Activation Patterns in Mild Cognitive Impairment Subtypes
New Investigator Research Grant—\$100,000 over two years
Can functional MRIs detect brain patterns associated with mild cognitive impairment?
 - **John Peter Seibyl, M.D.**
Institute for Neurodegenerative Disorders
New Haven, Connecticut
Development of 123-I IMPY as Biomarker for Alzheimer's Imaging
Investigator-Initiated Research Grant—\$237,563 over three years
Is a new PET or SPECT amyloid-imaging agent effective in a mouse model of Alzheimer's?
 - **Rong Wang, Ph.D.**
Mount Sinai School of Medicine
New York, New York
Biomarkers for Early Detection of Alzheimer's Disease
Investigator-Initiated Research Grant—\$240,000 over three years
Can "protein profiles" in the blood be correlated with progression of symptoms in Alzheimer's and related disorders?
- ### 2. Others
- **Nancy S. S. Foldi, Ph.D.**
Queens College and the Research Foundation
City University of New York
Flushing, New York
Detecting an Early Response to Donepezil With Measures of Visual Attention
Investigator-Initiated Research Grant—\$239,998 over three years
Can measures of attention be used to predict whether someone will benefit from treatment with an FDA-approved Alzheimer drug?

- **Keith A. Hawkins, Psy.D.**
Yale University School of Medicine
New Haven, Connecticut
Neuropsychological Norms for Elderly African Americans
Investigator-Initiated Research Grant—\$239,992 over three years
Can cognitive assessment tests be revised to be more accurate measures of impairment in African Americans?
- **Ira T. Lott, M.D.**
University of California, Irvine
Orange, California
Diagnosis of Alzheimer's Disease in Down Syndrome by Telemedicine
Investigator-Initiated Research Grant—\$237,367
Can a telephone-based diagnostic tool accurately detect the onset of dementia in people with Down syndrome?

Care and Support in Home and Long Term Residential Settings

1. Residential and Nursing Home Care

- **Kim J. Curyto, Ph.D.**
Pine Rest Christian Mental Health Services
Grand Rapids, Michigan
Linking Behaviors and Interventions: Impact of a Residential Behavior Program
New Investigator Research Grant—\$99,700 over two years
Will care outcomes improve using a care model that sees some disruptive behaviors as attempts to communicate needs?
- **Perry Edelman, Ph.D.**
Mather LifeWays Institute on Aging
Evanston, Illinois
Integrating Activity-Focused Quality-of-Life Assessment Into Dementia Care Practice
Investigator-Initiated Research Grant—\$238,169 over three years
Does a computerized observational model for assessing quality of life result in better outcomes in residential care settings?
- **Karen B. Hirschman, Ph.D., M.S.W.**
University of Pennsylvania
Philadelphia, Pennsylvania
Redesigning the Hospice Medicare Benefit for Persons With Advanced Dementia
New Investigator Research Grant—\$99,998 over two years
How can the Hospice Medicare Benefit be redesigned to meet the needs of end-of-life care for people with dementia?
- **Lene Levy-Storms, Ph.D., M.P.H.**
The Regents of California
Los Angeles, California
Improving Staff Communication With Nursing Home Residents During Mealtime
Investigator-Initiated Research Grant—\$239,976 over three years
Does a video-based communication training program improve staff-resident interactions?

- **Susan L. Mitchell, M.D., M.P.H.**
Harvard Medical School and
Hebrew Rehabilitation Center for Aged
Boston, Massachusetts
Improving Hospice Care in Advanced Dementia
Investigator-Initiated Research Grant—\$190,503 over three years
How can hospice care be enhanced to improve end-of-life care for people with dementia and their families?
 - **Howard D. Wactlar, M.S.**
Carnegie Mellon University
Pittsburgh, Pennsylvania
Machine Video and Audio Understanding for Monitoring Dementia Behavior
Everyday Technologies for Alzheimer Care
—\$199,733 over three years
Can video and audio monitoring improve quality-of-life assessments and care decisions?
 - **Sheryl Zimmerman, Ph.D.**
University of North Carolina
Chapel Hill, North Carolina
Evaluating the Alzheimer's Association Training Program for Direct Care Staff
Investigator-Initiated Research Grant—\$240,000 over three years
How effective is an Alzheimer's Association training program for residential care staff, and how does it contribute to improved outcomes in care and quality of life?
- 2. At-Home Care, Care Partnerships and Caregiver Support**
- **Rosemary Bakker, M.Sc.**
Weill Medical College of Cornell University
New York, New York
The Alzheimer-Friendly Virtual Home: A Caregiver Home Safety Tool
Investigator-Initiated Research Grant—\$240,000 over three years
How effective is a virtual-home instructional model in improving home safety and care management?
 - **Barbara M. Freund, Ph.D.**
Eastern Virginia Medical School
Norfolk, Virginia
Enhancing Independence: Prescribing Strategies to Promote Continued Driving
Investigator-Initiated Research Grant—\$239,967 over three years
Can training and monitoring enhance the driving skills of people with dementia and help prolong their independence?
 - **Katherine Judge, Ph.D.**
Benjamin Rose Institute
Cleveland, Ohio
Strength-Based Skills Training for Caregiving Dyads With Dementia
New Investigator Research Grant—\$99,997 over two years
How effective is a program that combines skills training for caregivers and cognitive rehabilitation for people with dementia?
- **Nidhi Mahendra, Ph.D.**
University of Arizona
Tucson, Arizona
Computer-Based Cognitive Interventions for Persons With Alzheimer's Disease
Everyday Technologies for Alzheimer Care
—\$198,624 over three years
Can a computer based program enhance cognitive skills and promote memory skills important for independent living?
 - **Misha Pavel, Ph.D.**
Oregon Health & Science University
Beaverton, Oregon
Tailored Interactive Video Exercise and Cognitive Rehabilitation
Everyday Technologies for Alzheimer Care
—\$200,000 over three years
How well does an interactive video-based exercise program improve the health and daily functioning of people with dementia?
 - **Gia Robinson Shurgot, Ph.D.**
University of Southern California
Los Angeles, California
Sociocultural Influences on the Health of Latino Dementia Caregivers
New Investigator Research Grant—\$99,928 over two years
How do social and cultural factors influence caregiver choices, health and well-being in Latino families?
 - **Frank M. Webbe, Ph.D.**
Florida Institute of Technology
Melbourne, Florida
PocketPC Technology to Promote Quality of Life for Alzheimer Patients and Caregivers
Everyday Technologies for Alzheimer's Care
—\$199,996 over three years
How effective is a PocketPC program in promoting independence and better care management?
- 3. Other Care Issues**
- **Bradley F. Boeve, M.D.**
Mayo Clinic
Rochester, Minnesota
Treatment of Obstructive Sleep Apnea in Patients With Mild Cognitive Impairment or Alzheimer's Disease
Investigator-Initiated Research Grant—\$239,792 over three years
How does treatment for sleep apnea in people with dementia affect their functional abilities and quality of life?
 - **Boyd Davis, Ph.D.**
University of North Carolina
Charlotte, North Carolina
Culturally Competent Materials on Communication and Dementia
Investigator-Initiated Research Grant—\$237,408 over three years
How can communications training be improved for health care workers who have limited English proficiency or literacy skills?
 - **David B. Reuben, M.D.**
University of California
Los Angeles, California
Practice Redesign and Partnership to Improve Quality of Dementia Care
Investigator-Initiated Research Grant—\$239,587 over three years
How can clinical practices be redesigned to integrate best practice recommendations for care of people with dementia?