alzheimer's R association

2016 Alzheimer's Association[®] Grant Awards

-Organized by Research Categories

Molecular Pathogenesis and Pathophysiology of Alzheimer's Disease

Onder Albayram, Ph.D. Beth Israel Deaconess Medical Center Boston, Massachusetts *Targeting the Misshapen Pathogenic Tau Protein in Tauopathies* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 174,293 over 3 years *How do different modifications of the tau protein contribute to the formation of tau tangles in the brain?*

Sandra Almeida, Ph.D. University of Massachusetts Medical School Worcester, Massachusetts *Exploring Molecular Pathogenic Pathways Common to AD and FTD* 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years *How do variations in the CHMP2B gene increase the risk of developing dementia?*

Nicolas Barthelemy, Ph.D. Washington University in St. Louis St. Louis, Missouri *Quantitative Analyses of Tau Isoforms in Human Brain, CSF and Plasma by MS* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 174,999 over 3 years *Can a novel method be used to detect different forms of the tau protein associated with Alzheimer's disease?*

Christine Bastin, Ph.D. Université de Liège (University of Liège) Liège, Belgium *Memory for Entities and Early Tau Accumulation in Prodromal AD* 2016 New Investigator Research Grant (NIRG) --\$ 99,990 over 2 years *Can a simple, targeted memory test detect Alzheimer's disease in its earliest clinical stages?*

Abdel Ali Belaidi, Ph.D. The Florey Institute of Neuroscience and Mental Health Melbourne, Australia *Iron and Apolipoprotein E Link in the Pathogenesis of Alzheimer's Disease* 2016 Alzheimer's Association Research Fellowship to Promote Diversity (AARF-D) --\$ 175,000 over 3 years *How do variations in the APOE gene affect iron levels in the brain and the risk for Alzheimer's disease?* George Bloom, Ph.D. University of Virginia Charlottesville, VA *Tau, mTOR & Neuron Cell Cycle Re-Entry: Why Insulin Resistance Promotes AD* 2016 Zenith Fellows Award (ZNTH)—\$450,000 over 3 years *How do nerve cells die in Alzheimer's disease and does insulin help prevent nerve cell death?*

Thomas Brett, Ph.D. Washington University in St. Louis St. Louis, Missouri *Structural and Functional Basis for TREM2/ApoE/Lipid interaction in AD* 2016 Alzheimer's Association Research Grant (AARG) --\$ 150,000 over 3 years *Do certain proteins associated with Alzheimer's physically interact in ways that may promote disease progression?*

Paramita Chakrabarty, Ph.D. University of Florida Gainesville, Florida *Comparative Prionoid and Strain Properties of Tau and Synuclein* 2016 Alzheimer's Association Research Grant (AARG) --\$ 150,000 over 3 years *Does the interaction of abnormal tau and alpha-synuclein proteins accelerate the progression of neurodegenerative disease?*

John Chen, Ph.D. University of California, San Francisco San Francisco, California *Identification of Cellular Factors that Control Tau Aggregation and Spread* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 145,000 over 3 years *What genes and proteins contribute to the build-up of tau tangles throughout the brain as Alzheimer's disease progresses?*

Carol Colton, Ph.D. Duke University Medical Center Durham, North Carolina *Onset of Immune Pathology in Alzheimer's Disease* 2016 Zenith Fellows Award (ZNTH) --\$ 450,000 over 3 years *How is the immune system and inflammation involved in Alzheimer's disease?*

Erin Congdon, Ph.D.

New York University School of Medicine New York, New York *Clarifying Clearance of Tau Pathology: Extra and/or Intracellular Mechanism* 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years *How do novel antibodies help clear abnormal tau protein from the brain?*

Holly Cukier, Ph.D. University of Miami Coral Gables, Florida *Investigating a Frameshift Deletion in ABCA7 of African Origin Using iPSC* 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years *Does a certain variation in the ABCA7 gene increase the risk Alzheimer's disease in African Americans?* Holger Cynis, Ph.D. Fraunhofer IZI-MWT Halle, Germany *Generation and Characterization of Novel APP-Wt X Tau-Wt Double Knock-In Mice* 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years *Can mouse models of Alzheimer's disease be improved to more accurately represent human disease?*

Mark Dallas, Ph.D. University of Reading Reading, United Kingdom *Carbon Monoxide Suppression of Alzheimer's Disease Pathology* 2016 Alzheimer's Association Research Grant (AARG) --\$ 149,758 over 3 years *Can carbon monoxide help protect nerve cells in the brain from toxic effects of beta-amyloid?*

Annina DeLeo, Ph.D.

Boston University Boston, Massachusetts

Characterization of Human AD Brain-Derived Exosomes on Tau Propagation

2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years How do cellular transport pathways contribute to the movement of abnormal tau protein throughout the brain in Alzheimer's disease?

Chad Dickey, Ph.D.

University of South Florida Tampa, Florida *The Role of Peptidyl-Prolyl Isomerases in Tau-Mediated Neurotoxicity* 2016 Mechanisms of Cell Death in Neurodegeneration Grant (MCDN) —\$495,000 over 3 years *How does a specific class of proteins regulate the structure of tau and its effects on nerve cells in neurodegenerative disease?*

Heng Du, M.D., Ph.D.

The University of Texas at Dallas Richardson, Texas *OSCP Aberration and Synaptic Injury in Alzheimer's Disease* 2016 Alzheimer's Association Research Grant (AARG)—\$149,985 over 3 years *How does beta-amyloid accumulation in the brain damage nerve cell synapses in Alzheimer's disease?*

Brittany Dugger, Ph.D.

University of California, San Francisco San Francisco, California *The Presence of Tau in Peripheral Tissues Across Alzheimer's Disease Stages* 2016 Alzheimer's Association Research Grant (AARG) --\$ 120,000 over 3 years *Is abnormal tau protein present in body tissues other than the brain during Alzheimer's disease?*

Francesca-Fang Liao, Ph.D.

The University of Tennessee Health Science Center Memphis, Tennessee *Is Dysfunctional eNOS a Major Contributing Factor For Sporadic Alzheimer's?* 2016 Zenith Fellows Award (ZNTH) -- \$449,999 over 3 years *How is a protein that regulates blood flow involved in the development of Alzheimer's-associated brain changes?*

Stefania Forner, Ph.D. University of California, Irvine Irvine, California *Impact of the Actin Cytoskeleton and its Regulators in Alzheimer's Disease* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 174,999 over 3 years *How does damage to the cellular structures needed for nerve cell communication contribute to Alzheimer's disease?*

Tamara Franklin, Ph.D.

Dalhousie University Halifax, Nova Scotia, Canada *Understanding the Neural Bases for Social Deficits in Alzheimer's Disease* 2016 Mentored New Investigator Research Grant to Promote Diversity (MNIRGD) --\$ 149,987 over 3 years *What are the specific brain changes that underlie the social/behavioral symptoms of Alzheimer's disease?*

Joshua Gamsby, Ph.D.

University of South Florida Tampa, Florida *Tauopathy and Circadian Dysfunction* 2016 New Investigator Research Grant (NIRG) —\$99,998 over 2 years *Can abnormal tau protein hinder brain function by disrupting normal sleep patterns?*

Jesus Gomar, Ph.D.

The Feinstein Institute for Medical Research New York, New York *Neuroinflammatory Mechanisms in AD: Gliosis, myo-Inositol and Amyloidosis* 2016 Alzheimer's Association Clinical Fellowship to Promote Diversity (AACF-D) --\$ 145,000 over 3 years *Can novel brain imaging methods shed new light on the relationship between beta-amyloid and brain inflammation?*

Lea Grinberg, M.D., Ph.D.

University of California, San Francisco San Francisco, California *Caspases and Proteasome as Determinants of Opposite Neuronal Fate in AD* 2016 Alzheimer's Association Research Grant (AARG) --\$ 120,000 over 3 years *Does an imbalance in specific nerve cell proteins lead to the formation of tau tangles in Alzheimer's disease?*

Lindsay Hohsfield, Ph.D.

University of California, Irvine Irvine, California *Manipulating Microglia to Prevent Alzheimer's Disease* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years *Can regulating the function of microglia in the brain help reduce inflammation associated with Alzheimer's disease?*

Heng-Wei Hsu, Ph.D. University of California, Irvine Irvine, California *The Role of Inflammation on Endothelial LRP1* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 170,000 over 3 years *How does inflammation reduce the clearance of beta-amyloid from the brain?*

Wen Hu, Ph.D.

New York State Institute for Basic Research in Developmental Disabilities Staten Island, New York

The Role of Hyperphosphorylation in the Spread of Tau Pathology 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years *How does a specific modification of the tau protein promote its accumulation and spread through the brain in Alzheimer's disease?*

Laura Jacobson, Ph.D.

The Florey Institute of Neuroscience and Mental Health Melbourne, Australia *Tau and Orexin Interactions in Sleep and Cognition in Alzheimer's Disease* 2016 New Investigator Research Grant (NIRG)--\$ 99,737 over 2 years *Can abnormal tau protein promote Alzheimer's disease by disrupting the sleep cycle?*

Leigh Johnson, Ph.D.

University of North Texas Health Science Center at Fort Worth Fort Worth, Texas *Inflammation as a Pathway for the Depression – Cognition Link* 2016 Alzheimer's Association Research Grant (AARG)—\$117,895 over 3 years *Can blood-based biomarkers for inflammation help predict if depression increases the risk for cognitive decline?*

Devi Krishna Priya Karunakaran, Ph.D.

Northwestern University Chicago, Illinois *Molecular Mechanisms of the Alzheimer's Risk Gene UNC5c in Neuronal Death* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years *Does a variation in a gene related to brain development increase the risk of Alzheimer's disease?*

Katherine Koenig, Ph.D.

Cleveland Clinic Foundation Cleveland, Ohio *Neuroimaging, Amyloid, and Cognitive Function in Down Syndrome* 2016 New Investigator Research Grant (NIRG) —\$97,718 over 2 years *Can a multi-pronged assessment of cognition, brain structure and beta-amyloid levels better clarify how people with Down syndrome develop Alzheimer's disease?*

Daniel Lee, Ph.D. University of South Florida Tampa, Florida *Modulation of GPRC6a Signaling to Mitigate Tauopathies* 2016 Alzheimer's Association Research Grant to Promote Diversity (AARG-D) --\$ 149,999 over 3 years *Can inhibiting the activity of a protein called GPRC6a reduce the formation of tau tangles in the brain?*

Hyoung-gon Lee, Ph.D. Case Western Reserve University Cleveland, Ohio *Pathological Role Of PLK1 in Selective Neurodegeneration in Alzheimer's Disease* 2016 Alzheimer's Association Research Grant (AARG)—\$149,998 over 3 years *Can blocking the cell-cycle protein PLK1 help prevent nerve cell death during Alzheimer's disease?*

Siok Lam (Sharon) Lim, Ph.D. University of California, Irvine Irvine, California Deciphering the Role of SYK as a Key Mediator of AB Clearance by Microglia

2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years How do alterations in an immune-related protein affect the clearance of beta-amyloid from the brain?

Kun Ping Lu, M.D., Ph.D.
Beth Israel Deaconess Medical Center
Boston, Massachusetts *Mechanisms of Neuronal Apoptosis Induced by the Early Pathogenic Cis P-Tau*2016 Mechanisms of Cell Death in Neurodegeneration Grant (MCDN) —\$608,547 over 3 years *How does a specific modification of the tau protein increase its abnormal accumulation and toxic effects on nerve cells?*

Laura McIntire, Ph.D. Columbia University Medical Center New York, New York *Functional Genetic CRISPR Screen for Prevention of Synapse Loss in Alzheimer's Disease* 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years *Can a new gene modifying method help identify novel factors that protect nerve cells from the effects of beta-amyloid?*

Stephen Meredith, M.D., Ph.D.

University of Chicago Chicago, Illinois *Brain Amyloid Seeded Oligomers* 2016 Zenith Fellows Award (ZNTH) -- \$450,000 over 3 years *What triggers the accumulation and spread of beta-amyloid in the brain during Alzheimer's disease?*

Kyong Nyon Nam, Ph.D.

University of Pittsburgh Pittsburgh, Pennsylvania *Effect of APOE and AB Oligomers Interaction on Cognition Decline in Mice* 2016 Alzheimer's Association Research Fellowship (AARF)—\$175,000 over 3 years *How do different versions of apolipoprotein E affect the build-up of beta-amyloid in the brain?*

Shamsideen Ojelade, Ph.D.

Baylor College of Medicine Houston, Texas *Understanding CD2AP's Role in Alzheimer's Disease* 2016 Alzheimer's Association Research Fellowship to Promote Diversity (AARF-D) --\$ 174,501 over 3 years *How do variations in the CD2AP gene affect nerve cell function and the risk for Alzheimer's disease?*

Towfique Raj, Ph.D. Icahn School of Medicine at Mount Sinai New York, New York *Functional Genomics of Alzheimer's Disease in African Americans* 2016 Alzheimer's Association Research Grant (AARG)—\$120,000 over 3 years *Can genetic changes detected in immune cells serve as blood-based biomarkers for Alzheimer's disease?* Srikant Rangaraju, M.B.B.S. Emory University Atlanta, Georgia *Ion Channels: Regulators of Neuroinflammation in Alzheimer's Disease* 2016 Alzheimer's Association Research Grant (AARG) --\$ 150,000 over 3 years *How do immune cells in the brain have both pro-inflammatory and anti-inflammatory effects during Alzheimer's disease?*

Heather Rice, Ph.D. Flanders Interuniversity Institute for Biotechnology (VIB) Leuven, Belgium Selective Vulnerability of Interneurons in Alzheimer's Disease 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 174,985 over 3 years What makes certain types of nerve cells more vulnerable to damage during Alzheimer's disease?

Catrina Robinson, Ph.D.

Medical University of South Carolina Charleston, South Carolina *Obesity-Related Cognitive Impairment: The Role of Brain Insulin* 2016 Alzheimer's Association Research Grant to Promote Diversity (AARG-D)—\$150,000 over 3 years *Why is obesity associated with an increased risk of memory problems and Alzheimer's disease?*

Karen Rodrigue, Ph.D.

The University of Texas at Dallas Richardson, Texas *Links Between Brain Iron and Beta-Amyloid Deposition in Aging and MCI* 2016 New Investigator Research Grant (NIRG) —\$98,450 over 2 years *Is iron accumulation in the brain an early risk factor for the development of Alzheimer's disease?*

Carlo Sala Frigerio, Ph.D.

Flanders Interuniversity Institute for Biotechnology (VIB) Leuven, Belgium *Somatic Mutations as Pathogenic Drivers in Sporadic Alzheimer's Disease* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 173,240 over 3 years *Can genetic modifications of certain brain cells increase the risk for Alzheimer's disease?*

Koorosh Shahpasand, Ph.D.

Royan Institute for Stem Cell Biology and Technology Tehran, Iran

Reason of Tau Toxicity Upon Cistauosis 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years *How does an abnormally modified version of the tau protein promote nerve cell death?*

Niraj Shanbhag, M.D., Ph.D.

University of California, San Francisco San Francisco, California *The Role of BRCA1 in Alzheimer's Pathogenesis*

2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years *Does a gene involved in DNA repair and cancer play a role in Alzheimer's disease?*

Salil Sharma, Ph.D. Indiana University Bloomington, Indiana *Role of Circulating MicroRNAs in Alzheimer's Diseases* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years *Can a blood-based molecule that regulates gene function serve as a biomarker for the early detection and diagnosis of Alzheimer's disease?*

Kinga Szigeti, M.D., Ph.D. State University of New York (SUNY) at Buffalo Buffalo, New York *Narrowing the Gap in the Genetic Architecture of Alzheimer's Disease* 2016 Alzheimer's Association Research Grant (AARG) --\$ 149,970 over 3 years *Could certain genetic variations that alter gene activity levels contribute to the risk for Alzheimer's disease?*

Andrew Teich, M.D., Ph.D. Columbia University Medical Center New York, New York *A Cross-Species Study of DNA Methylation in Alzheimer's Disease Dementia* 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years *How are gene patterns changed during the development of Alzheimer's disease?*

William Todd, Ph.D. Beth Israel Deaconess Medical Center Boston, Massachusetts *A Circadian Circuit for Behavioral Aggression in Alzheimer's Disease* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years *Do changes in circadian rhythms promote aggressive behavior in people with Alzheimer's?*

Badri Vardarajan, Ph.D. Columbia University Medical Center New York, New York Sequencing in Healthy APOE-e4 Samples to Identify Protective Variants in AD 2016 New Investigator Research Grant (NIRG) —\$99,056 over 2 years What are the unique genetic factors that may protect people at high risk for developing Alzheimer's disease?

Xiongwei Zhu, Ph.D. Case Western Reserve University Cleveland, Ohio *Role of Aberrant Calcium Signaling in Mitochondrial Dynamics in AD* 2016 Alzheimer's Association Research Grant (AARG)—\$150,000 over 3 years *Does beta-amyloid lead to excess calcium in nerve cells in Alzheimer's disease?*

Diagnosis, Assessment and Disease Monitoring

Ganesh Babulal, OTD Washington University in St. Louis St. Louis, Missouri *Racial Differences in Alzheimer's Disease Biomarkers and Driving Behavior* 2016 Alzheimer's Association Research Fellowship to Promote Diversity (AARF-D) --\$ 145,000 over 3 years *Can Alzheimer's disease biomarkers help predict who may be at risk for declines in driving ability?*

Einor Ben Assayag, Ph.D.

Tel-Aviv Medical Center Research And Development Fund And Health Services Tel Aviv, Israel *Blood Exosomal miRNAs as Biomarkers in Post-Stroke Brain Recovery/ Dementia* 2016 Alzheimer's Association Research Grant (AARG) --\$ 149,999 over 3 years *Can changes in a novel blood-based biomarker be used to help predict who will develop dementia after a stroke?*

Ashley Bush, M.D., Ph.D. The Florey Institute of Neuroscience and Mental Health Melbourne, Australia *Predicting Longitudinal Disease Outcomes Using CSF Iron Parameters* 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 33,000 over 2 years *Does iron accumulation in the brain contribute to the onset or progression of Alzheimer's or Parkinson's disease?*

Brandy Callahan, Ph.D.

Sunnybrook Health Sciences Centre Toronto Ontario, Canada *Cognition in Mild Cognitive Impairment and Adult Attention-Deficit Disorder* 2016 Alzheimer's Association Clinical Fellowship (AACF) --\$ 175,000 over 3 years *Can a new comprehensive set of tests distinguish cognitive changes associated with adult attention deficit disorder (ADD) from those associated with mild cognitive impairment (MCI)*?

Alice Chen-Plotkin, M.D.

University of Pennsylvania Philadelphia, Pennsylvania *Protein Signatures of AD And PD – Shared and Distinct Biomarkers in Blood* 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 150,000 over 2 years *Can biomarker profiles that signal for the presence of Alzheimer's or Parkinson's disease be identified in the blood?*

Taher Darreh-Shori, Ph.D.

Karolinska Institutet Stockholm, Sweden *Novel Lead Chat-PET Tracer as Early Diagnostic and Theragonistic Biomarker* 2016 New Investigator Research Grant (NIRG) —\$99,989 over 2 years *Can a novel PET imaging compound be used to detect early brain changes associated with Alzheimer's disease?*

Guangwei Du, M.D., Ph.D.

The Pennsylvania State University College of Medicine Hershey, Pennsylvania **Benchmark Structural MRI Marker(s) for Parkinsonian Syndromes** 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 146,508 over 2 years Which specific features of MRI brain images can uniquely identify people who have early-stage Parkinson's disease?

Jennifer Gatchel, M.D., Ph.D.

Massachusetts General Hospital Charlestown, Massachusetts

Depressive and Anxiety Symptoms and Tau PET Imaging in Alzheimer's Disease 2016 Alzheimer's Association Clinical Fellowship (AACF) --\$ 174,419 over 3 years *How are depression and anxiety related to brain changes associated with Alzheimer's disease?*

Edward Goetzl, M.D. Hebrew Home for the Aged Disabled San Francisco, California Neural-Derived Blood Exosome Protein Biomarkers in AD and FTD 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 150,000 over 2 years *Can a novel method for measuring brain-derived factors in the blood improve the detection and diagnosis of Alzheimer's disease or frontotemporal dementia?*

Yuanfang Guan, Ph.D.

University of Michigan Ann Arbor, Michigan *Cross-Disease Brain Image Modeling* 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 150,000 over 4 years *Can a novel method for analyzing brain images be used to improve the early diagnosis of Alzheimer's and Parkinson's disease?*

Andrea laboni, M.D., D.Phil.

Toronto Rehabilitation Institute-UHN Toronto Ontario, Canada

A Multidimensional Tool for Assessing Mobility in Advanced Dementia 2016 Alzheimer's Association Research Grant (AARG) --\$ 149,625 over 3 years Can a novel tool that measures multiple factors more accurately detect mobility loss across time in people with Alzheimer's disease?

Jeongchul Kim, Ph.D. Wake Forest University Health Sciences Winston-Salem, North Carolina

Analysis of Brain Degeneration in MCI Using a Biomechanical Framework 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 174,479 over 3 years *Can new methods to analyze subtle changes in brain structure be used to detect Alzheimer's disease in its earliest stages?*

Sungeun Kim, Ph.D.

Indiana University Indianapolis, Indiana *Biological Networks and Pathophysiology of AD and PD* 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 150,000 over 2 years *Can a combined analysis of multiple disease characteristics improve the diagnosis of Alzheimer's and Parkinson's disease?*

Randy McIntosh, Ph.D.

Baycrest Centre for Geriatric Care Toronto, Ontario, Canada *Differentiating Dynamic Neural Model Profiles In Neurodegenerative Disease* 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 149,993 over 2 years *Can a novel computer simulation of human brain activity improve the diagnosis and treatment of neurodegenerative diseases?*

Luis Medina, Ph.D.

University of Colorado Denver Aurora, Colorado

Performance-Based Functional Assessment of Alzheimer's Disease in Hispanics

2016 Alzheimer's Association Research Fellowship to Promote Diversity (AARF-D) --\$ 145,000 over 3 years *Can novel performance-based tests of brain function help improve the detection and diagnosis of Alzheimer's disease in Hispanic-Americans?*

Evan Miller, Ph.D.

University of California, Berkeley

Berkeley, California

Optical Tools to Interrogate Neuronal Physiology in Alzheimer's Disease

2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years Can a novel method for measuring electrical activity in nerve cells reveal how cellular communication breaks down in Alzheimer's disease?

Fabio Moda, Ph.D.

Fondazione IRCCS Istituto Neurologico "Carlo Besta" Milan, Italy

Seed of Dementia: Misfolded Proteins in Neurodegenerative Disorders

2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 121,000 over 2 years Can a new technology that non-invasively measures low levels of toxic proteins be used to detect neurodegenerative diseases at the earliest stages?

Ines Moreno-Gonzalez, Ph.D.

The University of Texas Health Science Center at Houston Houston, Texas

PET Imaging to Detect Alzheimer's-Like Pathology After Brain Injury

2016 New Investigator Research Grant (NIRG) — \$99,928 over 2 years Can an imaging technique help determine how traumatic brain injury may promote brain changes associated with Alzheimer's disease?

Neil Oxtoby, Ph.D.

University Čollege London London, United Kingdom *Network Models of Neurodegeneration (NetMon)* 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 149,669 over 3 years

Can a new model for analyzing brain changes across time improve the detection and diagnosis of Alzheimer's and Parkinson's disease?

Kathryn Papp, Ph.D.

Brigham and Women's Hospital, Inc. Boston, Massachusetts *Optimizing Semantic Memory Measures to Tau PET Deposition in Preclinical AD* 2016 Alzheimer's Association Clinical Fellowship (AACF) --\$ 174,980 over 3 years *Can a novel memory test help detect the earliest stages of Alzheimer's disease?*

Jeffrey Phillips, Ph.D. University of Pennsylvania Philadelphia, Pennsylvania *Anatomical Progression of Typical and Atypical Alzheimer's Disease* 2016 Alzheimer's Association Research Fellowship (AARF)—\$174,699 over 3 years *How does the progression of brain changes differ in typical and atypical Alzheimer's disease?*

Tom Schweizer, Ph.D. St. Michael's Hospital Toronto, Ontario, Canada *Using Functional MRI to Evaluate Cognitive Predictors of Driving in MCI* 2016 Alzheimer's Association Research Grant (AARG) --\$ 146,861 over 3 years *Can brain activation patterns inform the development of new tools to help determine if individuals with cognitive impairment can safely drive?*

Nicholas Seyfried, Ph.D.

Emory University Atlanta, Georgia *Proteomic Network Analysis to Define Common Mechanisms Underlying AD and PD* 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 150,000 over 2 years *How do large networks of proteins change in the brains of people with Alzheimer's or Parkinson's disease?*

Andy Shih, Ph.D.

Medical University of South Carolina Charleston, South Carolina *Long-term In Vivo Imaging of the Pericyte Response to Amyloid Beta* 2016 New Investigator Research Grant (NIRG) — \$99,960 over 2 years *How does beta-amyloid affect the function of blood vessels in the brain?*

Bryan Strange, Ph.D., M.B.B.S.

Technical University of Madrid Madrid, Spain The Healthy Elderly Brain: MRI Predictors for Developing MCI 2016 New Investigator Research Grant (NIRG) —\$100,000 over 2 years Can specific changes detected by brain imaging predict who is at risk for developing mild cognitive impairment?

Katherine Turk, M.D.

Boston VA Research Institute, Inc. Boston, Massachusetts *Diagnosis of Alzheimer's Disease Using Event Related Potentials* 2016 Alzheimer's Association Clinical Fellowship (AACF) --\$ 175,000 over 3 years *Can measuring specific changes in brain activity improve the early detection and diagnosis of Alzheimer's disease?*

Sylvia Villeneuve, Ph.D.

Douglas Hospital Research Centre Montreal, Quebec, Canada *Monitoring Behavioral Changes Using Online Tools in At-Risk Individuals* 2016 New Investigator Research Grant (NIRG) --\$ 100,000 over 2 years *Can an inexpensive, internet-based system help detect early changes in brain function in individuals at risk for Alzheimer's disease?*

Dieter Willbold, Ph.D.

Research Centre Juelich Jülich, Germany *Homo- And Hetero-Aggregates As Biomarkers In Neurodegenerative Disorders* 2016 Biomarkers Across Neurodegenerative Diseases (BAND) --\$ 147,500 over 2 years *Can a novel method to identify and measure different types of abnormal protein clumps in cerebrospinal fluid improve the detection and diagnosis of neurodegenerative diseases?* Renaud La Joie, Ph.D. University of California, San Francisco San Francisco, California *Multimodal Imaging of Neurodegeneration Processes and Their Propagation* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years *Can brain imaging techniques help promote more accurate detection and diagnosis of different types of dementia?*

Translational Research and Clinical Interventions

Tina Brinkley, Ph.D. Wake Forest University Health Sciences Winston-Salem, North Carolina *Diet, Exercise, and Soluble RAGE in Adults at Risk for Alzheimer's Disease* 2016 New Investigator Research Grant to Promote Diversity (NIRGD) —\$100,000 over 3 years *How may diet and exercise impact the levels of a potential Alzheimer's disease biomarker found in blood and cerebrospinal fluid?*

Michael Castle, Ph.D. University of California, San Diego La Jolla, California *AAV Vectors for Widespread and Specific BDNF Delivery to the Cortex in AD* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years *Can a novel method of delivering growth factors to the brain help promote nerve cell survival in Alzheimer's disease?*

Katherine Denny, Ph.D.

University of California, Davis Sacramento, California *Multidimensional Behavioral Intervention for Those at Risk for AD* 2016 Alzheimer's Association Research Grant (AARG) --\$ 120,000 over 3 years *Can a novel intervention that promotes a healthy lifestyle and improves everyday skills help slow the onset of Alzheimer's disease?*

Gary D'Souza, Ph.D.

Arizona State University Tempe, Arizona *Does Lenalidomide Alter AD Neuropathologies Via Gliosis Modulation?* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years *Can the drug lenalidomide reduce brain inflammation and the progression of Alzheimer's disease?*

Isidro Ferrer, M.D., Ph.D.

Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED) Barcelona, Spain

Sativex in MCI Patients at High Risk of Developing AD

2016 Part the Cloud Challenge on Neuroinflammation —\$999,131 over 3 years This Phase II clinical trial will examine if Sativex reduces brain inflammation and helps slow the progression of Alzheimer's disease in people with mild cognitive impairment Lin Guo, Ph.D. University of Pennsylvania Philadelphia, Pennsylvania

Developing Protein Disaggregases and RNA Inhibitors for FTD Protein: FUS

2016 Alzheimer's Association Research Fellowship (AARF)—\$175,000 over 3 years How do certain protein clumps promote frontotemporal dementia, and how may they be targeted to slow or prevent disease progression?

Mitchel Kling, M.D.

University of Pennsylvania Philadelphia, Pennsylvania

A Biomarker-Based Trial of Plasmalogen Repletion in MCI/AD

2016 Part the Cloud Translational Research Funding for Alzheimer's Disease Program — \$599,961 over 3 years Can a novel oral medication help restore the lipids necessary for nerve cell function that are lost in Alzheimer's disease?

Sanjaya Kuruppu, Ph.D.

Monash University Clayton, Australia *A Venom Derived Peptide to Treat Alzheimer's Disease* 2016 Alzheimer's Association Research Grant (AARG) --\$ 108,820 over 3 years *Can a molecule found in snake venom help reduce the build-up of beta-amyloid in the brain during Alzheimer's disease?*

Albert La Spada, M.D., Ph.D.

University of California, San Diego La Jolla, California *Modulators of Transcription Factor EB (TFEB)* 2016 Collaboration 4 Cure (C4C) --\$ 57,224 over 2 years *Can novel drug candidates that help regulate the removal of abnormal proteins be potential Alzheimer's disease treatments?*

Karienn Montgomery, Ph.D.

Texas A&M University Health Science Center College Station, Texas *Cognitive Impairment and AD: Targeting Presynaptic Therapeutic Mechanisms* 2016 Alzheimer's Association Research Fellowship to Promote Diversity (AARF-D) --\$ 145,000 over 3 years

Can strategies to preserve nerve cell communication help slow or prevent Alzheimer's disease?

Paul A. Newhouse, M.D.

Vanderbilt University Medical Center Nashville, Tennessee *Phase 1 Testing of a Muscarinic M1 PAM for Alzheimer's Disease* 2016 Part the Cloud Translational Research Funding for Alzheimer's Disease -- \$689,386 *Can a novel molecule that stimulates specific docking sites on the surface of nerve cells improve brain function?*

John Olichney, M.D.

University of California, Davis Sacramento, California *Proof of Mechanism Study of Senicapoc in Mild or Prodromal AD* 2016 Part the Cloud Challenge on Neuroinflammation—\$1,000,000 over 3 years *This Phase II clinical trial will examine if the drug senicapoc reduces brain inflammation and preserves cognitive function in people with early Alzheimer's disease*

Anthony Oliva, Ph.D.

Longeveron LLC Miami, Florida

Mesenchymal Stem Cell Therapy for Neuroinflammation in Alzheimer's Disease

2016 Part the Cloud Challenge on Neuroinflammation—\$1,000,000 over 3 years This Phase I clinical trial will test if a novel stem cell therapy is safe and can reduce brain inflammation in people with early Alzheimer's disease

Elena Pasquale, Ph.D.

Sanford-Burnham Medical Research Institute La Jolla, California Inhibiting the EphA4 Receptor to Counteract Alzheimer's Neurodegeneration 2016 Collaboration 4 Cure (C4C) --\$ 60,000 over 2 years *Can novel drug-like molecules stop abnormal clumps of the beta-amyloid protein from blocking nerve cell repair in people with Alzheimer's disease?*

Matthew Pearn, M.D.

University of California, San Diego La Jolla, California *Small Molecules to Normalize Early Endosome Structure and Function in AD* 2016 Collaboration 4 Cure (C4C) --\$ 55,000 over 2 years *Can a novel compound help prevent dysfunction of nerve cell transport systems in Alzheimer's disease?*

Huntington Potter, Ph.D.

University of Colorado Denver Aurora, Colorado *Safety & Efficacy of GM-CSF/Leukine in Mild-to-Moderate Alzheimer's Disease* 2016 Part the Cloud Challenge on Neuroinflammation—\$1,000,000 over 3 years *This Phase II study will determine if the FDA-approved drug, Leukine, is safe and can help slow or prevent the progression of Alzheimer's disease*

Arubala Reddy, Ph.D.

Texas Tech University Health Sciences Center Lubbock, Texas *Protective Effects of SSRI Against Alzheimer's Disease* 2016 New Investigator Research Grant (NIRG) —\$99,952 over 2 years *Could some antidepressant drugs be useful for treating Alzheimer's disease?*

Subhojit Roy, Ph.D.

University of California, San Diego La Jolla, California *Identifying Molecules that Attenuate APP and BACE-1 Interactions* 2016 Collaboration 4 Cure (C4C) --\$ 57,000 over 2 years *Can interfering with the interaction between APP and BACE-1 in nerve cells reduce beta-amyloid protein production?*

Evgenia Salta, Ph.D.

Flanders Interuniversity Institute for Biotechnology (VIB) Leuven, Belgium

Functional Validation of miR-132 Loss in AD and Therapeutic Targeting

2016 Alzheimer's Association Research Fellowship (AARF) --\$ 175,000 over 3 years Can a molecule that regulates gene activity help prevent brain changes associated with Alzheimer's disease?

Cécilia Samieri, Ph.D.

Association for the Development of Education and Research with Universities, Research Centers, and Enterprises of Aquitaine Pessac, France

Network Science Tools to Identify Novel Diet Patterns in Prodromal Dementia 2016 Alzheimer's Association Research Grant (AARG) --\$ 118,872 over 3 years *Can novel methods to analyze complex datasets reveal how diet impacts the risk of Alzheimer's disease?*

Henrieta Scholtzova, M.D., Ph.D.

New York University School of Medicine New York, New York *CAA Treatment via Innate Immunity Stimulation and MRI Detection in Primates* 2016 Alzheimer's Association Research Grant (AARG) --\$ 150,000 over 3 years *Can a novel treatment that stimulates the brain's immune system help prevent the harmful buildup of beta-amyloid in the brain?*

Lutz Tautz, Ph.D.

Sanford-Burnham Medical Research Institute La Jolla, California *Novel Screening Platform to Identify Specific Inhibitors of STEP* 2016 Collaboration 4 Cure (C4C) --\$ 52,722 over 2 years *Can a new nerve cell testing system identify drug candidates that inhibit a specific protein involved in Alzheimer's disease?*

Ramon Velazquez, Ph.D.

Arizona State University Tempe, Arizona *Pim1 Inhibition as a Therapeutic Strategy for Alzheimer's Disease* 2016 Alzheimer's Association Research Fellowship to Promote Diversity (AARF-D) --\$ 174,999 over 3 years *Can the regulation of a molecule involved in producing and degrading proteins lead to a novel Alzheimer's treatment?*

Steven L. Wagner, Ph.D.

University of California, San Diego La Jolla, California *Screening For Novel Gamma-Secretase Modulator Scaffolds* 2016 Collaboration 4 Cure (C4C) --\$ 32,249 over 2 years Can molecules with unique chemical structures be found that modulate the gamma-secretase protein and reduce toxic betaamyloid production?

Huaxi Xu, Ph.D.

Sanford-Burnham Medical Research Institute La Jolla, California *Promoting TREM2 Stability and Activity for AD Intervention* 2016 Collaboration 4 Cure (C4C) --\$ 64,471 over 2 years *Can new drug candidates that target the TREM2 protein on immune cells help regulate brain inflammation in Alzheimer's disease?*

Yunwu Zhang, Ph.D.

Sanford-Burnham Medical Research Institute La Jolla, California *Targeting Appoptosin for Intervention of Alzheimer's and Other Tauopathies* 2016 Collaboration 4 Cure (C4C) --\$ 64,471 over 2 years *Can novel molecules that inhibit high levels of the appoptosin protein protect against nerve cell death in Alzheimer's?*

Epidemiology (Dementia Risk Factors and Prevention)

Sara Adar, ScD, MHS University of Michigan Ann Arbor, Michigan *Neighborhood Noise, Socioeconomic Context, and Alzheimer's Disease* 2016 New Investigator Research Grant (NIRG) —\$99,996 over 2 years *Does neighborhood noise contribute to the risk of Alzheimer's disease?*

Tatyana Mollayeva, M.D., Ph.D.

Toronto Rehabilitation Institute-UHN Toronto Ontario, Canada *Alzheimer's Disease in Men and Women with Central Nervous System Trauma* 2016 Alzheimer's Association Research Fellowship (AARF) --\$ 144,784 over 3 years *What factors impact the relationship between brain trauma and the risk for Alzheimer's disease?*

Thuc-Nhi Nguyen, Ph.D.

University of California, Davis Sacramento, California *Cognitive Impairment and Vietnamese Female Nail Technicians* 2016 Alzheimer's Association Clinical Fellowship (AACF) --\$ 174,935 over 3 years *Does exposure to toxic chemicals in nail care products increase the risk of Alzheimer's disease?*

Monica Rivera-Mindt, Ph.D.

Fordham University Bronx, New York *Alzheimer's, Cerebrovascular and Sociocultural Factors for Dementia in HIV* 2016 Alzheimer's Association Research Grant to Promote Diversity (AARG-D)—\$150,000 over 3 years *What risk factors contribute to cognitive impairment in older Latinos living with HIV?*

Claudia Satizabal, Ph.D.

Boston University Boston, Massachusetts *Impact of Obesity in Brain Aging and Alzheimer's Disease* 2016 Alzheimer's Association Research Grant to Promote Diversity (AARG-D) --\$ 118,673 over 3 years *How does mid-life obesity contribute to a person's risk of Alzheimer's disease later in life?*

Kellee White, Ph.D.

University of South Carolina Columbia, South Carolina *Racial Disparities in Cognitive Outcomes: The Role of Multimorbidity*

2016 Alzheimer's Association Research Grant to Promote Diversity (AARG-D)—\$150,000 over 3 years Does the presence of multiple chronic medical conditions contribute to the risk of Alzheimer's disease?

Care, Support and Health Economics of Alzheimer's Disease

Bianca Acevedo, Ph.D. University of California, Santa Barbara Santa Barbara, California *Caregiving, Empathy and Alzheimer's Disease: A Pilot Study* 2016 Alzheimer's Association Research Fellowship to Promote Diversity (AARF-D) --\$ 174,999 over 3 years *Can a meditation intervention increase empathy and improve quality of life for caregivers of individuals with Alzheimer's disease?*

Susan Hunter, Ph.D. The University of Western Ontario London, Ontario, Canada *Paradoxical Effects of Mobility Aids on Postural Stability in Dementia* 2016 Alzheimer's Association Research Grant (AARG) --\$ 115,070 over 3 years *What are the unique needs of individuals with Alzheimer's disease who require the use of mobility aids?*

Oanh Meyer, Ph.D. University of California, Davis Sacramento, California *A Culturally-Relevant Intervention to Reduce Dementia Caregiver Distress* 2016 Mentored New Investigator Research Grant to Promote Diversity (MNIRGD)—\$150,000 over 3 years *Can Vietnamese-American dementia caregivers benefit from a culturally-relevant program that is designed to reduce stress and improve their health?*

Laura Middleton, Ph.D.

University of Waterloo Waterloo, Ontario, Canada *How Do We Get People with MCI and Dementia to be Physically Active?* 2016 New Investigator Research Grant (NIRG) --\$ 100,000 over 2 years *What is the best way to deliver an exercise program for people with cognitive impairment or dementia?*