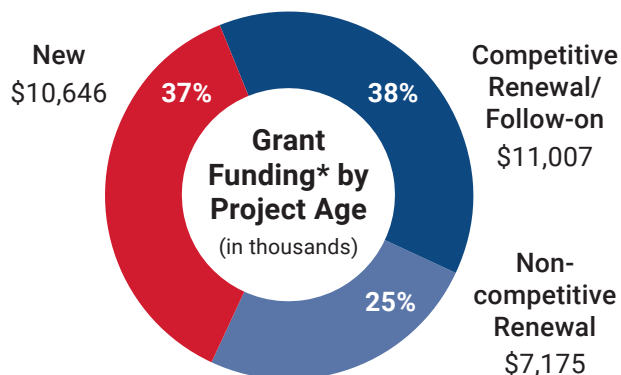




# 2024 Funded Research

Cure Alzheimer's Fund spent \$30 million to support our research program that included grants for 120 research projects across four research areas of focus. To read about 2024 research projects, visit us online at [bit.ly/2024-research](https://bit.ly/2024-research).



## Number of New Investigators and Projects

	Number	% of Total
New Named Investigators	32	23%
New Projects	41	34%
New Institutions	15	23%

\* Excludes research materials and scientific meeting spending.

Project/Researcher

Distribution Amount

## FOUNDATIONAL RESEARCH

### GENETIC RISK FACTORS

<b>Mapping the X Chromosome Multi-Ome in Alzheimer's and Parkinson's Disease</b> Michael Belloy, Ph.D., Washington University School of Medicine in St. Louis	\$219,578
<b>Systematic Assessment of Tandem Repeats in Alzheimer's Disease (STaR-AD)</b> Lars Bertram, M.D., University of Lübeck, Germany Valerija Dobricic, Ph.D., University of Lübeck, Germany	\$363,000
<b>Integrating Single-Cell Genomics for Pathways to Protection and Resilience Against Alzheimer's Disease</b> Winston Hide, Ph.D., Beth Israel Deaconess Medical Center; Harvard Medical School	\$201,235
<b>Moving the Cure Alzheimer's Fund Alzheimer's Genome Project™ Beyond Simple Associations: Integrating Functional Information, Fine-Mapping and Causal Inference Approaches into the Family-Based Analysis of the Cure Alzheimer's Fund Whole-Genome Sequencing (WGS) Family Study</b> Christoph Lange, Ph.D., Harvard T.H. Chan School of Public Health	\$230,000
<b>Precision Medicine Prediction Model for Alzheimer's Disease Using Cooperative Learning Approaches for Multi-Omic Data</b> Christoph Lange, Ph.D., Harvard T.H. Chan School of Public Health	\$187,315
<b>Interpreting Alzheimer's Disease-Associated Genetic Variation at Enhancer Regions</b> Andreas R. Pfenning, Ph.D., Carnegie Mellon University	\$201,250
<b>The Alzheimer's Genome Project™</b> Rudolph E. Tanzi, Ph.D., Massachusetts General Hospital; Harvard Medical School	\$1,955,000

### BIOMARKERS, DIAGNOSTICS, AND STUDIES OF RISK AND RESILIENCE

<b>Midlife Autoantibody Profiles and the Risk of Late-Onset Alzheimer's Disease in Women</b> Yu Chen, Ph.D., New York University	\$201,250
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## 2024 FUNDED RESEARCH (CONTINUED)

Project/Researcher	Distribution Amount
<b>Plasma Proteins, Sex and Alzheimer's Disease: Proteome-Wide Analyses of the UK Biobank and Framingham Heart Study</b> P. Murali Doraiswamy, MBBS, FRCP, Duke University School of Medicine	\$268,750
<b>Utility of Blood-Based Markers for Predicting Amyloid-Related Imaging Abnormalities and Their Course in Mild Cognitive Impairment and Alzheimer's Disease Subjects Undergoing Routine Clinical Treatment with Amyloid-Directed Antibodies</b> P. Murali Doraiswamy, MBBS, FRCP, Duke University School of Medicine	\$24,957
<b>Bioinformatics Platform for Modeling Alzheimer's Progression (MAP-AD Platform)</b> Ali Ezzati, M.D., University of California, Irvine	\$201,250
<b>Alzheimer's Disease PET Imaging of Nonfibrillar Amyloid Beta Aggregates Using Azapeptide (AZP) Tracer</b> Samuel E. Gandy, M.D., Ph.D., Icahn School of Medicine at Mount Sinai Brigitte Guérin, Ph.D., Université de Sherbrooke, Canada William D. Lubell, Ph.D., Université de Montréal, Canada Shai Rahimipour, Ph.D., Bar-Ilan University, Israel	\$213,426
<b>Understanding Human Brain Resilience to Alzheimer's Pathology</b> Teresa Gomez-Isla, M.D., Massachusetts General Hospital; Harvard Medical School	\$300,000
<b>Identification and Validation of Plasma-Based Lipid Biomarkers for Early Alzheimer's Disease in the Unique, Primarily Hispanic, South Texas Population</b> Xianlin Han, Ph.D., The University of Texas Health Science Center at San Antonio Tiffany F. Kautz, Ph.D., The University of Texas Health Science Center at San Antonio Bernard Fongang, Ph.D., The University of Texas Health Science Center at San Antonio	\$201,250
<b>Relationship Between Alzheimer's Disease Risk Score and Outcomes of Mild Repetitive Neurotrauma</b> Thomas W. McAllister, M.D., Indiana University School of Medicine Michael McCrea, Ph.D., ABPP, Medical College of Wisconsin; Wisconsin Institute of Neuroscience	\$185,140
<b>Characterization of Alzheimer's Disease Molecular Biomarker Profiles Throughout the Pathobiological Continuum</b> Krista L. Moulder, Ph.D., Washington University School of Medicine in St. Louis	\$123,098
<b>BIOLOGICAL RESEARCH MATERIALS: NEW ANIMAL AND CELLULAR MODELS, AND HUMAN SAMPLES</b>	
<b>Investigating the Serial Pathologies Related to Plasma Biomarkers in NLFTaum/h Mice: A New Mouse Model Featuring Neurofibrillary Tangles as a Result of Rising Amyloid Beta without Microtubule-Associated Protein Tau (MAPT) Mutations</b> Frances Edwards, Ph.D., University College London, England John Hardy, Ph.D., University College London, England	\$200,388
<b>Growth, Characterization and Distribution of a Neurodegenerative Disease-Focused Fibroblast/iPS Cell Bank to Support Molecular Models of Patient-Specific Variation with Validation in Matched Donated Brain Tissues</b> Derek H. Oakley, M.D., Ph.D., Massachusetts General Hospital; Harvard Medical School	\$201,250
<b>Characterization and Validation of Two Recently Created Sheep Models of Alzheimer's Disease in Preparation for Use as a Preclinical Pharmaceutical Testing Model</b> Russell G. Snell, Ph.D., University of Auckland, New Zealand Natasha McKean, Ph.D., University of Auckland, New Zealand	\$199,926
<b>Genes to Therapies™ (G2T) Research Models and Materials</b> Taconic Biosciences	\$202,715
<b>Effect of APOE Genotype in a Novel Rat Model of Cerebral Amyloid Angiopathy</b> William Van Nostrand, Ph.D., The University of Rhode Island	\$201,250
<b>Dissecting Alzheimer's Disease Phenotypes in Directly Reprogrammed Patient-Derived Neurons</b> Andrew S. Yoo, Ph.D., Washington University School of Medicine in St. Louis	\$258,750

## 2024 FUNDED RESEARCH (CONTINUED)

Project/Researcher	Distribution Amount
<b>TRANSLATIONAL RESEARCH</b>	
<b>STUDIES OF NOVEL ALZHEIMER'S DISEASE GENES</b>	
<b>Role of Ras and Rab Interactor 3 (RIN3) and Bridging Integrator 1 (BIN1) Interaction in the Neurons for Alzheimer's Disease Development</b> Raja Bhattacharyya, Ph.D., Massachusetts General Hospital; Harvard Medical School	<b>\$201,250</b>
<b>Multiomic and Functional Characterization of Soluble TREM2 Modifiers</b> Carlos Cruchaga, Ph.D., Washington University School of Medicine in St. Louis	<b>\$200,356</b>
<b>The Impact of Mutations in the Ligand-Binding Domain of CD33 on Alzheimer's Disease Pathogenesis</b> Ana Griciuc, Ph.D., Massachusetts General Hospital; Harvard Medical School	<b>\$125,000</b>
<b>Dissecting the Modulatory Roles of Interleukin-17 Receptor D in Alzheimer's Disease</b> Jun Huh, Ph.D., Harvard Medical School	<b>\$201,250</b>
<b>Elucidating the Therapeutic Potential of the Endo-Lysosome Pathway for Alzheimer's Disease</b> Jessica Young, Ph.D., University of Washington	<b>\$201,250</b>
<b>STUDIES OF AMYLOID PRECURSOR PROTEIN AND AMYLOID BETA</b>	
<b>Role of Stabilization of MAMs and MAM-associated Palmitoylated APP (MAM-palAPP) in Alzheimer's Disease</b> Raja Bhattacharyya, Ph.D., Massachusetts General Hospital; Harvard Medical School	<b>\$201,250</b>
<b>Structural Mimicry in Microbial and Antimicrobial Amyloids Connected to Neurodegenerative Diseases</b> Meytal Landau, B. Pharm, M.Sc., Ph.D., Technion, Israel Institute of Technology, Israel; Deutsches Elektronen-Synchrotron (DESY), Germany	<b>\$200,400</b>
<b>ADAM10 Cleavage of Amyloid Precursor Protein: Physiological Function in the Brain and Therapeutic Potential for Alzheimer's Disease</b> Jaehong Suh, Ph.D., Massachusetts General Hospital; Harvard Medical School	<b>\$230,000</b>
<b>STUDIES OF TAU</b>	
<b>Alzheimer's Disease Tau Consortium: Strain Replication in Mouse and Cell Models</b> Marc I. Diamond, M.D., University of Texas Southwestern Medical Center	<b>\$287,277</b>
<b>Alzheimer's Disease Tau Consortium: Post-Translational Modifications and Tau Ultrastructure; Impact of Amyloid Beta on Tau In Vivo</b> Karen E. Duff, Ph.D., University College London, England René Frank, Ph.D., University of Leeds, England	<b>\$366,770</b>
<b>Alzheimer's Disease Tau Consortium: Toxic Consequences of Early Tau Seeding</b> Bradley T. Hyman, M.D., Ph.D., Massachusetts General Hospital; Harvard Medical School Rachel Bennett, Ph.D., Massachusetts General Hospital; Harvard Medical School	<b>\$287,500</b>
<b>Alzheimer's Disease Tau Consortium: The Role of Amyloid Beta-Induced Membrane Damage in Tau Pathology</b> Katherine Sadleir, Ph.D., Northwestern University Feinberg School of Medicine Robert Vassar, Ph.D., Northwestern University Feinberg School of Medicine	<b>\$286,559</b>
<b>Alzheimer's Disease Tau Consortium: Deep Mass Spectrometry Profiling of Tau Aggregates in Alzheimer's Disease and Other Tauopathies</b> Henrik Zetterberg, M.D., Ph.D., University of Gothenburg, Sweden; University College London, England Gunnar Brinkmalm, Ph.D., University of Gothenburg, Sweden	<b>\$287,500</b>
<b>Cellular Vulnerability to Pathological Tau Protein Accumulation in Alzheimer's Disease</b> Mathieu Bourdenx, Ph.D., University College London, England Karen E. Duff, Ph.D., University College London, England	<b>\$219,880</b>

## 2024 FUNDED RESEARCH (CONTINUED)

Project/Researcher	Distribution Amount
<b>Multimomics Characterization of Tau Pathology Onset and its Relationship with Amyloid in the Human Hippocampus</b> Inma Cobos, M.D., Ph.D., Stanford University	\$201,250
<b>Identifying Mediators of Tau-Mediated Neuronal Necroptosis Using an Innovative In Vivo CRISPR Screen</b> Bart De Strooper, M.D., Ph.D., VIB-KU Leuven, Belgium; University College London, England	\$230,000
<b>Selective Vulnerability in Posterior Cortical Atrophy</b> John R. Dickson, M.D., Ph.D., Massachusetts General Hospital; Harvard Medical School Bradley T. Hyman, M.D., Ph.D., Massachusetts General Hospital; Harvard Medical School	\$230,000
<b>Tau-Induced Postsynaptic Dysfunction in Tauopathy Models</b> Karin Hochrainer, Ph.D., Weill Cornell Medicine Costantino Iadecola, M.D., Weill Cornell Medical College	\$201,250
<b>Hypertension, Tau and Neurodegeneration</b> Costantino Iadecola, M.D., Weill Cornell Medical College Giuseppe Faraco, M.D., Ph.D., Weill Cornell Medical College	\$200,532
<b>Modulating the Levels of Tau-Seed Interactors to Treat Alzheimer's Disease</b> Cristian Lasagna-Reeves, Ph.D., Baylor College of Medicine	\$200,631
<b>Investigating the Role of Tau Protein in Neuronal Senescence</b> Miranda E. Orr, Ph.D., Washington University School of Medicine in St. Louis	\$201,250
<b>STUDIES OF APOLIPOPROTEIN E (APOE)</b>	
<b>Fleming APOE Consortium: APOE Genotype-Specific Effects of Human Young Plasma on Cerebrovasculature and Alzheimer's Disease Pathology</b> Guojun Bu, Ph.D., The Hong Kong University of Science and Technology	\$287,500
<b>Fleming APOE Consortium: APOE4 Accelerates CD8 Exhaustion via Glucocorticoid Signaling in Alzheimer's Female Carriers</b> Oleg Butovsky, Ph.D., Brigham and Women's Hospital; Harvard Medical School Vijay K. Kuchroo, D.V.M., Ph.D., Brigham and Women's Hospital; Harvard Medical School	\$575,000
<b>Fleming APOE Consortium: Cell Autonomous Roles of Protective APOE Variants in Microglia in Response to Amyloid Pathology</b> Michael Haney, Ph.D., University of Pennsylvania	\$285,952
<b>Fleming APOE Consortium: Investigating Potential Cell Autonomous Neuroprotection of APOE Protective Variants</b> David M. Holtzman, M.D., Washington University School of Medicine in St. Louis	\$345,000
<b>Fleming APOE Consortium: Effect of Cholesteryl Ester Transfer Protein Activity on Amyloid and Cerebrovascular Pathologies in Animal Models of Alzheimer's Disease</b> Cheryl Wellington, Ph.D., University of British Columbia, Canada	\$287,500
<b>Investigating Lysosomal Mechanisms of Risk and Resilience in Alzheimer's Disease</b> Joel Blanchard, Ph.D., Icahn School of Medicine at Mount Sinai	\$201,250
<b>APOE in Choroid Plexus Function and Related Alzheimer's Disease Pathogenesis</b> Guojun Bu, Ph.D., The Hong Kong University of Science and Technology	\$230,000
<b>Circuit Dynamics in APOE4 Mice</b> Ksenia Kastanenko, Ph.D., Massachusetts General Hospital; Harvard Medical School	\$201,227
<b>Neuroproteasomes Mechanistically Connect APOE Isoforms to Endogenous Tau Aggregation</b> Kapil V. Ramachandran, Ph.D., Columbia University	\$201,279

## 2024 FUNDED RESEARCH (CONTINUED)

Project/Researcher	Distribution Amount
<b>STUDIES OF THE IMMUNE RESPONSE IN ALZHEIMER'S DISEASE</b>	
<b>Neuroimmune Consortium: Astrocyte Inflammatory Contributions to Alzheimer's Disease</b> Shane A. Liddelow, Ph.D., New York University	<b>\$287,500</b>
<b>Neuroimmune Consortium: Impact of AD Polygenic Risk Score on Microglial Response to Peripheral Inflammation</b> Martine Therrien, Ph.D., University of California, Davis	<b>\$285,851</b>
<b>2024 Jeffrey L. Morby Prize for Exceptional Research</b> David M. Holtzman, M.D., Washington University School of Medicine in St. Louis	<b>\$201,250</b>
<b>The Role of Astrocyte-Secreted Insulin-Like Growth Factor Binding Protein 2 (IGFBP2) in the Progression of Alzheimer's Disease</b> Nicola Allen, Ph.D., Salk Institute for Biological Studies	<b>\$201,250</b>
<b>Contributions of IL34 Signaling to Microglial Function and Alzheimer's Pathology in Mice</b> Staci Bilbo, Ph.D., Duke University School of Medicine	<b>\$192,314</b>
<b>Defining a Role for the MS4A Genes in Alzheimer's Disease</b> Sandeep Robert Datta, M.D., Ph.D., Harvard Medical School	<b>\$201,250</b>
<b>VGF-Derived Peptide Therapy for Alzheimer's Disease: Studies of Mouse and Human TLQP-21 and its Receptor, C3aR1</b> Michelle E. Ehrlich, M.D., Icahn School of Medicine at Mount Sinai Stephen R. Salton, M.D., Ph.D., Icahn School of Medicine at Mount Sinai	<b>\$172,500</b>
<b>Tau and Amyloid Beta are Innate Immune Antimicrobial Peptides in the Brain</b> William Eimer, Ph.D., Massachusetts General Hospital; Harvard Medical School	<b>\$201,250</b>
<b>Targeting Reactive Astrocytes AMPK Signaling to Suppress Inflammation in Alzheimer's Disease</b> Gilbert Gallardo, Ph.D., Washington University School of Medicine in St. Louis	<b>\$201,250</b>
<b>Impact of DNA Damage-Mediated Stimulator of Interferon Genes (STING) Activation on Myelin Function in an Alzheimer's Disease Animal Model</b> Alban Gaultier, Ph.D., University of Virginia	<b>\$201,250</b>
<b>Multidimensional Profiling of TREM2-Mutated or APOE4-Mutated Microglia in Human Brain Organoids to Understand Dysregulated Microglia Neuronal Crosstalk in Alzheimer's Disease</b> Florent Ginhoux, Ph.D., Agency for Science, Technology and Research, Singapore	<b>\$201,250</b>
<b>Endogenous Human Antibodies Associated with Alzheimer's Disease</b> Charles Glabe, Ph.D., University of California, Irvine	<b>\$230,000</b>
<b>Investigating Alzheimer's Disease-Associated Membrane Biology in Microglia and Neurons</b> Anna Greka, M.D., Ph.D., Brigham and Women's Hospital; Harvard Medical School; Broad Institute Beth Stevens, Ph.D., Boston Children's Hospital; Harvard Medical School; Broad Institute	<b>\$230,000</b>
<b>Antiviral T-Cell Infiltration to the Meninges and Brain Influences Neurodegeneration in Alzheimer's Disease</b> Jasmin Herz, Ph.D., Washington University School of Medicine in St. Louis	<b>\$201,250</b>
<b>Role of CD8+ T Cell-Glial Interactions in Mediating Alzheimer's Disease Pathogenesis</b> Mehdi Jorfi, Ph.D., Massachusetts General Hospital; Harvard Medical School Joseph Park, Ph.D., Massachusetts General Hospital; Harvard Medical School Rudolph E. Tanzi, Ph.D., Massachusetts General Hospital; Harvard Medical School	<b>\$201,250</b>
<b>To Elucidate the Role of Memory T Cells as a Determinant of Age-Related Inflammation in Alzheimer's Disease</b> Susan Kaech, Ph.D., Salk Institute for Biological Studies	<b>\$201,250</b>

## 2024 FUNDED RESEARCH (CONTINUED)

Project/Researcher	Distribution Amount
<b>Contribution of Skull Bone Marrow-Derived Cells to Alzheimer's Disease</b> Jonathan Kipnis, Ph.D., Washington University School of Medicine in St. Louis	\$201,250
<b>Role of Checkpoint Molecules TIM-3 and LAG-3 in Microglial Function in Alzheimer's Disease</b> Vijay K. Kuchroo, D.V.M., Ph.D., Brigham and Women's Hospital; Harvard Medical School	\$201,250
<b>Do Classical Complement Activation and the Route of Administration of Anti-Amyloid Antibodies Contribute to Vascular Side Effects Known as Amyloid-Related Imaging Abnormalities?</b> Cynthia A. Lemere, Ph.D., Brigham and Women's Hospital; Harvard Medical School	\$228,779
<b>The Role of Interferon-Induced Transmembrane Protein 3 (IFITM3) and Gamma-Secretase in Microglia</b> Yueming Li, Ph.D., Memorial Sloan Kettering Cancer Center	\$230,000
<b>Elucidating the Role of CLEC7A in Tau-Mediated Neurodegenerative Disease</b> John R. Lukens, Ph.D., University of Virginia	\$201,250
<b>Meningeal Regulatory T Cells (Tregs) in Individuals With Versus Without Alzheimer's Disease</b> Diane Mathis, Ph.D., Harvard Medical School	\$201,250
<b>Investigating the Association Between Clonal Hematopoiesis and Alzheimer's Disease</b> Cameron McAlpine, Ph.D., Icahn School of Medicine at Mount Sinai	\$201,250
<b>Elucidating Mechanisms Driving the Compromised Balance Between Mitophagy and cGAS-STING-Initiated Inflammation Toward a Treatment for Alzheimer's Disease</b> Per Nilsson, Ph.D., Karolinska Institutet, Sweden Evandro F. Fang, Ph.D., University of Oslo, Akershus University Hospital, Norway	\$198,490
<b>Probing the Molecular Underpinnings of G Protein-Coupled Receptor ADGRG1 Mediated Protective Microglial Responses to Alzheimer's Disease</b> Xianhua Piao, M.D., Ph.D., University of California, San Francisco	\$201,250
<b>Extracellular ATP is a Key Factor in Promoting Alzheimer's Disease Neuroinflammation</b> Paola Pizzo, Ph.D., University of Padova, Italy Anna Lisa Giuliani, Ph.D., University of Ferrara, Italy	\$149,995
<b>Specificity of T-Cell Responses in Autosomal Dominant Alzheimer's Disease (ADAD)</b> Naresha Saligrama, Ph.D., Washington University School of Medicine in St. Louis	\$201,250
<b>Dissecting Microglial State Dynamics in Alzheimer's Disease</b> Li-Huei Tsai, Ph.D., Massachusetts Institute of Technology; Broad Institute	\$300,000
<b>T-Cell Modulation of Microglia to Treat Alzheimer's Disease</b> Howard L. Weiner, M.D., Brigham and Women's Hospital; Harvard Medical School	\$201,234
<b>Decipher the Astrocyte Cell-Surface Proteome in Alzheimer's Disease</b> Hui Zheng, Ph.D., Baylor College of Medicine Junmin Peng, Ph.D., St. Jude Children's Research Hospital	\$230,000
STUDIES OF ALTERNATIVE NEURODEGENERATIVE PATHWAYS	
<b>Brain Exit and Entry Consortium: Human Three-Dimensional Neuro-Vascular Interaction and Meningeal Lymphatics Models with Application to Alzheimer's Disease</b> Se Hoon Choi, Ph.D., Massachusetts General Hospital; Harvard Medical School	\$287,500
<b>Brain Entry and Exit Consortium: How Does Vascular Fatty Acid Metabolism Regulate the Pathophysiology of Alzheimer's Disease?</b> Richard Daneman, Ph.D., University of California, San Diego	\$287,500

## 2024 FUNDED RESEARCH (CONTINUED)

Project/Researcher	Distribution Amount
<b>Brain Entry and Exit Consortium: Meningeal Mast Cell Control of Cerebrospinal Fluid Dynamics in Homeostasis and Alzheimer's Disease</b> Jonathan Kipnis, Ph.D., Washington University School of Medicine in St. Louis	\$345,000
<b>Brain Entry and Exit Consortium: Neuroinflammation at the Choroid Plexus in Alzheimer's Disease</b> Maria K. Lehtinen, Ph.D., Boston Children's Hospital; Harvard Medical School	\$86,250
<b>Brain Entry and Exit Consortium: Does Subarachnoid Lymphatic-Like Membrane (SLYM) Failure Compromise Glymphatic Clearance in Alzheimer's Disease?</b> Maiken Nedergaard, M.D., D.M.Sc., University of Rochester; University of Copenhagen, Denmark	\$287,500
<b>Brain Entry and Exit Consortium: High-Resolution Magnetic Resonance Imaging of the Brain Borders</b> Daniel S. Reich, M.D., Ph.D., National Institute of Neurological Disorders and Stroke, National Institutes of Health	\$287,500
<b>Microbiome Consortium: Harnessing Diet-Microbe Interactions to Prevent Alzheimer's Disease Pathogenesis</b> Laura M. Cox, Ph.D., Brigham and Women's Hospital; Harvard Medical School	\$275,500
<b>Microbiome Consortium: The Role of Gut Microbial Metabolism in Tau-Mediated Neurodegeneration</b> David M. Holtzman, M.D., Washington University School of Medicine in St. Louis	\$287,500
<b>Microbiome Consortium: Temporal Relationships Between Gut Dysbiosis, Brain Amyloid Beta Metabolism and Microglia Cell Activation Following Antibiotic Treatment</b> Sangram S. Sisodia, Ph.D., The University of Chicago	\$250,000
<b>Microbiome Consortium: Microbial Profiling of Human Brain and Gut Microbiomes in Alzheimer's Disease</b> Rudolph E. Tanzi, Ph.D., Massachusetts General Hospital; Harvard Medical School Nanda Kumar Navalpur Shanmugam, Ph.D., Massachusetts General Hospital; Harvard Medical School	\$287,500
<b>Microbiome Consortium: Interaction of the Microbiome with Astrocytes and Amyloid Pathology</b> Robert Vassar, Ph.D., Northwestern University Feinberg School of Medicine	\$345,000
<b>Identifying Age-Related Proteomic Changes That Predict Future Onset of Amyloid Beta Aggregation in Late-Onset Alzheimer's Disease</b> Randall J. Bateman, M.D., Washington University School of Medicine in St. Louis	\$201,250
<b>Neuroprotective Effects of the Exercise Hormone Irisin in Alzheimer's Disease</b> Se Hoon Choi, Ph.D., Massachusetts General Hospital; Harvard Medical School Christiane Wrann, D.V.M., Ph.D., Massachusetts General Hospital; Harvard Medical School	\$345,000
<b>Restore Meningeal Lymphatic Drainage to Alleviate White Matter Damage and Cerebral Amyloid Angiopathy in a Model of Alzheimer's Disease</b> Sandro Da Mesquita, Ph.D., Mayo Clinic, Jacksonville	\$201,250
<b>Decoding Microbial Products Modulating Alzheimer's Disease—Toward Precision Postbiotics Treatment</b> Eran Elinav, M.D., Ph.D., Weizmann Institute of Science, Israel; DKFZ, Germany	\$201,250
<b>Turning Up Mitophagy to Blunt Alzheimer's Tau Pathologies</b> Evandro F. Fang, Ph.D., University of Oslo, Akershus University Hospital, Norway	\$200,675
<b>The Role of Calcium Homeostasis in Axonal Spheroid Formation in Alzheimer's Disease</b> Jaime Grutzendler, M.D., Yale School of Medicine	\$199,995
<b>Novel Artificial Intelligence (AI) Decodes Aging Neurons</b> Andrew J. Holbrook, Ph.D., University of California, Los Angeles Theodore Zwang, Ph.D., Massachusetts General Hospital; Harvard Medical School	\$201,250



## 2024 FUNDED RESEARCH (CONTINUED)

Project/Researcher	Distribution Amount
<b>Characterizing Gut Bacteriome-Mycobiome Synergy in Correlation to Amylin-Amyloid Beta Antimicrobial Synergy in Alzheimer's Disease (AD) in AD Mouse Models</b> Deepak Kumar Vijaya Kumar, Ph.D., Massachusetts General Hospital; Harvard Medical School	\$201,250
<b>Dysregulation of Signaling on Post Synaptic Density Scaffolds in Alzheimer's Disease</b> Alexandra C. Newton, Ph.D., University of California, San Diego	\$201,250
<b>Evaluating the Contribution of TDP-43 Dysfunction and Cryptic Mis-Splicing to Alzheimer's Disease Pathogenesis</b> Leonard Petrucelli, Ph.D., Mayo Clinic, Jacksonville	\$201,250
<b>Protection Against Alzheimer's Disease with Longevity-Promoting Intervention 17a-Estradiol</b> Christian Pike, Ph.D., University of Southern California Bérénice A. Benayoun, Ph.D., University of Southern California	\$227,410
<b>2-Deoxyglucose and Its Analogs as Novel Therapeutics to Build Resilience to Alzheimer's Disease</b> Rajiv R. Ratan, M.D., Ph.D., Weill Cornell Medicine; Burke Neurological Institute Theodore J. Lampidis, Ph.D., University of Miami	\$197,596
<b>Pre-Clinical Testing of CDK4/6 Inhibitors as a Therapeutic Strategy in Alzheimer's Disease Using Alzheimer's Disease Tauopathy Mouse Model</b> Peter Sicinski, M.D., Ph.D., Dana-Farber Cancer Institute; Harvard Medical School	\$201,250
<b>Identifying the Sex-Specific Roles of the Gut Microbiome-Brain Axis in a Mouse Model of Amyloid Beta Amyloidosis</b> Sangram S. Sisodia, Ph.D., The University of Chicago	\$216,287
<b>Role of Psychosocial Stress in Alzheimer's Disease</b> Filip Swirski, Ph.D., Icahn School of Medicine at Mount Sinai	\$201,250
<b>Role of the Circulating Exerkine GPLD1 in Ameliorating Alzheimer's Disease Pathology</b> Saul Villeda, Ph.D., University of California, San Francisco	\$201,250
<b>Understanding How Human Brain Vascular Cells Mediate Genetic Risk for Alzheimer's Disease</b> Andrew Yang, Ph.D., University of California, San Francisco	\$201,250
<b>DRUG DISCOVERY</b>	
<b>DRUG SCREENING AND LEAD DRUG EVALUATION PROJECTS</b>	
<b>Development of Small Molecule Inhibitors of Cholesterol 25-hydroxylase</b> Anil Cashikar, Ph.D., Washington University School of Medicine in St. Louis Bahaa Elgendy, Ph.D., Washington University School of Medicine in St. Louis	\$201,250
<b>Validation and Characterization of Compounds Modulating Neuroinflammation and Amyloid Beta Uptake in Microglial Cells</b> Ana Griciuc, Ph.D., Massachusetts General Hospital; Harvard Medical School Luisa Quinti, Ph.D., Massachusetts General Hospital; Harvard Medical School	\$201,250
<b>Exploring Novel Drug Candidates for Alzheimer's Disease Through Integrative Pathway Analysis and Validation in 3D Cellular Models</b> Doo Yeon Kim, Ph.D., Massachusetts General Hospital; Harvard Medical School Luisa Quinti, Ph.D., Massachusetts General Hospital; Harvard Medical School	\$201,250
<b>Identification and Development of CD33 Inhibitors and Pre-RNA Splicing Modulators</b> Subhash Sinha, Ph.D., Weill Cornell Medicine	\$201,250



## 2024 FUNDED RESEARCH (CONTINUED)

Project/Researcher	Distribution Amount
<b>PRECLINICAL AND CLINICAL DRUG DEVELOPMENT</b>	
<b>PRECLINICAL DRUG DEVELOPMENT</b>	
<b>Combined Hormone Therapy as a Novel Treatment for Alzheimer's Disease in the Face of a Metabolic Challenge: Influence of Sex and Genotype</b> Liisa Galea, Ph.D., University of British Columbia, Canada; Centre for Addiction and Mental Health, Canada Annie Ciernia, Ph.D., University of British Columbia, Canada	<b>\$201,250</b>
<b>Sex-Biased Toll-Like Receptor 7 (TLR7) Signaling in Demyelination and Its Inhibition by Small Molecules</b> Li Gan, Ph.D., Weill Cornell Medicine Subhash Sinha, Ph.D., Weill Cornell Medicine	<b>\$402,500</b>
<b>Targeting Neuroinflammation with Nasal Administration of Anti-CD3 Monoclonal Antibody to Treat Alzheimer's Disease</b> Rafael M. Rezende, Ph.D., Brigham and Women's Hospital; Harvard Medical School	<b>\$195,250</b>
<b>Non-Invasive Delivery of IL-2 to the CNS for Local Expansion of Regulatory T Cells and Prevention of Neurodegeneration in Tauopathy</b> Peter M. Tessier, Ph.D., University of Michigan David M. Holtzman, M.D., Washington University School of Medicine in St. Louis	<b>\$201,250</b>
<b>Preclinical Analysis of Synaptogyrin-3 Oligonucleotides to Target Tauopathy</b> Patrik Verstreken, Ph.D., VIB-KU Leuven, Belgium	<b>\$201,250</b>
<b>Characterization of CNS-Penetrant HDAC11 Selective Inhibitors in Alzheimer's Disease Models</b> Can (Martin) Zhang, M.D., Ph.D., Massachusetts General Hospital; Harvard Medical School Changning Wang, Ph.D., Massachusetts General Hospital; Harvard Medical School	<b>\$201,250</b>
<b>CLINICAL TRIALS</b>	
<b>A Proposal to Evaluate the Effect of Bacillus Calmette-Guérin Vaccination on Alzheimer's Disease Development</b> Tamir Ben-Hur, M.D., Ph.D., Hadassah University Medical Center, Israel Herve Bercovier, D.V.M., M.Sc., Hebrew University of Jerusalem, Israel	<b>\$121,900</b>
<b>OTHER</b>	
<b>SCIENTIFIC MEETINGS AND SUPPORT</b>	
<b>Scientific Meeting Support</b>	<b>\$281,717</b>