ALZHEIMER'S DISEASE RESEARCH SUMMIT 2015:
PATH TO TREATMENT AND PREVENTION

Participant Biographies

RHODA AU, PHD

Dr. Au is Professor of Neurology at Boston University School of Medicine and Senior Investigator/Director of Neuropsychology at the Framingham Heart Study. Since1990, she has helped oversee daily operations of their multi-generation project on imaging, genetic, biomarker and cognitive precursors of neurological disorders. Her primary research focus is cognitive aging, particularly for preclinical neuropsychological indicators of risk for disease. She also has an MBA and is developing a translational innovation program with Chinese institutions focused on a joint Aging Well Initiative that includes development of a Chinese national cohort study and new technologies to advance ground-breaking research.

KELLY R. BALES, PHD

Dr. Bales obtained her PhD from Indiana University and currently leads a group of scientists focused on mechanisms and targets implicated in the pathophysiology of neurodegenerative diseases. She has more than 20 years experience in the pharmaceutical industry and has led several projects from mechanism identification to "first in human studies." Additionally, she and her laboratory have made seminal contributions investigating the interaction between apolipoprotein E and β-amyloid. Dr. Bales is recognized internationally as an expert in the area of pre-clinical animal models of Alzheimer's disease, has co-authored more than 80 peer-reviewed publications, numerous review articles and invited book chapters. She is also co-inventor on numerous patents related to novel therapies for AD.

LISA L. BARNES, PHD

Dr. Barnes is the Director of the Rush Center of Excellence on Disparities in HIV and Aging in the Rush Alzheimer's Disease Center, and a professor in the departments of Neurological Sciences and Behavioral Sciences at Rush University Medical Center. She earned a PhD in biopsychology from the University of Michigan and a postdoctoral fellowship in cognitive neuroscience from the University of California, Davis. She is the Principal Investigator for a number of community-based cohort studies and has been involved with several investigator-initiated NIH funded studies that focus on race, health disparities and aging.

DAVID A. BENNETT, MD

Dr. Bennett is Director of the Rush Alzheimer's Disease Center and the Robert C. Borwell Professor of Neurological Sciences at Rush University Medical Center in Chicago. The Rush Alzheimer's Disease Center is a free-standing multidisciplinary research and clinical center that studies a wide range of common chronic conditions of aging, including Alzheimer's disease, stroke, Parkinson's disease, sleep and circadian biology, HIV, immune function, gait disorders, neuro- and behavior economics, decision making and well-being. He is principal investigator of several studies funded by the National Institute on Aging including the Religious Orders Study and the Rush Memory and Aging Project. His studies incorporate imaging, omics, medical devices, biospecimens including post-mortem brain, spinal cord, nerve and muscle into community-based cohort studies of aging and disease. He is also principal investigator of two grants funded by NIH through the Accelerating Medicines Partnership to identify novel therapeutics for Alzheimer's disease. He serves on numerous international advisory and editorial boards. He has more than 500 peer-reviewed manuscript publications.

PHILIP E. BOURNE, PHD

Dr. Bourne is the Associate Director for Data Science (ADDS) at the National Institutes of Health. Formerly, he was Associate Vice Chancellor for Innovation and Industry Alliances, a Professor in the Department of Pharmacology and Skaggs School of Pharmacy and Pharmaceutical Sciences at the University of California San Diego, Associate Director of the RCSB Protein Data Bank and an Adjunct Professor at the Sanford Burnham Institute. He serves the national biomedical community through contributing ways to maximize the value (and hence accessibility) of scientific data. His research focuses on relevant biological and educational outcomes derived from computation and scholarly communication. He has published over 300 papers and 5 books, one of which sold over 150,000 copies. Dr. Bourne is a Past President of the International Society for Computational Biology, an elected fellow of the American Association for the Advancement of Science (AAAS), the International Society for Computational Biology (ISCB) and the American Medical Informatics Association (AMIA).

MONIQUE M.B. BRETELER, MD, PHD

Dr. Breteler is the Director of Population Health Sciences at the German Center for Neurodegenerative Diseases (DZNE) in Bonn. Prof. Breteler's research focuses on the etiology and preclinical detection of neurodegenerative and cerebrovascular diseases. She was one of the first epidemiologists to challenge the strict clinical distinction between Alzheimer's disease and vascular dementia, and to incorporate brain imaging into population based studies. In Bonn, she is currently establishing the Rhineland Study, a prospective cohort study of 30,000 individuals aiming to identify causes and preclinical multimodal biomarker profiles of neurodegenerative and neuropsychiatric diseases.

ROBERTA DIAZ BRINTON, PHD

Dr. Brinton is the Vanderveen Chair in Therapeutic Discovery and Development at the University of Southern California, where she is Professor of Pharmacology and Pharmaceutical Sciences, Biomedical Engineering, and Neurology. She received her PhD from the University of Arizona and conducted postdoctoral research at Rockefeller University. She leads NIA sponsored basic, translational and clinical research focused on elucidating mechanisms underlying late onset Alzheimer's disease, with emphasis on the aging female brain. Her discovery and translational research has led to development of systems biology therapeutics currently in clinical trials that target the bioenergetic and regenerative systems of the female and male brain to prevent, delay and treat Alzheimer's.

NEIL S. BUCKHOLTZ, PHD

Dr. Buckholtz is the Director of the Division of Neuroscience (DN) at the National Institute on Aging, National Institutes of Health (NIH), Bethesda, Maryland. The DN supports extramural research to understand the neural and behavioral processes associated with the aging brain. A major focus of DN is the support of basic, clinical and epidemiological studies of Alzheimer's disease. Dr. Buckholtz holds a doctorate in physiological psychology from the University of Wisconsin, Madison and was a faculty member at the Medical University of South Carolina, Department of Psychiatry, from 1970-1983, before coming to NIH.

SAMANTHA BUDD HAEBERLEIN, PHD

Dr. Budd recently joined Biogen Idec in the role of Vice President for Pain, Orphan Neurology, Ophthalmology, and early Alzheimer's in the Clinical Development organization. Previously, she held senior R&D roles at AstraZeneca in both Sweden and the US for 14 years. She has led science teams and discovery, diagnostic and clinical development projects out to Ph3. She has seen more than 20 candidate drugs through preclinical testing, and many of these into clinical testing. Passionate about using biomarkers to make decisions in early clinical development, in 2010 Dr. Budd built and headed the first Translational Science function at AstraZeneca. She has a BSc and PhD in Biochemistry from the University of Dundee in Scotland and has conducted research at the Neurosurgery Department, Brigham & Women's Hospital, Harvard Medical School in Boston, and The Center for Neuroscience Research at The Burnham Institute in San Diego.

CHRISTOPHER M. CALLAHAN, MD

Dr. Callahan is the Cornelius and Yvonne Pettinga Professor in Aging Research, a scientist in the Regenstrief Institute, Inc., and Director of the Indiana University Center for Aging Research. Dr. Callahan's research activities and clinical practice focus on older adults with dementia and depression as well as the impact of multi-morbidity on the aging brain. Over the past 25 years, this work has been supported by the NIA, the NIMH, the AHRQ, the John A. Hartford Foundation, and the Indianapolis community.

MARIA C. CARRILLO, PHD

Dr. Carrillo is a Vice President, Medical and Scientific Affairs, at the Alzheimer's Association, where she has a wide range of responsibilities, including oversight of the Association's granting process and communication of scientific findings within and outside of the organization. Dr. Carrillo is responsible for overseeing the International Research Grant Program, the mechanism through which the Association funds research. In addition to ensuring the smooth review of applications and distribution of awards to successful applicants, she is responsible for sharing results and ongoing investigations with a wide range of constituents. Dr. Carrillo also manages several Association initiatives. One of these is the Alzheimer's Association Research Roundtable, which provides a forum for pharmaceutical companies to discuss trends in Alzheimer's research and therapeutic targets. Other Association programs managed by Dr. Carrillo include the World-Wide Alzheimer's Disease Neuroimaging Initiative (WW-ADNI), which is a multi-country research effort aimed at finding biomarkers for early detection of Alzheimer's and the Working Group on Technology (WGT), which aims to promote the use of technologies available today for the support of individuals affected by Alzheimer's disease to retain their independence as long as possible. Dr. Carrillo is a member of the Genworth Financial Medical Advisory Board and an Advisory Committee member for *The Shriver Report.*

DANIEL COHEN, MD, PHD

Dr. Cohen is a leading expert and pioneer in the field of genomics, pharmacogenomics and combination medicine. He is currently the CEO and Chairman of Pharnext, a French biotech company applying network pharmacology approaches to develop combinations of repositioned drugs for the treatment of severe unmet neurological needs. Pharnext's clinical pipeline focuses on Charcot-Marie-Tooth, Alzheimer's and Parkinson's disease. Dr. Cohen is a professor of medical genetics at the University of Paris and the co-founder of the Center for the Study of Human Polymorphisms (CEHP), an international genetics research center located in Paris, Genethon and Millennium Pharmaceuticals. He is a recipient of numerous awards including the Legion of Honor and the American Academy of Achievement's Golden Plate Award.

MERYL COMER

Meryl Comer is president and CEO of the Geoffrey Beene Foundation Alzheimer's Initiative, which promotes early diagnosis, global innovation challenges, mhealth technology solutions and national public service campaigns like Geoffrey Beene's Rock Stars of Science™. A co-founder of WomenAgainstAlzheimer's, Comer is the recipient of the 2014 Wertheim Global Medical Leadership Award, 2007 Proxmire Award and 2005 Shriver Profiles in Dignity Award. In 2012, she led the formation of the 21st Century BrainTrust® (21CBT), a non-profit partnership to advance mobile health technologies and brain health. Comer has been the subject of primetime news stories by ABC's Nightline and the PBS NewsHour with Jim Lehrer. One hundred percent of proceeds from her new New York Times Bestseller book, Slow Dancing with a Stranger, will support Alzheimer's research.
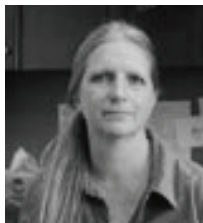
JENNIFER COUCH, PHD

Dr. Couch is the Chief of the Structural Biology and Molecular Applications Branch, Division of Cancer Biology, NCI, NIH. Dr. Couch's branch supports research and development of enabling technologies, models and methodologies including structural biology and biophysical characterization; bioinformatics, computational biology, mathematical modeling, data science, systems biology, citizen science and crowdsourcing methods; and bioengineering, biomimetics and biotechnology. Dr. Couch co-leads the NIH Citizen Science Working Group. She leads efforts in data analysis and software development for the NIH Big Data to Knowledge Program and the NCI Integrative Cancer Biology Program, and she participates in trans-NIH and trans-agency efforts in a variety of areas including single cell, inter-disciplinary research, systems pharmacology, and games.

SUZANNE CRAFT, PHD

Dr. Craft is Professor of Medicine and directs the Healthy Brain Aging and Alzheimer's Prevention Program at Wake Forest University. She earned a PhD from the University of Texas and completed fellowships in neuropsychology and behavioral neuroscience at Boston University and Harvard Medical School. Her research focuses on the role of metabolic dysregulation in AD. Dr. Craft currently leads a multi-center study testing intranasal insulin as a therapy for Alzheimer's dementia that was funded as part of the National Plan to Address Alzheimer's Disease. She is a recipient of an NIH MERIT Award and an Alzheimer's Association Zenith Award, and is a member of the Alzheimer's Association Medical and Scientific Advisory Council.

PHILIP DE JAGER, MD, PHD

Dr. De Jager is an Associate Professor of Neurology at Harvard Medical School and Director of the Program in Translational NeuroPsychiatric Genomics within the Ann Romney Center for Neurologic Diseases in the Department of Neurology at Brigham and Women's Hospital. He is the first incumbent of the Steven R. and Kathleen P. Haley Distinguished Chair for the Neurosciences. He is a practicing clinical neuroimmunologist. The goal of Dr. De Jager's work as a clinician-scientist is to apply modern methods of neuroimmunology, statistical genetics and computational biology to first delineate and then intervene in the sequence of events leading from health to neurodegenerative diseases.

JOEL DUDLEY, PHD

Dr. Dudley is the Director of Biomedical Informatics at Mount Sinai School of Medicine and an Assistant Professor of Genetics and Genomic Sciences. Prior to Mount Sinai, he held positions as Co-founder and Director of Informatics at NuMedii, Inc. and Consulting Professor of Systems Medicine in the Department of Pediatrics at Stanford University School of Medicine, where he participated in leading research to incorporate genome sequencing into clinical practice. His current research is focused towards solving key problems in genomics and precision medicine through the development and application of translational and biomedical informatics methodologies. His lab publishes in the areas of bioinformatics, genomic medicine, personal and clinical genomics, as well as drug and biomarker discovery.

STEPHEN H. FRIEND, MD, PHD

Dr. Friend is President of Sage Bionetworks, a non-profit organization that provides tools to empower citizens to contribute both their data and expertise as they see fit. He and his team developed an open-source technology platform, called Synapse, for data-intensive analysis, sharing and reuse, enabling researchers to perform cutting edge computational biology and research. He is engaging the community to crowd-source solutions to complex biomedical questions through targeted DREAM challenges. He previously led Merck & Co's Basic Cancer Research efforts. He co-founded and co-led the FHCRC's "Seattle Project" and later co-founded Rosetta Inpharmatics.

HUGO GEERTS, PHD

Dr. Geerts is currently on the faculty of the University of Pennsylvania and CSO of In Silico Biosciences, a company that provides mechanistic disease modeling services in CNS drug discovery and development. After receiving a physics degree, a biophysics PhD and a bachelor's degree in medicine, he worked with Dr. Paul Janssen at the Janssen Research Foundation (part of J&J) heading the AD tau pathology research and supported galantamine's clinical development. He is passionate about better translational modeling and simulation along the R&D process to reduce the failure rate of clinical trials and to get better drugs faster to the right patients.

DENNIS GILLINGS, CBE, PHD

Dr. Gillings was appointed as the World Dementia Envoy in February 2014. As the founder and executive chairman of Quintiles, the world's largest provider of biopharmaceutical development and commercial outsourcing services, Dr. Gillings has more than 30 years' experience. Prior to this, he was Professor of Biostatistics at the University of North Carolina. He also has personal experience of dementia, as his mother lived with the condition for 18 years until her death in 2013. He is passionate about harnessing innovation in cure and care, trying to prevent the condition and improving the lives of those living with dementia. Dr. Gillings, who was born and educated in the UK, was awarded a CBE in 2004 for services to the pharmaceutical industry.

LAURA N. GITLIN, PHD

Dr. Gitlin, an applied research sociologist, is professor in the Schools of Nursing and Medicine at Johns Hopkins University, and director of the Center for Innovative Care in Aging. She is nationally and internationally recognized for her research on developing, testing and implementing novel nonpharmacologic care approaches to enhance the well-being of older adults and families. She has received continuous funding from federal agencies and private foundations for 28+ years. Dr. Gitlin has received numerous awards, most recently the 2014 M. Powell Lawton Award for significant contributions to gerontology and innovations in services and treatments.

ALISON GOATE, DPHIL

Dr. Goate is Professor of Neurogenetics in the Mount Sinai Department of Neuroscience and Director of the Ronald M. Loeb Center for Alzheimer's disease at the Icahn School of Medicine at Mount Sinai. Dr. Goate has worked on the genetics of Alzheimer's disease for the past 27 years. She is the recipient of numerous awards for her research, including the Potamkin Prize for Alzheimer's disease research, the Alzheimer's Association Zenith Award, and the Senior Investigator Award from the Metropolitan Life Foundation. In 2012 she was elected a fellow of the American Association for the Advancement of Science.

LAWRENCE S. B. GOLDSTEIN, PHD

Dr. Goldstein is Distinguished Professor in the Department of Cellular and Molecular Medicine and the Department of Neurosciences at the University of California, San Diego (UCSD), School of Medicine, as well as Director of the UC San Diego Stem Cell Program, Scientific Director of the Sanford Consortium for Regenerative Medicine, and Director of the Sanford Stem Cell Clinical Center. He has served as Director of the UCSD Stem Cell Program since 2006, Scientific Director of the Sanford Consortium for Regenerative Medicine since 2012, and Director of the Sanford Stem Cell Clinical Center beginning in 2013. His awards include a Senior Scholar Award from the Ellison Medical Foundation, an American Cancer Society Faculty Research Award, the Loeb Chair in Natural Sciences when he was at Harvard University, election to the American Academy of Arts and Sciences, and the 2009 Public Service Award from the American Society for Cell Biology.

BARRY D. GREENBERG, PHD

Dr. Greenberg has been involved in AD research and drug discovery since 1985. He has held positions internationally in the US, Sweden and Canada within the bio-pharmaceutical industry and was the leader of a project at AstraZeneca through lead optimization, involving up to 50 individuals from eight departments. Before joining University Health Network as Director, Neuroscience Drug Discovery and Development, he was Senior Director of Pharmacology at Neurochem, responsible for the preclinical biology research program. He is also Strategy Director for the Toronto Dementia Research Alliance, a consortium involving academic research and five memory clinics at hospitals affiliated with the University of Toronto to create a citywide dementia research center.

DAVID HOLTZMAN, MD

Dr. Holtzman is Professor and Chair of Neurology at Washington University in St. Louis. His translational work has led to significant new insights into amyloid-β (Ab), apoE, and tau metabolism and Alzheimer's disease. The work has shown how apoE influences Ab metabolism and deposition, the development of 2 innovative in vivo techniques that allow one to determine if AD drugs are hitting their target, and how sleep may influence AD bi-directionally. His lab's work led to the development of the anti-Ab antibody solanezumab, now in late stage human AD clinical trials. Newer work on anti-tau antibodies is also being assessed.

GARETH HOWELL, PHD

Dr. Howell's lab applies genetics and genomics approaches to identify fundamental processes involved in the susceptibility, initiation and early propagation of age-related neurodegenerative diseases, focusing on Alzheimer's disease, non-Alzheimer's dementia and glaucoma with an emphasis on the beneficial and damaging roles of glial and neuroinflammatory processes in Alzheimer's disease. A major aim of the lab, in collaboration with other investigators at The Jackson Laboratory, is to combine knowledge from human genetics/genomics studies with the strengths of mouse genetics/genomics to develop new and improved mouse models for Alzheimer's disease and make them readily available to the scientific community. In his previous work, Dr. Howell applied novel genomics and bioinformatics strategies to identify new molecular stages of glaucoma that preceded morphological changes.

BRADLEY T. HYMAN, MD, PHD

Dr. Hyman is a neurologist and a physician scientist with a clinical practice and laboratory effort devoted to neurodegenerative diseases including Alzheimer's disease. He is the Jack Penney Professor of Neurology at Harvard Medical School and Massachusetts General Hospital, and directs the Alzheimer Disease Research Center. His laboratory focuses on translational studies, developing models of human neurodegenerative disease and comparing them to human neuropathology, often applying advanced imaging techniques including in vivo multiphoton microscopy. He has won the Metropolitan Life Award and the Potamkin Award, is a member of the IOM, and serves on NIA Council.

THOMAS R. INSEL, MD

Dr. Insel is Director of the National Institute of Mental Health (NIMH), the component of the National Institutes of Health committed to research on mental disorders. Dr. Insel has served as Director of this agency since 2002. During his tenure, Dr. Insel has focused on the genetics of neurobiology of mental disorders as well as transforming approaches to diagnosis and treatment. Prior to serving as NIMH Director, Dr. Insel was Professor of Psychiatry at Emory University where he was founding director of the Center for Behavioral Neuroscience and director of the Yerkes Regional Primate Center in Atlanta. Dr. Insel's research has examined the neural basis of complex social behaviors, including maternal care and attachment. A member of the Institute of Medicine, he has received numerous national and international awards served in several leadership roles at NIH.

RIMA KADDURAH-DAOUK, PHD

Dr. Kaddurah-Daouk has been a seminal force in the development and evolution of the metabolomics field. At Duke she leads a comprehensive program for mapping metabolic defects across the spectrum of neuropsychiatric diseases. In partnership with ADNI genetic and biomarker cores and the metabolomics community, she is building a comprehensive metabolomics database for the ADNI consortium mapping pathway and network changes across the trajectory of disease and connecting central and peripheral metabolome changes. In addition metabolomics data on ADNI subjects is being used to inform genomics data about functions of genes and genetic variants implicated in disease mechanism. The Pharmacometabolomics Research Network that Dr. Kaddurah-Daouk leads focuses on applying quantitative systems pharmacology approaches for defining mechanism of variation of response to drugs used for treatment of cardiovascular and neuropsychiatric diseases and for highlighting underlying disease heterogeneity.

JOHN KAUWE, PHD

Dr. Kauwe is an Associate Professor of Biology and head of the Bioinformatics program at Brigham Young University. He specializes in processing and analysis of genetic data and has published over 80 papers in this field. His research leverages novel phenotypes and approaches to characterize the genetic architecture of Alzheimer's disease. Dr. Kauwe is the recipient of several awards, including the Poletsky Award, the New Vision Award, and the McMillian Award, for his work in Alzheimer's disease. Dr. Kauwe currently serves as the Scientific Lead for the SAGE AD Challenge and as a Senior Associate Editor for *Alzheimer's and Dementia.*

JEFFREY KAYE, MD

Dr. Kaye is the Layton Professor of Neurology and Biomedical Engineering at Oregon Health and Science University. He is the Director of the NIA - Layton Aging and Alzheimer's Disease Center and Director of the Oregon Center for Aging and Technology (ORCATECH), an NIA Roybal Center. He also directs the Geriatric Neurology program at the Portland Veteran's Affairs Medical Center. His research has focused over the past two decades on the question of why some individuals remain protected from frailty and dependency at advanced ages while others succumb at much earlier times. This work has relied on a number of approaches ranging across the fields of genetics, neuroimaging, physiology and continuous activity monitoring. He leads several longitudinal studies on aging including the ongoing Oregon Brain Aging Study, the Intelligent Systems for Detection of Aging Changes (ISAAC), and the Ambient Independence Measures for Guiding Care Transitions studies using ubiquitous, unobtrusive technologies for assessment of elders in their homes to detect changes signaling imminent functional decline.

ABBY C. KING, PHD

Dr. King is Professor of Health Research & Policy and Medicine at the Stanford School of Medicine. Recipient of the Outstanding Scientific Contributions in Health Psychology Award from the American Psychological Association, her research focuses on the development, evaluation, and translation of public health interventions to reduce chronic disease. Her government taskforce memberships include the US DHHS Secretary's Scientific Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. An elected member of the Academy of Behavioral Medicine Research and Past President of the Society of Behavioral Medicine, she received AAMC honors for outstanding research targeting health inequities.

KENNETH LANGA, MD, PHD

Dr. Langa is a Professor in the Department of Internal Medicine and Institute for Social Research, a Research Scientist in the Veterans Affairs Center for Clinical Management Research, and an Associate Director of the Institute of Gerontology, all at the University of Michigan. He is also Associate Director of the Health and Retirement Study (HRS), a National Institute on Aging funded longitudinal study of 25,000 adults in the United States (http://hrsonline.isr.umich.edu). Dr. Langa received an MD and PhD in Public Policy at the University of Chicago as a Fellow in the Pew Program for Medicine, Arts, and the Social Sciences. He is a board-certified General Internist and an elected member of the American Society for Clinical Investigation (ASCI). Dr. Langa's research focuses on the epidemiology and costs of chronic disease in older adults, with an emphasis on Alzheimer's disease and other dementias. In 2007, Dr. Langa was a Visiting Professor at the Institute of Public Health at the University of Cambridge, and in 2015 he will be a Visiting Professor at the World Health Organization.

PETER T. LANSBURY, JR., PHD

Dr. Lansbury is Chief Scientific Officer of Lysosomal Therapeutics, Inc. He graduated from Princeton University and received his PhD from Harvard University. After a postdoctoral fellowship at the Rockefeller University, he joined the faculty of the Department of Chemistry at MIT. He moved to the Harvard Medical School in 1996 and was promoted to Professor of Neurology in 2004. He was the director of the Morris K. Udall NIH Parkinson's Disease Research Center of Excellence. He founded Link Medicine and served as its Chief Scientific Officer from 2005 until its sale in 2012.

LENORE J. LAUNER, PHD

Dr. Launer is a Senior Scientist and Chief of the Neuroepidemiology Section in the Intramural Research Program at NIA. She directs a suite of prospective, community-based cohorts, which provide a virtual life-course study of risk factors and early biomarkers for, and consequences of brain aging. Specific research interests include the role of microvascular disease, cerebral changes in physiologic functioning, and cardio-vascular risk factors as they are studied in observational cohorts and incorporated into prevention trials.

MAX LITTLE, PHD

Dr. Little began his career writing software, signal processing algorithms and music for video games, then moved on by way of a degree in mathematics to the University of Oxford. After postdoc positions in Oxford, he won a Wellcome Trust fellowship at MIT to follow up on his doctoral research work in behavioral and biomedical signal processing. He is currently an associate professor of mathematics at Aston University and a visiting professor at MIT's Media Lab.

SIMON LOVESTONE, PHD

Dr. Lovestone is Professor of Translational Neuroscience at Oxford University and also Lead for the NIHR Translational Research Collaboration in Dementia (a network of six Biomedical Research Units and Centres in England focused on dementia), deputy director of the Dementias Platform UK and co-cordinator of the European Medical Information Framework. He has research interests in the regulation of tau phosphorylation, dementia therapeutics and the search for genetic and other biomarkers of Alzheimer's disease. Underpinning all these studies is the use of informatics - clinical informatics, bioinformatics and the challenges of extracting value from very large variable datasets.

JENNIFER J. MANLY, PHD

Dr. Manly is an Associate Professor of Neuropsychology in Neurology at the G.H. Sergievsky Center and the Taub Institute for Research in Aging and Alzheimer's Disease at Columbia University. Her research on cognitive and genetic aspects of aging and Alzheimer's disease among African Americans and Hispanics has been funded by the National Institute on Aging and the Alzheimer's Association. She has authored over 100 peer-reviewed publications and 8 chapters. She serves on the US Department of Health and Human Services Advisory Council on Alzheimer's Research, Care and Services, and is a member of the Alzheimer's Association Medical and Scientific Research Board.

PAUL MARUFF, PHD

Dr. Maruff is a neuropsychologist. He is Chief Science Officer at Cogstate and developer of the Cogstate computerized test system. He is also Professor at the Florey Institute for Neuroscience and Mental Health at the University of Melbourne. He is chair of clinical panel of the Australian Imaging, Biomarkers and Lifestyle (AIBL) study. His research is concerned with how cognition is used to guide clinical decision-making in Alzheimer's disease.

TETSUYUKI MARUYAMA, PHD

Dr. Maruyama is currently Corporate Officer, General Manger and Head of the Pharmaceutical Research Division at Takeda Pharmaceutical Company, Ltd. Trained as a neuroscientist, Dr. Tetsuyuki held academic positions in the US and UK between 1989 and 2003, when he joined Merck Sharp and Dohme's Neuroscience Research Centre in the UK. From 2005 to 2010, he was the Head of GlaxoSmithKline's Centre for Research in Cognitive and Neurodegenerative Disorders in Singapore before moving to Takeda, where he is responsible for global drug discovery efforts across all of Takeda's therapeutic areas.

PIETRO MICHELUCCI, PHD

Dr. Michelucci directs the Human Computation Institute, a multidisciplinary innovation center that networks humans and machines in new ways to address wicked societal problems. He is Editor-in-Chief of the *Springer Handbook of Human Computation* (2013) and Founding Editor of the journal *Human Computation*. An Indiana University trained cognitive scientist, Dr. Michelucci has been advising federal research agencies since 2006. He continues to build and bridge communities through cross-agency initiatives, speaking events, and workshops. Most recently, he won a CRA grant to lead a three-day visioning activity at the Wilson Center, which produced a national roadmap for Human Computation research.

JONATHAN MILL, PHD

Dr. Mill is Professor of Epigenetics at the University of Exeter Medical School and also heads the Psychiatric Epigenetics group at the Institute of Psychiatry, King's College London. His group studies the role of epigenetic processes in complex disease, with a particular emphasis on neurodegenerative and neuropsychiatric disorders. Current areas of research include: epigenomic profiling in post-mortem brain tissue; investigating the role of epigenetic variation in mediating phenotypic/disease discordance between genetically identical individuals; describing dynamic epigenetic processes in brain development and function; and exploring interactions between the epigenome and DNA sequence variation, with the aim of undertaking an integrated genetic-epigenetic approach to disease. More information on their work can be found at www.epigenomicslab.com.

CONSTANTINA MIZIS

Constantina Mizis, who specialized in Linguistic and Hispanic Studies, founded The Latino Alzheimer's and Memory Disorders Alliance in 2008. She has dedicated over 20 years of service to Latino older adults and worked with national organizations on the development of programs for the Latino elderly, and is an active board member of the nation's top health committees. Ms. Mizis' work and commitment to excellence have earned recognition, from the Illinois Governor's office, Illinois Department on Aging, *Chicago Tribune*, *LA Times*, Univision, NBC, *La Opinion*, and *Seattle Times.*

STEPHANIE J. MONROE, JD

Stephanie Monroe is Director of the African American Network Against Alzheimer's, whose mission is to engage African Americans and others in the fight to find a cure or effective treatment for Alzheimer's by 2020. The African American Network is part of USAgainstAlzheimer's, which is a national non-profit advocacy organization in Washington, DC. She brings to this issue over 25 years of service in the United States Senate and 3 years of Executive branch experience, serving most recently as Assistant Secretary for Civil Rights at the US Department of Education. She is regarded as a veteran political strategist and an expert on a variety of health and education policy issues.

WENDY NILSEN, PHD

Dr. Nilsen is a Health Scientist Administrator at the NIH Office of Behavioral and Social Sciences Research (OBSSR) and the Program Director for the Smart and Connected Health program at NSF. Her scientific focus is on the science of human behavior and behavior change, including utilizing technology to better understand and improve health, adherence, the mechanisms of behavior change and behavioral interventions in complex patients in primary care. More specifically, her efforts in mobile and wireless health (mHealth) research include: serving as the NIH lead for the NSF/NIH Smart and Connected Health announcement, convening meetings to address methodology in mobile technology research, serving on numerous federal mHealth initiatives and leading the NIH mHealth training institutes. At NSF, she leads the Smart Health program, which targets science at the intersection between computer science, engineering, medicine and health, broadly defined.

SALLY OKUN

Sally Okun is the Vice President for Advocacy, Policy and Patient Safety at PatientsLikeMe, an online patient powered research network. She is responsible for bringing patient voice and insight to diverse advocacy and health policy discussions at the national and global level, and is the company's liaison with government and regulatory agencies. She joined the company in 2008 as the manager of Health Data Integrity and oversaw the development of the site's Drug Safety and Pharmacovigilance Platform. Prior to joining PatientsLikeMe, Ms. Okun, a registered nurse, practiced in community-based palliative and end-of-life care and contributed to numerous clinical, research, and educational projects in this specialty area.

CHIRAG PATEL, PHD

Dr. Patel is a research associate at the Center for Biomedical Informatics at Harvard Medical School. His long-term research goal is to address problems in human health and disease by developing bioinformatics methods to reason over large-scale environmental exposure information spanning molecules to populations. Dr. Patel created the first "search engine" to search for environmental exposures, or the exposome, associated with disease. He is now leading his own computational group under early investigator funding from the Pharmaceutical Research and Manufacturers of America (PhRMA) and the NIH National Institute of Environmental Health Sciences (NIEHS).

DR. MARTIN PRINCE

Dr. Prince is Professor of Epidemiological Psychiatry, Head of the Health Service and Population Research department, and joint-Director of the Centre for Global Mental Health, which is a joint King's Health Partner and London School of Hygiene centre. He trained in Psychiatry at the Maudsley Hospital and in Epidemiology at the London School of Hygiene and Tropical Medicine. His work is oriented to the salience of mental and neurological disorders to health and social policy in low and middle income countries (LMIC), with a focus on aging and dementia. He has coordinated, since 1998 the 10/66 Dementia Research Group, a network of researchers, mainly from LMIC working together to promote more good research into dementia in those regions. He led the development of the widely reported ADI World Alzheimer Reports for 2009 (prevalence and numbers), 2010 (societal cost) and 2011 (early intervention) and was a leading contributor to the WHO World Dementia Report 2012.

ERIC M. REIMAN, MD

Dr. Reiman is Executive Director of the Banner Alzheimer's Institute, CEO of Banner Research, Professor of Psychiatry at the University of Arizona, University Professor of Neuroscience at Arizona State University, Clinical Director of Neurogenomics at the Translational Genomics Research Institute, Director of the Arizona Alzheimer's Consortium, and a leader of the Alzheimer's Prevention Initiative (API). His interests include brain imaging, early detection and tracking of Alzheimer's disease (AD), accelerated evaluation of investigational AD prevention therapies, establishment of a new national standard of dementia care for patients and families, and development of new models of collaboration in biomedical research.

ERIC SCHADT, PHD

Dr. Schadt is Director of the Icahn Institute for Genomics and Multiscale Biology and Chair of the Department of Genetics and Genomics Sciences at the Icahn School of Medicine at Mount Sinai. He is an expert on the generation and integration of very large-scale sequence variation, molecular profiling and clinical data in disease populations for constructing molecular networks that define disease states and link molecular biology to physiology. He is known for calling for a shift in molecular biology toward a network-oriented view of living systems to complement the reductionist, single-gene approaches that currently dominate biology in order to more accurately model the complexity of biological systems. Prior to joining Mount Sinai in 2011, he held positions as Chief Scientific Officer at Pacific Biosciences and as Executive Scientific Director of Genetics at Rosetta Inpharmatics, a subsidiary of Merck & Co.

GERARD SCHELLENBERG, PHD

Dr. Schellenberg is a Professor in the Department of Pathology and Laboratory Medicine in the Perelman School of Medicine, at the University of Pennsylvania. His work focuses on the genetics of neurodegenerative disorders including Alzheimer's disease, progressive supranuclear palsy, and different forms of frontotemporal lobar degeneration. Dr. Schellenberg is the founder of and leads the Alzheimer's Disease Genetics Consortium (ADGC), which is comprised of a group of investigators who are using genome-wide association analysis methods to identify Alzheimer's disease genes. Dr. Schellenberg is participating in the Alzheimer's Disease Sequencing Project (ADSP) that was initiated in 2012. He is a member of the steering committee and a PI on an NIA/NIH project to analyze the large-scale whole exome and whole genome sequence data being generated by this project.

RAJ C. SHAH, MD

Dr. Shah is an Associate Professor in Family Medicine and the Rush Alzheimer's Disease Center at Rush University Medical Center. His main academic interest is the design and conduct of clinical intervention trials for the prevention, diagnosis, and treatment of common age-related conditions, such as Alzheimer's disease, in order to improve disability-free longevity in diverse, older adults.

DIANA SHINEMAN, PHD

Dr. Shineman is the Director for Scientific Affairs at the Alzheimer's Drug Discovery Foundation, where she develops and manages the Foundation's drug discovery and development grant programs and strategic initiatives. She earned a PhD in Cell and Molecular Biology from the University of Pennsylvania working under Drs. Virginia Lee and John Trojanowski. She also worked as an Editorial Intern for the *Journal of Clinical Investigation* and was an active member of the Penn Biotechnology Group. Dr. Shineman received a BA in Biology with a Nutrition concentration from Cornell University, where she was named a Howard Hughes Undergraduate Research Scholar.

REISA SPERLING, MD

Dr. Sperling is a neurologist, specializing in the early detection and treatment of Alzheimer's disease. She is a Professor in Neurology at Harvard Medical School, Director of the Center for Alzheimer Research and Treatment at Brigham and Women's Hospital, and Director of Neuroimaging for the Massachusetts ADRC at Massachusetts General Hospital. She is the Principal Investigator of the Harvard Aging Brain Study, funded by an NIA Program Project grant. Dr. Sperling led the NIA-Alzheimer's Association workgroup to develop guidelines for "Preclinical Alzheimer's disease," and currently serves on the NIA Council. She is the Project Leader for the ADCS Anti-Amyloid Treatment in Asymptomatic AD (A4) study—a three-year secondary prevention trial in 1000 clinically normal older individuals with PET amyloid imaging evidence of early Alzheimer's disease pathology.

DIANE STEPHENSON, PHD

Dr. Stephenson is a neuroscientist by training with 30 years experience in academic neuroscience and drug discovery. Dr. Stephenson received her undergraduate degree at University of California and her PhD in Medical Neurobiology from Indiana University. Her research has focused on neurodegenerative diseases. In industry, she contributed to identification and validation of novel targets and biomarker discoveries for the treatment of Alzheimer's disease, stroke, autism and Parkinson's disease. Dr. Stephenson joined Critical Path Institute in 2011 as Director of the Coalition Against Major Diseases (CAMD), a consortium dedicated to accelerating drug development for Alzheimer's disease and Parkinson's disease.

JULIE A. STONE, PHD

Dr. Stone joined Merck in 1995 following graduate studies in biomedical engineering at the University of Pennsylvania and postdoctoral research at Hoffmann-La Roche. At Merck, she has provided modeling and simulations, clinical pharmacokinetics and PK/PD support for a variety of programs, including 10 approved drugs. She currently directly supports osteoporosis (odanacatib) and Alzheimer's disease (BACE) programs and provides scientific supervision of clinical PK/PD and pharmacometrics across a wide range of discovery and development programs.

SHARON F. TERRY

Sharon Terry is President and CEO of Genetic Alliance, a network of disease advocacy and other health organizations that engages individuals, families and communities to transform health, and founding CEO of PXE International, a research advocacy organization for the genetic condition pseudoxanthoma elasticum (PXE), which affects her two adult children. Ms. Terry is a co-founder of the Genetic Alliance Registry and Biobank and serves in leadership roles with the Accelerating Medicines Partnership, IOM Science and Policy Board, IOM Roundtable on Translating Genomic-Based Research for Health, PubMed Central National Advisory Committee, PhenX scientific advisory board, Global Alliance for Genomics and Health, and International Rare Disease Research Consortium. She also is Founding President of EspeRare Foundation, and led the coalition that was instrumental in the passage of the Genetic Information Nondiscrimination Act. She has received many recognitions, is author of 140 peer-reviewed papers, serves on several journals' editorial boards, and is an editor of *Genome*.
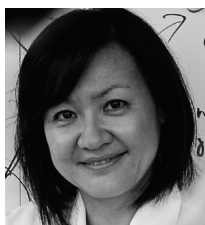
LI-HUEI TSAI, PHD

Dr. Li-Huei Tsai was born in Taipei, Taiwan. In 1986, she began her PhD at the University of Texas Southwestern and performed a postdoctoral fellowship at the Cold Spring Harbor Laboratory and at Massachusetts General Hospital. She is the Picower Professor of Neuroscience and Director of the Picower Institute for Learning & Memory since 2009. Dr. Tsai was elected Fellow of the American Association for the Advancement of Science in 2008, Academician of Academia Sinica in Taiwan in 2008, and Member of the Institute of Medicine in 2011. Her research focuses on the elucidation of the cellular, molecular, and circuit mechanisms that regulate cognitive function, and how dysregulation of these mechanisms contributes to the development and manifestation of the pathology and symptoms of Alzheimer's disease.

NANCY VUCKOVIC, PHD

Dr. Vuckovic is a medical anthropologist and Director of User Experience Research and Design for Intel's Health Strategy & Solutions Group. Her research at Intel has included studies of clinical application of technology, delivery of home-based care, and the experiences of patients and family caregivers during care transitions. Dr. Vuckovic has over 20 years of experience in health research. Prior to joining Intel, she was a principal investigator at the Kaiser Center for Health Research, where she developed and led health services research studies and clinical trials of behavior change interventions.

CLAES WAHLESTEDT, MD, PHD

At the University of Miami, Dr. Wahlestedt is currently Leonard M. Miller Professor and Associate Dean for Therapeutic Innovation. The author of 200+ papers with some 20,000 citations, his ongoing research projects concern epigenetics, mammalian transcriptomics, noncoding RNAs, and drug discovery. A native of Sweden, Dr. Wahlestedt obtained his MD and PhD degrees from Lund University. Dr. Wahlestedt was a founding faculty member and director of neuroscience discovery at the Florida campus of The Scripps Research Institute. Before that he was an endowed professor and department chair at the Karolinska Institute in Stockholm. Previously in his career, he directed large drug discovery and biotechnology teams in the pharmaceutical industry for Astra-Zeneca and Pharmacia/Pfizer. In recent years he co-founded biotech companies, including CuRNA Inc., acquired by Opko Health and Epigenetix Inc.

JOHN WILBANKS

John Wilbanks is the Chief Commons Officer at Sage Bionetworks and a Senior Fellow at Faster Cures. He has worked at Harvard's Berkman Center for Internet & Society, the World Wide Web Consortium, the US House of Representatives, and Creative Commons. He is a past affiliate of MIT's Project on Mathematics and Computation and also started a bioinformatics company called Incellico, which is now part of Selventa. He holds a degree in Philosophy from Tulane and studied modern letters at the Sorbonne.

ANTONY WILLIAMS, PHD

Dr. Williams is the VP of Strategic Development for the Royal Society of Chemistry and manager of the cheinformatics team for the RSC. He is also an adjunct professor at North Carolina State University and University of North Carolina, Chapel Hill. He started a hobby project to develop the ChemSpider database, one of the community's primary online chemistry resources, which was ultimately acquired by the Royal Society of Chemistry. At the RSC he is now involved with a number of national and international projects for delivering chemistry related data to the chemistry community. He is widely published and is known as the ChemConnector in the social networks. He has worked on the quality of chemistry content on Wikipedia, is a recipient of the Jim Gray award for eScience from Microsoft, and is focused on helping scientists understand the power of the web for encouraging crowd sourced participation and social networking in science.

BERISLAV ZLOKOVIC, MD, PHD

Dr. Zlokovic is Director of the Zilkha Neurogenetic Institute and Professor and Chair of the Department of Physiology and Biophysics at the University of Southern California, Keck School of Medicine, Los Angeles. Zlokovic has a long standing interest in understanding the role of small cerebral blood vessels, CNS microcirculation and blood-brain barrier (BBB) in the pathogenesis of neurological disorders such as Alzheimer's disease (AD) and related disorders, and ischemic injury as foundations for development of new therapies for AD, related neurodegenerative disorders and stroke. Using animal models and studying human brain, his laboratory has shown that damage to the BBB and brain microcirculation leads to progressive neuronal dysfunction, injury and loss. His research team has identified the cellular and molecular mechanisms in small cerebral blood vessels (genes, receptors) contributing to neuronal injury, degeneration and Alzheimer's Abeta accumulation. His team also discovered that pericytes control key neurovascular functions (i.e., BBB integrity, blood flow) necessary for proper neuronal structure and function, and that APOE4, the major genetic risk factor for Alzheimer's, disrupts cerebrovascular integrity causing neurodegeneration and Abeta accumulation. More recently, they developed a new BBB imaging assay in the living human brain. His preclinical studies in stroke with APC have been translated to Phase 2 trial in stroke patients.