25TH ANNUAL PUERTO RICO NEUROSCIENCE CONFERENCE Invited Speakers



Dr. Nancy Kanwisher, Professor @ MIT-Department of Brain and Cognitive Sciences and Investigator @ MIT- McGovern Institute for Brain Research.

Title: Functional Specificity in the Human Brain. Host: University of Puerto Rico-Rio Piedras



Dr. Paul Vezina Professor Department of Psychiatry and Behavioral Neuroscience The University of Chicago

Title: PKC signaling and enhanced responding to stimulant drugs

Host: Ponce Health Sciences University



Dr. Baljit S. Khakh, Professor of Physiology and Neurobiology David Geffen School of Medicine at UCLA.

Title: Astrocyte functions in neural circuits
Host: Universidad Central del Caribe



Dr. Michael Merzenich
FRANCIS A. SOOY PROFESSOR
Executive Chairman, Chief Scientific Officer, Posit Science
Corporation
2016 Kavil Prize Award with Karla Shatz and Eve Marder

Title: Brain Plasticity-based Therapeutics

Host: University of Puerto Rico-School of Medicine

About the invited Speakers

Dr. Michael Merzenich



Dr. Michael Merzenich, PhD, is one of the scientists responsible for our current understanding of brain plasticity—the notion that the brain can change itself at any age. For nearly five decades, he and his colleagues have conducted seminal research defining the functional organization of the auditory and somatosensory nervous systems. Research on cortical plasticity conducted in his laboratory has greatly contributed to our current understanding of the phenomenology of brain plasticity across the human lifetime. Dr. Merzenich has received numerous prestigious awards and prizes for his research and holds nearly 100 patents for his work. He is a member of both

the National Academy of Sciences and the Institute of Medicine. In 2016, Dr. Merzenich was awarded one of the world's top neuroscience prizes, the Kavli Prize, for his achievements in the field of brain plasticity. During the 1980s, initial models of a commercially successful cochlear implant (now distributed by Boston Scientific) were developed in his laboratory at the University of California, San Francisco. Later, driven by a desire to bring scientific discoveries out of the laboratory and into the world at large, to help the most people possible, he extended the fruits of cortical plasticity research into the commercial world by co-founding three brain plasticity-based therapeutic software companies (Scientific Learning, Posit Science, and Brain Plasticity Institute). Those companies have developed and validated neuroscience-based, computer-delivered rehabilitation training programs that have now been applied to more than 4 million impaired children and adults. Their research and treatment targets include developmental impairments that limit the cognitive, reading, and mathematical abilities of school-aged children; perceptual and cognitive impairments in normal aging; preventing and treating schizophrenia, bipolar disorder, depression, and other psychiatric diseases; rehabilitation strategies applied to treat traumatic brain injury and stroke; and the treatment of cognitive impairments arising from brain infections, toxin exposures, hypoxic episodes, and other environmental causes. Dr. Merzenich has published more than 150 articles in leading peer-reviewed journals (such as Science and Nature) and has received numerous awards and prizes (including the Russ Prize, Ipsen Prize, Zülch Prize, Thomas Alva Edison Patent Award Purkinje Medal and the Kavli Prize, for his achievements in the field of brain plasticity.) He and his work have been highlighted in hundreds of books about the brain, learning, rehabilitation, and plasticity. Dr. Merzenich's work is also often covered in the popular press, including the New York Times, the Wall Street Journal, Time, Forbes, Discover, and Newsweek. He has appeared extensively on television, and his work has been featured on four PBS specials, including "The Brain Fitness Program," "Brain Fitness 2: Sight and Sound," "The New Science of Learning," and "Brain Fitness Frontiers." Dr. Merzenich earned his bachelor's degree at the University of Portland and his PhD at Johns Hopkins. He completed a post-doctoral fellowship at the University of Wisconsin in Madison before becoming a professor at the University of California, San Francisco. In 2007, he retired from his long career at UCSF as Francis A. Sooy Professor

and Co-Director of the Keck Center for Integrative Neuroscience. He was elected to the National Academy of Sciences in 1999 and the Institute of Medicine in 2008.

Dr. Nancy Kanwisher



Nancy Kanwisher is a Professor in the Department of Brain & Cognitive Sciences at MIT, and an Investigator at MIT's McGovern Institute for Brain Research. After receiving her B.S. and PhD from MIT, Kanwisher served on the faculty at UCLA and Harvard, before returning to MIT in 1997. Kanwisher has received the Troland Research Award, MacVicar Faculty Fellow teaching Award, and Golden Brain Award. She is a member of the National Academy of

Sciences and the American Academy of Arts and Sciences.

Dr. Paul Vezina



Dr. Vezina received his BA, MA, and PhD at Concordia University, Montreal, Canada. He completed his postdoctoral studies in Neuropharmacology at the College de France in Paris, France. He joined the faculty of the University of Ottawa in 1991 before moving to his present position in the Department of Psychiatry and Behavioral Neuroscience at The University of Chicago in 1993. There, he has served as the Program Director for the NIDA Drug Abuse Training Program and on the editorial boards of several well-recognized

scientific journals. To date, he has published over 100 peer-reviewed articles and book chapters, and has been continuously funded through grants from the National Institute on Drug Abuse since 1995.

Dr. Baljit S. Khakh



Baljit S. Khakh received a Ph.D. degree from the University of Cambridge in 1995. During his graduate studies, he also spent some time at the Geneva Biomedical Research Institute. Dr. Khakh completed a postdoctoral fellowship in the laboratory of Dr. Graeme Henderson at the University of Bristol, followed by a fellowship at the California Institute of Technology, working in the laboratories of Drs. Henry A. Lester and Norman Davidson as a Wellcome Trust International Prize Traveling Research Fellow, and Senior Research Fellow in the Division of Biology. In 2001, Dr. Khakh returned to

Cambridge in the Division of Neurobiology at the MRC Laboratory of Molecular Biology as a Group Leader. Dr. Khakh joined UCLA in April 2006, where he is now Professor of Physiology and Neurobiology. Between 2014-2016, Dr. Khakh was a Visiting Scientist at the HHMI Janelia Research Campus in Virginia.