Board on Behavioral, Cognitive, and Sensory Sciences

Committee

Elizabeth A. Phelps

Chair

Elizabeth A. Phelps is the Pershing Square Professor of Human Neuroscience at Harvard University. She received her PhD from Princeton University and served on the faculty of Yale University and New York University. Her laboratory has earned widespread acclaim for its groundbreaking research on how the human brain processes emotion, particularly as it relates to learning, memory and decision making. Dr. Phelps is the recipient of the 21st Century Scientist Award from the James S. McDonnell Foundation, the Distinguished Scholar Award from the Social and Affective Neuroscience Society and the William James Award from the Association for Psychological Science. She is a fellow of the American Association for the Advancement of Science, the Society for Experimental Psychology and the American Academy of Arts and Sciences. She has served on the Board of Directors of the Association for Psychological Science, the Society for Neuroeconomics and was a founding board member of the Society for Neuroethics. She has previously served as the President of the Society for Neuroeconomics, the Association for Psychological Science and the Social and Affective Neuroscience Society.

Miguel P. Eckstein

Member

Miguel P. Eckstein is Distinguished Professor and holds the Mellichamp Chair in Mind and Machine Intelligence at the Department of Psychological & Brain Sciences at the University of California, Santa Barbara. He is an affiliate faculty in Computer Science and Electrical and Computer Engineering. Dr. Eckstein's research spans various fields, including perception, attention, eye movements, perceptual learning, medical image interpretation, collective intelligence, human-AI collaboration, and neuro-inspired AI. His significant contributions include developing a unified theory of covert attention, exploring the inferential and perceptual roles of eye movements during search, face recognition, and gaze-following, and developing models for automated evaluation of medical image quality, which were among the first to be applied on a large scale in clinical images. He has also proposed innovative approaches like multi-brain computing and visually-evoked EEG person identification. His research employs techniques from psychophysics, eye tracking, computational modeling, and deep neural networks, to fMRI, and EEG. Dr. Eckstein has received several awards, including the NSF Career Award, the Optical Society of America's Young Investigator Award, the National Academy of Sciences Troland Award, and a Guggenheim Fellowship. He earned his BA in Physics and Psychology from UC Berkeley and his Ph.D. in Cognitive Psychology from UCLA.

Wilson S. Geisler

Member

Wilson (Bill) S. Geisler (NAS) is the David Wechsler Regents Chair in Psychology and director of the Center for Perceptual Systems at the University of Texas at Austin. His primary research interests are in human vision, computational vision, and visual neuroscience. His research combines behavioral studies, neurophysiological studies, studies of natural stimuli, mathematical analysis, and computational modeling. He is best known for his work on the mathematics of how to perform perceptual tasks optimally (the “theory of ideal observers”), on the relationship between the statistical properties of natural stimuli and the design and evolution of the visual system, on the properties of eye movements in natural tasks, and on the relationship between visual performance and the neurophysiology of the visual system. He is a fellow of the Optical Society of America, a fellow of the Association for Research in Vision and Ophthalmology, a fellow of the Society of Experimental Psychologists and a member of the National Academy of Sciences. He obtained an undergraduate degree in psychology from Stanford University and a doctoral degree in mathematical and experimental psychology from Indiana University.

Michele J. Gelfand

Member

Michele Gelfand (NAS) is the John H. Scully Professor of Cross-Cultural Management and Professor of Organizational Behavior and Psychology at the Stanford Graduate School of Business. She previously served as a Distinguished University Professor at the University of Maryland, College Park. Dr. Gelfand uses field, experimental, computational, and neuroscience methods to understand the evolution of culture and its multilevel consequences for human groups. Her work has been cited over 20,000 times and has been featured in the Washington Post, the New York Times, the Boston Globe, National Public Radio, Voice of America, Fox News, NBC News, ABC News, The Economist, among other outlets. Dr. Gelfand has published in premier outlets such as Science, the Proceedings of the National Academy of Sciences, Psychological Science, Nature Scientific Reports, American Psychologist, among others. She is the founding co-editor of the Advances in Culture and Psychology Annual Series and the Frontiers of Culture and Psychology series. Dr. Gelfand is the past president of the International Association for Conflict Management and past division chair of the Conflict Division of the Academy of Management. She received the 2017 Outstanding International Psychologist Award from the American Psychological Association, the 2016 Diener award from the Society for Personality and Social Psychology, and the Annaliese Research Award from the Alexander von Humboldt Foundation. Her work that was published in Science was honored with the Gordon Allport Intergroup Relations Prize from the Society for the Psychological Study of Social Issues. She is the author of Rule Makers, Rule Breakers: How Tight and Loose Cultures Wire the World (2018, Scribner). She obtained a B.A. in psychology from the Colgate University and a Ph.D. in social psychology and organizational psychology from the University of Illinois, Urbana-Champaign.

Mara Mather

Member

Mara Mather is Professor of Gerontology, Psychology and Biomedical Engineering at the University of Southern California. Her research focuses on brain systems that regulate physiological and emotional arousal, how they affect attention, memory and decision making, and how these relationships change in aging. She has received the Distinguished Scientific Award for Early Career Contribution to Psychology from the American Psychological Association, a National Institutes of Health K02 Career Development award, an Alexander von Humboldt Foundation Research Fellowship and a Max Planck Sabbatical Award. Based on citations of her research, she has been identified as one of the top 1% of scientists worldwide (Baas, Boyack, Ioannidis, 2021). Her current research focuses on the role of noradrenaline in age-related change in cognition and on how heart rate variability biofeedback can enhance function of the brain’s emotion regulation networks. She received her Ph.D. in Cognitive Psychology from Princeton University and completed her undergraduate degree and postdoctoral training at Stanford University.

Ulrich Mayr

Member

Ulrich Mayr is the Lewis Professor and head of the department of psychology at the University of Oregon. Dr. Mayr's primary research focus is on the relationship between memory, attention, and cognitive control, both from a general and a developmental/life-span perspective. In his research, he focuses on the neurocognitive underpinnings of attention, memory, and decision making, and how these functions change across the life span. His research methods include behavioral experiments, eye-tracking, and EEG or fMRI neuroimaging. As a secondary focus, he examines complex, social decision processes (e.g., whether or not to enter a competition or to give money to a charity). In recent work, Dr. Mayr has applied neuroscience techniques to examine how people make complex economic decisions, such as in competitive or charitable-giving situations. Until recently, he was editor in chief of Psychology and Aging. He has received multiple awards, including the Humboldt Research Award from the German Government’s Humboldt Foundation. Professor Mayr received his Ph.D. from the Max Planck Institute of Human Development and the Free University in Berlin.

Katherine L. Milkman

Member

Katy Milkman is the James G. Dinan Professor at The Wharton School of the University of Pennsylvania, host of Charles Schwab's popular behavioral economics podcast Choiceology, and the former president of the international Society for Judgment and Decision Making. She is the co-founder and co-director of the Behavior Change for Good Initiative, a research center with the mission of advancing the science of lasting behavior change. An award-winning scholar and teacher, Katy explores ways that insights from economics and psychology can be harnessed to change consequential behaviors for good—behaviors such as savings, exercise, vaccination take-up and discrimination. She is an APS Fellow and the author of over fifty published articles in leading social science journals that have reached a wide audience through regular coverage in major media outlets such as NPR, The New York Times, and The Washington Post. She earned her undergraduate degree from Princeton University (summa cum laude), where she studied Operations Research and American Studies and her PhD from Harvard University where, she studied Computer Science and Business.

Mary C. Murphy

Member

Mary C. Murphy is the Herman B Wells Endowed Professor of Psychological and Brain Sciences at Indiana University. In the area of education, her research illuminates the situational cues that influence students' academic motivation and achievement with an emphasis on understanding when those processes are similar and different for structurally advantaged and disadvantaged students. She develops, implements, and evaluates classroom-based interventions that reduce identity threat and spur students' motivation, persistence, and performance. Mary is founder and CEO of the Equity Accelerator, a focused-research organization aimed at using research to create more equitable learning and working environments. In the realm of organizations and tech, her research examines barriers and solutions for increasing gender and racial diversity in STEM fields. In particular, she examines the role of organizational mindset in companies' organizational culture, employee engagement and performance, and diversity, equity, and inclusion. Mary earned a Ph.D. from Stanford University and completed an NSF postdoctoral fellowship at Northwestern University. In 2012, she joined the faculty of Indiana University and, in 2013, was named a Rising Star by the Association for Psychological Science (APS). In 2019, she was awarded the Presidential Early Career Award for Scientists and Engineers (PECASE)—the highest honor bestowed on early career scientists by the United States Government. She is the author of more than 100 publications and is an elected member of the American Association for the Advancement of Science (AAAS) and the recipient of over $8 million in federal and foundation grants including a recent NSF CAREER award for her research on strategies to improve diversity in STEM. Her research has been profiled in The New York Times, Forbes, Harvard Business Review, Scientific American, and NPR, among other outlets. Her new book on organizational mindset, Cultures of Growth: How the New Science of Mindset Can Transform Individuals, Teams, and Organizations was published by Simon and Schuster in 2024.

Elissa L. Newport

Member

Elissa L. Newport (NAS) is the George Bergeron Professor of Neurology and Director of the Center on Brain Plasticity and Recovery, Georgetown University Medical Center, Washington, DC. She has spent 49 years doing research on human language, studying the cognitive, computational and neural mechanisms involved in language learning and processing in children and adults, and the mechanisms underlying changes over age in neural plasticity. For 12 years she was chair of the Department of Brain & Cognitive Sciences at the University of Rochester, taking the department from one year past its inception to a well-developed department ranked 4th in its field in the NRC rankings. She has also received honors for her research, including election to the National Academy of Sciences, the 2015 Benjamin Franklin Medal in Computer and Cognitive Sciences, and three lifetime achievement research awards (from the APS in 2013, from the Society for Experimental Psychology in 2018, and from the American Psychological Association in 2020). She has expanded her research interests from a focus on language learning to include studying the recovery of language and reorganization of function after brain injury and also the neural mechanisms of acquisition in healthy children. In 2012 she became Professor of Neurology and Director of the Center on Brain Plasticity and Recovery at Georgetown University. At Georgetown she has developed two important lines of research. Our research on pediatric stroke, conducted with collaborators at Children’s National Medical Center, Georgetown University Medical Center, National Rehabilitation Hospital, and Children’s Hospital of Philadelphia, which extends her work on mechanisms of learning in young children to recovery after childhood stroke. The aim is to understand the principles and mechanisms of successful childhood recovery for language. At the same time, she and others have continued and expanded the research on language acquisition in healthy children, using miniature artificial language paradigms to understand the computational mechanisms that children use to acquire the structure of their native language. The work with healthy children and adults includes multi-session learning and testing after delays of varying lengths in order to understand the immediate encoding of linguistic material and the process of generalization over time; and also, using functional imaging in children ages 4 to 12, an understanding of how the neural representation of linguistic knowledge changes as learners acquire expertise in the language. Their findings show that young children and adults are remarkably competent at distributional analyses of linguistic input. They have also shown that the neural representation of language changes and crystalizes during learning and development, on a timetable related to learners’ success in language learning and their ability to recover from brain injury.

Don Operario

Member

Don Operario is the Grace Crum Rollins Distinguished Professor and Chair of the Department of Behavioral, Social, and Health Education Sciences at the Rollins School of Public Health, Emory University. His research program is motivated by two interrelated areas. The first research area examines the diversity of lived experiences associated with social inequality, with an emphasis on understanding the perspectives of minoritized group members and identifying strategies to promote resilience and equity. The second general area involves developing and evaluating theory-based, multi-level interventions to address the synergistic epidemics ("syndemics") of HIV, mental health, and structural violence in historically marginalized communities. He has published over 300 research papers and chapters and served as Principle Investigator or co-Investigator on 37 scientific grants. His research incorporates multiple methodologies (qualitative inquiry, observational designs, experimental trials, meta-analysis) and prioritizes community engagement and cultural humility. He conducts research in collaboration with community and academic partners in the United States, Kenya, China, Philippines, South Korea, and South Africa. He received his BA in psychology at UCLA and PhD in social psychology at University of Massachusetts at Amherst. Prior to joining Emory, he was a faculty member and researcher at Brown University, Oxford University, and UCSF.

David E. Poeppel

Member

David Poeppel is Professor of Psychology and Neural Science at New York University and the Scientific Director and CEO of the Ernst Struengmann Institute for Neuroscience in Frankfurt, Germany. He also runs the joint Max-Planck-NYU Center for Language, Music, and Emotion (CLaME). Trained at Massachusetts Institute of Technology (MIT) in cognitive science, linguistics, and neuroscience (Ph.D. 1995), Dr. Poeppel did his post-doctoral training at UCSF, where he focused on functional brain imaging. Until 2008, he was a professor at the University of Maryland College Park, running the Cognitive Neuroscience of Language laboratory. He has worked at NYU since 2009. From 2014-2021, he was the director of the Department of Neuroscience at the Max-Planck-Institute (MPIEA) in Frankfurt, Germany. The goal of his research program is to develop theoretically motivated, computationally explicit, and biologically realistic perspectives on auditory cognition (including music), speech perception, and language comprehension. All the tools of cognitive neuroscience are used, with special emphasis on methods with high temporal sensitivity. The lab has made contributions to understanding the functional anatomy of language, the role of neural oscillations in perception, and sensorimotor integration. He has been a fellow at the Wissenschaftskolleg (Institute for Advanced Studies Berlin), the American Academy Berlin, and a guest professor at many institutions. He is a fellow of the American Association for the Advancement of Science.

Mo Wang

Member

Mo Wang is a University of Florida Distinguished Professor and the Lanzillotti-McKethan Eminent Scholar Chair. He is also the Associate Dean for Research at the Warrington College of Business, the Chair of Management Department, and the Director of Human Resource Research Center. He specializes in research areas of retirement and older worker employment, occupational health psychology, expatriate and newcomer adjustment, leadership and team processes, and advanced quantitative methodologies. He received numerous research awards for his research in these areas, including Academy of Management (AOM) HR Division Scholarly Achievement Award, Careers Division Best Paper Award, European Union’s Erasmus Mundus Scholarship Award for Work, Organizational, and Personnel Psychology, Emerald Group’s Outstanding Author Contribution Awards, Society for Industrial-Organizational Psychology’s (SIOP) William A. Owens Scholarly Achievement Award, and Journal of Management Scholarly Impact Award. He also received a number of Early/Mid-Career Contribution Awards from AOM, APA, SIOP, and Society for Occupational Health Psychology (SOHP). He is an elected Foreign Member of Academia Europaea (M.A.E) and a Fellow of AOM, APA, APS, and SIOP. He was the President of SOHP (2014-2015) and is currently serving on the President-track for SIOP (2021-2024). Dr. Wang received his Ph.D. from Bowling Green State University in 2005.

Duane Watson

Member

Duane Watson is Associate Provost for Faculty Development and the Frank W. Mayborn Chair of Psychology and Human Development in Peabody College at Vanderbilt University. He earned his A.B. in Psychology from Princeton University, and received a doctorate in Cognitive Science from M.I.T. After completing a postdoctoral fellowship at the University of Rochester, Dr. Watson joined the Department of Psychology at the University of Illinois at Urbana-Champaign. He moved to the Department of Psychology and Human Development at Vanderbilt University in 2016.

Dr. Watson's research focuses on the cognitive processes that underlie language production, comprehension, and reading. His research has been funded by both the National Institute of Health and the National Science Foundation. He has served on the Psychonomic Society Governing Board since 2018 and served as the Chair of the Psychonomic Society Governing Board in 2021. Watson is also a co-founder of the SPARK Society, an organization that works towards increasing the number of historically marginalized groups in the brain and cognitive sciences. He currently serves on the SPARK Society Governing Board.