



# NEURO SCIENCE

August 25, 2021

Date	Time	Track	Presentation Title	Speaker
25-Aug	07:30 - 08:30 AM	Neurodegenerative Disorders - Impacts and Progress	Keynote Presentation: Development of Pharmacological Chaperones Targeting the Intrinsically Disordered State of Misfolding Proteins in Neurodegenerative Diseases	Gergely Tóth, PhD, MBA CEO and CSO, Cantabio Pharmaceuticals Inc.
25-Aug	09:00 - 10:00 AM	Integrating Theories of the Brain	Keynote Presentations: Current and Future Directions of the NIH BRAIN Initiative	James Gnadt, PhD Program Director, Systems and Cognitive Neuroscience, National Institute of Neurological Disorders and Stroke Grace Peng, PhD Director of Mathematical Modeling, Simulation and Analysis, National Institute of Biomedical Imaging and Bioengineering, National Institutes of Health John J. Ngai, PhD Director, NIH BRAIN Initiative Mohammad M. Ghassemi, PhD NIH Data Scholar, Assistant Professor of Computer Science and Engineering at Michigan State University (MSU) Susan Wright, PhD Program Director for Big Data and Computational Science, National Institute on Drug Abuse (NIDA), Division of Neuroscience and Behavior (DNB) Hsiao Yu (Christina) Fang, PhD Scientific Program Manager in the NINDS Systems and Cognitive Neuroscience Cluster
25-Aug	10:30 - 11:30 AM	Neurodegenerative Disorders - Impacts and Progress	A Novel Blood-Based Biomarker for Silent Cerebral Edema and Brain Vascular Injury	Jason D. Hinman, PhD, MD Associate Professor, Vice Chair of Research, Department of Neurology, David Geffen School of Medicine, UCLA
25-Aug	10:30 - 11:30 AM	Integrating Theories of the Brain	Methods for Culturing Primary Adult CNS Neurons	Erna van Niekerk, Ph.D. Department of Neuroscience, Center for Neural Repair University of California - San Diego

25-Aug	12:00 - 01:00 PM	Integrating Theories of the Brain	Debate Discussion: Can We Generate an Organizing Theory of the Brain?	Florian Engert, PhD Professor of Molecular and Cellular Biology, Harvard University David Kleinfeld, PhD Dr. George Feher Endowed Chair in Experimental Biophysics, Distinguished Professor, UC San Diego Mohammad M. Ghassemi, PhD NIH Data Scholar, Assistant Professor of Computer Science and Engineering at Michigan State University (MSU)
25-Aug	01:30 - 02:30 PM	Integrating Theories of the Brain	Spatial Context Matters: Molecular Cartography™ to Study Gene Expression Changes in the Brain	Jeroen Aerts, PhD Customer Technology Advisor at Resolve Biosciences
25-Aug	01:30 - 02:30 PM	Neurodegenerative Disorders - Impacts and Progress	Spatial Transcriptomics of Alzheimer's Disease Mouse Models with and Without Trem2R47H Mutation.	Frances Edwards, PhD Professor of Neurodegeneration, Department of Neuroscience Physiology and Pharmacology, University College London
25-Aug	12:00 - 12:45 AM	Neurodegenerative Disorders - Impacts and Progress	A Novel Mouse Model of Ataxia Telangiectasia for Testing Small Molecule Readthrough (SMRT) Compounds	Paul Mathews, PhD Investigator & Co-Director of the Neurotherapeutics IWI, Lundquist Institute (Formerly "LA BioMed"); Assistant Professor, David Geffen School of Medicine at UCLA Department of Neurology
25-Aug	12:00 - 12:45 AM	Neurodegenerative Disorders - Impacts and Progress	Alpha-synuclein Aggregation in Parkinson's Disease - Is it Relevant and How can we Model it?	Andrii Domanskyi, PhD Senior Research Scientist, Orion Pharma
25-Aug	12:00 - 12:45 AM	Neurodegenerative Disorders - Impacts and Progress	Alpha-Synuclein Strains in Synucleinopathies	Wouter Peelaerts, PhD Neuroscientist and Senior Post-Doctoral Fellow, FWO Flanders at KU Leuven
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Can Deep Learning Produce a General Model of Natural Sound Encoding by Auditory Cortex?	Stephen V. David, Ph.D. Associate Professor, Oregon Hearing Research Center, Oregon Health and Science University
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Can Multiscale Computer Modeling Save the Human Genome Project?: Climbing the Omes for Schizophrenia	William Lytton, MD SUNY Distinguished Professor, SUNY Downstate Health Sciences University

25-Aug	12:00 - 12:45 AM	Neurodegenerative Disorders - Impacts and Progress	Characterizing Pathogenic Protein Aggregates for Utilization as Molecular Tools to Accelerate Neurodegenerative Disease Research	Jacob McPhail, PhD R&D Scientist, StressMarq Biosciences Inc.
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Cortical Chimera States Predict Epileptic Seizures	Terrence J Sejnowski, PhD Francis Crick Professor, The Salk Institute for Biological Studies; Distinguished Professor of Biology and Computer Science and Engineering, University of California, San Diego
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Dimensions of variability in circuit models of cortex	Brent Doiron, PhD Professor of Neurobiology and Statistics, University of Chicago
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Learning Electrical Connectomes of Neuropsychiatric Disorders and Behaviors	David Carlson, PhD Associate Professor, Duke University
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Machine Learning Approaches to Characterizing and Interpreting Brain-wide Dynamics	Shella Keilholz, Ph.D. Professor, Wallace H. Coulter Department of Biomedical Engineering, Emory University & Georgia Institute of Technology
25-Aug	12:00 - 12:45 AM	Neurodegenerative Disorders - Impacts and Progress	Mechanistic Insight into Tandem Repeat Expansions in Amyotrophic Lateral Sclerosis	Paul Valdmanis, PhD Assistant Professor, Division of Medical Genetics, Department of Medicine University of Washington
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Mechanistic Models of Cognition: from Perception to Navigation to Semantic Development	Surya Ganguli, PhD Associate Professor, Department of Applied Physics, Stanford University
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Mine Your Own View: A New Self-Supervised Learning Approach for Building Stable Representations of Neural Activity	Eva L. Dyer, PhD Assistant Professor of Biomedical Engineering, Georgia Institute of Technology; Emory University
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Null Models of Large Neural Networks	Ilya Nemenman Professor of Physics and Biology, Emory University
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Orchestrating the Brain for Social Behavior	Richard Tsien, PhD Chair, Neuroscience and Physiology; Director, Neuroscience Institute; NYU Langone Health; NYU Grossman School of Medicine

25-Aug	12:00 - 12:45 AM	Mental Health in the Age of COVID-19	Positive Psychology and Well-Being for Clinicians and Consumers: Addressing Burnout, Compassion Fatigue and Secondary Trauma in the COVID-19 Era	Dorit Saberi, PhD Supervising Clinical Psychologist, Harbor UCLA Medical Center, Clinical Director- SAFE HARBOR Trauma Recovery Center; Associate Professor, UCLA- David Geffen School of Medicine
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Rational Thoughts in Neural Codes	Xaq Pitkow, Ph.D. Associate Professor, Rice University
25-Aug	12:00 - 12:45 AM	Mental Health in the Age of COVID-19	SARS-CoV-2 Effects on the CNS	Eric Song, MD PhD Candidate
25-Aug	12:00 - 12:45 AM	Integrating Theories of the Brain	Sequences and Modularity of Dynamic Attractors in Inhibition-Dominated Neural Networks	Carina Curto Professor and Co-Associate Head of Graduate Studies, Department of Mathematics Pennsylvania State University
25-Aug	12:00 - 12:45 AM	Neurodegenerative Disorders - Impacts and Progress	The Long Hangover: Adolescent Intermittent Ethanol's Effects on Hippocampal Neuroimmune and Cell Death Markers, Reversal by Donepezil	Kati Healey, MA, PhD Postdoctoral Associate, Duke University