INTERACTIVE BOOTHS



Neurons Under a Microscope

Marvel at the intricate morphology of nerve cells from different brain regions, and learn how it changes to accommodate new memories.



Brain Zoo See and touch real brains from a variety of species!



Neuroplasticity and Prosthetics Witness your brain changing! Control a mechanical claw

with your brain! And take away your partner's free will!



Stroke and Rehabilitation

Trace brain vessels! Learn about stroke and traumatic brain injuries, and get informed on the latest advances in rehabilitation.



Brain Trivia

Spin the wheel! There is a prize for you whether you get the answer right or wrong!



Your Genes and Why Neurons Care Let's purify some real DNA! Learn about genes, and why they are important for typical brain fuction and in diseases.



Information and Poster Contest Vote for your favorite research poster, grab helpful information and sign up to receive news and events from the UC Davis Center for Neuroscience.

ABOUT THE CENTER FOR NEUROSCIENCE

The Center for Neuroscience is the interdisciplinary hub for neuroscience research and education at UC Davis. Our mission is to reveal how the brain works and to leverage these discoveries to promote health and advance treatments and cures for neurological and psychiatric disorders. Learn more at neuroscience.ucdavis.edu.

Center for Neuroscience



Brain Rewiring in Health and Disease

A Brain Awareness Week Public Seminars and Interactive Experience

Saturday, March 10, 2018 1:00-5:00 PM



PROGRAM



1:00-1:45 PM Visit interactive booths and vote for your favorite poster!



1:45 PM Director's Welcome

Kimberley McAllister, Ph.D., is Director of the Center for Neuroscience and Professor of Neurobiology, Physiology and Behavior and Neurology. Her research focuses on

understanding how circuits in the developing brain are formed and sculpted by experience. Dr. McAllister also studies the role for immune molecules in brain development and in psychiatric disorders.



2:00 PM

How the Brain Changes During Learning and in Disease

Karen Zito, Ph.D., is Associate Professor of Neurobiology, Physiology and Behavior. Her research focuses on

understanding how neural circuits in the brain are initially formed and how they are refined during learning. Her lab uses advanced imaging methods, molecular genetics, and electrophysiological approaches to identify the signaling molecules and mechanisms important for brain development and function. Results from experiments in her lab have the potential to aid in the development of novel therapeutics for neurological disorders, such as schizophrenia and Alzheimer's disease.



2:30PM

Brain and Cognitive Development in Typically and Atypically Developing Children

Susan Rivera, Ph.D., is Professor and Chair of the Department of Psychology. Her research aims to elucidate

the complex brain-behavior relationships that underlie the development of human cognition. Her lab uses behavioral and neuroimaging techniques to investigate language acquisition, arithmetic reasoning, motion perception and multisensory integration. She is particularly interested in the brain and cognitive development of children with neurodevelopmental disorders including autism, Down syndrome and Fragile X syndrome. Dr. Rivera is a Marie Curie scholar and has received numerous awards and distinctions, including the Dean's Award for Diversity, Inclusion and Equity.



3:00 PM BREAK: Visit interactive booths and vote for your favorite poster!



3:45 PM The Brain is Like a Symphony; What Happens When the Conductor Goes Missing?

Gene Gurkoff, Ph.D., is an Assistant Professor in Neurological Surgery. Dr. Gurkoff hypothesizes that many symptoms associated with neurological disorders are a result of altered communication between brain regions, and that electrical stimulation (deep brain stimulation) can be used to improve brain function and ultimately, behavioral outcome. Dr. Gurkoff firmly believes that by training the next generation of scientists to share his passion for studying brain disease, the neuroscience community will have a better chance of one day treating debilitating neurological disorders such as traumatic brain injury and epilepsy.



4:15 PM

Brain Plasticity After Spinal Cord Injury

Karen Moxon, Ph.D., is Professor in the departments of Biomedical Engineering and Mechanical and Aerospace Engineering. Her research examines how neuronal circuits encode information, and the impact of injury and disease

on neural encoding. She has developed new technologies to further this area of research, obtaining two patents with four patents pending. She is an elected fellow of the American Institute for Medical and Biological Engineers and the American Association for the Advancement of Science.



4:45 PM

Poster Awards and Closing Remarks

Diasynou Fioravante, Ph.D., is Assistant Professor of Neurobiology, Physiology and Behavior and co-chair of the Center for Neuroscience's NeuroFest activities.

Dr. Fioravante studies the fundamental mechanisms and functional implications of plasticity in neural microcircuits during learning and memory. Her current research examines the role of the cerebellum in the regulation of emotion, which has implications for anxiety and post-traumatic stress disorder.