Participating Faculty

**Mark Bear**, Modification of the Cerebral Cortex by Sensory Experience

**Ed Boyden**, Development of Neural Control Tools and Application to Brain Disorders

**Martha Constantine-Paton**, Activity-Dependent Development of Synapses

**Michale Fee**, How the Brain Learns and Generates Complex Sequential Behaviors

**Guoping Feng**, Mechanisms of Neuronal Circuitry Development and Psychiatric Disorders

**Frank Gertler**, Molecular Mechanisms of Axonal Outgrowth and Brain Development

**Ki Ann Goosens**, Brain Mechanisms that Underlie Fear, Anxiety and Stress

**Ann Graybiel**, Function of the Basal Ganglia

**Leonard Guarente**, Effects of SIRT1 on Neurodegenerative Diseases and Cognition

**Richard Hynes**, Biology of Cell Adhesion in Development and Disease

**Robert Horvitz**, Genetics of Nervous System Development and Function in C. elegans

**David Housman**, Pathology Mechanisms and Genetic Modifiers in Huntington’s Disease

**Rudolf Jaenisch**, Epigenetic Control of Brain Development and Function

**Alan Jasanoff**, Non-Invasive Functional Imaging Methods to Study Neural Behavior

**Yingxi Lin**, Development and Function of Inhibitory Circuits in the Brain

**Susan L. Lindquist**, Correcting the Protein Misfolding of Neurodegenerative Disease

**J. Troy Littleton**, Synapse Formation, Function and Plasticity in Drosophila

**Carlos Lois**, Neurogenesis and Assembly of Brain Circuits

**Christopher Moore**, Brain Dynamics Involved in Sensory Perception

**Elly Nedivi**, Characterization of Genes Involved in CNS Plasticity

**William Quinn**, Genetic Analysis of Learning and Memory in Drosophila

**Peter Reddien**, Genetic Control of Nervous System Regeneration in Planarians

**Morgan Sheng**, Molecular Mechanisms of Synaptic Plasticity

**Hazel Sive**, Brain Patterning and Morphogenesis in Zebrafish

**Mriganka Sur**, Plasticity Mechanisms in the Developing and Adult Cerebral Cortex

**Susumu Tonegawa**, Genetic Approaches to Learning and Memory Circuits in Mice

**Li-Huei Tsai**, Mechanisms of Alzheimer’s Disease and Epigenetic Regulation of Learning & Memory

**Matthew Wilson**, Neuronal Plasticity, Learning & Sleep

**Weifeng Xu**, Molecular Mechanisms Underlying Hippocampal Synaptic Plasticity
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