Neuroscience 2011

SHORT COURSE III

BACs, TRAPs, and Targeted Mutations:
Revealing Secrets of the Mammalian Brain Using Advanced Genetic Approaches

Organized by Nathaniel Heintz, PhD

SOCIETY FOR NEUROSCIENCE

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Introduction

Although classical histological studies established that the morphology of specific neural cell types in the mammalian brain varies dramatically, the ability to genetically target these cell types and understand the biochemical basis of their structure and function eluded scientists for nearly a century. To address this problem, a variety of novel approaches have been developed for the investigation of genes, cells, and circuits *in vivo*. This day-long course consists of a series of lectures by the faculty illustrating the power of cell-specific genetic strategies for investigation of mechanisms that contribute to the histological and functional complexities of the mammalian brain, followed by informal breakout sessions, and includes a syllabus book.

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