Plan to attend the Society for Neuroscience 43rd Annual Meeting

San Diego



Now more than ever is the time to join more than 30,000 colleagues from nearly 80 countries at Neuroscience 2013 — the world's largest marketplace of ideas and tools for global neuroscience.

This is the premier event in the field — the science and networking opportunities are unmatched with nearly 16,000 scientific

presentations, nearly 600 exhibiting companies, and dozens of career development opportunities. Neuroscience 2013 remains one of the best values in science. Attendees can register at 2012 rates — these modest registration fees are even lower for members, students, attendees from developing countries, and advance registrants. Register early and save.

This year's meeting will be in San Diego, one of the top convention and meetings

destinations, offering an enjoyable climate and great value for every budget. Attendees enjoy an array of neuroscience-related social activities, budget-friendly restaurant options, convenient transportation, attractions, and nightlife.

Don't miss your chance to experience the latest scientific research and innovations, build and strengthen professional relationships, and discover state-of-the-art products and services.

Top Reasons to Attend Neuroscience 2013 in Challenging Times:

- Discover the latest science and cutting-edge research
- Forge collaborations with peers
- Access to resources for funding and career development
- Explore new tools and technologies

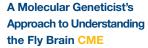
Presidential Special Lectures

The Mind of a Worm:
Learning From the *C.*elegans Connectome CME



Saturday, Nov. 9, 5:15-6:25 p.m.

The connectome of the roundworm *C. elegans* reveals the neural pathways that underlie its motivated and purposeful behavior. New connectomics data suggest the topology of a neural network contributes to integration of multiple sensory inputs in a decision-making process that guides a multistep behavioral pathway. Our thoughts, memories, and behavior are emergent collective properties of a vast network of neurons. Determining the wiring diagram of the nervous system of a tiny animal is a first step toward learning how patterns of connectivity contribute to the rapid, robust, and economic function of the brain.





Sunday, Nov. 10, 5:15-6:25 p.m.

To probe the workings of the nervous system, we will need to be able to assay and manipulate the function of individual neuronal cell types. The intellectual framework for such an approach has been apparent for many years, but the available tools have been inadequate for the job. This lecture addresses efforts to develop and apply an advanced set of tools that will be required for a comprehensive analysis of the anatomy and function of the fly brain at the level of individual cell types and circuits.

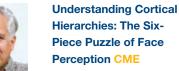


Connectomics: What, How, and Why CME

Jeff W. Lichtman, MD, PhD Harvard University

Monday, Nov. 11, 5:15-6:25 p.m.

Connectional maps of the brain have value in modeling how the brain works and fails when subsets of neurons or synapses are missing or misconnected. Such maps also provide information about how brain circuits develop and age. Efforts to obtain complete wiring diagrams of peripheral motor and autonomic axons provide insight into the way mammalian nervous systems mold in response to experience. Automated electron microscopy used to collect tapes of brain sections then imaged at high resolution will be discussed. This imaging pipeline will make large-scale connectomic analysis of brain circuits more routine.



Doris Y. Tsao, PhD
California Institute of Technology

Tuesday, Nov. 12, 5:15-6:25 p.m.

How the brain distills a representation of meaningful objects from retinal input is one of the central challenges of systems neuroscience. Functional imaging experiments in the macaque reveal that one ecologically important class of objects, faces, is represented by a system of six discrete, strongly interconnected regions. Electrophysiological recordings show that these "face patches" have unique functional profiles. By understanding the distinct visual representations maintained in these six face patches, the sequence of information flow between them, and the role each plays in face perception, we can gain new insights into hierarchical information processing in the brain.

