COMPUTATIONAL CHEMISTRY BI-WEEKLY SEMINAR SERIES

TOPIC: **Neuronal Circuitry and Computation in the Retina**

SPEAKER: **Z. Jimmy Zhou, School of Medicine, Yale University**

TIME: 13:30-14:30, 12 November 2014

VENUE: Room 152, Geography Building, 3663 Zhongshan Road North, Shanghai (中山北路校区，地理楼 152 室)

ABSTRACT OF THE TALK

As a most approachable part of the brain, the retina is an ideal model system for understanding neuronal classification, connections, circuits, and computation. This seminar will discuss current strategies in understanding neuronal connectivity map (connectome), synaptic function, and network computation in the retina, using electrophysiology, optogenetics, and two-photon imaging.

BIOGRAPHY

Dr. Zhou received a BS in Nuclear Physics from Fudan University and a Ph.D. in Physics/Biophysics from University of Houston, and postdoctoral training in Neurophysiology at UCLA. He is currently Marvin L. Sears Professor of Ophthalmology and Visual Science, Professor of Cellular and Molecular Physiology and of Neurobiology, Yale University School of Medicine, where he also serves as Vice Chairman and Director of Research in the Department of Ophthalmology and Visual Science. Dr. Zhou's research interests include retinal function and development, synaptic transmission and circuitry, visual signal processing, and vision restoration.