The 28th iCeMS SEMINAR

Fri 18 Sep 2009 16:00-17:00

Lecturer:

Prof. Rachel O. L. Wong

Department of Biological Structure University of Washington

Activity-dependent Regulation of Synaptic Development in the Vertebrate Retina

Venue: 2nd floor Seminar Room (#A207) Main Building iCeMS Complex 1, Kyoto University

The highly organized circuitry and well-characterized visual function of neurons in the vertebrate retina allow us to assess how changes in cell-cell interactions, including neurotransmission, regulate the structural development, connectivity and function of retinal circuits. Using live-cell imaging techniques, electrophysiology and molecular approaches, we have recently explored how reduction in neurotransmission during development influences the rate of synapse formation and elimination in the inner retina. Our findings suggest a role for activity in the local, rather than global, regulation of synaptic connectivity between retinal neurons.







