

CDB SEMINAR

Masahito Yamagata

Department of Molecular and Cellular Biology, Harvard University

Monday, December 25, 2006 15:00~16:00 A7F CDB Conference Room

Formation of lamina-specific neuronal connectivity in visual system

Summary

Neurons are connected with a remarkable degree of synaptic specificity in neuronal circuits. Many areas of the central nervous system consist of multiple neuronal cell layers, each of which bears a unique population of neuronal types. In such laminated areas, both axons and dendrites restrict their synaptic connections to particular laminae. Thus, lamina-specific synaptic connectivity is a major wiring principle of the brain. To understand cellular and molecular mechanisms that underlie development of lamina-specific connectivity, retinal ganglion cells, sole projection neurons of the retina, are useful because their axons and dendrites make striking laminar choices in the central targets and retina, respectively. I am going to talk about our findings on immunoglobulin superfamily adhesion molecules that guide lamina-specific connectivity.

Host:

Masatoshi Takeichi Cell Adhesion and Tissue Patterning, CDB takeichi@cdb.riken.jp Tel:078-306-3116 (ext:1321)

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