

Neuroanatomy and Cellular Neurobiology

1. Staffs and Students (April, 2009)

Professor	Sumio TERADA	
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2. Purpose of Education

Section of neuroanatomy and cellular neurobiology takes charge of basic neuroscience education for medical undergraduate student (Lectures and Wet labs), especially from the morphological point of view.

For graduate school students, we offer introductory courses on both optical and electron microscopy (Lectures and Wet labs), with close relation to molecular and cellular neurobiology.

3. Research Subjects

- 1) Molecular mechanism of intracellular transport, quality control of transporting cargos, and their interrelation (Slow axonal transport and neurodegeneration)
- 2) Development of the real-time detection system of the biomolecular network in vivo and its application to cell biology
- 3) Molecular and cellular biological analysis of neuron-specific small G proteins
- 4) Development of new spectroscopic methods to visualize the localization of biomolecules without fluorescence labeling
- 5) Search for new cellular morphological regulatory factors on cytoskeletal dynamics
- 6) Functional image analysis on neuropsychiatric disorders

4. Publication