

現地レポート Report from Participants／

Penphimon Phongpha nphanee (生命科学研究所 生理科学専攻、Department of Physiological Sciences, School of Life Science)

Destination country : United State of America

Receiving Univ./institute : Duke University Medical Center

Period of study : From 21/09/2006 to 20/10/2006

Date of report : 12/10/2006

Progress of the class/research

(Registration of the class: Unregisterd)

1. Study the photostimulation system for electrophysiological recording.
2. Observe the experiments conducted in Department of Neurobiology.
3. Practice whole cell patch-clamp recording in the superior colliculus (SC) slices with photostimulation system.

1. Coronal slices were prepared from the SC of 21- to 28-day-old rats. The animal were anesthetized and perfused transcardially with ice-cold artificial cerebrospinal fluid (ACSF) solution. A portion of the brain containing the SC was removed, mounted with glue to a sectioning chamber and sectioned with a microslicer vibratome, 250 micrometer thickness.
2. Whole cell patch-clamp recording was used to record the neurons in the SC slices. Biocytin was included in the pipette solution for the morphological study of the recorded cells.
3. UV light from an argon ion laser was directed via the laser mirror to the microscope and entered the brain slice. The caged glutamate was photolyzed and uncaged for stimulation at the specific area, 50 micrometer in diameter in focal plane.



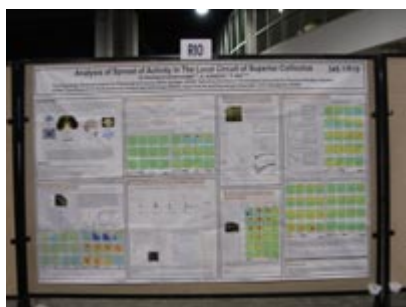
- Duke Univ. Dept. of Neurobiology -



- SFN Center -

Living conditions

1. Accommodation: I have stayed at the hotel about 4 miles from the university. The room is comfortable and furnished with full kitchen. The grocery shop and restaurants are very near the hotel.
2. Transportation: the shuttle van is available for going to the university.
3. People: In my lab, Professor and his colleagues are very kind and friendly.



- Mee' s Poster -



- Logde -

Living conditions

I would like to suggest to the students, who are going to come here, to contact with administrative office for preparation of some required documents before departure.