Neuroscience Seminar

Seminar Time: 1:30-3:20 m, every Monday (unless specified in red)

Room: 1F B100, Interdisciplinary Research Building, Academia Sinica

Description: This course intends to encourage students to learn and discuss neuroscience discoveries through the original papers. The papers following the lecture ("Introduction to Neuroscience") theme will be selected by the coaching PI. Every student has to read the papers and express his/her opinions through the class. It is considered "failed", if you do not read the papers or do not participate in discussion at all.

Date	Topic	Lecture	Presenter
9/9	Neuroscience: Past, Today, and Future	Yi-Shuian Huang 黃怡萱	
9/16	The Structure of the Nervous System (Chapter 7) Paper discussion (seminar)	Li-Jen Lee 李立仁	
9/23	Neurons and Glia (Chapter 2) Paper discussion (seminar)	Yung-Feng Liao 廖永豐	
9/30	The Neural Membrane and Action Potential (Chapter 3, 4) Paper discussion (seminar)	Shi-Bing Yang 楊世斌	
10/7	Neurotransmitter Systems (Chapter 6) Paper discussion (seminar)	Chih-Cheng Chen 陳志成	
10/14	Synaptic Transmission (Chapter 5) Paper discussion (seminar)	Chi-Kuang Yao 姚季光	
10/28	The Eye and Visual System (Chapter 9, 10) Paper discussion (seminar)	Shih-Kuo Chen 陳示國	
11/4	The Chemical Sense (Chapter 8) Paper discussion (seminar)	Hung-Hsiang Yu 游宏祥	
11/11	The Somatic Sensory System (Chapter 12) Paper discussion (seminar)	Yu-Wei Wu 吳玉威	
11/18	Spinal Control of Movement (Chapter 13) Paper discussion (seminar)	Jun-An Chen 陳俊安	
11/25	Chemical Control of Brain and Behavior(Chapter 15) Paper discussion (seminar)	Shih Chieh Lin 林士傑	
12/2	Cognitive Neuroscience I (Chapter 20) Paper discussion (seminar)	Chia-Ying Lee 李佳穎	
12/4	Diseased Brain (Chapter 22) Paper discussion (4:20- ~6:00pm), right after the lecture	Chen-Jee Hong 洪成志	
12/11	Interdisciplinary Neuroscience: Brain Mind Welfare Paper discussion (4:20- ~6:00pm), right after the lecture	Fu-Zen Shaw 蕭富仁	

Papers will be assigned by the coaching PI. We will E-mail you the papers as soon as they are available.

Aims:

1. To bridge the gap between the theory and breakthrough discovery you hear from the course and the original experiments to derive the axiomatic knowledge in the seminar discussion.
2. To train student's Q & A ability and critical thinking.
3. To develop student's discussion skill, especially encouraging them to express their personal views about the papers with the guidance from the coaching PI.

Class style:

For all students: you are required to read the papers prior to the class. Each one of you will be randomly assigned to explain one or two figures in the papers by the coaching PI. You need to: correct wrongful interpretation by your classmate, raise thoughtful questions regarding the experimental design and interpretation of the papers (questions such as "how did the authors perform this experiment?" are considered as you did not read the papers at all because most of classic papers contain detailed material and methods, which is your responsibility to read it thoroughly).

For the designated student: you will be assigned in the first class by random drawing. You are responsible to make Powerpoint slides containing two parts: first, a few introduction slides, presented by you with the time limit of 10 min; second, figures of the papers with clear visibility (please break down the multi-panel figures into 2-3 slides for all small fonts to be visible by the audience), you are responsible to operate the computer to change the slide.

Grading:

Active participation in the discussion is the key to pass the class. Each coaching PI will be provided with a grading sheet to document your performance during the class, and the course organizer will summarize your performance after the final class and assign grades accordingly.

Rules:

Students are allowed to be absent for only one time with prior notification (at least 30 min before class) to TIGP-INS office. Absence due to sickness or unforeseeable accident requires hospital official document or written proof of accident. Late for the class for more than 10 min is considered as absence without notice.