



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

VP146_DIP_BIOS

Visiting Professor Program Academic year 2022/2023

TEACHING COMMITMENT: 12 hours

COURSE TITLE

Neurophysiology

TEACHING PERIOD

1st term

SCIENTIFIC AREA

Physiology

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

- Synaptic Transmission: Excitatory Synapses;
- Synaptic Transmission Inhibitory Synapses: Heterogeneity of GABA interneurons in CNS;
- Practical small group workshops: students will be required to work in small groups to solve specific problems concerning the lectures topics relevant to human disease.

LEARNING OBJECTIVES

The course aims at focusing the relevant issues of synaptic transmission and aims to foster basic knowledge of students on cellular neurophysiology and electrical signals transmission as well as integrated knowledge of neurophysiology. Additional objective points to a quantitative analysis of some conceptual and technical approaches to neurophysiological mechanisms from a molecular and postgenomic point of view, with particular emphasis on selected themes.

TUTORSHIP ACTIVITIES

N/A

LAB ACTIVITIES

Practical small group: Ca²⁺ imaging analyses using ImageJ

OTHER ACTIVITIES BESIDES THE COURSE

Other activities besides the course: i.e. seminars and conferences addressed to PhD students and research fellows, dissemination conferences (if applicable) (10 lines max)

During the Visiting Professorship, the invited professor will also perform a series of lessons in form of seminars as part of the teaching training organized by the PhD School of "Neuroscience", in accordance with Prof. Fiorio Pla and Prof De Marchis presenting an updated state of the art of the GABA and glutamate ligand-gated channels at the inhibitory and excitatory synapses relevant to the understanding of mechanisms of synaptic plasticity and the plasticity of disease .

VISITING PROFESSOR PROFILE

The Visiting Professor should have a solid teaching experience in Physiology, preferentially with an academic position, as well as a solid experience in English teaching. Due to the focused topic proposed for the Neurophysiology course the Visiting Professor should have both experience in the teaching of fast synaptic transmission Neurophysiology as well as on ion channels involved. On the other hand, it would be

necessary that the Visiting Professor has a internationally-recognized research experience related to ion channels regulation involvement in Physiopathology. The Visiting Professorship will be a great opportunity

for the students to be able to meet and to have the possibility of training abroad.

CONTACT PERSON AT THE DEPARTMENT

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