



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

TIC63_DIP_DBIOS

Visiting Professor Program Academic year 2020/2021

DEPARTMENT OF LIFE SCIENCES AND SYSTEMS BIOLOGY

TEACHING COMMITMENT: 20 hours

COURSE TITLE

Neurophysiology

TEACHING PERIOD

1st term

SCIENTIFIC AREA

Physiology

LANGUAGE USED TO TEACH

English

The Degree Course is entirely taught in English

COURSE SUMMARY

The course will be focused on sensory physiology as part of the Neurophysiology course.

In particular the course will focus on fast chemical synapses in the peripheral and central nervous system with emphasis on functional and pharmacological properties of distinct ligand gated ion channels.

Moreover, one ECTS/CFU (16 hrs practical) will be dedicated to group student work supervised by Visiting Professor. Students will be divided into working groups focusing on different aspects of ion channel regulation involved in fast synaptic transmission (10 hrs), the outcome of which will be presented in the form of seminars (6 hrs). The practical work including the presentation will be evaluated as part of the final grade of the Neurophysiology course.

LEARNING OBJECTIVES

The course aims at focusing the relevant issues of reproduction Neurophysiology 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 (IF APPLICABLE)

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.

LAB ACTIVITIES (IF APPLICABLE)

OTHER ACTIVITIES (IF APPLICABLE)

VISITING PROFESSOR PROFILE DESCRIPTION

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 an international-recognized research experience related to ion channels regulation involvement in Physiopathology.

CONTACT PERSON AT THE DEPARTMENT

Prof. Alessandra Fiorio Pla
alessandra.fiorio@unito.it