



Direzione Ricerca,
Innovazione e
Internazionalizzazione

**UNIVERSITÀ
DI TORINO**

ID

VP_153_NEU

Visiting Professor Program Academic Year 2025/2026

TEACHING COMMITMENT: 12 hours

COURSE TITLE

Neurophysiology of Pain

TEACHING PERIOD

II semester

SCIENTIFIC AREA

Neurophysiology

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

The module of Neurophysiology introduces the basic principles of neuronal signaling, the transduction and processing of sensory information, the planning and generation of motor commands, and the neural basis of complex and cognitive functions of the nervous system.

At the cellular level, the aim is to guide the student to understand the basis of electrical and molecular signals of the nervous system and how they encode, process and transmit information in and between single cells.

At the systems level, a main goal is to lead the students to understand how each specific sensory, motor or higher function is implemented by neuronal activity of the nervous centers involved. Specific contributions will be about the neurophysiology of pain and/or learning and memory.

LEARNING OBJECTIVES

Deepen the understanding about the sequence of events leading from sensory transduction to conscious perception of pain and /or deepen the understanding about types of learning and memory and how they are implemented by neural circuits.

OTHER ACTIVITIES BESIDE THE COURSE

Seminars and conferences addressed to PhD students and research fellows.

VISITING PROFESSOR PROFILE

The ideal candidate has established lecturing expertise in neurophysiology, delivering courses at both the bachelor's and/or master's levels, with a specific focus on the neurophysiology of pain and/or learning and memory.

CONTACT REFERENT

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