



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

TIC55\_DIP\_BIOS

## **Visiting Professor Program Academic year 2021/2022**

**DEPARTMENT OF LIFE SCIENCES AND SYSTEMS BIOLOGY**

**TEACHING COMMITMENT: 12 hours**

**COURSE TITLE**

**Cellular and molecular neuroendocrinology**

**TEACHING PERIOD**

1st term

**SCIENTIFIC AREA**

Physiology

**LANGUAGE USED TO TEACH**

English

The Degree Course is entirely taught in English

**COURSE SUMMARY**

The lessons will focus on cellular/molecular approaches applied to neuroendocrinology. First, specific molecular tools and experimental models (possibly including the zebrafish as an animal model) will be presented. Next, selected topics in neuroendocrinology will be covered, starting with general concepts such as the steps involved in the discovery process and pathological aspects, followed by the present state of the art in mammalian research and comparative aspects with special emphasis on results obtained in different animal models, including zebrafish. Topics should include one or more of the following:

- 1) The circadian clock system in vertebrates;
- 2) Neuroendocrine regulation of food consumption;
- 3) Neuroendocrine regulation of reproduction.

### **LEARNING OBJECTIVES**

- 1) Learn the state of the art in selected fields of neuroendocrinology research and related pathological aspects;
- 2) be aware of the most important and innovative methodologies and approaches in molecular endocrinology;
- 3) in the end, be able to critically read and discuss manuscripts in the field.

### **TUTORSHIP ACTIVITIES**

N/A

### **LAB ACTIVITIES**

2 of the 12 hrs will be dedicated to workgroup activities and discussion with the students

### **OTHER ACTIVITIES BESIDES THE COURSE**

The visiting professor will be invited to give a lecture for the PhD students in Neuroscience and to meet the PhD students interested in discussing their projects

---

### **VISITING PROFESSOR PROFILE**

The visiting professor should be an internationally recognized specialist in the field of neuroendocrinology, using established animal (preferentially zebrafish) and cellular models. She/he should have a well-documented scientific record in her/his field. She/he should also have a proven experience in teaching at various academic levels, including being a lab and thesis supervisor, and should have been previously involved in the organization of scientific training activities.

### **CONTACT PERSON AT THE DEPARTMENT**

Prof.ssa Patrizia Bovolin  
patrizia.bovolin@unito.it