



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

TIC61_DIP_DBIOS

Visiting Professor Program Academic year 2020/2021

DEPARTMENT OF LIFE SCIENCES AND SYSTEMS BIOLOGY

TEACHING COMMITMENT: 16 hours

COURSE TITLE

Oncology and Molecular Pathology - Module 'Molecular Bases of Muscle Pathology'

TEACHING PERIOD

1st term

SCIENTIFIC AREA

General pathology

LANGUAGE USED TO TEACH

English

The Degree Course is entirely taught in English

COURSE SUMMARY

The course will provide the students a deep insight into muscle derangements occurring in aging and in several pathologies of both neurogenic and inflammatory origin, such as amyotrophic lateral sclerosis, muscle dystrophies, multiple sclerosis, cancer, obesity, diabetes. The skeletal muscle account for about 50% of total body proteins and is, together with the nervous system, the body compartment mainly involved in the maintenance of a good quality of life, in terms of independence, possibility to perform normal daily activities, prevention of risk of falls, etc. For these reasons it is important to form students providing them a good knowledge about the mechanisms that can lead to reduced muscle mass and function.

LEARNING OBJECTIVES

Aim of the course is to provide students with instruments to understand the molecular bases of muscle derangements associated with human diseases, including cancer. Students will be able to

establish connections between molecular alterations and pathological processes at high integration levels (subcellular compartments, cells, tissues/organs and organism).

These objectives will be reached by combining the interaction with an expert in the field with the discussion on recently published papers.

TUTORSHIP ACTIVITIES (IF APPLICABLE)

LAB ACTIVITIES (IF APPLICABLE)

8 hrs will be dedicated to group work with presentation and discussion of selected papers.

OTHER ACTIVITIES (IF APPLICABLE)

Seminars will be offered to PhD students enrolled in the Doctoral School of Life and Health Sciences.

VISITING PROFESSOR PROFILE DESCRIPTION

The Visiting Professor should have a background in biology and/or biotechnology. She/he should possess a wide expertise in the field of chronic pathologies, with particular emphasis on muscle function and metabolism. Her/his contribution to the state of the art in muscle pathology should be internationally recognized.

CONTACT PERSON AT THE DEPARTMENT

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