



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

TIC40_DIP_SCB

Visiting Professor Program Academic year 2019/2020

DEPARTMENT OF CLINICAL AND BIOLOGICAL SCIENCES

TEACHING COMMITMENT: 12 hours

COURSE TITLE

PHYSIOLOGY OF SYSTEMS

TEACHING PERIOD

2nd term

SCIENTIFIC AREA

PHYSIOLOGY

LANGUAGE USED TO TEACH

English

The Degree Course is entirely taught in English

COURSE SUMMARY

Starting from anatomical, biochemical, biological and physical basis, the teaching program aims to illustrate the function of the various organs and systems. During the entire course an in-depth of knowledge of the physiological concepts essential for understanding mechanisms of disease will be given. The program consists in the physiology of cardiovascular, renal, pulmonary and gastro-enteric systems. Control mechanisms and functions of body systems and their clinical relevance will be the core of the course. Cardiovascular physiology and pathophysiology will be analyzed in depth for many body systems. The visiting professor, starting from the classical concepts of cardiovascular physiology and adaptations during exercise, will introduce the concepts of ischemic heart disease and heart failure development and mechanisms.

LEARNING OBJECTIVES

Students shall have an in-depth understanding of the functional mechanisms of the human body. To this end, the student should be able to describe and discuss the main physiological mechanisms and, when necessary, compile and explain the graphs related to the physiology of the cardiovascular, renal, pulmonary and gastrointestinal systems. As a future MD, the student should

also be able to discuss the physiological phenomena that occur during stress adaptations and the basic mechanisms that lead to the disease and failure of an organ. Given the centrality of the cardiovascular system, a thorough knowledge of this part is required.

VISITING PROFESSOR PROFILE

The visiting professor should have extensive experience in teaching cardiovascular physiology, supervising and mentoring undergraduate and postgraduate students. He/she should be an expert in cardiovascular physiology and "conditioning" approach against myocardial ischemia/reperfusion injury, and should be also an expert on the potential mechanisms involved in the development of post-ischemic cardiac hypertrophy and failure.

CONTACT PERSON AT THE DEPARTMENT

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