UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Translational Approach To Neurological Disorders

2627-2-F0902D012

Aims

The student should be able to integrate basic knowledge regarding the field of neuroscience, besides pathogenic mechanisms, therapeutic goals and present research trends in the main nervous system and cardiovascular diseases.

Knowledge and Understanding - at the end of this course, the student will be able to understand and integrate interdisciplinary info useful for understanding neuroscience and cardiovascular research methods. Know and understand the applicative fields of neuroscience and of cardiovascular diseases.
Applying Knowledge and Understanding - At the end of this course, the student should be able to use the acquired knowledge for understanding neuroscience and cardiovascular research potential in the medical field.
Making Judgments - At the end of this course, the student will be able to link and put together info coming from different fields (biology, medicine, technology), in order to understand and interpret neuroscience and cardiovascular research.
Communication Skills - At the end of this course, the student will have acquired an adequate scientific terminology and will be able to expose with the correct use of language the course topics.
Learning Skills - At the end of this course, the student will be able to comprehend and critically evaluate the scientific literature regarding neuroscience and cardiovascular diseases..

Contents

This course aims at contributing to the training of a medical biotechnologist able to integrate basic principles of neuroscience in order to understand the biological basis, main pathogenic mechanisms and experimental models regarding nervous system and cardiovascular diseases. Models will be analyzed stressing critical aspects and role in the development of novel therapeutic strategies.

Detailed program

Please refer to each Teaching Unit:

1. Mechanisms and Biomarkers of Neuronal Damage
2. Mechanisms and Models of Vascular Diseases

Prerequisites

Basic knowledge of anatomy and histology, physiology and general pathology and neuropharmacology.

Advanced knowledge of biochemistry, molecular biology and genetics.

Teaching form

In-presence erogative.

Textbook and teaching resource

Slides, scientific papers.

Semester

First semester second year.

Assessment method

Vascular models module: Multiple-choice quiz (30 multiple-choice questions. Only one correct answer. +1 point for each correct answer. 0 points for each incorrect answer. 45 minutes). A passing grade is required to proceed to the Neurology module oral exam. Score equal to one-third of the final grade.
Neurological module: Oral examination, questions regarding topics treated during the course. (passing grade needed, score equal to two thirds of the final grade).

Office hours

By email to the Professor: lucio.tremolizzo@unimib.it

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING