UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

From Bench To Bedside:translational Approach To Diseases

2526-2-F0901D059

Aims

The aim of the Course is to provide the student with a critical knowledge of the technical instruments and strategies normally employed in defining the pathophysiology of the various disorders and possible new therapeutic approaches.

Knowledge and understanding - at the end of the course "From Bench to Bedside" the student will be able to use the provided information to understand the predisposing genes and molecular mechanisms underlying gastrointestinal pathologies.

Ability to apply knowledge and understanding - at the end of the course the student must be able to use the acquired knowledge to understand the molecular basis of new therapeutic approaches.

Independent judgment - at the end of the course, the student will be able to put together information from different fields (biology, medicine, technology) to understand and interpret new therapeutic approaches in the gastroenterology field.

Communication skills - at the end of the course the student will have acquired adequate scientific terminology and will be able to explain the topics covered in the course with correct language.

Learning ability - at the end of the course the student will be able to understand and critically evaluate the scientific literature regarding genetic/autoimmune-based gastroenterological and hepatological pathologies.

Contents

The aim of this course is to present several examples of diseases and their physiopathology, and the role of biotechnology in their diagnosis/ therapeutic approach. Gastroenterological and iron metabolism disorders will be analyzed. A general introduction on the methodologies employed to analyse the molecular mechanisms underlying

the pathological processes will be provided.

Detailed program

For the detailed description of the program please refer to the information provided in the specific module

Prerequisites

Advanced knowledge in genetics, biology and molecular biology.

Teaching form

20 two-hour classes delivered in presence.
6 two-hour "informal classes" delivered in presence.

Textbook and teaching resource

Reviews or specific papers published in international journals.

The slides employed during classes will be provided.

Semester

First semester

Assessment method

The oral exam (in presence) will consist of an interview on the topics covered in class and described in the provided material. This interview will allow for an in-depth evaluation of the acquired knowledge, as well as of the critical ability and the ability to place individual topics within a broader context (for example, by evaluating possible interactions).

Office hours

By appointment.

To arrange the appointment please use the email addresses provided in the two modules.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY