



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Mutagenesi del Gene Malattia

2324-1-F0601Q116-F0601Q117M

Aims

The course will be multidisciplinary and organized in modules in order to offer an overview of genetic, molecular, biochemical, physiological and pharmacological aspects of a human disease.

The focus of the course will be the study, from different perspectives, of a genetic disease, from diagnosis to treatment.

In particular, at the end of the course the student will have acquired the following skills:

1. knowledge and understanding: complete overview with different integrated approaches of a specific human genetic disease
2. applied knowledge and understanding: apply what has been learned to the study of numerous human genetic diseases
3. self-judgment: capacity to critically evaluate what has been learned
4. oral competences: oral communication of what has been learned using the correct scientific terminology
5. ability to learn: critical learning and understanding of scientific literature on different aspects of a human disease.

In the academic year 2023-2024 the genetic disease studied will be Cystic Fibrosis.

Contents

Site-specific mutagenesis approaches and in silico design of constructs

Detailed program

The Molecular Biology module includes:
-discussion of site-specific mutagenesis approaches
-design of the mutagenesis strategy

Prerequisites

Basic knowledge in molecular biology

Teaching form

Frontal teaching, group work and reverse teaching

Textbook and teaching resource

Powerpoint presentations will be available on e-learning.

Semester

Second semester

Assessment method

Written exam.

The exam of the course will assess the learning of the material discussed in all the modules.

The written exam will be done in the computer laboratories.

See the details on the general course page.

Office hours

upon appointment

Sustainable Development Goals
