



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Mutagenesi del Gene Malattia

2324-1-F0601Q116-F0601Q117M

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#### 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**

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