



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Mutagenesi del Gene Malattia

2425-1-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 2024-2025 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 and group work

## **Textbook and teaching resource**

Powerpoint presentations will be available on e-learning.

## **Semester**

Second semester

## **Assessment method**

See the general course page

## **Office hours**

Upon appointment by e-mail

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION

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