



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Cell and Molecular Biology II

2425-1-H4102D002-H4102D007M

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#### Aims

The course provides theoretical knowledge and practical training on some widely used molecular biology techniques that are relevant for medical research.

#### Contents

Introduction to biotechnological applications in medicine.

#### Detailed program

The course will develop around the following technologies:

- **SDS-PAGE:** casting gels, loading samples, running electrophoresis;
- **Western blotting:** proteins transfer, incubation with primary and secondary antibodies, signal development; interpretation and discussion of the results;
- **Confocal microscopy:** short training on the use of a confocal microscope, with imaging of pre-stained tissue slides;
- **Protein analysis:** use of Bradford reagent, generation of a standard curve, determination of protein concentration using a spectrophotometer, discussion of the results.

#### Prerequisites

Basic sciences

### **Teaching form**

Three five-hour interactive practical training sessions delivered in presence.

### **Textbook and teaching resource**

Slides employed to provide some knowledge of the techniques will be provided.

### **Semester**

First semester

### **Assessment method**

The topics will be part of the final integrated oral examination (further details are reported in the Syllabus of the entire course).

### **Office hours**

By appointment

### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION

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