UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Cell and Molecular Biology II

2425-1-H4102D002-H4102D007M

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