



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Immunology II

2122-2-H4102D011-H4102D034M

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#### Aims

The Immunology II course provides students with the theoretical knowledge of some basic cell and molecular immunology laboratory techniques.

The course will provide skills on the preparation of the sample to be analyzed, as well as immunology techniques. At the end of the course the student will be able to understand how some laboratory techniques work.

#### Contents

- Cell culture techniques.
- Preparation of leukocytes from blood samples
- Antibody production. Monoclonal antibodies and their applications.
- Antigen-antibody interaction, direct and indirect immunofluorescence. Immunohistochemistry.
- Immunoassay: immunoblotting, immunoprecipitation. ELISA test.

## **Detailed program**

- Cell culture techniques.
- Preparation of leukocytes from blood samples
- Antibody production. Monoclonal antibodies and their applications.
- Antigen-antibody interaction, direct and indirect immunofluorescence. Immunohistochemistry.
- Immunoassay: immunoblotting, immunoprecipitation. ELISA test.

## **Prerequisites**

Knowledge related to basic immunology

## **Teaching form**

Presentation of classroom techniques. Discussion of manuscripts with students. Reverse teaching: presentation of a monographic paper by group students.

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## **Textbook and teaching resource**

Scientific and technical publications.

## **Semester**

5 days of 6 hours in the semester

## **Assessment method**

The exam includes a written test with multiple choice questions on the topics covered during the exercises, administered together with the immunology I test

## **Office hours**

The appointment for students will be set by email to the Prof.

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