UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

## Immunology II

**1920-2-H4102D011-H4102D034M**

### 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.

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## 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.

One day at pathological anatomy is expected to become familiar with immune system cells stained with specific antibodies

## 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.