

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **COURSE SYLLABUS**

## **Immunology II**

1819-2-H4102D011-H4102D034M

#### **Aims**

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

The course will provide skills on sample preparation to be analyzed as well as basic immunology techniques. At the end of the course the student will be able to understand how the main immunological tests can be applied both to the diagnosis of diseases and to the translational research laboratory.

#### **Contents**

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

## **Prerequisites**

Knowledge relating to the theoretical course of Immunology I

## **Teaching form**

exercises

## Textbook and teaching resource

#### Semester

5 days - 6 hours

### **Assessment method**

The exam includes a written test with multiple choice questions on the topics covered during the exercises

#### Office hours