

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### SYLLABUS DEL CORSO

## Histology

2324-1-H4102D088-H4102D025M

### Aims

Students will be able to the understand the basic histological techniques, to prepare histological samples for the observation of the structure and ultrastructure of the main biological tissues. There will be the supervision of qualified laboratory staff by using an "on field" approach.

At the end of the clerkship the student will be able to manage a paraffin-embedded organ sample, and then to cut, stain with ematoxilin-eosin and mount a slide for histological examination.

#### Contents

The students are introduced to the main histological techniques and to the instruments, materials and reagents needed for histological analysis.

#### **Detailed program**

Preparation of biological samples for histological analysis, immunohistochemistry, immunofluorescence and ultrastructural analysis

Principles of light microscopy, confocal microscopy and electron microscopy

Blood cytology

#### Prerequisites

College-level scientific knowledge

#### **Teaching form**

Frontal lessons, practical activity in the histology laboratory

(Note: activities in attendance)

#### **Textbook and teaching resource**

Histology: A Text and Atlas, with Correlated Cell and Molecular Biology, 6th Edition by Michael H. Ross PhD, Wojciech Pawlina MD.

Junqueira's Basic Histology: Text and Atlas, Thirteenth Edition by Anthony Mescher.

#### Semester

2nd term

#### Assessment method

Assessment of the suitability on the basis of the attendance/participation to the laboratory activities. Knowledge and skills will be further assessed during the "Fundamentals of Human Morphology" examination, with the modalities there described.

#### Office hours

See "Clerkship 2"

#### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | GENDER EQUALITY | DECENT WORK AND ECONOMIC GROWTH | REDUCED INEQUALITIES