UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Histology

2526-1-H4104D008-H4104D00803

Aims

Students will be able to understand the basic histological techniques, to prepare histological samples for the observation of the structure 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 resin and paraffin-embedded organ sample, and then to cut and stain 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

General principles of sample preparation for light and electron microscopy.
Processing of samples:

- Paraffin embedded samples:

1. Tissue block embedding
2. Microtome sectioning
3. Collection of sections on slide

- Resin embedded samples:

1. Microtome sectioning
2. Staining
3. Light microscopy analysis

- Blood:

1. Preparation of a blood smear.
2. Staining of blood cells
3. Light microscopy analysis

Prerequisites

College-level scientific knowledge

Teaching form

Practical activity in the histology laboratory
(Note: 100% in person interactive activities)

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

It is required the attendance at a minimum of 70% of the internship hours.
Assessment
Proficiency will be assessed using the Labster platform, which is used for lab simulations. During virtual exercises, students will be asked questions about both theoretical and practical content, and points will be awarded. In order to pass each simulation, students must achieve at least 70% of the maximum score obtainable.
The final evaluation will be pass/fail.

Office hours

Mon-Fri, by appointment

Sustainable Development Goals

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