



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Neurobiology

2526-5-H4101D159

---

#### Aims

Recent neurogenetic and neurobiological discoveries have widely changed diagnostic approach and therapy for neurological diseases.

The aim of this course is to provide students a wide view of main research lines and direct experience of lab techniques to investigate bases of CNS disorders.

#### Contents

Biological mechanisms of neurological disorders.

#### Detailed program

Theoretical part will review biological bases of CNS disorders. Main themes will cover the role of glutamatergic system, excitotoxic mechanisms, neuronal apoptosis, mechanisms of neuroimmunological diseases, epilepsy, brain ischemia, neurodegenerative disorders.

Lab activities will be devoted to learn main neurobiological techniques: neuronal glial and fibroblast cultures, molecular biology techniques (Western blot-Northern blot-PCR) and biochemical techniques (ELISA-RIA-Binding-Uptake). Present research activities of laboratory of Neurobiology will be described.

## **Prerequisites**

Medical students at 5th and 6th year of Italian and English Courses.

## **Teaching form**

Theoric and practical course, with frontal lectures and experimental activities in the Lab of Neurobiology.

## **Textbook and teaching resource**

Slides from the lectures. Scientific papers.

## **Semester**

Second semester.

## **Assessment method**

Attendance. Discussion of papers.

## **Office hours**

By e-mail appointment with the teacher.

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION

---