

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Development of diagnostic methods for the evaluation of the response to treatments in preclinical models of glioma

2122-90R-MOD11

Aims

The aim of the course is to learn the fundamentals of research and diagnostic application of imaging in clinical and preclinical field in glioma.

Contents

Main points of the lectures:

Heterogeneity and molecular classification of glioma

State of the art of the different imaging techniques available for both preclinical and clinical research

Examples of established models of glioma and their applications.

Detailed program

General introduction:

- molecular classification of glioma
- cellular heterogeneity of glioma

- therapy and resistance
- diagnostic methods and monitoring of therapy response
- neuroinflammation and glioma
- Imaging methods (MRI, PET, CT, optical imaging):
- brief introduction of imaging techniques
- study of tumor heterogeneity using imaging
- Preclinical models of glioma

Using of imaging techniques for the monitoring of therapy response.

Prerequisites

For students attending the PhD program in Neuroscience.

Teaching form

Lectures.

Textbook and teaching resource

Scientific papers will be suggested by the teachers during the lessons.

Semester

II semester: January - February 2022

It is possible to change according to enrolled PhD students.

Assessment method

Multiple choice test at the end of the lectures.

Office hours