UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Molecular and Oncological Therapy

2223-2-F0901D048-F0901D082M

Aims

The students will learn the following items:

- Use of TKIs in different neoplastic diseases;
- Mechanisms of resistance to TKIs;
- Methods to identify and analyze genetic lesions causally connected to the transformed phenotype;
- DNA and Histone methylation as a therapeutic targets;
- The RNA interference targeting strategy;
- High Throughput Sequencing applied to neoplastic diseases.

Contents

Students will be trained on the main targeting stragegies using small molecules in Hematology and Oncology.

In particular, the students will learn how to critically evaluate targets and the importance of the relationships between targets and mechanisms of neoplastic transformation.

Detailed program

Use of TKIs in different neoplastic diseases;

Mechanisms of resistance to TKIs.

Methods to identify and analyze genetic lesions causally connected to the transformed phenotype.

DNA and Histone methylation as a therapeutic targets.

The RNA interference targeting strategy.

High Throughput Sequencing applied to neoplastic diseases.

Prerequisites

Basic knowledge on pathology and immunology. Advanced knowledge in biochemistry, molecular biology and genetics

Teaching form

Lessons in attendance, subject to any ministerial changes following the COVID pandemic situation

Textbook and teaching resource

Updated reviews on all topics will be suggested at each lesson

Semester

First Semester

Assessment method

Written exam: one question with opened answer

Final oral exam with the presentation of a scientific article

Office hours

Contact the teacher by email

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING