



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Molecular and Oncological Therapy

2021-2-F0901D048-F0901D082M

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#### 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 strategies 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**

Lectures

During the Covid-19 emergency period, lessons will take place in a mixed mode: partial presence and asynchronous / synchronous videotaped lessons with some physical presence events.

## **Textbook and teaching resource**

Updated reviews on all topics will be suggested at each lesson

## **Semester**

First Semester

## **Assessment method**

Oral exam with the presentation of a scientific article

## **Office hours**

Contact the teacher by email

