

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

# **Diagnostica Biotecnologica**

2526-3-I0302D035-I0302D047M

#### **Aims**

Molecular diagnostics of Thrombophilia, Hereditary hemochromatosis, cardiovascular risk, and cancer. Epigenetic modifications. Pharmacogenetics and pharmacogenemics. Tools for gene expression analysis (Calibrated RT-PCR, Real Time RT-PCR, Microarrays). Molecular diagnostic in solid tumors and haematological malignancies

#### **Contents**

The primary goal of the course is to provide tools for the understanding of the laboratory techniques of clinical molecular diagnostics.

#### **Detailed program**

Molecular diagnostics of cardiovascular risk and thrombophilia (FV, FII, MTHFR, CBS, APO-E, gene mutations), hemochromatosis molecular diagnosis (HFE, TFR2, FPN1, etc), molecular diagnosis of cancer. Genetic and phenotypic screening.

Pharmacogenetics e pharmacogenomics.

Genetic expression studies (calibrated RT-PCR, Real Time RT-PCR, Microarrays).

### **Prerequisites**

Lectures
Textbook and teaching resource
The Teachers will provide educational materials
Semester
First semester
Assessment method
Oral Test
Office hours
On appointment requested by mail

**Teaching form** 

**Sustainable Development Goals** 

GOOD HEALTH AND WELL-BEING