UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

## Medical Genetics

**2122-4-H4101D262-H4101D077M**

### Aims

to introduce the students to the correct  prescription of genetic testing

### Contents

tecniques of cytogenetics, molecular cytogenetics and molecular genetics

### Detailed program

Use of technologies for the detection of genetic diseases :
1) cytogenetics: preparation techniques of conventional karyotypes 2) molecular biology: PCR and gel electrophoresis; Digestion with restriction enzymes (RFLP), Allele-specific amplification (ARMS), Hybridization with specific oligonucleotides, Sanger sequencing, MLPA. New generation sequencing and applications in diagnostics
3) molecular cytogenetics: CHG, array-CHG, SNPs array
Classification of genetic tests and clinical utility. Indications for the prescription of genetic tests with a diagnostic, prognostic and therapeutic purposes.

### Prerequisites

Those foreseen by the didactic regulations of the CdS

## Teaching form

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

## Textbook and teaching resource

slides

## Semester

first semester

## Assessment method

quizzes multiple choice , possible oral examination

## Office hours

appointemt on request by e-mail