



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Laboratory Medicine

2122-4-H4101D262

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#### Aims

to introduce the students to the correct prescription of genetic testing

#### Contents

techniques 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 will be provided in presence, subject to any ministerial changes following the COVID pandemic situation

## **Textbook and teaching resource**

Slides distributed during the course

## **Semester**

first semester

## **Assessment method**

Quizzes multiple choice , possible oral examination

## **Office hours**

Appointemt on request by e-mail

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