

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