UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Citogenetica

1819-1-H4101D004-H4101D014M

Aims

The course provides students with the tools to understand the composition and definition of a normal and pathological human karyotype.

Contents

The course provides the best indications for the analysis of the karyotype and the conventional and molecular cytogenetic techniques up to the array-CGH technique. It provides information to understand the mechanisms of formation of the major chromosomal abnormalities found in human pathologies, both numerical and structural, at constitutional and somatic level.

Detailed program

Methods for chromosome analysis - The normal human karyotype -

Chromosomal and genomic mutations and their meiotic and phenotypic effects

- Deletions, inversions, duplications, translocations and non-disjunctions -

Turner and Klinefelter syndromes, Down Syndrome -

Chromosomal Mutations in tumors: leukemia and lymphoma. Ex in Chronic myelogenous leukemia and Burkitt lymphoma -

Germline mutations, somatic and mosaicism

Prerequisites

notions of basic sciences

Teaching form

Lectures

Textbook and teaching resource

slides and notes taken in class

Semester

second semester

Assessment method

see general page of the course

Office hours

see general page of the course