

# 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
Cerrinine	mutations,	Somatic	anu	mosaicism



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