



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Citogenetica

2021-1-H4101D004-H4101D014M

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#### 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

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