

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **SYLLABUS DEL CORSO**

# **Tecniche Strumentali**

2425-1-I0302D005-I0302D021M

#### **Aims**

To describe PCR and molecular tests based on it (also sample preparation)

## **Contents**

To provide the fundamentals of the main principles of instrumental techniques employed in Clinical Molecular Biology laboratory.

## **Detailed program**

Techniques for the lymphocyte separation from whole blood. DNA and RNA extraction, purification, quantification and storage: theory and practical aspects. Restriction enzymes: theory and diagnostic applications. Retro transcription reaction. Polymerase chain reaction (PCR): parameters for the amplification (denaturation, hybridization, extension) master mix. Amplification products identification (agarose-gel electrophoresis and hybridization techniques). Genetic mutation identification. PCR product sequencing. Viral nucleic acid assays (HCV, HBV, HIV).

## **Prerequisites**

**Biomedical Sciences** 

Exercises
Textbook and teaching resource
Teacher will provide teaching material.
Samaatar
Semester
second semester
Assessment method
Oral examination
Office hours
By appointment
Sustainable Development Goals
GOOD HEALTH AND WELL-BEING

Teaching form