



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Instrument-Based Techniques

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

Teaching form

Exercises

Textbook and teaching resource

Teacher will provide teaching material.

Semester

second semester

Assessment method

Oral examination

Office hours

By appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING
