

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

# Internship in Cardiology e Tecnology

2122-3-H4102D073

#### **Aims**

Understanding how technology helps cardiology for an in-depth characterization of patients' profiles, with a special focus on advanced echocardiography, functional evaluations under stress conditions, and hemodynamic assessment

#### **Contents**

Basis, applications and implications of advanced echocardiography, gas-exchange analysis and invasive hemodynamics for the characterization of patients' profiles in the modern era.

#### **Detailed program**

The course will focus on novel diagnostic tools for the functional evaluation of patients with suspected or known cardiovascular disease, thanks to the recent progresses in technology. In particular, we will focus on advanced echocardiography (3D echo, strain analysis; exercise stress echo) combined or not with gas-exchange analysis (cardiopulmonary exercise test) as well as on invasive hemodynamic evaluation, both at rest and during exercise, with a mention on PV loop analysis.

The student will take part to such clinical evaluations

#### **Prerequisites**

Basis of physiology and of cardiovascular medicine

#### **Teaching form**

Non-frontal didactics and participation to clinical exams

## Textbook and teaching resource

slides that will be provided to the students

#### Semester

2nd semester

#### **Assessment method**

written exam (short report on the patients' cases evaluated during clinical practice in light of the topics discussed during non-frontal lessons)

#### Office hours

monday 11-12 AM