

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

# **Patologia Generale**

2021-2-I0302D007-I0302D023M

Aims

The student must be able to perform the:

- Classification and characterization of cell damage and death mechanisms
- Description of vascular and general mechanisms of acute inflammation
- Description of pathogenetic mechanisms of chronic inflammation
- Description of pathogenetic mechanisms of hemostasis
- Description of tissue repair and regeneration
- Definition of cellular and molecular mechanisms of atherosclerosis
- Description of cell-mediated and humoral immunological mechanisms
- Classification and description of hypersensibility responses

- Description and characterization of preneoplastic lesions
- Description of neoplastic growth with characterization of benign and malign features
- Description of metastatic process
- Definition and characterization of oncogenes and oncosuppressor genes
- Description of cancerogenic role of physical and chemical agents
- Definition of cancerogenic role of viruses

### Contents

By the end of the course, the students will have acquired the general concepts and specific knowledge of: ethiopathogenesis of inflammatory, oncological and immunological diseases

### **Detailed program**

Etiology and pathogenesis of diseases: Cellular response to damage; irreversible damage; extrinsic etiology of the diseases: physical etiology (radiation and heat)

**Immunology**: tissue response to damage; immunity response; cells, tissue and organs of immunological system; antibodies and antibody response.

**Immunopathology**: immunodeficiencies; autoimmune diseases; immediate hypersensibility response; delayed hypersensibility response.

Inflammation: acute inflammation; chronic inflammation; atherosclerosis; systemic effects of inflammation

Tissue repair and wound healing

#### Cell growth and differentiation pathology.

General Oncology: preneoplastic lesions; cancer; cancerogenesis; oncogenes and oncosuppressors

# Prerequisites

## **Teaching form**

During COVID-19 emergency lessons will be performed on-line

# **Textbook and teaching resource**

- G.M. Pontieri ELEMENTI DI PATOLOGIA GENERALE E FISIOPATOLOGIA GENERALE IV° ed. PICCIN

- V. Del Gobbo IMMUNOLOGIA (per le Lauree sanitarie) IV° ed. PICCIN

### Semester

Second year, first semester

#### Assessment method

Written test (multiple choice test) to evaluate global knowledges about course program.

During COVID-19 emergency written test will be performed on-line with proctoring control

Final judgment of the integrated course is based on the grade point average normalized for credits obtained in each module

# Office hours

making an appointment