UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Patologia Generale

2627-2-H4602D007-H4602D00703

Aims

Preparation of expert odontologists by the acquisition of knowledge in etiopathogenesis of pathological processes, in particular related to odontopathology.

Contents

Knowledge about the determining causes (etiology) and mechanisms (pathogenesis) of human pathological processes; the etiopathogenesis of the fundamental alterations of the structures, functions and control mechanisms, at the various levels of integration, of the organism. The essential notions for interpreting and addressing functional problems. Appropriate technical/scientific terminology to be able to profitably interact with colleagues, work teams and citizens, and implement correct communication regarding health needs. Knowledge of the pathogenetic and pathophysiological mechanisms for addressing further training courses in clinical disciplines.

Detailed program

Etiology, pathogenesis. Acquired, congenital, hereditary, acute, chronic-degenerative diseases. Innate and acquired immunity. Immune response. Primary and secondary response. Vaccinations. Immunopathology. Hypersensitivity. Ionizing radiation pathology. Burns. Acute and chronic inflammation. Fever, leukocytosis, acute phase proteins. Wound healing. Granulation and scar tissue. Fibrosis. Amyloidosis. Cellular death. Atherosclerosis. Hypertrophy, hyperplasia, hypotrophy. Organ failure, compensation, decompensation. Preneoplastic lesions. Benign, malignant tumors. Carcinogenesis (chemical, physical, biological, viral and voluptuary tumors). Oncogenes, tumor suppressors, DNA repair genes. Hereditary tumors. Hypoxia, angiogenesis and metastasis. Tumor microenvironment. Gender oncology: Impact of sex and gender on the development of tumors. Study of hormone- and non-hormone-related differential mechanisms. Odontostomatology tumors. Neoplastic cachexia.

Coagulation, haemophilia, thrombosis, embolism, heart attack. Thalassemias.

Prerequisites

Knowledge concerning the previous preparatory courses.

Teaching form

Frontal lessons of 2 hours each in "in-person" delivery mode.

Textbook and teaching resource

- Patologia generale e fisiopatologia:
“Le basi patologiche delle Malattie" Robbins e Cotran, X edition, Edra;
“Patologia Generale” Pontieri, Russo, Frati. V ed. Piccin;
“Cellule, tessuti e malattia- Principi di Patologia Generale” Majno e Joris, ed. CEA.
- Immunologia e immunopatologia:
Roitt, Immunologia, Zanichelli;
Abbas, Immunologia cellulare e molecolare, X edizione, Edra;
Abbas, le basi dell'immuniologia, V edizione, Edra
Kuby, Immunologia, UTET.
- Slides and pertinent bibliography.

Semester

Annual course, at the second year.

Assessment method

Oral examination.
Students are required to select and to present a topic chosen from the course content. Questions will follow about other course topics that require concise but comprehensive answers for the completion of the exam. The questions will assess the degree of understanding and comprehension of all fundamental aspects of the individual parts of the course content.
There will not be in itinere examinations.

Office hours

By appointment (email request).

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY