

**Medical Immunology**

Code: 102928  
ECTS Credits: 4

| Degree           | Type | Year | Semester |
|------------------|------|------|----------|
| 2502442 Medicine | OB   | 3    | 0        |

**Contact**

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**Use of languages**

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: No  
Some groups entirely in Spanish: No

**Teachers**

Marta Vives Pi  
Oscar de la Calle Martin  
Eva Maria Martinez Caceres  
Candido Juarez Rubio  
Manuel Hernández González  
Maria Jose Amengual Guedan  
Aina Teniente Serra  
Maria Esther Moga Naranjo  
Roger Colobrán Oriol  
Mónica Martínez Gallo

**External teachers**

Ana Marin Sanchez  
Juan Francisco Delgado de la Poza

**Prerequisites**

It is advisable that the student has attained basic skills in cell biology, biochemistry and molecular biology before enrolling in the immunology course.

It is absolutely necessary to have acquired sufficient knowledge in: general and specific anatomy and physiology of different organs and systems.

The student will preserve the confidentiality and professional secrecy of the data to which he / she may have access through to the learning process in the health care provider facilities. In addition, he/she behavior will follow the professional ethical code.

## **Objectives and Contextualisation**

- 1) To know the essential features of the molecular, cellular, anatomical elements of the immune system (SI) and their function in the healthy individual.
- 2) To understand the role of the immune system in the following pathological processes:
  - a. Common infections
  - b. Allergies and hypersensitivity in general
  - c. Immune-mediated diseases, autoimmune, autoinflammatory and other
  - d. Immunodeficiencies
  - e. Cancer
  - f. Transplantation
- 3) To understand the basic action mechanisms of immune-based therapies:
  - a) Vaccines,
  - b) Immunosuppressants,
  - c) Immunomodulators
- 4) To learn and understand the basis of the laboratory and clinical tests that have diagnostic value for the immune mediated diseases

## **Content**

Contents of the subject by teaching units

### **Block 1 Basic Immunology**

UD1 Introduction to immunology

UD2 Natural Immunity

UD3 Clonal receptors and their ligands

UD 4 Cells of the immune system

UD5 The immune response, regulation and effectors

### **Block 2 Immunopathology**

UD6 The immune response in the whole organism and disease

UD7 immune responses in special clinical situations

UD8 Diagnostic tests in clinical immunology

UD9 immunology based therapies