



INSTITUTO DE HIGIENE E  
MEDICINA TROPICAL  
DESDE 1902

## CU NAME

### IMMUNOLOGY OF INFECTIOUS AND PARASITIC DISEASES

**CU characterization:**

**CU name:**

Immunology of Infectious and Parasitic Diseases

**Scientific area acronym:**

I

**Duration:**

Semiannual

**Working hours:**

115 h

**Contact hours:**

30 h

**ECTS:**

4

**Observations:**

T: 10 h

TP: 4 h

P: 6 h

OT: 6 h

S: 4 h

**Teacher in charge and respective teaching load in the CU:**

Gabriela Santos-Gomes – 0.73

**Other teachers and respective teaching load in the CU:**

Ana Armada 0.33

Henrique Silveira 0.27

**Intended learning outcomes (knowledge, skills and competences to be developed by the students):**





At the end of the course, students should:

- Recall the composition of the immune system and the importance of homeostasis;
- homeostasis and understand the architecture of the immune system and its main underlying characteristics;
- Understand the interactions that take place between the different elements that make up the immune system and the different elements that make up the immune system and pathogens in terms of co-evolution in particular, the strategies of invasion, evasion, and subversion of immune system activity developed by pathogens;
- Identify the appropriate immune parameters for vaccine validation;
- Understand the principles and perform techniques of cellular and molecular immunology and identify the application of the different analytical methodologies to study immune system mechanisms.

### *Syllabus:*

#### *Evidence of the syllabus coherence with the CU intended learning outcomes:*

The syllabus for this course includes a first approach to the constitution and integrated functioning of the immune system following the first objective. In the second step, some strategies developed by pathogens to overcome immune defenses to establish infection and induce pathology are addressed. Prophylactic processes are also explored considering their importance in individual and public health settings, applicability, and methodologies for developing vaccines for infectious and parasitic diseases. Contact is also provided with methodologies used in the study of the immune response, which enables the development of laboratory skills, which corresponds to the last objective.

#### *Teaching methodologies (including assessment):*

- Lectures in theoretical classes
- Theoretical-practical classes
- Problem-solving in practical classes
- Seminars
- Tutorial support available

Assessment method:

The assessment of learning will be continuous and formative, considering:

1. participation and intervention in theoretical classes;
2. performance in theoretical-practical classes and in seminars;

#### *Evidence of the teaching methodologies coherence with the CU intended learning outcomes:*

Alongside lectures, in which students are expected to review basic concepts and acquire complementary knowledge, theoretical-practical classes promote the application of



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knowledge to proposed situations, consolidating and speeding up the ability to apply knowledge. Practical classes allow for the development of laboratory skills and seminars promote autonomy in the search for and acquisition of additional knowledge, communication and discussion.

***References for consultation / mandatory existence:***

- Experimental and review scientific articles available (open access) in biomedical literature databases