



INSTITUTO DE HIGIENE E  
MEDICINA TROPICAL  
DESDE 1902

## PARASITIC INFECTIONS

### *CU characterization:*

#### *CU name:*

Parasitic Infections

#### *Scientific area acronym:*

MT

#### *Duration:*

Semiannual

#### *Working hours:*

280

#### *Contact hours:*

92

#### *ECTS:*

10

#### *Observations:*

Mandatory CU

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

Jorge Seixas – 41.5 hours

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

Kamal Mansinho – 12 hours

Cláudia Conceição – 11.5 hours

Rosa Teodósio – 12 hours

Fátima Nogueira – 1 hour

Ana Paula Arez – 1 hour

Silvana Belo – 7.5 hours

Gabriela Santos-Gomes – 7.5 hours

Ana Reis – 7.5 hours

Luísa Lobo – 7.5 hours

Marcelo Ferreira – 11.5 hours

Henrique Silveira – 1 hour

Paulo Almeida – 7.5 hours



## PARASITIC INFECTIONS

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

After this unit, students should be able to:

1. Know basic concepts in medical parasitology.
2. Know the epidemiology, physiopathology, clinical presentations, diagnostic techniques, treatment, prevention and control of the principal parasitic infections of importance in tropical health and medicine.
3. Know the diagnostic methods in medical parasitology and how to critically interpret their results.
4. Know the principal research methodologies applied to Parasitic Diseases.

### *Syllabus:*

- I. Concepts and present importance of medical parasitology. Types of parasitism, host interaction, dissemination pathways and their determining factors.
- II. Vectors: Introduction to Medical Entomology: mosquitos, *Glossina* spp. Phlebotomus. Distribution, systematics, bioecology, morphology and importance in human and animal medicine
- III. Epidemiology, physiopathology, clinical presentations, diagnostic, treatment, prevention and control of the principal protozoan and helminthic infections in tropical health and medicine.
  - a. Malaria
  - b. Human African Trypanosomiasis
  - c. Chagas disease
  - d. Leishmaniasis
  - e. Schistosomiasis
- IV. Other parasitic neglected, emerging and re-emerging diseases:
  - a. Intestinal helminths and protozoans; cysticercosis and other tapeworm infections, hydatidosis
  - b. Filariasis; Dracunculiasis; Intestinal nematodes, food-borne disease caused by trematodes, free-living amebas
- V. Diagnostics of human parasitosis
- VI. Research applied to Parasitic Diseases



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

The Unit is organized in theoretical lectures (one for each of themes 1, 2 and 5) introducing the themes, followed by targeted group discussion. For theme 5 a practical demonstration of some diagnostic techniques will be organized. Theme 6 will be approached in an integrated way for each disease or group of diseases, including practical laboratory demonstrations.

For themes 3 and 4 the methodology of theoretical lectures will also be used, followed by case studies presented and discussed in support of the learning objectives.

A final written assessment with consultation on transversal themes (clinical cases, diagnostic, treatment, control and/or research problems) related to the several disease or group of diseases will be asked.

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

- Barroso H et al. Microbiologia Médica. Vol 2. Editora Lidel, 2014.
- Bueno-Marí, R., Almeida, A. P. G., and Navarro, J. C., eds. (2015). Emerging zoonoses: eco-epidemiology, involved mechanisms and public health implications. Lausanne: Frontiers Media. doi: 10.3389/978-2-88919-618-0
- Hunter's Tropical Medicine and Emerging Infectious Diseases. 9th ed. Saunders, 2012.
- Manson's Tropical Diseases. 23<sup>a</sup> Ed. Saunders Ltd, 2014
- WHO. World malaria report 2015. Geneva.
- WHO. Investing to overcome the global impact of Neglected Tropical Diseases: Third WHO Report on Neglected Tropical Diseases. 2015. Geneva.