UE Infectious Diseases (part I)

ECTS
6 crédits

Composante
UFR Chimie-Biologie

Période de l'année
Toute l'année

- **Langue(s) d'enseignement:** Anglais
- **Ouvert aux étudiants en échange:** Oui
- **Code d'export Apogée:** YAMB8U28

Présentation

Description

Course outline

Lectures:

1) Introduction to infectious diseases (1.5 h) CM

2) Parasites: bases of the pathogenicity and host / parasite interactions

- Make yourself at home: remodeling of the host cell by *Plasmodium falciparum* (1.5 h) CM
- Schistosoma spp (1.5 h) HP
- Neglected tropical diseases, selected examples:

Leishmanioses (3 h) CM

Lymphatic filariosis or foodborne trematodiases or cysticercosis (1.5 h) CM

3) Pathogenic bacteria: bases of the pathogenicity and host / bacteria interactions

- Borrelia burgdorferi, the infectious agent of Lyme disease: evasion from the immune system (1.5 h) ASP
- Pathogenicity of Vibrio cholerae, the infectious agent of cholera (1.5 h) ASP

- Gastric ulcer and gastric cancer: the role of Helicobacter pylori (1.5 h) ASP
- Lung diseases: Pseudomonas aeruginosa or Mycobacterium tuberculosis (1.5 h) CV
- Pseudomonas aeruginosa: model of experimental evolution (1.5 h) CV
- Bacteria of the digestive tract: Enterohemorrhagic Escherichia coli, Shigellae, Listeria monocytogenes (3 h) TH
- Life within a vacuole: Francisella, Salmonella, Chlamydia (3 h) CM

4) Viruses: bases of the pathogenicity and host cell / virus interactions

- Negative RNA viruses: Influenza virus, Rabies, Measles, Ebola (7.5 h) RR and MJ
- Virus and cancers (1.5h) PM
- HIV-1: life cycle, entry and budding, vaccine development (3 h) WW

Tutorials: 15h

Analysis of scientific publications to illustrate different aspects of the course

Training to the terminal exam: examples of previous exams

Heures d'enseignement

UE Infectious Diseases (part I) - CM	CM	34,5h
UE Infectious Diseases (part I) - TD	TD	15h

Pré-requis recommandés

Pre-requisites:

- Basic knowledge in genetics, cell biology, microbiology and biochemistry.
- No specific knowledge is required in virology or in parasitology.

Période : Semestre 8

Compétences visées

Targeted skills:

- Knowledge in host-pathogen interactions (models of bacterial, parasitic and viral infections)

- Ability to analyze biological data from published scientific manuscripts.

Infos pratiques

Contacts

Responsable pédagogique

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