

Immune response against infectious diseases at systemic and mucosal levels

Organization: Université de Tours

Teaching unit coordinator: Isabelle DIMIER-POISSON (PhD)

Position: Professor -

Teaching unit coordinator 2: Sonia LAMANDE (PhD) - Fabrice LAURENT (PhD)

Position: INRAE Researchers

Teaching unit outline

In this module, the fundamental aspects of the innate and adaptive immunity will be taught. These two topics are central to understanding the host's interaction with an environment containing a wide range of potentially pathogenic microorganisms. The major role played by the dendritic cells at the interface of the innate and adaptive immune responses will be a major focus of interest. Practical works will complement this teaching by examining the immune response (Cell sorting, imaging, FACS analyses)

Topics addressed

Innate response: Toll like receptors, Natural Killer cells, Macrophages, Mucosal barrier

Adaptive response : Dendritic cells (presentation, subsets, functions), Mucosal lymphoid tissues,

Antiviral immunity, anti parasitic immunity, antibacterial immunity,

Microbiome

Practicals : Cell sorting, imaging, FACS analyses

ECTS	Lectures	Tutorials	Practical work	Digital learning	Personal work
5	40h		15 h		70h

Assessment method

29% Oral presentation of a scientific article

43% Written exam

14% Scientific report on the practical courses

Review of a scientific paper (14%)