UCLouvain

wsbim2216

2018

3 credits	20.0 h + 10.0 h	Q2

Teacher(s)	Coulie Pierre coordinator ;Dumoutier Laure ;Lucas Sophie ;
Language :	French
Place of the course	Bruxelles Woluwe
Main themes	Advanced notions of immunology, focusing on a few topics relevant for biomedicine: inflammation and triggering mechanisms, cancer immunology and therapeutic applications, cytokines and regulation of innate and adaptive immune responses, immunosuppressive mechanisms and regulatory T cells with their roles in autoimmune diseases, T helper cells and NK cells in the defense against pathogens.
Aims	1 At the end of this course the student will be able to understand various experimental methods used in immunology, and to interpret and criticize experimental results in immunology themes that were discussed during classes. - - - - *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Evaluation methods	Written exam, open questions. Experimental results are presented, similar to but different from those presented during the classes, and will have to be interpreted and discussed by the students.
Teaching methods	Lectures by three teachers, based mostly on published experimental results, with discussions regarding the experimental controls used and the proposed interpretations of the results. Three sessions at the end of the period will be devoted to an active and direct participation of the students, who will work in groups, with a preparation required prior to the sessions. These sessions will consist in critical analyses of 3-4 fictitious research projects in the field of immunology. Each project will be presented and defended briefly by a group of students, and all projects will be evaluated by a fictitious jury, also comprised of students. The jury and the other participating students will rank the projects, in a manner similar to ranking performed for major research funding programs. Interactions and discussions with students are expected and encouraged. Students need to understand fundamental immunology. Three teachers, with 1-3 topics per teacher.
Content	Advanced studies on immunology, focused on a few topics that are medically relevant: inflammation and its triggering mechanisms, cancer immunology and therapeutic applications, cytokines and regulation of innate and adaptive immune responses, immunosuppressive mechanisms and regulatory T cells with their roles in autoimmune diseases, NK cells in the defense against pathogens.
Bibliography	• Documents utilisés lors des cours disponibles sur Moodle. • All documents on Moodle. All articles that are used for the course are found on Moodle Les articles servant de base au cours seront disponibles sur Moodle.
Other infos	Prerequisite: basic immunology.
Faculty or entity in charge	SBIM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Biomedicine	SBIM2M	3		
Master [60] in Biomedicine	SBIM2M1	3		