Université catholique de Louvain - Cellular and molecular pathophysiology of human diseases - en-cours-2025-wsbim2185

WSbim2185Cellular and molecular2025pathophysiology of human diseases

The version you're consulting is not final. This course description may change. The final version will be published on 1st June.

3.00 credits

30.0 h

Q1

Teacher(s)	Bertrand Luc ;Dumoutier Laure ;Henriet Patrick ;Horman Sandrine ;Jonas Jean-Christophe (coordinator) ;Maggi Pietro ;			
Language :	English			
Place of the course	Bruxelles Woluwe			
Prerequisites	This course requires good knowledge of cellular and molecular biology, biochemistry of cell metabolism, immunology, cell and organ physiology, and human pathology.			
Main themes	The classes will cover the pathophysiological mechanisms underlying the development of frequent non- communicable human diseases, the drugs targeting these mechanisms and unanswered questions on the topic (biomedical research). The link between the molecular, cellular, and tissue alterations and their impact on the whole organism will be highlighted as much as possible. Topics covered during classes (subject to variation depending on the group of teacher in charge): cellular therapy; cardiovascular and respiratory diseases; hemostatic disorders; endothelial dysfunction and vascular remodeling in cardiovascular diseases; neurodegenerative diseases ; cancers; endometriosis ; chronic inflammatory diseases; diabetes.			
Learning outcomes				
Evaluation methods	<ul> <li>Written examination or assignment depending on the professor.</li> <li>In case of a written exam, questions will be in English, answers can be in English or French according to student's wishes.</li> <li>For assignments, instructions and evaluation criteria will be detailed by each professor.</li> <li>The final note will be computed as the geometrical mean of the notes, with equal weight for each professor (final note = root 7th of the product of the 7 notes). As a consequence, the final note will be 0/20 if one assignment (or more) has not been submitted for grading.</li> </ul>			
Teaching methods	Depending on the topic, from regular classes to inverted classesor other teaching ways deemed appropriate by the teacher.			
Content	The classes will cover the pathophysiological mechanisms underlying the development of frequent non- communicable human diseases, the drugs targeting these mechanisms and unanswered questions on the topic (biomedical research). The link between the molecular, cellular, and tissue alterations and their impact on the whole organism will be highlighted as much as possible. Topics covered during classes (subject to variation depending on the group of teacher in charge): cellular therapy; cardiovascular and respiratory diseases; hemostatic disorders; endothelial dysfunction and vascular remodeling in cardiovascular diseases; neurological diseases (multiple sclerosis); cancers; endometriosis; chronic inflammatory diseases; diabetes.			
Inline resources	Slides projected during classes and additional documents will be posted on MoodleUCL.			
Other infos	This course requires good knowledge in cellular and molecular biology, biochemical metabolism, immunology, physiology, and pathology.			
Faculty or entity in charge	SBIM			

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Master [120] in Biomedicine	SBIM2M	3		٩		
Master [60] in Biomedicine	SBIM2M1	3		٩		