


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	<p><b>At the end of this learning unit, the student is able to :</b></p> <ul style="list-style-type: none"> <li>- know the pathophysiology of the diseases covered during classes, from the molecule to the cell, the cell to the organ, and the organ to the organism</li> <li>- understand/be able to explain the link between the molecular and cellular alterations described and the development of the chronic diseases covered during classes, as well as the mode of action of drugs targeting these alterations and their impact in other organs</li> <li>- be able to analyze and criticize a conference or paper in that field ; use his/her new knowledge and skills to investigate unanswered questions on the topic</li> <li>- imagine new approaches to study the pathophysiology of other diseases</li> </ul>
Evaluation methods	Written examination. Questions in English, answers in English or French according to student's wishes.
Teaching methods	Depending on the topic, from regular classes to inverted classes or 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; neurodegenerative diseases ; cancers; endometriosis ; chronic inflammatory diseases; diabetes.
Inline resources	Slides projected during classes and additional documents will be posted on MoodleUCL.
Faculty or entity in charge	SBIM

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Biomedicine	<a href="#">SBIM2M</a>	3		
Master [60] in Biomedicine	<a href="#">SBIM2M1</a>	3		