UCLouvain

wsbim2114

2020

Advanced cellular and molecular biology (Part 1)

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

4 credits	39.0 h	Q1

Teacher(s)	Demoulin Jean Baptiste ;Hermans Emmanuel ;Lemaigre Frédéric ;Limaye Nisha (compensates Demoulin Jean Baptiste) ;Michiels Thomas ;Octave Jean-Noël (coordinator) ;Tyteca Donatienne ;
Language :	English
Place of the course	Bruxelles Woluwe
Main themes	The main topics are those of the analysis of the interaction between DNA and proteins, the study of gene expression, including manipulation of the expression level, cell imaging, receptor function, and electrophysiology. The integrated use of the tools presented will be further illustrated by recent scientific publications.
Aims	1 At the end of this course, students will be able to use the tools needed to study the function of genes and their expression. Students will also be able to use the tools needed to investigate the subcellular localization and function of the proteins encoded by these genes. - - - - *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	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** Written examination on theoretical issues, data analysis, and methodological choices based on issues raised.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** Lectures
Content	DNA / protein Interaction and gene networks, gene expression profile, new generation DNA/RNA sequencing, expression vectors, cell imaging, membrane receptors coupling, electrophysiology.
Inline resources	Illustrations and text posted on Moodle.
Other infos	Courses grouped into periods of two hours at the start of the first term. Courses are given in english.
Faculty or entity in charge	SBIM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Biomedicine	SBIM2M	4		
Master [60] in Biomedicine	SBIM2M1	4		