UCLouvain

wsbim2114

2023

Analysis of gene expression and function

4.00 credits	39.0 h	Q1

Teacher(s)	Demoulin Jean Baptiste ;Hermans Emmanuel ;Lemaigre Frédéric (coordinator) ;Limaye Nisha ;Michiels Thomas ;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.
Learning outcomes	**At the end of this learning unit, the student is able to :** 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.
Evaluation methods	Written examination on theoretical issues, data analysis, and methodological choices based on issues raised. The final mark is the arithmetic mean of all questions. When a student has a final mark between 9/20 and 10/20 after correction, the lecturers review together the exam copy to decide whether the mark should be rounded down or up according the overall evaluation of the copy.
Teaching methods	Lectures
Content	Control, manipulation and analysis of gene expression (transcriptomics); detection of gene expression and function by imaging; characterization of protein function.
Inline resources	Illustrations and text posted on Moodle.
Other infos	Courses grouped into periods of two hours during the first trimester. Courses are given in english.
Faculty or entity in charge	SBIM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Biomedicine	SBIM2M	4		🔍
Master [60] in Biomedicine	SBIM2M1	4		🔍