

WSBIM1211

2013-2014

Methodolgy of cell and molecular biology

3.0 credits	22.5 h	2q
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Teacher(s):	Bommer Guido ; Pierreux Christophe ; Collet Jean-François (coordinator) ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	Methodologies currently discussed are (1) principles and methods of protein purification, including the calculation of a purification table; (2) principles, applications and safety rules in the use of radioactivity as a tool in biochemistry and cell biology; (3) principles and applications of cell culture; (4) the physical basis, methods, potentials and limitations of analytical subcellular fractionation; and (5) morphological methods, with emphasis on molecular tracking in fixed and living cells
Aims:	To get a critical grasp on a few essential methodologies in cell and molecular biology, on which teachers have a special expertise. The course primarily aims at the understanding of basic principles and inherent limitations, so as to help students in selecting the most appropriate approach to address a specific question. This teaching further demands the quantitative analysis of the observations and the differentiation between warranted and unjustified conclusions from a particular experiment 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".
Content :	protein purification; radioactivity as a tool in research; cell culture; subcellular fractionation; molecular tracking in fixed and living cells.
Other infos :	Prerequisite: cell biology and general biochemistry Calendar: second quadrimester, each Thursday, from 14:00 to 15:45 at ICP 75-1. Individual support: printed notes Examination: quantitative analysis of new data obtained with one or several of described methods and usually presented in English; testing of their understanding
Cycle and year of study:	> Bachelor in Biomedicine > Preparatory year for Master in Biomedicine
Faculty or entity in charge:	SBIM