

Ateliers de stratégie expérimentale en biologie cellulaire et moléculaire (théorie)

3.0 credits	30.0 h	1q
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Teacher(s) :	Kienlen-Campard Pascal (coordinator) ;
Language :	Français
Place of the course	Bruxelles Woluwe
Prerequisites :	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Main themes :	<p>Some experimental strategies, based on a well-defined system, and that gave rise to major breakthroughs in cellular and molecular biology are exposed and discussed. The key experiments will be detailed. Students (in small groups) further elaborate experimental strategies for specific problems:</p> <ul style="list-style-type: none"> -first, the teacher proposes selected problems in the field of molecular and cellular biology and provides the students with useful informations to elaborate an experimental strategy; -the students propose experimental models and approaches that need to be validated by the teacher; -these experimental approaches are tested and the results obtained are analysed and discussed in the light of published work. -finally, the students present the result of their work to their colleagues and teachers.
Aims :	<p>To integrate fundamental knowledges in biochemistry, cell biology, cell physiology, molecular biology and genetics; To define a scientific question, to translate it in terms of experimental strategy and propose experimental protocols including appropriate controls; To interpret the results, discuss their relevance and compare them to data taken from the literature; To finally propose some perspectives.</p> <p><i>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".</i></p>
Content :	<p>This workshop is devoted to train students to work together on scientific projects.</p> <ul style="list-style-type: none"> -it learns how to define precisely a scientific question and to collect the appropriate informations; -it leads to elaborate and the validate a logical (and chronological) experimental program; -it forms to the critical discussion of experimental results and to their presentation to other students and teachers.
Other infos :	<p>Prerequisite : basic knowledges in biochemistry, cell biology, cell physiology, molecular biology and genetics. This course can be completed by methodological courses (e.g. SBIM2111 : Méthodologie de biologie cellulaire et moléculaire), and other courses of cell biology (e.g. BICL3245 : Questions spéciales de biologie cellulaire) and molecular biology (e.g. DBCM3001 : Tutorat en biologie moléculaire).</p> <p>Assessment : the elaboration of the experimental approach, the analysis of the results and their critical discussion are evaluated.</p>
Faculty or entity in charge:	SBIM

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Biomedicine	SBIM1BA	3	<p>WMD1120 and WMD1106 and WFARM1221S and WSBIM1226 and WSBIM1227 and WMDS1211 and WSBIM1293 and WFARM1247 and WSBIM1201T and WSBIM1201P</p>	