Université catholique de Louvain

Biologie cellulaire et moléculaire approfondie (2e partie)

4.0 credits

WSBIM2214

2012-2013

32.0 h

Teacher(s) :	Lemaigre Frédéric ; Constantinescu Stefan ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	The course describes the molecular cell biology of hormone action and focuses on the main molecular mechanisms of action of the major classes of intercellular signals (signal transduction pathways). The course approaches the theoretical and technical principles by which these signaling mechanisms are studied. How perturbations in these signaling pathways lead to pathologic conditions, such as developmental defects and cancer represents an important focus of the course.
Aims :	The students are expected to acquire a broad understanding of the molecular mechanisms on which intercellular signaling molecules (hormones, growth factors, messengers of intercellular communication) rely in order to control cell activity. At the end of the course the students should be able to (i) understand how perturbations of signaling mechanisms lead to several pathologic conditions, (ii) understand the literature of the field, (iii) acquire the ability to critically analyze seminars/conferences and novel findings in the field of cell signaling and relate those findings to the general state of the art in the field, (iv) and use their acquired knowledge to approach novel questions in the field. <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>
Other infos :	Requirements : Basic notions of general biochemistry, molecular biology and cell biology. Evaluation: (i) Oral exam with written preparation. The student will be evaluated with respect to acquired knowledge and the ability to use this knowledge in order to solve problems. (ii) Evaluation of the summaries of the two conferences Support: Notes of the course and reprints of scientific papers.
Cycle and year of study :	Master [120] in Biomedicine Master [60] in Biomedicine
Faculty or entity in charge:	SBIM