UCLouvain

wsbim2215

Post-translational regulation of proteins

2023

2.00 credits 20.0 h Q1	2.00 credits	20.0 h	Q1
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Teacher(s)	Bertrand Luc (coordinator) ;Bommer Guido ;Collet Jean-François ;Demoulin Jean Baptiste ;
Language :	French > English-friendly
Place of the course	Bruxelles Woluwe
Prerequisites	It is the perfect follow-up of sbim2115, protein structure and function.
Main themes	This course aims to deepen the knowledge on post-translational modifications.
Learning outcomes	
Evaluation methods	Written exam on all parts of the course
Teaching methods	The different parts of the course will be given by lecturers who are specialists in their domains using powerpoint slides. The slides will be available for the students.
Content	General introduction on the importance of post-translational modifications of proteins in their regulation and function
	- Mechanisms of disulfide bond formation in prokaryotes and eukaryotes
	- Protein phosphorylations
	- The new world of post-translational modifications resulting from metabolism (Acetylation, O-GlcNacylation) - Mechanisms of targeted proteolysis, protein ubiquitination and related post-translational modifications - Protein repair mechanisms (isoaspartates, glycation/deglycation) and role of rare post-translationnal modifications
Inline resources	There is no formal syllabus! PDF versions of slides presented in the course, which cover the subject in a comprehensive way, will be made available on MoodleUCL (https://moodleucl.uclouvain.be/). In addition, a tablet will be used to explain certain aspects of the course. The "Tablet" PDF versions of the PowerPoint files will also be made available to students via MoodleUCL.
Faculty or entity in	SBIM
charge	

Programmes containing this learning unit (UE)							
Program title	Acronym	Credits	Prerequisite	Learning outcomes			
Master [120] in Biomedicine	SBIM2M	2		Q.			
Master [60] in Biomedicine	SBIM2M1	2					