UCLouvain wfarm2180

## Organotoxicity : molecular, cellular and functional aspects

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

3 credits

2019

30.0 h + 15.0 h

Q2

Teacher(s)	Feron Olivier (coordinator) ;Hantson Philippe ;Lysy Philippe ;Wittebole Xavier ;				
Language :	French				
Place of the course	Bruxelles Woluwe				
Main themes	This course will detail the mechanisms of toxicity in a variety of target organs such as the liver and the nervous system but also in the very specific context of cancer. Molecular, cellular and functional aspects will be considered as well as the methodology for diagnostic and prevention. The course will be organized in modules centred on specific organs and illustrated by examples derived from frequent pathologies and/or issued from the News.				
Aims	The major objective of this course is to provide students with the required bases to evaluate drug toxicity, the term "drug" being taken in its broader signification including medicines as well as illicit substances and fugi. 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".				
Evaluation methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. Questions requiring short-open-responses.				
Teaching methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. Lectures (slide projection). Flipped classroom for some parts of the course.				
Content	<ul> <li>The main objective of this course is to provide students with the basics needed to assess the tissue toxicity of different molecular entities. The term "molecular entity" is taken in its broadest acceptance, namely drugs, illicit substances but also antibodies (autoimmunity) or endogenous substances. The term "tissue" covers both healthy organs and (pre) cancerous lesions.</li> <li>The mixed team of teachers from the academic and clinical worlds allows -through "capita selecta"- to cover different target organs with their molecular and cellular specificities but also to address clinical aspects (diagnostic and prognosis in particular).</li> <li>P. Hantson and X. Wittebole: From clinical cases, the mechanisms of toxic neurological, cardiac and renal manifestations will be discussed for various pharmacological compounds or substances present in the environment.</li> <li>P. Lysy: Topics will include one or several aspects of the following: (i) endocrinological complications of anti-cancer treatments (chemo + radio), long-term effects of growth hormone therapy, acute / chronic complications of anti-diabetic treatments and drug-induced doping. hormones.</li> <li>O. Feron: A reflection on the toxicity of anticancer drugs will be conducted through the example of the clinical failure of anti-angiogenic drugs.</li> </ul>				
Inline resources	All the documents projected during the courses are accessible on UCL's Moodle website.				
Faculty or entity in charge	FARM				

Programmes containing this learning unit (UE)					
Program title	Acronym	Credits	Prerequisite	Aims	
Master [60] in Biomedicine	SBIM2M1	3		٩	
Master [120] in Biomedicine	SBIM2M	3		٩	
Master [120] in Pharmacy	FARM2M	3		٩	