

Faculty of Medicine



FARM2280 Organotoxicity and cancer : molecular, cellular and functional aspects

[30h+15h exercises]

Teacher(s): Pedro Buc Calderon, Olivier Feron, Philippe Hantson
Language: French
Level: Second cycle

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.

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.

Content and teaching methods

Content of the proposed modules :

- Hepatic toxicity : cirrhosis, steatosis, liver insufficiency, liver transplantation, #
- Toxicity of the nervous system associated to the use of anxiolytic (serotonergic syndrome), illicit substances (cocaine), alcohol, #
- Cancer: toxicity associated to radiotherapy, cardiotoxicity of conventional and modern chemotherapy, anti-angiogenic drugs (a desired toxicity model), #

Personal work :

Bibliographic work on a subject chosen by the student after discussion with the teachers; non-restricted propositions of subjects are presented at the beginning of the first courses.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

- Evaluation : written examination and oral presentation of the personal work.
- Support : slides (PowerPoint) used during courses are made available to the students as xerox copies or online documentation (icampus)

Other credits in programs

ESP3DS/TI	Diplôme d'études spécialisées en santé publique (santé au travail - toxicologie industrielle)	Mandatory
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