

Faculty of Medicine



IEPR1021 Cellular physiology

[30h] 3 credits

Teacher(s): Marc Francaux (coord.), Norman Heglund
Language: French
Level: First cycle

Aims

At the end of this course, the student will understand the principle structures and functions in common to all eukaryotic cells. In addition, the specialized functions of striated muscle cells will be studied in detail. The basic mechanisms of immune system will also be covered.

Main themes

Cell function is approached as a thermodynamic system exchanging matter and energy with its environment. The main topics include: the physical/chemical laws governing these exchanges, the signals allowing the exchange of information between and within cells, the mechanism of muscular contraction, models of muscular contraction, and the functioning of the immune system.

Content and teaching methods

Human cell physiology, with emphasis on muscle structure, function and models.

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

Evaluation: written or oral exams with elements of continuous evaluation

Support materials: course outline, iCampus, handouts and a textbook

Supervision: professors and assistants

Other credits in programs

EDPH12BA	Deuxième année de bachelier en sciences de la motricité	(3 credits)	Mandatory
EDPH1PM	Année d'études préparatoire au master en sciences de la motricité, orientation éducation physique (60 & 120)	(3 credits)	Mandatory
FSA13BA	Troisième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil	(3 credits)	
KINE12BA	Deuxième année de bachelier en kinésithérapie et réadaptation	(3 credits)	Mandatory
KINE1PM	Année d'études préparatoires au master en kinésithérapie et réadaptation (60) et au master en sciences de la motricité, orientation générale (120)	(3 credits)	Mandatory
MATR23	Troisième année du programme conduisant au grade d'ingénieur civil en science des matériaux	(3 credits)	