

## 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**

<b>EDPH12BA</b>	Deuxième année de bachelier en sciences de la motricité (3 credits)	Mandatory
<b>KINE12BA</b>	Deuxième année de bachelier en kinésithérapie et réadaptation (3 credits)	Mandatory