

## Faculty of Medicine



### BCHM2120 Supplementary Biochemistry

[30h] 2 credits

This course is taught in the 2nd semester

**Teacher(s):** Luc Bertrand, Mark Rider  
**Language:** French  
**Level:** Second cycle

#### Aims

This is an optional advanced course suited to third-year students of medicine, biomedical technology, human nutrition and biomedical science that is designed to complement courses of general biochemistry. The teaching is devoted to recent advances in the literature with emphasis on pathological implications and development of the basic skills and understanding needed to initiate biochemical research.

#### Main themes

The aim of the course is to cover rapidly developing areas of research in biochemistry and molecular biology. The topics will be chosen with respect to their complementarity to the teaching of general biochemistry. Areas to be covered in depth include: short-term and long-term regulation of metabolism, inter- and intra-cellular signalling, insulin signalling, control of protein synthesis, apoptosis, growth factor signalling.

#### Content and teaching methods

A. For the academic year 2005-2006 the course content will be: 1. Principles of enzyme kinetics and thermodynamics, 2. Signal transduction, - Hormone receptors and G-proteins - Protein kinases and lipid kinases - Protein interaction domains - Second messengers and protein phosphatases, 3. Apoptosis, 4. Control of protein synthesis.  
 B. Teaching: formal lectures and exercises - all lectures will be given as Power point presentations which will be distributed to the students.

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

Students will be given the opportunity to present a personal written dissertation or a personal oral presentation consisting of either:

1. A literary project on a subject of choice in relation to the course content that will be subject to an oral examination.
2. Presentation of a seminar on a subject of choice in relation to the course content that will be examined in the form of questions to the student

#### Programmes in which this activity is taught

**NUT2** Licence en sciences biomédicales (nutrition humaine)  
**SBIM3DS** Diplôme d'études spécialisées en sciences biomédicales

**Other credits in programs**

<b>BIOL22/A</b>	Deuxième licence en sciences biologiques (Biologie moléculaire, cellulaire et humaine)		
<b>MD3DA/MO</b>	Diplôme d'études approfondies en sciences de la santé (sciences de la motricité)		Mandatory
<b>MED12BA</b>	Deuxième année de bachelier en médecine	(2 credits)	Mandatory
<b>SBIM31DS</b>	Première année du diplôme d'études spécialisées en sciences biomédicales	(2 credits)	