BRMC2102 Molecular physiology

[22.5h+0h exercises] 2 credits

This course is taught in the 2nd semester

Teacher(s): Marc Boutry, Michel Ghislain, Pierre Morsomme
Language: French
Level: Second cycle

Aims

To understand how molecular and cellular tools are able to contribute to a better knowledge of physiological functions at the cell or organism level.

Main themes

The course will illustrate through various examples taken from the microbial, plant and animal fields, how typical methodologies of molecular and cellular biology can be integrated to better understand physiological functions of the organism. The course will be based on a detailed analysis of papers that appeared recently in the scientific literature.

Content and teaching methods

Examples will be taken from the following non-exhaustive list:
- The immune system
- Ion and metabolite transport, long distance transport, neuronal signaling
- Animal and plant development
- Cell cycle
- Molecular signaling
- Response to biotic and abiotic stress

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

Prerequisite: general courses of molecular biology and biochemistry

Programmes in which this activity is taught

BIR2 Bio-ingénieur

Other credits in programs

BIR22/2C	Deuxième année du programme conduisant au grade de bio-ingénieur : Chimie et bio-industries (Ingénierie biomoléculaire et cellulaire)	(2 credits)	Mandatory