

MASTER BIOLOGIE-SANTE

Parcours “International Master of Biomedicine”

UE Cell responses: from receptors to signaling – 3 ects (M1S2)

Tutored group work regarding the basic molecular mechanisms involved in cell signaling leading to cell responses (contraction, secretion, migration, proliferation, stimulation, cell cross talk...)

Description du contenu de l'enseignement

Students will present the signaling pathways and their molecular targets enabling specific cell responses that are crucial in the cardiovascular, immunological and neurological system. They will describe the partners involved, effectors and mediators, and the regulatory pathways at a molecular and cellular level. They will also present the targets of actual or emerging treatments to improve a dysfunctional cell.

Compétences à acquérir

Knowledge of the main actors of signaling pathways controlling cell responses in the cardiovascular, immunological and neurological systems and in endocrine cells. Identify pertinent targets to restore a cell function.

Bibliographie, lectures recommandées

- « Pharmacologie. des cibles vers l'indication thérapeutique » de Yves Landry, Jean Pierre Gies, éditeur collection Sciences su, Edition DUNOD.
- Goodman and Gilman's. The Pharmacological Basis of Therapeutics. 13th Edition
- Web sites: <http://www.cellsignallingbiology.org/csb/mikeb.htm>;
<http://www.ncbi.nlm.nih.gov/pubmed>
- IUPHAR: <http://www.guidetopharmacology.org>

Modalités d'organisation et de suivi

- Tutored work of multidisciplinary and multicultural groups of students.
- Oral presentation by students (each group will be tutored by one teaching servant or a researcher).

Responsable

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