MASTER BIOLOGIE-SANTE

Parcours “International Master of Biomedicine”

UE Biological responses: from targets to treatments – 3 ects (M1S2)

- Lectures: 20 h, Tutorials 8 h

Description du contenu de l'enseignement

Lectures will present major mechanisms involved in the control of vascular and cardiac homeostasis under physiological conditions and their alteration during physiological ageing. Both molecular and cellular mechanisms involved in the local and neuronal regulation of the cardiovascular structure and function will be described as well as the interaction of blood cells and blood-derived factors on the cardiovascular system. The different elements of these regulatory systems and their alteration during ageing will be developed. For each regulatory system, the actual and potential targets for therapeutic intervention will be discussed. The lectures are based predominantly on published articles. Tutorials will illustrate ageing-related cardiovascular dysfunctions in experimental animals and humans based on published articles.

Compétences à acquérir

Knowledge of the major systems and their different elements contributing to the regulation of cardiovascular homeostasis and their alteration during physiological ageing. For each regulatory system, the student will be able to identify the key targets enabling the modulation of the cardiovascular system and discuss its pertinence.

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; htttp://www.ncbi.nlm.nih.gov.pubmed
- IUPHAR: http://www.guidetopharmacology.org

Modalités d'organisation et de suivi

- 20 h teaching and 8 h tutorial sessions, encouraging multidisciplinary and cultural exchanges.
- Teaching slides, including those from tutorials, and when possible recordings will be provided.

Responsable

Pr Valérie Schini-Kerth, Faculté de Pharmacie, INSERM UMR1260, Université de Strasbourg
Tél : +33 (0)3 68 85 41 27 and 06 66 63 82 70
Email : valerie.schini-kerth@unistra.fr