

CDD recherche-enseignement en biologie cellulaire/génétique Université Versailles-Saint-Quentin-en-Yvelines

Enseignement

La personne recrutée effectuera des enseignements (192h) en licence à l'UFR Sciences (campus de Versailles). Les enseignements concernent principalement des UE de génétique et de biologie cellulaire et moléculaire.

Recherche

- ❖ La personne recrutée effectuera sa recherche au sein du Laboratoire de Génétique et Biologie Cellulaire situé à l'UFR Santé-Simone Veil (Montigny-Le-Bretonneux).
<https://www.lgbc.uvsq.fr/>
<https://www.lgbc.uvsq.fr/english>

- ❖ **Projet de recherche : ROS and intestinal homeostasis**

The project aims to examine the localization and impact of reactive oxygen species (ROS), more specifically H₂O₂ in intestinal homeostasis. ROS are necessary for defense against pathogens, but too much ROS can have harmful effects. In intestinal pathophysiology, ROS are involved in chronic inflammatory diseases. The *Drosophila* model will be used for its ease of obtaining mutants and since the processes involved in intestinal regeneration are conserved with mammals. The project will address the following questions: in physiological or pathophysiological conditions can we detect an H₂O₂ modulation in enterocytes ? Where inside the cell ? How do the different sources of ROS contribute to the H₂O₂ signal? What are the relationship between the ROS sources? What are the consequences of modulating H₂O₂ production at the physiological and molecular levels? Is H₂O₂ a signaling messenger between cells in the gut? To answer these questions, the post-doctoral fellow will make use of a genetically encoded fluorescent probe for H₂O₂. The biosensor can be addressed to different cells and at different locations inside the cell. The depletion or inhibition of specific ROS producing enzymes or complexes on this H₂O₂ signal will be examined. Then, H₂O₂ modulation impact will be assessed at the physiological level, especially with different proliferation assays in the gut, and at the molecular level.

Le poste est à pourvoir au 1^{er} Septembre 2024

Contacts

Enseignement : Michèle Cren (Directrice du Département de Biologie)
michele.cren-reisdorf@uvsq.fr

Recherche : Isabelle GuénaI (Directrice du LGBC)
isabelle.guenal@uvsq.fr