



**Laboratoire de génét
et biologie cellu**

**CDD RECHERCHE-ENSEIGNEMENT EN
BIOLOGIE CELLULAIRE/GÉNÉTIQUE -
UNIVERSITÉ VERSAILLES-SAINT-QUENTIN-
EN-YVELINES**

Le LGBC recrute !

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 Simone Veil-Santé (Montigny-Le-Bretonneux) avec le professeur Sophie Dupré-Crochet (publications), récemment recrutée au laboratoire.

<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 1er Septembre 2024