

The Louvain Drug Research Institute (LDRI) and the Unit of Cellular and Molecular (FACM) at the Université catholique de Louvain (UCL) (Brussels) is pursuing a large scale research programme on

Antibacterials targeting bacterial membrane lipids and lipid domains

We have an opening for **a post-graduate (Ph D, PharmD, or MD) in sciences** (biophysics, chemistry, pharmacy)
(duration = 24 months; from 01/01/2020 to 31/12/2021)

PROJECT:

The membranes are a dynamic supramolecular organisation of individual lipid molecules whose combined chemical and physical properties define the matrix within which membrane proteins are organized. They are a specialized barrier and their structural and functional integrity is critical for life.

The aim of the project is to explore the molecular mechanisms involved in the antibacterial activity of new potential amphiphilic derivatives of neamine (synthesized by the team from Prof. J. Decout; Université Grenoble Alpes, France) acting on bacterial membranes.

The objective is to decipher, at the molecular level the interaction between selected amphiphilic neamine derivatives with specific lipids or lipid domains and the consequences on the activity of proteins involved in bacterial division or in membrane asymmetry.

Techniques used: Biophysics, Microbiology, Biochemistry and Cellular and Molecular Biology, Microscopy

General information on the laboratory: The activities of the Louvain Drug Research are described on the web site <https://www.uclouvain.be/en-ldri.html> and those of the Research group in cellular and molecular pharmacology at the following adress: <https://www.uclouvain.be/en-269733.html>

The laboratory is located in the outskirts of Brussels in a major University/Hospital center, with excellent communication facilities. Languages spoken include English and French.

Criteria for selection

- a recent PhD qualification.
- International mobility
- a highly motivated junior postdoctoral researcher with demonstrated achievement
- a capability of working within a project team to achieve results.
- good communication, organisation and interpersonal skills.

Dates: from 01/01/2020 or 31/12/2021

Contact: marie-paule.mingeot@uclouvain.be (send cover letter, recommendations and detailed CV)