

The Louvain Drug Research Institute (LDRI) and the Unit of Cellular and Molecular Pharmacology at UCL (Brussels, Belgium) is pursuing a large scale research programme on

Role of lipid domains and BAR domain containing proteins in membrane curvature sensing & cell deformation

We now have an opening for

a post-graduate (Ph D, PharmD, or MD) in sciences (biophysics, cellular biology)
(duration = 48 months from 01/10/2017 30/09/2019)

PROJECT:

In their environment, cells face a variety of stimuli and stresses inducing membrane curvature and cell deformation. These physico-mechanical stresses include sheer stress by squeezing of red blood cells (RBCs) in the narrow pores of spleen sinusoids. We will here study how lipid domains could play a role in membrane curvature and cell deformation as well as the interplay between lipid domains, BAR domain proteins and the cytoskeleton. Elucidation of the importance of membrane lipid domains for cell deformation is a prerequisite toward manipulation for therapeutical benefit.

Approaches: Cellular Biology and Biophysics (AFM, FRET, FRAP, Micropipette, Microfluidics), Electron and confocal microscopy.

General information

“Bridging sciences for better health” is the LDRI’s motto. The members of the LDRI join their forces to form a multidisciplinary Institute where all major aspects of the drug are covered. The research activities range from the design or identification of a new drug (and the discovery of new targets) to its optimal use through up-to-date methodology of evaluation. The approaches use in vitro (membranes and cells) and in vivo pre-clinical models (small animals). Patients-oriented research is focused on the pharmacokinetics / pharmacogenomics and clinical pharmacy.

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

Submission of applications: Applications must be submitted electronically at the following email address: marie-paule.mingeot@uclouvain.be and should include a cover letter and curriculum vitae, including an explanation of prior training, qualifications for this position, and a list of publications. Review of applications will begin immediately and continue until the position is filled.