

# PhD position in Cell physiology / Neuroscience

University of Louvain - Brussels - Belgium

## Project Title

Modulation of mechanosensitive ion channels by lipidic environment. Role in cancer biology.

## Overview

Cellular mechanosensitivity plays a key role in the life of the cell, regulating its migration, its proliferation and its death during physiological phenomena such as development. Alteration of cellular mechanosensitivity is implicated in the development of a number of pathologies, including cancer, notably in glioblastoma on which this project is focused. The general goal of this proposal is to better understand how lipid environment of cell membranes affect mechanosensitive ion channels. To achieve this goal, we will combine expertises in cell morphology and mechanics, lipid membrane biophysics and ion channels activity measurements to understand how the composition of the lipid bilayer, its asymmetry and its lateral domains affect mechanosensitive channel gating and clustering.

## Principal investigator and host laboratory:

Philippe Gailly, Laboratory of cell physiology - Institute of Neuroscience (IoNS), University of Louvain (Brussels campus), Belgium.

## Requirements

The candidate should hold a master's degree in Physiology, Biology, Biophysics, Medicine, Chemistry, Biomedical and Health Sciences or related fields. In addition, the candidate should have a keen interest in ion channel biophysics.

The candidate should be fluent in English and/or French.

The application should include a complete CV, a motivation letter explaining why the applicant is best suited for this project, and 2 letters of recommendation.

The project will start in mid-2024 and run for 4 years. The successful candidate will receive funding for 2 years (renewable) and will apply to competitive PhD fellowships (FRS-FNRS, FRIA).

For more details about the position, please contact **Philippe Gailly**: [philippe.gailly@uclouvain.be](mailto:philippe.gailly@uclouvain.be)