

PhD position available at the GIGA-Neurosciences Unit

The Laboratory of Nervous System Disorders and Therapy lead by Pr Bernard Register has an opening PhD-position currently available.

Project summary

We have previously shown that, in adults, glioblastoma initiating cells (GIC) can leave the tumor mass and migrate to the subventricular zone (SVZ), a neurogenic region of the brain. We have identified the CXCL12/CXCR4 axis as being involved in the migration of GIC to the SVZ. CXCL12 is a chemoattractant secreted by endothelial cells in the SVZ which acts via CXCR4 receptors expressed on GIC cells. GIC nested in the SVZ are involved in high-grade glioma (HGG) resistance to treatments and could possibly be involved in tumor recurrences (Kroonen et al, Int. J. Cancer 2011; Goffart et al, Neuro. Oncol. 2015; Goffart et al, Neuro. Oncol. 2016).

The aim of this project is to study the involvement of GIC and the CXCL12/CXCR4 axis in the progression, resistance to treatments and recurrences of two pediatric brain tumors: childhood HGG and diffuse intrinsic pontine gliomas (DIPG), both having very poor prognosis.

Techniques

The project relies on a panel of *in vivo* and *in vitro* assays. It combines cellular, biochemical and molecular biology techniques (Cell culture, Western Blotting, RT-qPCR, immunohistochemistry, flow cytometry, a mouse model of xenotransplantation of human glioblastoma ...;).

Profile

The candidate will be graduated in medicine, biomedical sciences, biology or biochemistry. He/she will be motivated and should be able to work independently and to efficiently collaborate within a team. A good level of English is expected.

Application

Please send your cover letter and your CV to Dr. Natacha Coppieters, post-doc at the GIGA Neurosciences Unit (ncoppieters@uliege.be) and Dr. Caroline Piette, pediatric neuro-oncologist at the University Department of Pediatrics, CHR Citadelle (caroline.piette@chuliege.be).