

Ph.D Position at the GIGA-Stem Cells/GIGA-Neurosciences, Liège, Belgium

The GIGA biomedical research center of the University of Liège (http://www.giga.ulg.ac.be/) is seeking for a Ph.D fellow for a position in the Molecular Regulation of Neurogenesis laboratory, hosted by the GIGA-Stem Cells/GIGA-Neurosciences Units, Liège, Belgium.

Please follow this link to learn more about the GIGA: www.giga.ulg.ac.be/videos

The GIGA was established in 2007 at the University of Liège. It is an interdisciplinary research center in biomedical sciences whose mission is advanced medical innovation. The institute includes 600 members (PI, senior researchers, post-doctoral scientists, thesis students, technicians) with expertise in medical genomics, in silico medicine, neuroscience, cancer, infection and immunity, and cardiovascular sciences.

To meet the increasing demands of performing multidisciplinary research, the GIGA offers Core facilities including imaging, molecular biology, proteomics/metabolomics, histology, aquatic facility (zebrafish), mouse facility, etc.

GIGA also offers business facilities and a training center. The center offers an extraordinary range of services on the same site, where researchers, clinical doctors, doctoral students, students and private sector actors meet.

GIGA is the only Belgian research center directly integrated within a university hospital, making it a major player in translational research where links between researchers and doctors are at the heart of our research activity.

The Fellowship

We are looking for one highly motivated Ph.D candidate to join the Molecular Regulation of Neurogenesis laboratory hosted by the GIGA-Stem Cells/GIGA-Neurosciences Units, Liège, Belgium

(https://www.giganeurogenesis.uliege.be/cms/c_4241430/en/giganeurogen).

We offer comprehensive training in the innovative fields of stem cell research and neuroscience, a highly stimulating environment and state-of-the-art laboratories featuring the latest technologies in mouse genetics and stem cell-derived neural protocols, human brain organoid generation, brain organoid assembloid formation, mouse brain transplantation and life imaging technologies.

Project Description

The human cerebellum is a complex brain structure with several neuronal subtypes connected in a unique manner with limited input and output.

Human pluripotent stem cells (hPSC) are an efficient tool for the generation of different neural identities in order to study human brain development in health and disease.

Our project aims at the generation of human cerebellar organoids from hPSC to: 1) characterize cerebellar progenitor identity; 2) characterize human cerebellar neuronal diversity; and 3) unravel the pattern of connectivity of the human

cerebellum with the rest of the brain. These insights would be highly valuable for the development of cell therapies to treat human cerebellar disorders.

The candidate

Applicants must have a Master degree in Biomedical Sciences, Medicine, Bioengineering, Biology, or a related discipline with excellent study results.

Previous internships in the fields of Biomedical Sciences, Neuroscience and stem cell biology will be highly appreciated.

The candidate should be passionate about scientific research and motivated to pursue a PhD degree for at least 4 years. Excellent written and verbal English communication skills are required.

How to apply?

Candidates should apply by email to the co-supervisors Dr. Ira Espuny Camacho (<u>im.espunycamacho@uliege.be</u>) and Dr. Laurent Nguyen (<u>Inguyen@uliege.be</u>) include a CV, description of your specific interest in our research, and if available contact information for references.