Post-doctoral Position

Cell Biology

GIGA-Neurosciences

Function

We are looking for one highly motivated post-doctoral candidate with PhD in cell biology, molecular biology, neurosciences or genetics to join our research group in the Development Neurobiology Unit at the GIGA-Stem cells, Liège, Belgium (<https://www.gigaldn.uliege.be/cms/c_4226711/en/gigaldn>)

Missions

Because of their high prevalence, 5% of the population worldwide, an untreated decline of hearing impairments has a profound negative impact on the affected individuals' quality of life, impeding communication and leading to social isolation, depression, and reduced physical and cognitive functions. Impaired synaptic transmission, degeneration of auditory neuron neurites, and neuronal loss characterize most of these disorders. Despite the significant recent progress on hearing loss mechanisms, treatment options are mostly missing, and the economic and societal burden on healthcare systems worldwide keeps increasing.

We previously identified a new drug that is promising to restore cochlear synaptogenesis. Local administration of this drug through the tympanic membrane is a preferable option. Still, the efficacy of such an administration relies on the drug's capacity to remain long enough at the cochlear round window level. This project aims to develop a novel nanoparticle-based pharmacologic strategy for treating deafness.

The applicant will test the new nanoparticle vector in vitro on cell lines and organotypic cultures. Then, he/she will inject the novel nanoparticle vector in vivo to test its safety. Finally, he/she will assess the protective effect of this new formulation in a well-established in vivo mouse model of deafness.

Profile

Applicants must have a PhD in a relevant discipline, and interest and experience in molecular, cellular and/or computational biology would be an advantage. Excellent written and verbal English communication skills are required. Preference will be given to candidates with an excellent track record of peer-reviewed publications. Working with animal models should not be a problem and having a diploma in performing animal experiments is an advantage.

Work environment

GIGA is an interdisciplinary research center in biomedical sciences whose mission is advanced medical innovation. The institute encompasses more than 600 members with expertise in medical genomics, in silico medicine, neurosciences, cancer, infection and immunity, and cardiovascular sciences. GIGA is the only Belgian research center directly integrated within a university hospital. It is a significant player in translational research, where links between researchers and doctors are at the heart of the research activity.

To meet the increasing demands of multidisciplinary research, the GIGA offers Core facilities, including advanced imaging, flow cytometry, proteomics/metabolomics, deep sequencing, and genome engineering.

We offer

We offer comprehensive training in an innovative field of Neuroscience, a highly stimulating environment, and advanced technologies including in vivo assessment of hearing function, light sheet and super-resolution confocal microscopy, and high-throughput sequencing technologies.

The candidate will have the opportunity to have an attractive 1-year post-doc grant with the possibility of 1 or 2 additional years.

How to apply?



Outstanding candidates should apply by email to Dr Brigitte Malgrange (bmalgrange@uliege.be), including a CV, a description of your specific interest in our research program, and contact information for two references.

**Deadline for application:** position available immediately.