

Louvain Drug Research Institute (LDRI)



Advanced Drug Delivery and Biomaterials



Post-doctoral position PIEZO4SPINE (PATHFINDER EU project)

A revolutionary multifaceted actuator to repair the injured spinal cord

We are very pleased to share an opening for a postdoctoral position in the Advanced Drug Delivery and Biomaterials Group, LDRI, Université Catholique de Louvain (UCLouvain), Brussels, Belgium to join the team of Prof. Anne des Rieux.

The Project

Piezo4spine is an EU funded project (https://www.piezo4spine.eu) that aims to develop a novel multifactorial therapy for spinal cord injury (SCI). To tackle SCI complexity more accurately, we will focus on two pivotal aspects of neural repair: mechanotransduction and inhibitory scarring.

The project is highly multidisciplinary as it gathers 7 partners from all over Europe and makes use of the latest advances in Nanotechnology, Molecular Biology and Tissue Engineering to develop a bioprinted 3D mesh (theramesh) containing nanocarriers that deliver diverse gene therapeutic agents to the lesion. These bioactive nanocarriers will be released from the theramesh on-demand via wireless powering.

UCLouvain is leading Work package 2 (https://www.piezo4spine.eu/workpackages/). The candidate is expected to contribute to the leading of the WP (coordination, reporting, paper writing) in addition to the experimental work involved mostly in WP2 for the in vitro work and in WP4 for the in vivo work.

Profile

The candidate holds a PhD in the field of Neuro/Medical Sciences or similar for less than 3 years, with a trackable experience in Neurosciences such as neural cell cultures (primary and cell lines), spinal cord injury animal models, spinal cord imaging, behavioral analysis, ... Mastering of basic molecular biology and biochemistry techniques (i.e. gene expression analysis, cyto/immunochemistry, image acquisition and quantification, ...) as well as experience in animal work is mandatory. Having experience in biomaterial cyto/biocompatibility testing is a plus.

A good command of English (spoken and written), excellent communication skills and ability to work independently within a team are required. We are looking for a collaborator showing enthusiasm, creativity and excellent team spirit who will easily integrate in ADDB and Piezo4Spine teams, who will be an asset for the project and work well with the other partners.

The candidate needs to be in international mobility, meaning that she/he has not resided, studied or worked in Belgium for more than 24 months over the last 3 years before the start of the present position.

Benefits and Research environment

The candidate will benefit from a 2-years full time contract. The contract will start in May or June (starting date can be discussed). Costs related to public transport pass are covered.

She/he will join a multidisciplinary team within a well-established research group that is part of a dynamic research institute (https://uclouvain.be/en/research-institutes/ldri).

How to apply?

If you are excited about this project and you think that you could flourish in this environment and be an asset to the Piezo4Spine team and project, send you application (CV and motivation letter including at least 2 references) to anne.desrieux@uclouvain.be.

European





Innovation Council