

PhD position (Doctoral Candidate 5) in 'Frontier Research Competences for Neuro-modulation and Oscillations in Pain

Apply for EU funded support to undertake cutting edge research within a high-level European Training Network consortium of seven research intensive institutions and universities. You will benefit from a team approach, integrated international mobility, high level subject and transferable skills development oriented to your future employment in research and the wider economy. Frontier Research Competences for Neuro-modulation and Oscillations in Pain (FRESCO4NoPain) is an EU-funded Doctoral Network (DN) under the Marie Skłodowska-Curie Actions (MSCA) - (Grant number 101167856 - HORIZON-MSCA-2023-DN-01). More information about the project can be found on www.fresco4nopain.com. FRESCO4NoPain offers 17 Doctoral Candidates positions to begin on the 1st of September 2025 or soon before and a list of all available position can be found on the website. Please consult the '[Guide for Applicants](#)' document for further details.

This specific PhD/DC position is for Individual research Project (IRP)5: 'Bridging the gap between preclinical studies and non-invasive neuromodulation in humans using intracerebral electroencephalography and intracerebral periodic stimulation'. Doctoral Candidate 5 will investigate whether intracerebral periodic stimulation (iPS) – a technique that allows rhythmic stimulation of deep brain areas – can synchronize ongoing brain oscillations and modulate pain perception in humans. Brain activity will be measured using intracerebral electroencephalography (iEEG). The goal is to develop personalized neuromodulation strategies, where stimulation is tailored to each patient's brain signals to achieve the best possible pain relief. This project will exploit preclinical findings to guide neuromodulation in humans and assess the connectivity between brain regions involved in nociception and pain perception.

Supervisory team: Main supervisor Dr. Giulia Liberati, Institute of Neuroscience, UCLouvain - Université catholique de Louvain, Belgium. Co-supervisor Director Ipek Yalcin, Institute of Cellular and Integrative Neuroscience, the National Centre for Scientific Research, France. Mentor: Principal Regulatory Affairs Consultant and Director Operations Jeroen Pieper, Signifix.

Workplace: Main workplace will be Institute of Neuroscience, UCLouvain - Université catholique de Louvain, Belgium. Two secondments are planned for Institute of Cellular and Integrative Neuroscience, the National Centre for Scientific Research, France and at the company Signifix, the Netherlands.

Candidate eligibility

The DC position is open for highly motivated candidates holding a master's degree or who will obtain a master's degree by the DC start date of September 1st, 2025. Applicants should not be in possession of a doctoral degree at the time of the call deadline. Furthermore, applicants must not have resided or carried out your main activity (e.g. work, studies) in the country where you have been recruited, for more than 12 months in the 3 years immediately before the recruitment date. Applicants must demonstrate that their ability to understand and express themselves in both written and spoken English is sufficiently high for them to derive the full benefit from the network training.

Application deadline

7th of April 2025.

How to apply

The application is only to be submitted online. Please send your application to the FRESCO4NoPain project management at fresco4nopain@hst.aau.dk

Your application must include the following:

- Motivation letter (max. 2 pages) including the following:
 - Brief presentation of the DC
 - The main reasons for choice of DC project
 - General knowledge on the research topic
 - Main research and training goals
 - Future plans
 - Complimentary skills
- Curriculum Vitae:
 - A CV (e.g. using the EU model) which states your educational background, experience, techniques, language skills and other skills or experiences relevant for this position. In accordance with mobility rules, it is crucial to provide detailed information about your employment and academic history, including residence details for at least the past three years.
- Certificate of academic degree:
 - A copy of the original master's degree with full transcripts. In case the master's degree has not been obtained at the call closing date applicants must upload their BSc degree/diploma in English and upload the transcript of the exams sustained so far during their master course, with a clear indication of the conclusion of the studies.
- Recommendation letter:
 - Attesting to the academic standing and potential of the applicant. Must be from an academic supervisor or collaborator, line manager, and/or

company CEO. Must contain referees' contact details (will only be contacted upon prior agreement) and name of applicant.

Selection process

The Selection Committee will oversee and manage the entire selection process to ensure fairness, transparency, and compliance with the established criteria and MSCA guidelines. This committee is responsible for reviewing applications, shortlisting candidates, and conducting interviews. The Selection Committee will consist of the supervisory team.

By the 5th of May 2025, the candidates will be shortlisted based on their applications. The evaluation criteria for shortlisting applications can be found in the '[Guide for Applicants](#)'. Candidates will be invited for an online interview which will take place in the period 5th of May to 2nd of June 2025. Please refer to the '[Guide for Applicants](#)' for details on the process and evaluation criteria for the interview.

About the workplace

Institute of Neuroscience, UCLouvain - University catholique de Louvain

The Institute of Neuroscience (IoNS) is home to a multidisciplinary team of over 300 researchers and supporting staff dedicated to advancing our understanding of the brain in both health and disease. The institute is organized into three key research axes: cellular and molecular neuroscience, systems and cognitive neuroscience, and clinical neuroscience. Based in Brussels, IoNS maintains state-of-the-art research facilities and benefits from close collaborations with Saint-Luc University Hospital, fostering a strong link between fundamental research and clinical applications.

Terms of employment and salary

Doctoral candidates are employed under a fixed-term contract and will be working full-time on the project. FRESCO4NoPain offers competitive salaries including a living allowance, a mobility allowance and when applicable a family allowance (rates are adjusted using the country correction coefficient).

Contact

You may obtain further information about the position by contacting Dr Giulia Liberati giulia.liberati@uclouvain.be