

Post-doc position 24 months International mobility University of Mons – UMONS University of Namur - UNamur



Within the frame of a **Marie Curie action** of the European Union, the University of Mons – UMONS/the University of Namur is seeking for highly motivated post-doctoral researchers for interdisciplinary projects. Within this frame, the laboratories of **neuroscience**, **neuropsychology** and **engineering innovation** are joining their forces to develop a cross-disciplinary research project on **neurodegenerative diseases**. The fellowship is a prestigious EU funding scheme which supports mobility, career development and training in Europe and beyond. The fellowship offers a 24 months' highly competitive salary and research/training funds.

Applicants

- o any nationality, no age restriction, fluent in English
- o must hold a PhD in any fields related to the subject at the call deadline (7th March 2022)
- o cannot have resided or carried out her/his main activity in Belgium for more than 12 months in the three years before the call deadline

Research project and research groups

Cognitive Neuroscience is a very complex field of research, requiring the contribution of complementary disciplines, such as psychology, biomedical sciences, mathematics and engineering. The Center for Interdisciplinary Research and Training in Psychophysiology and Electrophysiology of Cognition - CiPsE - brings together the activities of 7 research departments from 4 faculties of the UMONS. Its aim is to create an environment favorable to the development of multidisciplinary projects integrating new technologies and exploiting physiological, psychological and electrophysiological measurements of brain activity during cognitive tasks.

UMONS has a strong expertise in the development of tools (explainable AI) and statistical methods to integrate behavioral and EEG data for the development of precision medicine in psychiatric and neurodegenerative pathologies. The CiPsE has developed a multicenter recruitment network of Alzheimer patients (EpiCura, CHwapi, ISPPC, CHU Ambroise Paré) and has EEG tools (64 to 128 channels), Infrared Spectroscopy (fNIRS), Eye-tracking and Physiological Parameters Measurement for data collection.

The aim of this multidisciplinary project is to combine expertise and techniques for an early diagnosis of Alzheimer-s disease and to develop tools to better predict conversion from mild cognitive disorder to Alzheimer. These tools will be of tremendous importance when disease-modifying drugs will be available on the market.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska Curie grant agreement No 101034383.

The project will be co-supervised by Laurence Ris from the Faculty of Medicine and Pharmacy, Laurent Lefebvre from the Faculty of Psychology and Educational Sciences and Philippe Fortemps from the Faculty of Engineering.

Websites

<u>Lancement de l'appel à projets du programme Connect with Wallonia (C2W) ce 1er décembre - Université de Mons (umons.ac.be)</u>

Home - Service / FMP - Neurosciences (umons.ac.be)

Home - Service / FPSE - Psychologie cognitive et Neuropsychologie (umons.ac.be)

Home - Service / FPMS - Management de l'Innovation Technologique (umons.ac.be)

How to apply?

Expression of interest must be submitted to *Laurence Ris, UMONS, <u>laurence.ris@umons.ac.be.</u>*Applicants are invited to either propose their own research project or to discuss with the PIs to develop an interdisciplinary project based on their specific expertise.

