

The University of Caen Normandy and Centre d'Etudes et de Recherche sur le Médicament de Normandie (CERMN) are hiring for 12 months **A RESEARCH ENGINEER IN MRI**

The University of Caen (France) with its 35,000 students, is a major player and a driving force behind the development of higher education and research in Normandy. UNICAEN is a member of Normandie University.

Your mission

The recruited research engineer will contribute to the CrIM research project funded by Normandie Valorisation, a project aiming at developing new diagnostic tools for Magnetic Resonance Imaging (MRI) using hyperpolarized xenon. This project is developed through a close collaboration between Centre d'Etude et de Recherches sur le Médicament de Normandie (CERMN, boulevard Henri Becquerel, 14000 CAEN, FRANCE; <http://cermn.unicaen.fr/>), the Laboratory of Catalysis and Spectrochemistry (LCS, boulevard Maréchal Juin, 14000 CAEN; <https://www.lcs.ensicaen.fr/>) and the Physiopathology and imaging laboratory of neurological disorders (PhIND, UMRs 1237 INSERM, boulevard Henri Becquerel, 14000 CAEN) and the Blood and Brain Institute @ Caen-Normandie.

Hyperpolarized xenon MRI is an emerging clinical diagnostic technique currently developed for pulmonary functional imaging, with high potential for applications in brain imaging. Since 2019, the CERMN laboratory has been developing a new generation of contrast agents adapted to xenon. The LCS laboratory has expertise in xenon hyperpolarization applied to the study of materials. The objective of CrIM project is to translate these different skills to preclinical MRI as proof of concept.

The recruited research engineer will be trained to use the xenon polarizer, and will have to perform maintenance of this apparatus. He/she will have to continue the implementation of hyperpolarized xenon at the imaging center GIP CYCERON and will actively participate to the in vivo MRI experiments. Data acquisition will be performed on Bruker apparatus.

The recruited research engineer will be based in both LCS and PhIND laboratories, under the scientific responsibility of the principal investigator of the project, and will work in close collaboration with CERMN collaborators and Cyceron platform.

Your Profile:

The candidate shall possess several skills:

- A PhD diploma (or equivalent diploma)
- Good knowledge in MRI (acquisition, sequence programming, data processing)
- Good communication skills
- Autonomy and curiosity

An experience in the production and/or the use of hyperpolarized species will definitely be a plus but not mandatory to apply.

Taking office: As soon as possible

Documents required:

- CV and cover letter.
- Two letters of recommendation, or contacts likely to provide.

Mail to: emmanuelle.dubost@unicaen.fr