

## **Neuroimaging Engineer Opportunity in the Team “Multimodal Neuroimaging of Brain Diseases” (Dr. Gael Chételat , Inserm U1237, Caen, France)**

- \* Duration: 2 years
- \* Starting date: February 2021
- \* Research unit: Inserm U1237, Caen, France (Pr. Denis Vivien)
- \* Research team: Multimodal Neuroimaging of Brain Diseases (Dr. Gael Chételat)
- \* Salary: according to experience

**Job Description:** The engineer will be in charge of the implementation of open access databases related to aging and neurodegenerative disease (e.g., ADNI, DIAN) within our team and of the development of new methods of (pre)processing neuroimaging data. More specifically, the engineer will have to set databases for use, implement quality control procedure for different imaging modalities (e.g., structural and functional MRI, PET) and connect together the different databases. Moreover, the engineer will be involved in the development of innovative processing and analyses techniques for one or several of the neuroimaging data modalities acquired in the lab (e.g., fMRI, DTI, ASL, PET imaging).

**Requirements for applicants:** Master or PhD Degree in neuroscience, engineering, or equivalent, and experience in neuroimaging are essential. The applicant should also have a solid background in programming, especially in Matlab. Strong expertise with one specific neuroimaging modality (e.g., fMRI, DTI, ASL) and/or previous research experience in aging or neurodegenerative disease field are highly desirable though not necessary.

**The lab:** The Multimodal Neuroimaging of Brain Diseases team, headed by Dr. Gael Chételat, is organized around four main areas of interest: i) improving neuroimaging biomarkers for early Alzheimer’s disease diagnosis; ii) further the understanding of the physiopathological mechanisms of Alzheimer’s disease with multimodal imaging, iii) investigating the relationships between lifestyle factors and brain biomarkers and iv) developing non-pharmacological interventions to promote mental health and wellbeing in ageing population. The team is currently involved in 2 large projects: Multimodality Imaging of Early-stage Alzheimer’s Disease (IMAP+) and Silver Santé Study, a European study granted by the European Commission (H2020, 2015-PHC-22) concerning the effects of two 18-month interventions (English versus mental training) on behavioral and biological markers of ageing and Alzheimer’s disease. The team is affiliated to the Inserm Unit 1237 of Pr. Denis Vivien and is based at Cyceron (Caen, France), a structure devoted to multimodal imaging. The structure provide a stimulating work environment as it groups several research units and several research instruments, such as a cyclotron, 2 PET-CT and 2 MRI.

Questions regarding the position can be directed to Géraldine Poisnel (poisnel@cyceron.fr).

**To apply:** Send a CV, motivation letter and contact details of two academic referees to Géraldine Poisnel (poisnel@cyceron.fr).