

Postdoctoral Position in Metabolic MRI NeuroSpin, CEA-Saclay, France

We are seeking a postdoctoral fellow who will be responsible for the development, implementation and optimization of fMRI and metabolic MRI (chemical exchange saturation transfer, CEST and chemical exchange spin lock, CESL) techniques on the 7T human scanner at NeuroSpin (CEA, Saclay):

http://joliot.cea.fr/drf/joliot/Pages/Entites_de_recherche/NeuroSpin.aspx

The postdoc will develop, implement and improve upon advances in MRI pulse sequence, image reconstruction, metabolite quantification and optimize scanning protocols to study altered metabolism in Alzheimer's patients. The postdoc will have a particular focus on the 7T scanner but will also work on the 3T PET/MRI scanner at Service Hospitalier Frédéric Joliot (SHFJ): http://joliot.cea.fr/drf/joliot/Pages/Entites_de_recherche/SHFJ.aspx, which is located 5 km away from NeuroSpin. The transfer of the developed protocols to the human 11.7T scanner is also envisioned.

The successful candidates is required to hold a PhD in physics or engineering using MRI and have experience in MRI sequence development and image processing, ideally for neuroimaging. It is also essential that she/he have programming experience, including but not limited to C/C++, Matlab/Python and UNIX scripting. Excellent oral and written communication skills are imperative. Experience in fMRI and/or parallel transmission at high or ultra-high magnetic fields is desirable. Knowledge of Siemens pulse programming would be a strong asset.

The position is available starting November 1st, 2019. The post will be offered on a two-year fixed term contract.

To apply please send your CV, a letter of motivation and the names and contact information of two referees to Luisa Ciobanu (luisa.ciobanu@cea.fr).