Postdoctoral position
Development of MRI acquisition techniques for neuroscience

Laboratory for Neuroimaging Research
Lausanne University Hospital

Applications are invited for a postdoctoral position at the Laboratoire de Recherche en Neuroimagerie (LREN), Department of Clinical Neuroscience, Lausanne University Hospital, Switzerland. The position is under the supervision of Dr Antoine Lutti, Head of MRI physics, in close collaboration with the other research groups of the LREN laboratory. The LREN provides an excellent multidisciplinary and interactive research environment combining expertise in neuroimaging methods development, clinical and fundamental neuroscience and electroencephalography.

The project aims at developing MRI acquisition sequences for the study of the healthy brain and brain disease. In particular, the project will be based on high-end equipment allowing the prospective correction of patient motion in real-time during the acquisition of MRI data. The project will involve extending this technology to a variety of MRI acquisition sequences and ensure optimal data quality in non-compliant populations (e.g. Parkinson’s Disease). The successful applicant will be given privileged access to the MRI facilities of the Department of Clinical Neuroscience, which include a research-dedicated 3T Prisma Siemens MRI scanner and equipments for physiological monitoring and stimulation of research participants in the MRI scanner.

A significant fraction of the workload will be dedicated to support activities to assist the neuroscience research projects conducted on the MRI facilities of the Department of Clinical Neuroscience. These activities include the maintenance of an MRI data processing software, regular assessment of the performance of the MRI scanner, optimization of MRI protocols for neuroscience projects and MRI data acquisition.

The ideal candidate should have a PhD in MRI physics or similar disciplines. Previous experience in the development of MRI acquisition techniques, strong programming skills and proficiency in English and French are advantageous.

The position is available from the 15th of March 2018 till March 2020. The salaries are in accordance with the Swiss Public service regulations. Applications including a CV, a statement of research interests and the name and full contact details of two referees should be sent to: antoine.lutti@chuv.ch

Key publications