

Postdoctoral Position in Neuronal Current Imaging and EEG-fMRI University Hospital and Inselspital Bern, Switzerland

The Support Center for Advanced Neuroimaging (SCAN), part of the Institute for Diagnostic and Interventional Neuroradiology at the University Hospital of Bern, is inviting applications for a highly motivated **Postdoctoral Researcher**. The position focuses on the development and application of advanced neuroimaging methods in the study of epilepsy.

About the Project

This position is part of the SNSF-funded project *SWISS SECOND: the impact of disease activity on secondary brain alterations in epilepsy patients five years after the first seizure*, led by Prof. Dr. med. Roland Wiest. The successful candidate will work on the development and validation of **Spin-lock (SL) based fMRI**, a non-BOLD technique that is sensitive to neuronal magnetic fields and compare it with EEG-fMRI data from both a 3T (Prisma, Siemens) and 7T (Terra, Siemens) MRI systems in patients with epilepsy.

Key responsibilities

- Further develop and optimize Spin lock functional MRI sequences at 3T and 7T
- Conduct phantom testing and human data acquisition
- Improve post processing and quantitative analysis tools
- Collaborate closely with clinical and technical partners within the project

Required qualifications

- PhD in physics, biomedical engineering, or a related field
- Experience with the Siemens IDEA pulse sequence programming environment
- Knowledge of EEG-fMRI is an advantage
- Strong motivation for applied neuroimaging research and collaborative work

Position details

Start Date: Between October and December 2025

Duration: 24 months

Salary: According to SNSF guidelines

More information about the SCAN group is available at www.scancore.org

For inquiries, please contact Dr. Milena Capiglioni (milenasofia.capiglioni@insel.ch). To apply, please send a curriculum vitae and a motivation letter.