POSTDOCTORAL RESEARCH FELLOW IN FMRI DATA ANALYSIS AND MULTI-SITE HARMONIZATION

The Functional MRI Laboratory at the University of Michigan is seeking a postdoctoral research fellow in the area of multi-site harmonization of fMRI measures in the human brain. The position is funded by an international effort to harmonize state-of-the-art and advanced fMRI protocols across multiple MRI vendor platforms, based on the Pulseq (http://pulseq.github.io/) open file standard for MRI pulse sequences. The scientific goal of this endeavor is to make fMRI measures more reproducible across imaging centers. For further details, see https://reporter.nih.gov/search/G2E-aUtOlkSnEPHbV1PDfw/project-details/10306940.

The candidate will assist with testing and validating the proposed vendor-independent fMRI protocols, and will take the lead in designing and executing ‘traveling volunteer’ studies to assess cross-site and cross-vendor reproducibility of fMRI measures. The candidate will help define the fMRI measures to be evaluated and design the data processing and analysis pipeline. The fellow will be supervised by Dr. Jon-Fredrik Nielsen, in close collaboration with: other members of the U of Michigan study team (Drs. Scott Peltier, Douglas Noll, and Jeffrey Fessler); the University Medical Center Freiburg study team (Dr. Maxim Zaitsev and one postdoc TBD); and a panel of international experts overseeing the project. The ideal candidate will have a strong background in human neuroscience and fMRI data analysis and statistics, and enjoy working in a highly collaborative and international environment. This position offers a unique opportunity to be at the forefront of an international effort to develop an open source platform for acquiring fMRI data in a consistent way across sites, that we hope will become a widely used standard for future multi-site fMRI research studies.

Requirements:

- PhD in engineering, neuroscience, or a related field.
- Track record and advanced skills in human fMRI experimental design and data analysis and statistics.
- Strong written and oral English communication skills.

Desired skills:

- A solid understanding of MRI pulse sequences.
- Ability to work in a collaborative environment.

Application information:

- This position is full-time with benefits and is available immediately.
- The initial appointment period is for one year with the intention of annual renewal for an additional two years contingent upon satisfactory performance and the availability of funding.
- Interested applicants should send a cover letter describing research experience, interests, and future research and career goals, as well as an up-to-date curriculum vitae and contact information for three references, to Dr. Jon-Fredrik Nielsen, via email: jfnielse@umich.edu.
- Questions regarding this position and informal inquiries should be directed to Dr. Jon-Fredrik Nielsen, via email: jfnielse@umich.edu.