Postdoc opportunity on diffusion functional MRI at ultra-high field

A postdoctoral position is available at the Center for Biomedical Imaging (EPFL, Lausanne, Switzerland), conducting research on a highly innovative approach to fMRI with Dr. Ileana Jelescu, in collaboration with Prof. Dimitri Van De Ville. The project focuses on using state-of-the art hardware and processing tools to examine the functional contrast produced by diffusion fMRI and how it compares to and complements standard BOLD contrast. It will involve clinical data acquisition at 3T and 7T using custom protocols and the development of processing pipelines for resting-state and task-based fMRI. The position is funded through the SNSF for a year with possibility of extension, and available with an effective start date as soon as possible, but no later than March 1, 2020. Applications will be considered until the position is filled, so interested candidates are encouraged to apply early.

Requirements:

- A Ph.D. in medical physics, electrical engineering, biomedical engineering, or related field.
- The successful candidate will be a motivated researcher with self-initiative, curiosity, appeal for novelty and a strong background in signal processing; ideally in fMRI or diffusion MRI acquisition/analysis.
- Proficiency in programming (either Matlab or Python) is necessary and experience with typical neuroimaging software and bash scripting is preferred.
- Demonstrated track record of scientific publications in the field of MRI
- Excellent written and oral communication skills in English

Salary: in compliance with Swiss National Science Foundation guidelines.

Environment: The CIBM is a partnership between EPFL, UNIL, CHUV, UniGe and HUG with around 50 affiliate members in a variety of disciplines ranging from MRI to signal processing, EEG and PET. We offer outstanding imaging facilities including 7T (EPFL) and 3T Prisma (CHUV) Siemens clinical scanners and 9.4T Varian and 14T Bruker pre-clinical scanners (EPFL). More information about the infrastructure can be found here: https://cibm.ch/infrastructure/resources-equipments/. There are ample opportunities for collaboration with leading clinicians, neuroscientists and biologists.

Interested? Please send your CV, a brief statement of research interests and contact information of two references to Dr. Ileana Jelescu (ileana.jelescu@epfl.ch).