Post-doctoral position in neuroimaging and hyperpolarized ^{13}C research

Date 01.09.2024 open until filled

A two-year SNF funded postdoctoral position is available at the Laboratory of Functional and Metabolic Imaging, EPFL, Lausanne, Switzerland. Highly motivated candidates with a strong background in preclinical models, MR neuroimaging, biochemistry, and/or brain metabolism.

The goal of our research is to develop mechanism-driven MR imaging/spectroscopy approaches for improved detection of neurological disorders and monitoring of metabolic response to cerebral stimulation. We develop and biologically validate new hyperpolarized probes, as well as optimize imaging strategies for diagnosis and monitoring of treatment.

Job requirements:
1. Completed Ph.D. in MR Imaging/Spectroscopy, Neuroimaging, Biochemistry, Biomedical Engineering, Neurosciences or a related field, with an emphasis on the brain.
2. Knowledgeable within one or more of the following subjects: MRI/S, high-field imaging, X-nuclei, metabolism, hyperpolarized ^{13}C, DNP, MR sequence programming, data processing, neurological disorders, metabolomics.
3. Proven ability to communicate novel research findings through oral presentation and written publication.
4. Ability to work with people who have both similar and different backgrounds
5. Evidence of top-quality research on the above-specified areas in the form of published papers in top conferences/journals.

Preferred characteristics:
1. Experience with data analysis/post-processing, using R, Python, or Matlab.
2. Experience with preclinical models of disease (animal handling procedures)

The successful candidate is expected to publish his/her research results in leading international journals and conferences. She/he is also expected to collaborate with scientists from different disciplines and international networks in Switzerland, Denmark, and Japan. We anticipate providing significant training in those disciplines with which the candidate is less familiar.

Interested individuals are encouraged to email a curriculum vita, 2 references, and a statement of research interests to Mor Mishkovsky, PhD, mor.mishkovsky@epfl.ch