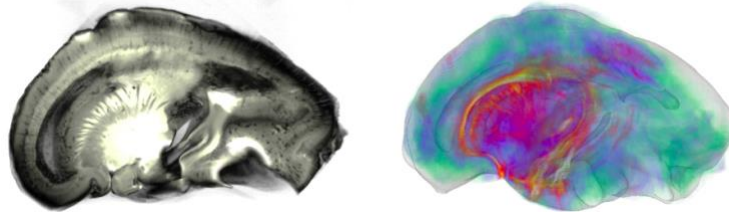




SNSF Swiss Postdoctoral Fellowship in magnetic resonance imaging of the developing human brain circuitry



Background

The brain's neural circuitry develops dynamically: functional specialization and interconnections emerge rapidly before birth, but the precise nature and significance of this process remains unclear. In the envisaged research project, a combination of *in vivo* and *post mortem* MRI data will be used to study the emergence of neural circuitry in the human brain. Specifically, we aim to disentangle how circuits responsible for higher cognition and learning develop and how common pathological conditions may affect their development. Based on our core methods and data, the candidate for this position will be free to identify the key research questions and methodological focus of the project.

What we offer

Our research group ([Link to website](#)) addresses challenges of pediatric developmental neuroimaging, build computational tools and use them to explore the dynamic aspects of perinatal and pediatric neurodevelopment in the individual patient and across larger study groups. Your project will use state-of-the-art research infrastructure, such as a 9.4T MRI preclinical scanner, dedicated pediatric MRI scanners, or the mesoSPIM light-sheet microscope. We collaborate several research groups focusing on basic and applied clinical research in Switzerland and internationally. You will receive an attractive package consisting of a competitive postdoctoral salary (equivalent to ca. 99'100 Euros per year) for two years, your own project budget and other benefits.

Your profile

You are a highly motivated early career scientists who is looking forward to relocating to Switzerland. You bring in expertise in the field of MRI research, which may include the acquisition and post-processing of MRI, developing new image processing methods and applying machine-learning to MRI analysis. Expertise in ultra-high-field imaging, diffusion tensor imaging and structural connectivity analysis is a plus. You completed a PhD degree no longer than 8 years ago in the field of neuroscience or engineering sciences and have a promising early track record of several peer-reviewed publications in internationally renowned journals in the field.

Application procedure

We would like to develop the application together with you. Upon successful application, the funding for the research project will be provided by the SNSF Swiss Postdoctoral Fellowships. We would like to get to know you first. If selected, we will offer the possibility for you to apply for a Swiss Postdoctoral Fellowships in our institution. Our team provides full support for you during the application.

We accept application enquiries until 15th of September 2022. The deadline for the Swiss Postdoctoral Fellowships is 1st of December 2022. The earliest project start is July 2023.

Contact

General information on the SNSF Swiss Postdoctoral Fellowships:

<https://www.snf.ch/en/m1NtWp4nTELQixlu/funding/horizon-europe-swiss-postdoctoral-fellowships>

PD Dr. Andras Jakab, PhD

Research Group Leader

Center for MR-Research, University Children's Hospital Zürich, University of Zürich

E-mail: andras.jakab@kisp.uzh.ch Phone: +41 44 266 3129