PhD Position in CNS intravital imaging of Alzheimer's disease models

Theodor Kocher Institute, University of Bern

We seek a qualified and highly motivated individual aiming to pursue a PhD thesis involving in vivo imaging of the cerebrospinal fluid (CSF) circulation and the brain barriers in the context of neurodegenerative disorders within the groups of Dr. Steven Proulx and Prof. Britta Engelhardt at the Theodor Kocher Institute at the University of Bern in Switzerland.

This Synapsis Foundation-supported project involves development of new imaging techniques to evaluate CNS fluid flow and the role of the brain barriers in mouse models of Alzheimer's disease. An ideal candidate should be motivated to learn and develop new *in vivo* microscopic techniques, involving near-infrared and two-photon imaging, as well as be interested in characterizing mouse models of disease.

The applicant should have a master's degree in the life sciences or in medicine preferably with a background in neuroscience, biomedical engineering or a related field and have a dedicated interest in the fields of neuroimmunology, neurodegeneration and neuroanatomy. Previous in vivo experience with rodent models is of advantage. The candidate must have strong written and oral communication skills in English, while working knowledge of German is a plus.

The position is available starting April 1st 2022. The TKI offers international state-of-the-art laboratory equipment and a collaborative work environment between several research groups focused on neuroimmunology (www.tki.unibe.ch). The PhD student will be enrolled in the interfaculty Graduate School for Cellular and Biomedical Sciences at the University of Bern (www.gcb.unibe.ch) with the potential option of enrolling in the Microscopy Imaging Center PhD program (https://www.mic.unibe.ch/phd_program.php) or the Cell Migration PhD program (https://cell-mig.ch).

Please send your application with a meaningful motivation letter and your CV (including the names of at least two references) to Dr. Steven Proulx (steven.proulx@tki.unibe.ch) or Prof. Britta Engelhardt (britta.engelhardt@tki.unibe.ch). For further information, please contact by e-mail. Please send your application before February 15th, 2022.