Ph.D. Position in Retinal Neurophysiology/Optogenetics

The PhD position will be hosted in the Optogenetics group of PD Dr. S. Kleinlogel at the Department of Physiology at the University of Bern (Switzerland). The main focus of the lab lies on the restoration of vision in the blind with customized optogenetic tools (van Wyk et al., PLoS Biology, 2015). The available Ph.D. project is part of an initiative to gain insight into the so far elusive pathophysiological adaptations during retinal degeneration in order to improve optogenetic treatment strategies for the blind.

The successful candidate will apply cutting edge molecular and electrophysiological technology to optogenetically re-activate retinal neurons and monitor their activity. These include gene therapy with next-generation optogenetic tools, multi-electrode array and patch-clamp recordings on mouse and human ex vivo retinas. The candidate will be responsible for the design of visual stimuli and the analysis of the acquired single-cell or population data.

We are seeking a highly motivated candidate with strong interest in neural circuits and the visual system. The optimal candidate should have excellent skills in multi-electrode array or patch-clamp recordings as well as programming (Matlab or Python). Academic excellence, a professional work attitude, a proactive and self-driven nature and leadership potential are expected.

The candidate will be enrolled in the PhD program of the Graduate School of Biomedical Sciences of the University of Bern. The position is supported by a Swiss National Science Foundation grant and immediately available.

How to apply:
Please send a CV (max 2 pages), University grades, a statement of methodological experiences and research motivation (max 2 pages) and 2 recommendation letters to: kleinlogel@pyl.unibe.ch.
Only short-listed candidates will be further contacted. For further information please contact Sonja Kleinlogel.