

University of Heidelberg

Two PhD Positions in Developmental Neurobiology

Topic: Molecular Mechanisms of Axon Growth

The projects in our department aim at a better understanding of the molecular mechanisms underlying the growth and navigation of axons during development and regeneration. In particular, we study the role of cell adhesion molecules (CAMs), cytoskeletal components, and intracellular signaling molecules which mediate between them. The two PhD projects will focus on new CAM interaction partners which we identified and will analyze the functional impact of these interactions on axon growth. The projects are basic research but also aiming at contributing to the development of novel therapeutic approaches, e.g. for axon regeneration (patents applications). Our major model systems are retina and spinal ganglia of mouse/chick embryos/adults. Our approaches comprise a broad spectrum of state-of-the-art techniques such as elaborate cell and tissue culture systems, molecular biology, biochemistry, micro-/nano-technology, and high-end live imaging microscopy. Preference will be given to candidates with expertise in these techniques and a background in neurobiology/developmental biology. Please also see our webpage:

www.cos.uni-heidelberg.de/index.php/ge.pollerberg

We offer a well-equipped department (Faculty of Biosciences) which is member of the COS (Center for Organismal Studies), IZN (Interdisciplinary Center for Neurosciences), and Cell Network Excellence Cluster. The Heidelberg Campus provides not only a very stimulating scientific environment but also a wide range of excellent facilities such as the Nikon Imaging Center, electron microscopy core facility, RNAi screening facility, deep sequencing core facility etc. In our department, we offer long term experience in the field, supportive mentoring, and reliable financial funding. Please send your application including a detailed CV, short letter of motivation, and contact address of two referees to G.E.Pollerberg@cos.uni-heidelberg.de by email as one single pdf (max. 2 MB) with your family name in the subject line. Please apply as soon as possible, applications will be reviewed until the two positions are filled.