

PhD position in Developmental Neuroscience

Our research group focusses on the molecular basis of synapse formation in the central nervous system. The successful candidate will employ state-of-the-art experimental approaches to study the development of synapses in wildtype and transgenic mice. The project will be a continuation of previous studies (Handara et al., (2019) The role of agrin, Lrp4 and MuSK during dendritic arborization and synaptogenesis in cultured embryonic CNS neurons. *Developmental Biology* **445**: 54-67; Handara & Kröger (2019) Alternative splicing and the intracellular domain mediate TM-agrin's ability to differentially regulate the density of excitatory and inhibitory synapse-like specializations in developing CNS neurons. *Neuroscience* **419**: 60-71; Karakatsani et al., (2017). Neuronal LRP4 regulates synapse formation in the developing CNS. *Development* 144, 4604-4615) and will involve high-resolution confocal microscopy, electrophysiology, biochemistry and molecular biology.

We offer an exciting research topic with high biomedical relevance in a stimulating and interactive scientific environment. The Ludwig-Maximilians-Universität München (LMU) is one of the most renowned Universities in Europe. Our research facility is located on the research campus in Großhadern/Martinsried. The Department of Physiological Genomics (http://www.genom.physiol.med.uni-muenchen.de/research_gr/index.html) is located in the new Biomedical Center of the LMU Munich (<http://www.bmc.med.uni-muenchen.de>) and offers excellent training and support in a highly stimulatory scientific environment.

We are seeking a highly-motivated candidate for our team. The PhD position requires a master's degree/diploma in life sciences or related disciplines. Prior experiences in molecular and cellular neuroscience, analysis and breeding of transgenic mice as well as interest and basic knowledge in Developmental Neuroscience are advantageous. Excellent communication skills in English (oral and written) are required.

For more information:

http://www.genom.physiol.med.uni-muenchen.de/research_gr/kroeger_group/index.html

Prof. Dr. Stephan Kröger
Biomedical Center
Department of Physiological Genomics
Großhaderner Str. 9
82152 Planegg-Martinsried
Email: skroeger@lmu.de