The department "Circuits-Computation-Models" of Prof. Dr. Alexander Borst at the MPI for Neurobiology is looking for a

PhD student

Drosophila **motion vision lab based in Munich, Germany seeks motivated and reliable PhD student to work on CRISPR/Cas9-based strategies for conditional protein labeling***.*

Background and project
Our lab is interested in the computation of visual information in the *Drosophila* optic lobe. T4 and T5 neurons are the first neurons along the visual processing chain that respond to visual motion in a direction selective way. In this context, the subcellular organization of neurotransmitter receptors and voltage-gated ion channels in T4 and T5 neurons plays a crucial role. Neurotransmitter receptors and ion channels shape the biophysical properties of neurons, from the sign of the response mediated by neurotransmitter receptors to the dynamics shaped by voltage-gated ion channels. Therefore, knowing the exact types of receptors and channels expressed by a neuron as well as their subcellular localization is fundamental for our understanding of the complex computations performed by this neuronal circuit. To this avail, we recently developed new tools to visualize the subcellular localization of specific proteins in *Drosophila* (Fendl, Vieira, and Borst, 2020). Currently, we are expanding the existing FlpTag lines by applying CRISPR/Cas9-based genome editing strategies and we are looking for a PhD student to join this project.

Candidate requirements
- Master's degree in Biology, Biochemistry, or Neuroscience or related fields
- Experience with molecular biology techniques especially various cloning techniques. Pervious working experience with CRISPR/Cas9-methods is a plus.
- Knowledge about *Drosophila* genetics, immunohistochemical techniques, and confocal imaging are preferable
- Enthusiasm, responsibility, and excellent collaboration skills
- Strong oral and written skills in English

How to apply
The PhD position is fully funded and the potential candidate should start as soon as possible, but no later than July 2021. Max-Planck Society is an equal opportunity employer; therefore, we strongly encourage applicants from underrepresented groups within science and academia to apply. If you are excited about the position, please reach out via e-mail with a cover letter and CV to Sandra Fendl (sfendl@neuro.mpg.de) and Renee Vieira (rvieira@neuro.mpg.de).
https://www.neuro.mpg.de/borst