

PhD position: Understanding subcellular signaling in learning and memory using the genetic model system *Drosophila melanogaster*

The working group of Prof. Henrike Scholz focuses on an interdisciplinary approach to investigate the neuronal and mechanistic bases of behaviors associated with addiction such as learning and memory. We use genetic, molecular-genetic, cellular and biochemical methods combined with neuroanatomical and behavioral analysis to dissect molecular mechanisms underlying synaptic plasticity using *Drosophila melanogaster* as a genetic model system.

The project aims to understand the function of cAMP signaling in the regulation of synaptic plasticity underlying learning and memory and the goal is to successfully perform a dissertation project. The successful candidate must have:

- A Master degree or equivalent in Molecular Biology, Neuroscience, Biology or related disciplines
- Strong interest in neuroscience, behavioral science and learning and memory
- Profound knowledge of molecular-genetic, genetics or cellular biology
- Experiences in imaging techniques and working with *Drosophila melanogaster* is desirable
- Excellent communication and team-working skills
- Enthusiasm and great commitment to research
- Very good command of the English language

We offer:

- Exciting and excellent research environment
- Opportunity to participate in the graduate school of neuroscience and graduate school for biological science of the University of Cologne
- Travel opportunities for training and meeting
- Training opportunities in molecular biology, systems biology, neuroanatomy, opto-genetics and neuro-genetics, behavioral analysis

Applications must contain the following documents:

- Detailed Curriculum Vitae
- Cover letter
- Short essay describing your motivation, a description of past research experience and future interests
- List of publications (if any)
- Name and addresses of at least two referee

For further information, please contact Prof. Henrike Scholz. Please submit all documents as one PDF to henrike.scholz@uni-koeln.de. Deadline of application is 18.10.2021. We are looking forward to your application.