## PhD Position (f/m/d) in the NeuroNex Project

Institute of Zoology – AG Ito

Faculty of Mathematics and Natural Sciences

The University of Cologne (UoC) is one of the largest and most research-intensive universities in Germany, offering a wide range of subjects. With its six faculties and its interfaculty centres, it offers a broad spectrum of scientific disciplines and internationally out-standing profile areas, supported by the administration with its services.

A position for a PhD student is available in the international NeuroNex Project "Communication, Coordination and Control of Neuromechanical Systems (C3NS)" (<u>https://case.edu/neuronex/</u>) in the DFG funded project under the supervision of Prof. Dr. Kei Ito, Institute of Zoology at the UoC (<u>https://zoologie.uni-koeln.de/arbeitsgruppen/ag-ito</u>). The project is aiming at unraveling the interaction between sensory signals from the appendages of an animal with neural networks in the central nervous system underlying the generation of motor flexibility in locomotion.

## **YOUR TASKS**

With the project work, you will be combining cutting-edge techniques such as 3D laser scanning microscopy image analysis, electron microscopy connectome analysis, calcium imaging, optogenetics and quantitative analysis of locomotor behavior in the fruit fly to unravel how the nervous system controls flexible and adaptive motor behavior.

## YOUR PROFILE

You should have an excellent master degree (within a few months from now) in biology or a related study programme and/or you should be competent in one or several of the methodological approaches named above.

## WE OFFER YOU

- » collaboration in a large-scale international research project bridging experimental neurosciences with modelling and robotics (<u>https://case.edu/neuronex/</u>)
- » integration in a highly dynamic research environment in the neurosciences at the Institute of Zoology at the University of Cologne (<u>https://zoologie.uni-koeln.de/en/</u>)
- » participation in the Graduate School for Biological Sciences, Association with the Research Training Group "Neural Circuit Analysis on the Cellular and Subcellular Level" with advanced training opportunities to optimally support your doctoral thesis work and period (<u>https://rtg-nca.uni-koeln.de/</u>)

- » a diverse and fair working environment
- » support in reconciling work and family life
- » flexible working time models
- » extensive advanced training opportunities
- » occupational health management offers
- » local transport ticket at a discount for UoC employees

The position is available as soon as possible on a part-time basis (65%/25,89 hours per week). Initial contract is for 2 years with possible extension. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

The University of Cologne is committed to equal opportunities and diversity. Women are especially encouraged to apply and will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from people with disabilities / special needs or of equal status.

If you are interested, please send your convincing application by email (in one pdf.file) including your CV, grade records of your bachelor and master courses, and a letter of motivation with reference number Wiss2204-10 to <u>bewerbung.ito.lab@uni-koeln.de.</u> The application deadline is 31 May, 2022.

If you have any questions, please contact Prof. Dr. Kei Ito (k.ito@uni-koeln.de).

