Position for Doctoral Student in Ecophysiology of Weakly Electric Fish at Humboldt-Universität zu Berlin (3 years)



A position for a doctoral student is available as of October 2024 in the Behavioural Physiology Lab at the Institute of Biology of Humboldt-Universität zu Berlin, Germany. The overall focus of the research group is on understanding neural mechanisms of sensory information processing and effects of environmental factors on behavior and physiology, using the electrosensory system of weakly electric fish.

The research:

The research is part of a third-party funded project that explores the influence of environmental temperature and oxygen availability on behavior, cognition, physiology, and gene expression in a weakly electric fish. Climate change and environmental pollution are causing increasingly warmer temperatures and lower oxygen concentrations in aquatic ecosystems. These two stressors reinforce each other, as the oxygen demand of ectothermic animals increases at warmer temperatures. For many species, we know little or nothing about how they cope with temperature fluctuations, where their tolerance limits lie, whether their cognitive abilities are affected, and how their metabolism - which relies mostly on oxygen as an energy source - is affected by temperature fluctuations. The project aims to answer these questions using behavioral tests in a shuttle-box, critical thermal maximum measurements (CT_{max}), respirometry, behavioral object detection tests, and gene expression analysis with an African weakly electric fish as a study organism.

Your profile:

Applicants must hold an academic university degree (M.Sc.) or equivalent in a relevant discipline (e.g., Biology, Neuroscience). A solid background in animal physiology and neuroethology would be considered an asset, as would be experience with behavioural experiments, animal experimentation, and data analysis (e.g., R, Python).

The job:

The appointment is for 3 years. The salary corresponds to E 13 TV-L (65%). The Behavioural Physiology Lab is well equipped and additionally offers access to a large number of state-of-the-art resources through the Institute of Biology (<u>https://www.biologie.hu-berlin.de</u>). Berlin is not only a highly livable city, it also has a vast and vibrant research landscape with outstanding opportunities to develop collaborations within (e.g., Bernstein Center for Computational Neuroscience: <u>https://www.bccn-berlin.de</u>) and outside of Humboldt-Universität.

How to apply:

Please send a single pdf file including (1) a cover letter, (2) your CV, (3) a statement of research interests, and (4) contact information for 2 academic referees to <u>ruediger.krahe@hu-berlin.de</u>. Please mention the job identification number **DR/082/24**. Informal inquiries to the same email address are welcome. The deadline for applications is 4 July, 2024.

Contact: Prof. Dr. Rüdiger Krahe, Institute of Biology, Humboldt-Universität zu Berlin, Philippstr. 13, Haus 18, 10115 Berlin; Mailing address: Unter den Linden 6, 10099 Berlin, Germany.

Please visit the website <u>www.hu-berlin.de/stellenangebote</u>, which gives you access to the legally binding German version of this job ad.