



**Universität
Zürich**^{UZH}

Postdoctoral position on “Humanely ending the life of laboratory rodents”

We offer a postdoctoral position at Zurich Integrative Rodent Physiology (ZIRP) - an interdisciplinary rodent core facility situated at the Institute of Physiology at the University of Zurich (www.zirp.uzh.ch). ZIRP provides infrastructure and know-how for the advanced in vivo analysis of rodent physiology and offers expert advice as well as teaching and training for researchers working with laboratory rodents. This includes refining experimental conditions wherever possible.

This postdoctoral position is part of the project “Humanely ending the life of laboratory rodents” funded by the Swiss Federal Food Safety and Veterinary Office (FSVO) and running for 5 years.

Around 400'000 mice and 60'000 rats each year in Switzerland and 5.2 million mice and 1.2 million rats in the European Union are euthanized either at the end of experiments or because they are overhead animals - most of them with CO₂. It can be assumed that exposure to CO₂ (but also other gases) induces feelings like pain, anxiety, fear and breathlessness in animals before losing consciousness. Therefore, the aim of this project is to evaluate gases or gas mixtures in comparison to carbon dioxide (CO₂) which might induce euthanasia in mice and rats more humanely. First, assessment methods for the evaluation of parameters potentially suitable for indicating signs of distress like air hunger, anxiety, fear and pain have to be established and the acquired parameters have to be evaluated for their suitability to detect the before mentioned signs of distress, unconsciousness and loss of electrical cortical brain activity. Thereafter, gases or gas mixtures potentially inducing unconsciousness more humanely than CO₂ have to be evaluated in comparison to CO₂ by applying the established assessment methods. The overall goal of this study is to demonstrate reduced (or even lack of) aversion and/or distress to a gas or a gas mixture before loss of consciousness.

The project is primarily located at the University of Zurich (C.A. Wagner and P. Seebeck) and will be conducted in close collaboration with the Institute of Animal Welfare, Animal Behavior and Laboratory Animal Science, Department of Veterinary Medicine of the Free University Berlin (C. Thöne-Reineke).

We are seeking a highly motivated, team-oriented candidate with a strong interest in rodent experimental work and technically demanding cutting-edge experimental technologies. The candidate will be responsible for establishing a complex setup combining whole body plethysmography, radiotelemetry (EEG, ECG and blood pressure) and automated behavioral tracking technologies, will organize the different parts of the study and be responsible for data acquisition and analyses.

The successful applicant will hold a PhD/doctoral degree in the field of veterinary or biomedicine or a related subject together with good knowledge of the above-mentioned techniques. Proficiency in English (and German), strong skills in organizing animal experimental work, applied data analysis as well as a good knowledge base in rodent behavior, welfare and care are required. Previous experience with the above mentioned techniques and/or surgery in rodents would be an advantage. Due to the collaborations within the project, the candidate is willing to travel.

We offer a highly stimulating and diverse research environment within a small team and state-of-the-art infrastructure. The salary is according to local standards. The position is limited to the end of 2025 but might be prolonged. For veterinarians we can offer an ECLAM residency (supervisor P. Seebeck).

Please direct your inquiries to Petra Seebeck, petra.seebeck@uzh.ch, including your CV, letters of reference or contact addresses of references, as well as transcripts of courses and degrees as a single pdf file until October 15th, 2021. The position is available from January 1st 2022 or by mutual agreement.