

Two PhD positions (4 years) on the effects of inbreeding on robustness, resilience, and replicability in mice

At the Division of Animal Welfare (Prof. Hanno Würbel, PD Dr. Bernhard Voelkl), **University of Bern**, Switzerland, we are seeking two PhD students to study how inbreeding affects developmental robustness and stress resilience in laboratory mice, and how this impacts the replicability of research findings and animal welfare. Both positions are part of a research project funded by the Swiss National Science Foundation (SNSF). The successful candidates will join a dynamic team of scientists and technicians involved in national and international research projects aimed to promote rigorous and responsible animal research. For further information on our team and research, visit our [website](#).

PhD student 1 will analyse large public databases to investigate the effects of homozygosity on phenotypic plasticity and on environmental and mutational robustness in laboratory mice and conduct a systematic review and meta-analysis on the effect of inbreeding on stress resilience and the replicability of research with mice.

PhD student 2 will experimentally test whether homozygous (inbred) mice are developmentally less robust and less resilient to stressors by assessing morphological asymmetries and behavioural, physiological, and cellular measures of stress using a representative population of inbred, F1 hybrid, and outbred mice.

Candidates need a university degree in biology or biomedical sciences and advanced training in statistics. Expertise in data analysis and quantitative genetics (for PhD 1), or morphometrics and experience with laboratory mice (PhD 2), will be a plus.

We offer an attractive academic environment, opportunities for academic career development, and a competitive salary based on the Swiss National Science Foundation (SNSF) scheme.

Please send your application letter together with a motivation statement, your CV, copies of relevant study certificates, and contact details of one or two reference persons (reference letters are not required at this stage) merged into **one single pdf-file** to: hanno.wuerbel@unibe.ch.

The deadline for application is **November 30, 2023**. The position will be available from January 2024 or at your earliest convenience. Please indicate your preferred, as well as your earliest possible start date in the application letter.

For informal enquiries, please contact Prof. Hanno Würbel: hanno.wuerbel@unibe.ch or PD Dr. Bernhard Voelkl: Bernhard.voelkl@unibe.ch.