

The **Professorship of Animal Husbandry, Behaviour and Welfare (Prof. Dr. Uta König v. Borstel)**, Institute of **Animal Breeding and Genetics, Faculty of Agricultural Sciences, Nutritional Sciences, and Environmental Management**, invites applications in the third party funded research project "*Modular, autonomous and intelligent pasture (protection) fence with detection and deterrence of predators (mAI fence)*" for **two part-time positions to the extent of 50 % full-time equivalent** as

### **Scientific assistant/PhD/Doctoral student (m/f/d)**

The position is available as of now until 01.07.2024 (with the possibility of extension to a total of three years). The salary of the position is determined by payment group E 13 according to the collective labor agreement of the State of Hesse (TV-H). The possibility of further scientific qualification (doctorate) is given in addition to the work in the project.

The wolf is back in Germany and this inevitably leads to conflicts with livestock farmers and the general public. In close cooperation with the University of Bremen (Department of Physics and Electrical Engineering) and a partner from industry, an "intelligent" pasture fence will be developed in this joint project that detects predators (especially wolves) and deters them, but at the same time does not harm farm animals and wildlife. One of the two successful applicants will test the effect and efficacy of different deterrence methods on wolves, taking animal welfare into account. The other successful applicant will focus on the responses of different livestock species to the presence of predators and methods of deterrence.

#### **Task Description:**

- Acquisition of farms for data collection
- Collect behavioural and physiological data from farm animals (especially sheep, goats, chickens, cattle and horses) and predators (especially wolves) at participating farms and wildlife park
- Support the project partners in the collection of images and movement data on wolves, grazing animals and other wild animals
- Organisation of laboratory analyses for physiological stress markers
- Statistical analysis of the collected data on behaviour and stress physiology
- Preparation and communication of the findings in scientific media and to a broad public
- Scientific exchange with project partners and participation in the development of an AI-supported system for the detection and defence against predators

#### **Requirements:**

- Master's degree in biology, agricultural sciences (specialisation: animal sciences) or comparable degree (state examination) in veterinary medicine
- Proof of ability to carry out scientific work (evidenced by publications or excellent theses)
- Mobility (valid driver's license) and willingness to carry out extensive data collection in the field, on farms and in wildlife parks
- Experience with data collection of animal behaviour in the laboratory and/or under field conditions
- Experience in laboratory work for the analysis of physiological parameters is advantageous
- Knowledge of, or willingness to learn, relevant programmes for statistical data analysis (SAS, R)
- Good knowledge of written and spoken English; knowledge of German is not mandatory, but motivation to learn German is desired
- Interest in scientific communication as well as communication with the public
- Motivation to work in a team

If you have any questions, please contact Prof. Dr. Uta König von Borstel ([uta.koenig@agrار.uni-giessen.de](mailto:uta.koenig@agrار.uni-giessen.de)) or Dr. Désirée Brucks ([desiree.brucks@agrار.uni-giessen.de](mailto:desiree.brucks@agrار.uni-giessen.de)). Further information can also be found at: <https://www.uni-giessen.de/fbz/fb09/institute/ith/tierhaltung>

The Justus Liebig University (JLU) aims to employ more women in academic research. We therefore particularly encourage female candidates to apply. The university is regarded as a family-friendly university. Applicants with children are very welcome.

Please send your application, quoting the **reference number 397/09**, with a letter of motivation, curriculum vitae, list of publications, summary of previous research experience, and contact details of two references until **September 23<sup>rd</sup>, 2021** to **Prof. Dr. Uta Koenig von Borstel, Institute of Animal Breeding and Genetics, Leihgesterner Weg 52, 35392 Giessen**. Applications from disabled people of equal aptitude will be given preference. Please only submit copies of your application documents without document files or folders, as they cannot be returned after the application procedure is completed.