

PhD position at the Animal Behaviour Group, University of Zurich, Switzerland



Topic: At the intersection of motivation and cognition: combining multiple predictors of animal intelligence using meerkats as a model system

Background

Along with ecological challenges, animal cognition has been extensively linked to a species social life. But *if* and precisely *how* social life selects for cognitive abilities remains one of the burning subjects in biological science. Social factors may not always act directly on cognitive skills, but might be *indirectly* critical, as sociality can influence individuals' motivational levels. One further prediction is that increased cognitive abilities also provide fitness benefits for animals that presumably are better at dealing with both their social and physical environment. *The overall aim of this project is to investigate the influence of different aspects of social life, intrinsic motivation, and ecology on both cognitive abilities and fitness in wild meerkats*. To do so, we will combine observational data with field experiments on cognitive skills in the species ecological natural habitat. Our study site at *the Kalahari Research Center (KRC)*, South Africa, features multiple habituated wild groups of meerkats, which allows for an excellent set up to test both within- and between-group influence on cognition. Incorporating the relationship between cognition and fitness presents another critical aspect when unraveling the function of cognitive abilities. In combination with the existing long-term database from KRC and new collected data, this model system also enable us to measure lifetime reproductive success and other fitness outcomes.

As a key member of our team, we are looking for a

PhD candidate (all genders welcome)

This PhD position is fully funded by the Swiss National Science Foundation (SNSF) for a period of 4 years. The starting date for this position is September 1st, 2022.

The position entails prolonged work divided into two-time blocks at the Kalahari Research Center in the South African Kalahari Desert, and we are therefore looking for a candidate especially dedicated and passionate to do fieldwork (https://kalahariresearchcentre.org/). You will combine video-assisted behavioral field observations, field experiments on motivation and cognition, and dynamic social network analyses within the large-scale research project. As a PhD at the University of Zurich, you will be enrolled in the PhD Program in Evolutionary Biology of the Life Science Zurich Graduate School (https://www.evobio.uzh.ch/en.html).

The Animal Behaviour Group is part of the Department of Evolutionary Biology and Environmental Studies, UZH, featuring numerous research groups studying a wide variety of organisms and ecosystems. The institute commits to high quality research and teaching with a philosophy of good scientific practice and training that highlights the ethical responsibilities of scientists to their colleagues, society, and the environment.

We expect from you

- A successfully completed master's degree in the field of animal behaviour, cognition or comparable.
- Field research experience
- Experience in collecting cognitive experiments is a strong plus
- Prior experience in conducting social network analyses is welcomed but not required
- Solid experience in data analysis with R (experience with large data sets is beneficial)
- Enthusiasm for working in an international environment and spend prolonged times abroad

- Good self-management, goal driven and solution-oriented work style
- Strong communication skills and good team-player qualities
- Good enough physical fitness to work under demanding conditions: days can be long and hot, and following the meerkats sometimes means hiking several miles with a backpack and climbing fences
- Excellent knowledge of English and prior experience in writing scientific texts

We offer You

- Full integration in the activities of the Animal Behaviour Group, and the Department of Evolutionary Biology and Environmental Studies. But also, additional interactions with other relevant departments and international and interdisciplinary research environments at the University of Zurich.
- The opportunity to conduct your PhD in the Life Science Program and be involved in all parts of the project and have the resulting papers contribute to your doctoral thesis.
- You will take part in the Kalahari Meerkat Project and enjoy time at one of the longest run animal field research centers, where you will have the benefit of the well-established infrastructure necessary for the project. You will be introduced to the KMP international community and engage on a regular basis i.e. Through yearly meetings between the UZH group and our Cambridge collaborators.
- A vibrant atmosphere of international team of researchers and volunteers.
- Assistance with immigration and employment paperwork by UZH's Welcome Centre.

Application

Applications can be sent via email *starting now* until *15th of April* or until the position is filled. Applications should consist of one PDF document including:

- Cover letter expressing your interest in the PhD project and a summary of your experiences relevant for the project (max one-page)
- Curriculum Vitae
- Names of two potential referees with contact information (affiliation, e-mail, phone number)
- Copies of academic degree certificates
- Any documentation certifying further relevant skills (e.g. internships, workshops visited, completed courses, etc.)
- An example of a scientific written (either a selected publication, a thesis chapter or alternatively a max two-page essay about a self-chosen topic relevant to the project).

Suitable applicants will be contacted and in a second stage invited for an interview. Questions and applications can be directed directly at the project PI Dr. Sofia Forss (*sofia.forss* @ieu.uzh.ch)

