



PhD position in Subterranean Biology Lab

Subterranean Biology Lab at University of South Bohemia, Faculty of Science is seeking a highly motivated Ph.D. student for a project on the **Behavioural ecology of social African mole-rats**

Social African mole-rats (Bathyergidae) are cooperative breeding mammals that live strictly underground. These fascinating animals live in families consisting of related individuals, where reproduction is typically limited to a single breeding pair. Family members participate on various activities, particularly in extending and reworking their burrow systems. Burrowing is simply their nature! The extent of individual contributions to these activities is still unclear. Moreover, mole-rat families act mostly as closed xenophobic units that vigorously defend the family against unrelated intruders. The specific roles of individual family members in defending the family against these intruders is unknown.

What we aim to explore on different African mole-rat species:

- 1. Cooperative digging: Analysis of how mole-rats of different ages, sexes and breeding statuses contribute to burrowing activities, especially in coordinated digging chains.**
- 2. Digging vs. general activity: Investigating whether mole-rat's digging activity correlates with their overall activity.**
- 3. Family defence: Examining how mole-rat family members respond to unrelated foreign intruders and predators.**

Where: University of South Bohemia in České Budějovice, Faculty of Science, Czech Republic (EU). České Budějovice is a vibrant city in South Bohemia, surrounded by beautiful nature and historical landmarks. The University of South Bohemia boasts a modern campus with excellent research facilities and a welcoming academic community.

When: Starting in March 2024, full funding is for standard duration of Ph.D. study (4 years)

We need: A candidate with M.Sc. degree in Zoology or a related field; a background in animal behaviour, behavioural ecology, or zoology; good English skills; a positive attitude toward working with live mammals; teamwork and collaboration abilities; sufficient statistical skills.

We offer:

Fellowship: The position offers four years of financial support (approximately 25,000 CZK monthly = 300,000 CZK annually, which is currently about €12,000). This amount is generally sufficient to cover

living costs in České Budějovice, where the rent for a single room in the university dormitory is about 5,500 CZK per month.

Welcome service: The university offers help with arrangements of officialities linked with studying in the Czech Republic.

Research Environment: You will join an interdisciplinary team with access to one of the best subterranean rodent facilities worldwide, working on unique group of mammals.

Scientific output: The project is expected to result in 3-4 articles published in international peer-reviewed journals. You will also acquire a doctorate degree upon completion.

Opportunities: Participation in international mammalogical, behavioural, and zoological conferences, optional field work in Africa.

For informal inquires and formal application please contact Prof. Radim Šumbera (sumbera@prf.jcu.cz, jobs@prf.jcu.cz). Formal application must include a motivational letter, CV, and contacts for two referees. **Deadline: December 31, 2024.**

Lab website: <https://zoo.prf.jcu.cz/index.php/staff-item/sumbera-radim/?lang=en>

