

# Ph.D. opportunity in behavioral biology of rainforest frogs

**Position details:** The candidate will be supervised by Dr. Andrius Pašukonis and Dr. Bibiana Rojas at the Konrad Lorenz Institute of Ethology, University of Veterinary Medicine, Vienna, Austria. Additional research visits are planned to Vilnius University, Lithuania and Laboratoire Ecologie, Evolution, Interaction des Systèmes Amazoniens, French Guiana. The position is fully funded including salary, research and travel expenses for 3.5 years. Position starting in October 2024.

**Application requirements and procedures:** M.Sc. degree in biological sciences and related field or an equivalent degree. Full proficiency in written and spoken English, statistical computing skills, strong interest in and experience with field research and animal behavior. Physical and mental preparedness for intensive fieldwork and basic living conditions of tropical field research. Additional qualifications in the following areas will be also highly valued: scientific publishing and conference presentations, advanced computational skills, animal movement and behavioral analyses, experience in bioacoustics, chemical, and/or sensory ecology, chemical analyses, experience in tropical fieldwork. The application should be sent to [andrius.pasukonis@gmc.vu.lt](mailto:andrius.pasukonis@gmc.vu.lt) no later than July 31<sup>st</sup> and should include a CV (no photo), the contact details of two referees who can provide recommendation letters, and a motivation letter written by the applicant stating their research interests and experiences. Interviews will be held online at the end of August.

**Project summary:** Rainforests are among the world's most complex sensory landscapes, yet animals thrive in this environment and excel at navigating in search of scattered and ephemeral resources. Among the most impressive examples are poison frogs (Dendrobatoidea), which accurately navigate between home territories and small breeding pools scattered from the forest floor to the canopy. The goal of the project is to reveal the cognitive and sensory strategies rainforest frogs use to discover and evaluate breeding pools, and to navigate between them. The candidate will design and carry out behavioral experiments to test the role of sound, smell, and spatial memory in the water-finding and navigation abilities of two species of dendrobatid frogs in their natural habitat. The project will involve, among others, several months of intensive fieldwork in French Guiana, behavioral experiments in captivity, movement tracking, acoustic playbacks, video recordings, and chemical analyses.

**Main research field:** behavioral biology, animal navigation, spatial cognition, sensory ecology.

## References

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- Serrano-Rojas, S. J., & Pašukonis, A. (2021). Tadpole-transporting frogs use stagnant water odor to find pools in the rainforest. *Journal of Experimental Biology*, 224(21).
- Fouilloux, C. A., Serrano-Rojas, S. J., Carvajal-Castro, J. D., Valkonen, J. K., Gaucher, P., Fischer, M.-T., Pašukonis, A., & Rojas, B. (2021). Pool choice in a vertical landscape: Tadpole rearing site flexibility in phytotelm-breeding frogs. *Ecology and Evolution*, 11(13).
- Pašukonis, A., Loretto, M.-C., & Rojas, B. (2019). How far do tadpoles travel in the rainforest? Parent-assisted dispersal in poison frogs. *Evolutionary Ecology*, 33(4).
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