

Position Opening

The newly created Emmy Noether Group based at the Chair of Animal Ecology and Tropical Biology (Zoology III) of Julius-Maximilians-Universität Würzburg, Germany, invites applications for two

Researcher Positions.

The contracts will start on 1 January 2023 or as soon as possible thereafter. The positions are part time (0.65 FTE), and remuneration will be based on the *Tarifvertrag für den öffentlichen Dienst der Länder* (collective agreement for the public service of German federal states, TV-L). The contracts will be for a fixed term to end on 15 October 2025 and may be renewed on expiry.

Background: Open wounds pose a major health risk to individuals. Recent discoveries in ants showed that other members of the group do not only rescue injured individuals from danger, but also treat open wounds with antimicrobial compounds, thereby preventing an infection outbreak. These behaviours have until now only been described in one population of the termite-hunting ant species *Megaponera analis* (in Côte d'Ivoire). However, it seems to be absent in another population of the species in Mozambique where it hunts less pugnacious prey. In addition, preliminary results provide evidence for wound care towards injured individuals in another species, the army ant *Eciton rapax* in Ecuador.

The aim of this Emmy Noether project is to better understand the evolutionary processes leading to rescue and social wound care behaviour and the behavioural adaptations that evolved with it. The advertised positions are therefore associated in particular with the following tasks:

- Research will be focused on **behaviour** (quantifying how nestmates care for wounded individuals), **ecology** (how prey speciation and ecological niche affect injury rate and wound care adaptations), **microbiology** (what pathogens cause the infections and what compounds are used to inhibit bacterial growth) and **chemical ecology** (how do the injured and infected ants communicate their need for care).
- One position will focus on researching wound care behaviours in other populations of *Megaponera analis* across Africa (Cameroon, Kenya, Mozambique), the other will focus on the army ant genus *Eciton* in the neotropics (Costa Rica, Ecuador)

We are seeking two highly motivated employees with a strong interest and expertise in social insect behavioural ecology and evolution. The following qualifications are required:

- Applicants should have an MSc or *Diplom* degree in ecology, behaviour or a related discipline as well as skills in several of the following areas: experimental field research (e.g. natural history and behavioural studies), use of statistical data analysis (preferably in R), and proficiency in scientific writing in English.
- Experience in the tropics would be an asset. Physical fitness and very good English language skills are required.
- The successful applicants will be expected to work in an interdisciplinary and international project with long periods of field work in Latin America or Africa.

The University of Würzburg is an equal opportunity employer. As such, we explicitly encourage applications from qualified women.

Severely handicapped applicants will be given preferential consideration when equally qualified.

Please email your application as **one single pdf file** to Dr. Erik Frank at erik.frank@uni-wuerzburg.de. Applications should include a cover letter, a short summary of your research interests, a CV, complete certificates, and the names and email addresses of two potential referees.

The closing date for applications is **30 September 2022**.

Please do not send any original documents to us; only send photocopies. As we need to save costs, we will not be able to return your documents to you. They will be shredded shortly after a hiring decision has been made. If you enclose a postage-paid return envelope, we will return your application documents to you three months after a hiring decision has been made.

