





PhD position to study male chimerism in yellow crazy ants [Mainz, Germany]

We are inviting applications for a PhD position to investigate male chimerism in the yellow crazy ant. This position is immediately available and has secured funding for three years. The successful applicant will conduct their research in the research group of Hugo Darras at the Johannes Gutenberg University Mainz, Germany.

Sexual reproduction is widespread in eukaryotes, but alternative reproductive systems, such as female or male clonality, have evolved repeatedly across various taxa. Our group investigates the proximate and ultimate mechanisms that drive transitions between different reproductive systems in ants. We recently discovered an extraordinary reproductive system in the yellow crazy ant. In this species, males are all chimeras carrying maternal and paternal genomes in different body cells (https://www.science.org/stoken/author-tokens/ST-1119/full). Chimerism occurs when parental nuclei bypass syngamy and divide separately within the same egg.

The PhD student will investigate the genomic, molecular, and cellular bases of chimerism. Candidates should have a strong interest in genomics and/or cell biology, ideally with bioinformatics or microscopy experience. The details of the project can be tailored towards the research interest of the candidate. Training in evolutionary biology and experience with ants are advantageous, but not mandatory. This position is supported by the DFG for three years. The PhD student will be able to join the GenEvo graduate program (https://www.genevo-rtg.de/), which fosters a supportive community of graduate students and offers comprehensive training in molecular and evolutionary biology. The host department has a dynamic and inclusive environment, welcoming candidates from all backgrounds.

https://www.blogs.uni-mainz.de/fb10-evolutionary-biology/darras-hugo/





