



PhD position available on the evolution and organization of non-canonical olfactory systems in ants

We are seeking a motivated and talented student interested in understanding the evolution and organization of the olfactory system in ants (and other insects). The student will join a multidisciplinary team composed by Carlotta Martelli (neurobiology and computational biology), Hugo Darras (evolution and genomics) and Susanne Foitzik (behavior and evolution), two PhD students and one postdoc.

The project aims to unravel the organizational logic of the olfactory system in *Temnothorax* ants, from genes to neurons to behavior. The long-term goal is to identify evolutionary signatures of non-canonical organizations of the olfactory system and to understand the computational consequences of different architectures for odor coding and behavior. This innovative, interdisciplinary project combines neurobiological and behavioral experiments, molecular genetic analysis, genomics, transcriptomics, and theory.

This call is intended to fill a PhD position focusing on bioinformatics applied to genomic, single-cell transcriptomic and neurobiology analyses which will be co-supervised by H. Darras and C. Martelli in collaboration with S. Foitzik. The PhD student should have a **strong interest in bioinformatics**, ideally with theoretical or practical knowledge in single-cell transcriptomics, experience in comparative genomics and/or neurobiology. Training in evolutionary biology, experience in handling insects and programming skills in Python would also be an advantage but are not a prerequisite.

Funding for this position is secured over 3 years, with potential of extension. The PhD student will have the opportunity to be integrated into the GenEvo graduate program (<https://www.genevo-rtg.de/>), which offers a close-knit community of graduate students and provides training in molecular and evolutionary biology, as well as methodological courses such as on bioinformatics.

To apply, please send a letter of motivation, CV and contact information of two referees to cmartell@uni-mainz.de by **January 21st, 2024**.

For additional information, please contact us!

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