

Job announcement ref. #11-22014

The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. SGN conducts natural history research with more than 800 employees and research institutions in six federal states. Within SGN, the Senckenberg Biodiversity and Climate Research Centre (SBIK-F) explores the interactions between biodiversity, climate, and society.

For the DFG funded project “**Genomic Basis of Evolutionary Innovations**“, **Senckenberg BiK-F** is looking for a

PhD candidate (m/f/d)
for studying the genomic and epigenetic basis of cuticular hydrocarbon diversity in Hymenoptera

(part time, 65%)

Cuticular hydrocarbons (CHCs) serve insects as desiccation barrier, and chemical communication signals, representing a prime example of a multifunctional trait. Within insects, Hymenoptera show an astonishing **CHC profile diversity**. Yet little is known about the evolutionary mechanisms at the genomic and regulatory level that give rise to this diversity.

We aim to fill this knowledge gap by applying a **comparative genomic, transcriptomic and epigenetic** approach to study this multifunctional trait in a collaborative project in which multiple PIs and two PhD students are involved.

In this context, the Menzel research group at the Johannes-Gutenberg-University of Mainz and the Feldmeyer research group at the Senckenberg BiK- Frankfurt offer a joint PhD position (65% TV-L E13 for three years).

We are looking for a highly motivated candidate with interest in molecular evolution, genomics, epigenetics, and chemical ecology. The PhD project will focus on the identification of gene regulatory mechanisms (including epigenetics) governing species- and sex-specific CHC profile variation in a total of 26 wasp, ant, and bee species.

Your tasks

- CHC profile analysis
- RNA extraction and construction of ATAC-seq and whole-genome bisulfite sequence libraries
- Bioinformatic analyses
- Publication of results in internationally peer-reviewed journals
- Close collaboration with the comparative genomics counterpart

Your profile

- Master degree in evolutionary biology, molecular biology, computational biology/bioinformatics or a related subject
- Teamwork-oriented, excellent communication skills with proficiency in written and oral English
- Interest to collaboratively work in an interdisciplinary team
- Previous experience with working on insects, in chemical ecology, molecular biology, statistics, and/or bioinformatics is advantageous, but not mandatory.

What is awaiting you?

The successful applicant (m/f/d) will join an international dynamic scientific environment at the Johannes-Gutenberg-University of Mainz (JGU) and the Senckenberg Biodiversity and Climate Research Institute Frankfurt and will have access to state-of-the-art laboratories and computing facilities. He/she will work part of the time at the JGU and at the Senckenberg BiK-F. Both locations are spatially close to each other. The working language in both research groups is English.

Salary and benefits are according to a part-time public service position in Germany (TV-H E 13, 65% for three years).

The Senckenberg Biodiversity and Climate Research Centre supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The employer is the Senckenberg Gesellschaft für Naturforschung.

You would like to apply?

Please include the reference to this position (**ref. #11-22014**) in the subject line and include a

- ✓ a cover letter outlining your motivation, research interests, and skills on one page
- ✓ a detailed CV with list of publications,
- ✓ copies of transcripts, credentials and certificates,
- ✓ contact details of two potential referees.

Please submit your application until July 25th, 2022, via e-mail as **a single PDF file** or via our online application tool on our website to:

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Senckenberganlage 25
60325 Frankfurt am Main
E-Mail: recruiting@senckenberg.de



For more information on the project, please contact Dr. Barbara Feldmeyer, e-mail barbara.feldmeyer@senckenberg.de and PD Dr. Florian Menzel, e-mail menzelf@uni-mainz.de.