



### Job Announcement ref. #12-22007

The LOEWE Center for Translational Biodiversity Genomics (LOEWE-TBG, https://tbg.senckenberg.de/) aims at making the genomic basis of biological diversity accessible for basic and applied research. Building on genome sequencing and analysis, LOEWE-TBG research topics range from comparative genomics, natural products genomics, and genomic biomonitoring to functional environmental genomics. LOEWE-TBG is based in Frankfurt am Main, Germany, and is a joint venture of the Senckenberg Gesellschaft für Naturforschung (SGN), Goethe-University Frankfurt, Justus-Liebig-University Giessen and Fraunhofer Institute for Molecular Biology and Applied Ecology.

The Senckenberg Gesellschaft für Naturforschung and the LOEWE -TBG invite applications for a

# PhD Candidate (m/f/d)

# **Epigenetics and DNA methylation in molluscs**

We are seeking highly motivated PhD students with interest in epigenetics and DNA methylation. The project involves functional evaluation of DNA methylation in the sacoglossan sea slug species *Elysia timida* as a model system to understand the fundamental roles of this epigenetic mark in the phylum Mollusca and to identify potential genes important for successful chloroplast incorporation (functional kleptoplasty). Epigenetic mechanisms regulate the interpretation of genetic information and adapt gene expression patterns to changing developmental or environmental conditions. Several epigenetic mechanisms have been identified to date, with DNA cytosine methylation being the best studied and possibly the most important epigenetic mark. The project will be supported by the excellent laboratory and bioinformatics facilities of the center.

#### Your tasks

- Establishment of a culture of the alga Acetabularia acetabulum and E. timida at LOEWE-TBG
- Perform experimental time series (whole genome bisulfite sequencing (WGBS) / RNA-seq) during the life cycle of E. timida
- Perform subsequent bioinformatic analyses of whole-genome bisulfite sequencing and RNAseq data using existing recipes/scripts
- Publication of results in high-profile international journals

# Your profile

- Master degree in evolutionary biology, molecular biology, computational biology/bioinformatics or a related subject
- Experience with analyzing WGBS and RNA-seq data (scripting in R or python would be beneficial)
- Teamwork oriented and excellent communication skills with proficiency in written and oral English
- Interest to collaboratively work in an interdisciplinary, international team





### What is awaiting you?

- An interesting task in a dynamic team of researchers in an international research group and joining the new LOEWE TBG excellence centre with its 20 new research groups
- A relevant and timely research topic for a PhD project
- The possibility to create a network with scientists in interdisciplinary fields in translational biodiversity genomics
- Flexible working hours dual career service leave of absence due to family reasons (certified by "auditberufundfamilie") – parent-child – office – annual special payment – company pension scheme – Senckenberg badge for free entry in museums in Frankfurt – leave of 30 days/year

The Senckenberg Gesellschaft für Naturforschung 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.

Place of employment: Frankfurt am Main Working hours: part time (65% position)

Type of contract: 3 years, starting as soon as possible

Salary: according to the German collective agreement TV-H

(pay grade E 13)

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### How to apply

Please send your application, mentioning the reference of this job offer **(ref. #12-22007)** until **06 June 2022 (deadline)**, by e-mail (attachment in a single pdf document) including a brief cover letter detailing your research interests and experience (1 page), a CV and copies of your certificates, transcripts and grades to:

Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt a.M.

E-Mail: recruiting@senckenberg.de



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