

The Johann Wolfgang Goethe University Frankfurt is one of the largest universities in Germany with about 48,000 students and around 5,000 employees. Founded in 1914 by Frankfurt citizens and since 2008 back in the legal form of a foundation, the Goethe University has a high degree of autonomy, modernity and professional diversity. As a full-service university, the Goethe University Frankfurt offers more than 100 study programs on five campuses in a total of 16 faculties and at the same time has outstanding research strength.

Applications are invited for one

**PhD Student (m/f/d)**  
**(E13 TV-G-U, 65%)**

available at the Institute of Cardiovascular Regeneration at the **Goethe-University of Frankfurt** (Germany).

We are embarking on an ambitious program to delineate molecular mechanisms and functional importance of **spatio-temporal, non-coding transcriptome regulations in health and disease**. The study will focus on selected transcripts with known cellular functions (TUG1 lncRNA and TERT mRNA) and extend transcriptome wide. We are interested in uncovering new mechanisms and clinical relevance of regulation of coding and non-coding RNA localization in healthy and disease states using state-of-the-art imaging, biochemical and computational approaches. This includes using single-molecule RNA imaging, RNA-protein interaction analyses, CRISPR-Cas9 in culture and in vivo for functional and molecular studies. For more information, please visit our lab website <https://bit.ly/3szDm4K>.

We seek innovative, curious, and team-oriented researchers with a passion for **RNA biology** to join our team. We provide a highly stimulating, collaborative and international working environment with state-of-the-art infrastructures, and unique professional career development opportunities. **Our team is looking for both computational and experimental applicants.** The University advocates equal rights for women and men and therefore strongly encourages women to apply. People with disabilities are given priority if they have the same qualifications.

#### **Activities and responsibilities**

##### **Your role:**

- On the **computational** side, we are looking for applicants with background in analysis of next-generation sequencing data with focus on RNA splicing and RNA-protein interactions
- On the **experimental** side, we are looking for applicants with experience in or desire to learn single-molecule RNA imaging, RNA biochemistry, cell / molecular biology, CRISPR-Cas9 and mammalian cell culture
- Planning and critical analysis of experiments/datasets aiming to mechanistically and functionally characterize relevant spatio-temporal programs using cancer, stem cells and/or cardiovascular system as a model system
- In close collaboration with your mentor, you will publish your scientific results in peer-reviewed journals and present your data at international conferences

##### **You have:**

- A master degree in molecular biology, cell biology, biochemistry or a related discipline
- Interest and enthusiasm for RNA biology
- Excellent communication and presentation skills in English
- Experience in standard molecular biology techniques, mammalian cell culture and data analysis
- Organizational and team skills, flexibility, open-mindedness

##### **What we offer:**

- International, diverse, and positive working atmosphere, flexible working environment
- A competitive salary based on previous work experience, following the collective agreement applicable to the Goethe University
- Access to state-of-the-art infrastructure
- Professional career development opportunities and mentoring support

The contract is initially limited to 2 years with the possibility of extension. Interested candidates should send their application, consisting of a motivation letter, a CV, and the contact details of two/three previous advisors/mentors, as a single pdf to Dr. Gabrijela Dumbovic, Institute for Cardiovascular Regeneration, Center for Molecular Medicine, House 25B, Goethe University Frankfurt, Theodor-Stern-Kai 7, 60590 Frankfurt am Main, Germany, email: [application-icr@med.uni-frankfurt.de](mailto:application-icr@med.uni-frankfurt.de).

Prospective start date: 1 April 2022 or later.