

To strengthen our team, we are looking for a highly motivated

Ph.D. student in bioinformatics and/or a wet-lab biologist with computational background

About the lab

The successful candidate will be part of the **Andergassen lab** based at the Institute of Pharmacology and Toxicology of the Technical University of Munich (TUM). The lab bridges computational and experimental strategies (high-throughput sequencing, epigenetics, CRISPR in vivo editing) to understand the functional contributions of the non-coding genome, such as regulatory DNA elements and long non-coding RNAs in the cardiovascular system. We aim to understand the impact of epigenetic changes on heart function and elucidate the molecular basis for sex differences in cardiovascular diseases. To address these fundamental questions, the lab combines allele-specific genomics with disease and genetic mouse models with the overall aim to elucidate relevant therapeutic candidates to form the basis of new therapies to treat cardiovascular diseases. More information: www.andergassenlab.com

About the institute

The Institute of Pharmacology and Toxicology (IPT) is part of the Medical Faculty of the Technical University of Munich (TUM), one of the leading universities in the European Union. The institute's research focuses on non-coding RNAs, their control of cardiac gene expression, and the effects of their therapeutic manipulation in cardiac disease. The institute's state-of-the-art research facility includes a fully equipped mouse cardiac phenotyping lab, a viral vector core, and the entire experimental pipeline for next-generation sequencing from tissue or single-cells, including FACS-based cell separation. Furthermore, the IPT coordinates and receives funding from the DFG Collaborative Research Center TRR267 "Non-coding RNA in the Cardiovascular System" and is the Munich partner site of the German Center for Cardiovascular Research (DZHK). The outstanding infrastructure and experience present in the institute provide an ideal environment for a project to succeed. More information: www.ipt.med.tum.de

Your profile

- You hold a master's degree in bioinformatics or biology (with computational background)
- Experience from working in a Linux/Unix environment.
- Programming experience in R.
- Hands-on experience from working with Illumina sequencing data.
- Solid wet-lab experience and skills working with DNA and/or RNA (for wet-lab biologist applicants).
- Experience with library preparation for next-generation sequencing (for wet-lab biologist applicants).
- Written and oral communication skills in English
- Highly motivated scientist and commitment to scientific excellence

We offer

- A 3-year contract with the possibility to prolong (payment according to TV-L (E13 / 65%))
- Access to the Leibniz-Rechenzentrum (LRZ)
- A state-of-the-art facility with mouse phenotyping, human iPS cell, single-cell sequencing, CRISPR in vivo editing
- A highly motivated and international institute with a high PostDoc to student ratio.
- Membership in the TUM Graduate School and benefit from educational programs etc.

Your application

The TUM aims to increase the diversity of its staff substantially. As an equal opportunity and affirmative action employer, the TUM explicitly encourages nominations of and applications from women and all others who would bring additional diversity dimensions to the university's research and teaching strategies.

Please send your complete application documents (cover letter, C.V., certificates) via email to:

Daniel Andergassen Ph.D.

daniel.andergassen@tum.de

Technische Universität München TUM, Institute of Pharmacology and Toxicology

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Notes on data protection:

As part of your application for a position at the Technical University of Munich (TUM), you submit personal data. Please note our privacy policy in accordance with Art. 13 General Data Protection Regulation (DSGVO) <http://go.tum.de/554159> for the collection and processing of personal data in the context of your application. By submitting your application, you confirm that you have read the data protection notices of TUM.