

PhD Position in Megakaryocyte Biology



Application deadline: 15/12/2024

The University Hospital Würzburg is seeking a motivated and talented PhD student (m/f/d) to join the Emmy Noether Research Group led by Dr. Zoltan Nagy at the **Institute of Experimental Biomedicine**. Be part of a dynamic research group and investigate fundamental mechanisms in hematology!

In this DFG-funded project, you will work at the forefront of megakaryocyte biology, leveraging state-of-the-art technologies, including single-cell transcriptomics, CRISPR gene editing, transgenic mouse models, and advanced imaging techniques.

We Offer

- Access to cutting-edge laboratory facilities, including single-cell platforms, high-resolution imaging systems, and automated immunoblotting technologies.
- The opportunity to contribute to an exciting research project based on a recently discovered signalling pathway crucial for megakaryocyte maturation.
- Comprehensive training in molecular, cellular, and data analysis methods.
- Personalized mentoring and a collaborative environment designed to support your professional growth.

Your Tasks

- Design and perform single-cell RNA sequencing experiments, applying advanced data analysis to identify novel regulatory mechanisms.
- Conduct in vivo studies in mouse models, focusing on experimental hematology techniques to investigate and modulate platelet biogenesis.
- Carry out in vitro cell culture experiments, utilizing stem cell differentiation protocols and CRISPR-based gene editing to manipulate and study megakaryocyte function.
- Perform innovative biochemical experiments, including advanced immunoblotting, to dissect key signalling pathways involved in megakaryocyte development.
- Present research findings at project meetings and conferences, and contribute to peer-reviewed publications.

Your Profile

- A Master's degree in Biochemistry, Cell Biology, Molecular Biology, Hematology, or a related field.
- A strong foundation in molecular and cellular biology, with hands-on experience in cell culture and techniques such as microscopy, flow cytometry, or Western blotting.
- Interest in bioinformatics, including single-cell RNA-seq data analysis, and computational skills, such as experience with data analysis tools (e.g., GraphPad) or programming languages like R, would be an advantage.
- Demonstrated scientific rigor, curiosity, and a willingness to learn and apply new methods.
- Strong motivation and communication skills, with proficiency in written and spoken English demonstrated through a language exam, thesis work, publications, or conference presentations.

To Apply

Please follow the link: <https://karriere.ukw.de/en/p/wissenschaftundforschung/jobs/10814/phd-job-in-wuerzburg-megakaryocyte-biology-research>

For further information, please do not hesitate to contact us at nagy_z@ukw.de.