

The Department of Internal Medicine III – Cardiology Research Lab, Saarland University is inviting applications for the following position commencing 01 September 2022

Academic research assistant (m/f/x)

Salary will be in accordance with the German TV-L salary scale, pay grade: **E13, employment: 65 % of standard working time, for 40 months.**

Workplace/Department:

The position is offered by the group of Priv.-Doz. Dr. med. Christian Werner in the Cardiology Research Lab on the Homburg Campus of Saarland University. (URL: https://www.uniklinikum-saarland.de/de/einrichtungen/kliniken_institute/medizinische_kliniken/innere_medizin_iii/forschung_lehre/arbeitsgruppen/kardiovaskulaere_alterung_und_myokardfibrose/). My group is seeking a motivated candidate for an interdisciplinary translational project. This project is part of a consortium investigating “Mechanisms of Cardiovascular Complications in Chronic Kidney Disease” (URL: <https://www.sfb-trr219.de/>). We are interested in understanding the molecular mechanisms of cardiorenal interaction in chronic renal and cardiovascular diseases, focusing on myocardial fibrosis, senescence and the role of the bone marrow. Particularly, we are motivated to implement our expertise and that of our collaborators to address how the renin-angiotensin-aldosterone-system (RAAS), cellular ageing and the Raf kinase inhibitor protein (RKIP) contribute to uremia-induced organ remodelling. The scientist will be able to use different mouse strains, subjected to an established renal damage model. He will test different pharmacological stimuli, exercise, bone marrow transplant and other models to measure the effects of RAAS and eNOS modulation on adverse cardiovascular remodeling and senescence in chronic kidney disease. In the second part of the project, he will decipher the effects of genetic modulation of the RKIP on these processes, using a conditional knock-out model. The main analyses will be on a functional, histological and molecular level and include cell culture assays and patient samples.

Job requirements and responsibilities:

- Conducting experiments planned for the second funding period of project M-06 within the SFB TRR219 consortium.
- Data analysis and presentation in regular internal group meetings as well as in regular meetings of the consortium.
- Actively participate in design of experiments and adjusting project plans according to obtained results.
- Standard good practice in the lab and maintenance of lab equipment.
- Stringent documentation of experiments and cooperation with the SFB’s data manager
- Support practical courses in the lab by offering technical support to students and participation in the efforts of the IRTG associated with the SFB TFF 219.
- Preparation of animal testing applications
- Preparation of abstracts or scientific meetings
- Participate in publication of data and manuscript preparation.

Your academic qualifications:

- MSc or an equivalent qualification in biology, immunology, pharmacy or closely related disciplines (“post-doc” preferred)

The successful candidate is expected to:

- Have excellent spoken and written German skills. Good English skills are preferable.
- Have basic knowledge about physiology of kidney, heart and circulating cells.
- Be able to perform statistical evaluation of data, critically analyse own data and consider the necessary controls for validation experiments.
- Have experience with animal experiment planning, handling, injections, operations and be able to isolate organs and cells from experimental animals (after receiving the necessary training in the lab).
- Candidates with experience in conditional knock-outs (Cre/Lox) or CRISPR-Cas9 are preferred
- Candidates with good experience in standard histology as well as immunostaining are preferred
- Have sufficient experience in standard molecular biology techniques.
- Have experience in cell culture and flow cytometry.
- Actively participate in scientific discussions about own and other colleagues’ projects.
- Be a skillful user of standard data and text editing software (Word, Excel, Powerpoint etc).

What we can offer you:

- Exciting work on a clinically relevant project in a stimulating environment in direct vicinity to patient care (research lab facilities within the IMED building).
- Performance and analysis of animal models simulating kidney and heart diseases (adenine diet, 5/6 nephrectomy, transaortic constriction, myocardial infarction) including small animal echocardiography, haemodynamic testing, endothelial function and an established bone marrow-transplant model for mice in the Cardiology lab.
- A broad spectrum of methods for studying organ and cell interactions, circulating cells and cellular senescence.
- Benefit from strong collaborations within the SFB consortium with access to technologies such as confocal imaging, single cell sequencing, cardiac electrophysiology, digital pathology and many more.
- Integration into a graduate school programme (IRTG) that offers tailored interdisciplinary training, scientific and social activities and mentorship for future career development

We look forward to receiving your written application. Applications should be available by **15 July 2022** and should be sent to the following address:

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Application documents will not be returned. Please only submit copies of your documents and do not use plastic wallets, folders, ring binders, etc. If you have any questions, please contact us for assistance.