



2 PhD-Positions available in the lab of Ralf Gilsbach. Join the new



CRC1550 “Molecular Circuits of heart disease”.

Project: Function and modulation of genomic cardiomyopathy enhancers

We offer

PhD positions (TVL-13: 65%) in the newly formed CRC1550 “Molecular Circuits of Heart Disease” available for highly motivated and creative candidates in the lab of Ralf Gilsbach at Heidelberg University (Germany). In the CRC1550 you will be work in a cross-disciplinary team, comprised of basic, clinician and data scientists to answer fundamental questions of heart disease.

Project Description

The available research projects are at the interface of cardiovascular and computational biology and aim to understand and develop strategies to treat heart disease. You will combine epigenetic methods (e.g. C&T, CHIP, ATAC), chromatin interaction analysis (Hi-C), massive reporter assays and single-cell technology to unravel regulatory mechanisms of heart disease. CRISPR-based functional genomic methods will allow you to explore and steer regulatory mechanisms of heart disease. These studies will take advantage of *in vitro* and *in vivo* disease models, including iPS-derived cell models.

Location

Our lab is located at the Institute of Experimental Cardiology in a research building together with several cardiovascular basic science groups to form a highly interactive and dynamic research infrastructure, which will provide a perfect environment for your research.

Qualifications and Requirements

Candidates with a background and passion for cardiovascular sciences, chromatin biology and computational biology are highly encouraged to apply. We expect an excellent MSc related to cardiac sciences and/or chromatin biology and/or bioinformatics to join as a PhD student. Experience with iPS cells, epigenetic methods, CRISPR perturbation and a passion for large data analysis is a big plus.

How to apply

Interested candidates should send their application, consisting of a motivation letter, a CV, and the contact details of previous advisors/mentors to Prof. Dr. Ralf Gilsbach (ralf.gilsbach@uni-heidelberg.de). PhD students will join the HBIGS graduate school and a dedicated cardiovascular track. The prospective start date is flexible.

For more information on our work, please visit our lab homepage (tinyurl.com/Gilsbach-cardioscience) or refer to:

Gilsbach, R. et al. 2018. Nat Commun. 9:391.

Nothjunge, S. [...] R. Gilsbach. 2017. Nat Commun. 8:1667.

Gilsbach, R. et al. 2014. Nat Commun. 5:5288.

