



**International Research Training Group 1902
„Intra- and interorgan communication of the
cardiovascular system”**



The International Research Training Group 1902 located at the Heinrich Heine University Düsseldorf, Germany is seeking highly motivated

**PhD students (f/m/d)
in Cardiovascular Research**
starting in October 2019.

Our program:

The IRTG 1902 (www.irtg1902.hhu.de) is a German Research Foundation (DFG) funded international research program which aims to advance international research and training of doctoral students in medicine and natural sciences. This is undertaken in the context of tightly linked, cooperative research projects and an interdisciplinary training program in an alliance of the Heinrich Heine University (HHU), Düsseldorf, Germany and the Cardiovascular Research Center at the University of Virginia (UVA), Charlottesville, USA. The PhD projects will be supervised from two principal investigators, one from HHU and the other from UVA. The training program involves a six-month research phase at the partner university.

Our research:

The central research idea of the IRTG 1902 is the investigation of functional and molecular mechanisms underlying intra- and inter-organ communication as a means to understand normal and pathological cell and organ function. Research topics includes cytokine signaling, extracellular matrix function, angiogenesis, cardiovascular function and interactions of heart, kidney, skeletal muscle and adipose tissue in heart failure.

In project P08 our aim is to analyse the interorgan communication between the failing heart and peripheral organs such as skeletal muscle and adipose tissue. The PhD student will analyse heart and muscle function and metabolism in a transgenic heart failure knockout mouse model. The analyses will involve state of the art techniques such as high resolution echocardiography, FACS, and transcriptomic analyses by RNAseq and single cell sequencing.

In project P11 our aim is to study in purified fibroblasts and epicardial derived cells the role of the ATP-releasing channel Pannaxin I in purinergic signaling.

Please visit our website www.irtg1902.hhu.de/research.html for detailed project descriptions.

We offer:

Creative and stimulating working conditions are offered in a dynamic and international research environment with access to a broad spectrum of high-end technology in molecular biology, proteomic research, cell biology, transgenic animals, isolated organs and organ culture.

Your qualifications:

We are seeking to recruit highly qualified, energetic and dynamic graduate students holding a Master of Science degree. We need open-minded candidates with a strong biology background and experiences in general molecular biology. Excellent written and oral communication skills in English are mandatory as well as a willingness to perform animal experiments in mice.

Terms of salary and employment:

The graduate students will be employed at the Heinrich Heine University Düsseldorf, Germany. PhD positions (65% TV-L E13) are funded for three years by the German Research Foundation (DFG, www.dfg.de).

Your Application:

Applications should include CV, publication list, letter of motivation, summary of the master thesis, references from two professors, school certificates, higher education qualifications and a proof of English language skills (TOEFL certificate). Applications must be submitted via our application form: (<https://www2.hhu.de/MachForms/view.php?id=61258>)!

Closing date is August 15th 2019.

The Heinrich Heine University wishes to reflect the diversity of society and welcomes applications from all qualified candidates regardless of personal background. Applications from developing and emerging countries are encouraged.