### **Contact:**

Dr. med. Carolin Lerchenmüller

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06221/56-38276

#### Location:

Analysenzentrum III Im Neuenheimer Feld 669

#### Required Prerequisits:

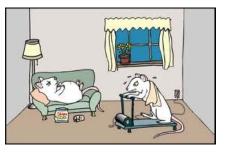
- Knowledge of cardiac physiology
- Interest in basic cardiovascular research
- 1 year full-time commitment

### Methods:

- Established molecular biology and biochemistry techniques including: protein isolation, western blotting, RNA isolation, and qPCR among others.
- Cell culture
- In vivo data acquisition
- Microscopy (Fluorescent, Confocal, Bright Field)

# DOKTORARBEIT ZU VERGEBEN

# INNERE MEDIZIN III MOLECULAR CARDIOLOGY



The Lerchenmüller lab is looking for highly motivated medical students who are interested in gaining experience in the areas of cardiology and molecular biology for conducting their medical thesis.

Our lab studies the molecular mechanisms of physiological and pathological cardiac hypertrophy. Interestingly, the heart has the ability to grow in size in response to both physiological and pathological stimuli. While pathological hypertrophy is a common prelude to heart failure, physiological hypertrophy – as seen with exercise training – not only does not lead to heart failure, but actually appears to mediate cardiac benefits. Therefore, understanding the mechanisms that contribute to this physiological hypertrophy may provide new insights into understanding cardiomyocyte growth and function and open new disease treatment perspectives.

We are offering a highly motivated and experienced supervision, efficient teaching of required methods and a friendly, collegial environment.

For more information or to submit an application please email: carolin.lerchenmueller@med.uni-heidelberg.de