

We are currently seeking a highly motivated

Master student (f/m/d)

for a project on “ Regulation of cardiogenesis in desmosome deficient mouse embryos”.

Desmosomes are important structural junctions between cardiomyocytes that maintain cellular structure and confer tissue integrity. In the [“Heart research group”](#) of MOCA we aim to study the impact of mutations in desmosomal proteins during early heart morphogenesis. To this end, transgenic animal models will be utilized to investigate *in vivo* cardiogenesis under specific genetic conditions. In the first phase of the project, desmosome formation will be compared in different transgenic animals to wild type controls. In the second phase of the project cardiomyocytes shape, cytoarchitecture and their extracellular matrix composition will be studied.

Your Tasks

- Histological analysis of embryonic heart, including tissue fixation, sectioning by microtome and staining of the tissue slides
- Detection of protein expression and localization using immunohistochemical techniques
- Visualizing protein expression and localization by fluorescence microscopy and analyzing data via ImageJ software.
- Analysis of RNA expression and localization via in situ hybridization techniques

Your profile

- B.Sc. in biology, biomedical or related studies
- Interested in developmental aspects of heart
- Previous lab experiences is a plus but not required
- Detail oriented, a good observer, and well organized

**Funding is available to support the student as a HIWI.

Please send your application including your CV, cover letter and transcripts to Mrs. Dr. Hoda Moazzen, hmoazzen@ukaachen.de.

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