

# Master thesis

We offer a Master thesis in medical basic research at the University of Fribourg.

Main topics of our research group are:

- **Progression of chronic kidney disease**
- **Mechanisms and regulation of renal volume retention**
- **Pathological mechanisms of volume retention in proteinuric kidney diseases**
- **Mechanisms and regulation of endocytosis**

Techniques:

1. disease models in rats and mice
2. generation of mouse models (knockout, transgen)
3. cell culture of epithelial cells, transfection transient, stable
4. all kinds of techniques in immunohistochemistry, confocal microscopy, electron microscopy
5. RNA isolation / detection, TaqMan analysis, si-RNA treatment
6. biochemical assays (proteomics, quantitative western blot analysis, immunoprecipitation, pull down analysis)
7. molecular biology, cloning, mi-RNA isolation/quantification/knockdown etc.

Participation on seminars and the lab journal club are desired. The possibility to contribute to publications as well as to continue on a **PhD position** will be given.

By interests please reply to the e-mail listed below (in German, English or French):

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