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**Medizinische Klinik IV – Nephrologie  
Dr. Tobias Hermle**

Group leader

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# PhD position in Nephrology

## Studying mechanisms of genetic renal disease in *Drosophila* and mouse.

We offer a PhD position (full-time, E13 65%, DFG-funded) in a newly established lab that is well-embedded in the excellent research environment of the Division of Nephrology in Freiburg. The position is available for three years and should be filled as soon as possible, starting in fall 2018.

**Project:** The lab is interested in studying mechanisms of genetic renal disease utilizing the *Drosophila* and mouse animal models in conjunction with approaches *in vitro*. We focus on genetic forms of nephrotic syndrome, a disorder that is characterized by edema and excessive proteinuria. Underlying is a disturbance of the complex glomerular filter that is essentially maintained by the highly specialized podocytes. Mutations in more than 50 genes have been described as single gene causes of nephrotic syndrome. Sharing molecular, morphological, and functional analogies with podocytes, the *Drosophila* nephrocytes will be employed to study disease mechanisms and for whole-animal drug screening to develop novel therapeutic strategies. The candidate will work in a diverse scientific environment with extensive supervision and support.

**Requirements:** We are looking for a highly motivated and ambitious candidate with a strong interest in basic research with clinical relevance. The applicant should hold a master's degree in Molecular Medicine, Biology, or an equivalent discipline. Experience in cell and molecular biology, mice and/or *Drosophila* is desirable but not mandatory.

**Application:** Interested candidates should send an application including a CV, a brief motivation letter and two references to

**Dr. Tobias Hermle (tobias.hermle@uniklinik-freiburg.de).**

Selected References:

1. Hermle, T, Schneider, R, Schapiro, D, Braun, DA, van der Ven, AT, Warejko, JK, et al.: GAPVD1 and ANKFY1 Mutations Implicate RAB5 Regulation in Nephrotic Syndrome. *J Am Soc Nephrol*, 2018.
2. Helmstadter, M, Huber, TB, Hermle, T: Using the *Drosophila* Nephrocyte to Model Podocyte Function and Disease. *Front Pediatr*, 5: 262, 2017.
3. Hermle, T, Braun, DA, Helmstadter, M, Huber, TB, Hildebrandt, F: Modeling Monogenic Human Nephrotic Syndrome in the *Drosophila* Garland Cell Nephrocyte. *J Am Soc Nephrol*, 28: 1521-1533, 2017.