

Working with your finger on the pulse of time

PhD student (65% E13)

Institute of Cellular and Integrative Physiology – TRR422 Podocyte Signaling Networks (PodoSigN)

Salary according to 65% E13 TV-KAH

We offer

- An innovative and family-friendly work environment in the heart of Hamburg
- Work as a member of a young and highly motivated team
- Advanced training in the graduate program of the Collaborative Research Center (Sonderforschungsbereich) 422
- Structured and guided induction to your new workplace
- Open scientific exchange of knowledge within the team

Our group investigates how proteins are degraded within podocytes (an essential cell of the kidneys filtration unit). Within the transregional research consortium 422 the proposed project B2 focuses on the role of the podocyte endo-lysosomal system beyond degradation in normal and diseased podocyte-conditions with the goal to connect basic with applied research ultimately leading to novel medical applications. Our group is embedded within an excellent scientific environment as part of the Sonderforschungsbereich 1192 – Immune mediated glomerular diseases as well as the research consortium “NeuroFlame – Defense and Demise of Inflamed Neurons”.

We are seeking a PhD student for this third-party funded project. The project examines the cell-specific role of the endo-lysosomal system on podocyte homeostasis.

The following aims will be addressed:

- 1) The subcellular distribution and structure of the endo-lysosomal system in human, pig and mouse podocytes.
- 2) Changes in the endo-lysosomal system upon podocyte stress and its impact on other degradative systems.
- 3) Function of the podocyte endo-lysosomal system, regarding plasma membrane regulation and calcium homeostasis.

The position is temporary for 3 years with 65% of the weekly working time. The goal is the achievement of a PhD.

What is waiting for you

Planning and conduction of animal and molecular biochemical experiments, work with murine, pig and human samples (blood, urine and kidney tissue).

- Animal experiments: Isolation of podocytes from human, pig and mouse kidneys by FACS sorting for -omic and biochemical analyses, immunization of mice for disease induction, measurement of antibody titers, clinical and histological work (analysis of serum and urine, immunohistochemical and immunofluorescence stainings and analyses)
- Molecular biology: cell specific analyses of the expression and activity of the endo-lysosomal and proteasomal systems, Western blots, qPCR, immune precipitations, activity assays and cell expression systems.
- Analysis and summary of your own experimental results and presentation in internal / national / international meetings.

What we expect

- University degree in molecular life science, biology, chemistry or biochemistry
- Strong interest in scientific questions, especially in complex interactions between different protein degradation systems.
- Willingness to perform animal experiments

- Desirable: knowledge in FACS analysis, molecular biology, histological methods (immune fluorescence, confocal and high-resolution microscopy)
- Skills in MS Office, ability to speak english and/or german
- You are capable of teamwork and independence, you are highly motivated, dedicated, flexible, and bring great organizational skills to the table.

Your contact: Dr. rer. nat. Wiebke Sachs (w.sachs@uke.de) Professor Dr. med. Catherine Meyer-Schwesinger (c.meyer-schwesinger@uke.de) or Claudia Kollien (ckollien@uke.de)

We offer a work environment that offers everyone the same chances, regardless of age, sex, sexual preference, disability, ethnic background or religion. We are actively trying to increase the number of women in senior roles, especially in research and teaching. In the event of equal levels of qualification, preference will be given to female candidates. The same rule will apply to all genders when one gender is deemed to be under-represented in the department relevant to the available position. Severely disabled applicants with essential identical technical and personal suitability will be preferentially selected.