

PhD position in Cell Biology and Lipid Metabolism

The **Nephrogenetics unit headed by Prof. Dr. Matias Simons** is recruiting a motivated PhD student to lead a research project at the interface of cell biology and lipid metabolism. The mission of the Nephrogenetics unit is to advance the understanding of the underlying molecular and cellular mechanisms of inherited kidney disorders as a prelude to improving prevention, diagnosis and treatment of common kidney disease. Currently, we have a major interest in studying lipid metabolism in kidney physiology and pathophysiology. Here, we are focusing on mechanisms of lipotoxicity, lipid droplet formation and contact sites between the endoplasmic reticulum, lipid droplets and mitochondria in conditions of excess fatty acid uptake. We are also using *Drosophila* as a rapid genetic model to study the crosstalk between different organs, including the kidney, in lipid metabolism. Recent publications include Li et al, *Nature Comms*, in press; Dow et al, *Nature Reviews Nephrology*, 2022; Jouandin, Marelja et al, *Science*, 2022; Perez Marti et al, *eLife* 2022; Marchesin et al, *Cell Rep* 2020; Bedin et al, *J Clin Invest* 2020; Goncalves et al, *PloS Genetics* 2018; Rujano et al, *J Exp Med* 2017; Gleixner et al, *Cell Rep* 2014. For more info on the lab see www.simons-lab.de.

Within the framework of the SFB1638 on membrane remodeling (www.sfb1638.de), we now offer an exciting PhD-opportunity to study lipid metabolism in kidney disease. For this, we invite applications from individuals with solid expertise in molecular cell biology. Prior experience with lipid biology is an advantage but not a prerequisite. The successful candidate will have good communication and organizational skills. She/he is expected to be highly motivated and to work independently with a strong work ethic. As we are an international lab, proficiency in English language is a requirement. The project will be carried out in a stimulating work environment with scientific collaborations across the Heidelberg life science community. Applications including a cover letter, a detailed CV including a publication list and contacts of up to three referees should be sent **as soon as possible** to matias.simons@med.uni-heidelberg.de

Key words:

Lipid metabolism, lipotoxicity, lipid droplets, membrane contact sites, kidney, proximal tubular cells, diabetes