



ERC-funded postdoctoral position at the *Institut of Human Genetics*, University Hospital Heidelberg

Location: Institut of Human Genetics, INF 366, 69120 Heidelberg
Contract: 2 years with extension possibilities, begin as soon as possible
Salary: Competitive, subject to skills and experience

The newly created **Nephrogenetics unit headed by Prof. Dr. Matias Simons** is looking for an enthusiastic postdoc to join our research group at the Institute of Human Genetics of the University Hospital Heidelberg. The general interest of the lab is in the **molecular mechanisms underlying hereditary kidney and metabolic diseases**. Most of these diseases are caused by single-gene defects and thereby offer unique opportunities to decipher fundamental regulatory pathways of human development and physiology and to develop targeted diagnostic and therapeutic options. Recent publications include Marchesin et al, Cell Rep 2020; Bedin et al, J Clin Invest 2019; Goncalves et al, PloS Genetics 2018; Simons, JASN 2018; Rujano et al, J Exp Med 2017; Trepiccione et al, JASN 2016; Gleixner et al, Cell Rep 2014. We combine human genetics with several experimental approaches, including fly and mouse genetics, cell culture, microscopy and biochemistry. For more info on the lab see www.simons-lab.de.

We offer an exciting translational project aimed at **exploring the role of random monoallelic expression in renal development** and at **solving the molecular cause of patients with renal hypodysplasia**. For this project, we invite applications from individuals with a solid background in molecular cell biology. **Prior experience with stem cells (e.g. mouse ESCs or human iPSCs), organoids, single cell RNA-seq, epigenetics and kidney research is an advantage but not a prerequisite**. The projects will be carried out in a stimulating work environment with scientific collaborations within the institute, across the Heidelberg life science community (e.g. EMBL, DKFZ) and worldwide.

The successful applicant will have good communication and organisational skills and a PhD in a relevant area (or be in the final stages of completion). We also invite applications from research-oriented MDs. Candidates are 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. 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:

developmental biology, tissue homeostasis, renal hypodysplasia, pluripotent stem cells, organoids, monoallelic expression, gene expression, epigenetic regulation