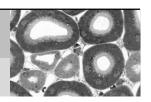
Tubular system and interstitium of the kidney: (Patho-) physiology and crosstalk

Seminar





Prof. Dr. med. Janina Müller-Deile

Seltene Nierenerkrankungen, Nephrologie und Hypertensiologie (Medizin 4), Universitätsklinikum Erlangen

Cell-cell communication through miRs and circulating factors in renal diseases

Research interest

Dr. Janina Müller-Deile investigates rare glomerular diseases with different models, different techniques, interdisciplinary collaborations and patient material to cover multidimensional aspects of the disease in a patient centered manner. Cell-cell signaling cascades are analyzed to learn more about pathomechanisms of rare glomerular diseases that might also translate in novel therapeutic targets in the future. So far, she focuses on membranous glomerulonephritis, idiopathic FSGS, preeclampsia and lysosomal storage diseases with renal involvement. She aims to better understand the role of glomerular endothelial cell and podocyte derived miRs in the pathophysiology of membranous glomerulonephritis and discovered the involvement of a new protein called Nephronectin. She analyzes unknown circulating permeability factors causing FGSS using innovative techniques including Raman spectroscopy and mass spectroscopy, a humanized zebrafish model and a parabiosis model. Providing individualized treatment options is necessary especially with rare glomerular diseases that are very heterogeneous even within one disease group. Treating 3D glomerular cell cultures including patient-derived mutated podocytes with different immunosuppressive substances should allow characterising renal diseases on a personalised level in the future.

Time: Monday 21st December 2020, 17:15h

Location: zoom

To get the zoom link please contact: michaela.kritzenberger@ur.de



