

# ASHBi

## DISTINGUISHED SEMINAR

2026 **4.1** Wed  
**17:00 - 19:00**

Register here



Venue

Conference Room / Zoom  
B1F, Faculty of Medicine Bldg. B

Lecturer

**Tobias Huber** Ph.D., MD  
Director, The III. Department of Medicine,  
University Medical Center Hamburg Eppendorf (UKE)

**Peter Boor** Ph.D., MD  
Professor, Institute of Pathology RWTH Aachen University, Aachen

CHAIRS



**Univ.-Prof. Dr. Danilo Fliser**  
Director, Internal Medicine IV, Saarland University Medical Centre

**Prof. Motoko Yanagita**  
Professor / ASHBi PI, Kyoto University



### Unlocking Precision Nephrology Through Kidney Endotyping

Lecturer: **Tobias Huber** MD,Ph.D.  
Director, The III. Department of Medicine,  
University Medical Center Hamburg Eppendorf (UKE), Germany



Precision nephrology requires moving beyond descriptive histologic patterns toward molecularly defined disease endotypes. Advances in single-cell and spatial transcriptomics are revealing distinct injury and stress programs within the nephron, particularly in podocytes that critically determine glomerular filtration barrier integrity. A recent example from our lab is the characterization of circulating anti-nephrin autoantibodies that directly target podocyte slit diaphragm proteins and can drive nephrotic syndrome in a subset of patients previously classified within broad clinical entities. Integrating such mechanism-based discoveries with molecular biopsy profiling enables kidney endotyping, providing a framework for biomarker-guided diagnosis, targeted therapy, and truly personalized treatment strategies in glomerular disease.



### Transformative potential of AI for pathology

Lecturer: **Peter Boor** MD,Ph.D.  
Professor, Institute of Pathology RWTH Aachen University, Aachen, Germany

Artificial Intelligence (AI) and Deep Learning (DL) hold great promise to transform medical practice, including pathology. This lecture will provide an overview of the potential of AI in pathology, focusing on the challenging area of kidney pathology. The lecture will introduce Pathomics, i.e., a novel -omics approach utilizing AI, that enables large scale, precise quantification of morphology in histopathology. Finally, challenges in using and implementing AI will be discussed.