



Bergen Meeting of Nephrology 2023

New Methods in Renal Pathology

Hotel Grand Terminus, Bergen, 20th – 22nd September 2023

Wednesday, Preconference Seminar, 20th September

16:00 – 18:00	Presentations of the Renal Research Group, UiB, Bergen and Pathology in West Norway PiV, Helse Vest	Øystein Solberg Eikrem and Sabine Leh et al.
18:00 – 19:00	Opening lecture “IgA nephropathy: an update with particular emphasis of the MEST-C score”	Jürgen Floege, Germany

Thursday, 21st September 2023

09:00 – 09:10	Welcome	Hans-Peter Marti and Sabine Leh, Norway
09:10 – 10:10	Session 1: Machine learning and algorithm development in digital (nephro-)pathology I	
	Interactive tools for digital (nephro-)pathology	Andrew Janowczyk, Switzerland
	Cloud-based AI analysis suite for kidney pathology	Pinaki Sarder, USA
10:10 – 10:30	Fast forward industry presentations	
10:30 – 11:00	Coffee break	
11:00 – 12:30	Session 2: Better visualization of kidney structures	
	Intravital multiphoton imaging of glomeruli	Kerstin Amann, Germany
	Development of an online cloud-based tool for automatic measurement of foot process width (FPW) using deep learning (DL): applications in assessment of podocyte injury in Fabry disease (FD)	Behzad Najafian, USA
	Super-resolution microscopy for quantification of foot process effacement	Nicole Endlich, Germany
12:30 – 13:30	Lunch	
13:30 – 15:30	Session 3: RNA and DNA extraction - single cell sequencing	
	Single cell sequencing and proteomics from archival tissue sections	Peter Horvath, Hungary
	Podocyte energy in disease: deciphering pathological mechanisms using RNA seq analysis	Christos Chatziantoniou, France
	Current methods for single cell RNA sequencing	Pirkko Mattila, Finland
	Spatial transcriptomics at the University of Oslo in Norway	Leonardo Meza-Zepeda, Oslo
15:30 – 16:00	Coffee break	

16:00 – 17:30	Session 4: Reporting, biobanking and registries	
	MRC Precision Medicine Project based on the NURTuRE biobank in the UK	Moin Saleem, UK
	The NYRETUB project leading to the Norwegian Renal Registry as a future tissue-, serum- and urine - based biobank for research?	Stein Hallan, Trondheim
	Structured reporting for generation of kidney biopsy datasets	Amélie Dendooven, Belgium
17:30 – 18:00	Coffee break	
18:00 – 19:00	Session 5: Machine learning and algorithm development in digital (nephro-)pathology II	
	Strategies for machine learning: unsupervised clustering	Michael Kampffmeyer, Tromsø
	Artificial intelligence (AI) tools for stain normalization	Anirban Mukhopadhyay, Germany
19:00-19:30	Session 6: Handling of Big Data	
	EU COST Action-21165 Personalized Medicine in CKD: improved outcome based on big data	Joachim Jankowski, Germany
20:15	Dinner	

Friday, 22nd September, 2023

09:00 – 10:30	Session 7: Clinical applications of AI tools in (nephro)pathology diagnostics	
	Computational Models for Kidney Pathology Assessment	Arvydas Laurinavicius, Lithuania
	Classification of glomerular lesions by deep learning algorithms	Stefan Porubsky, Germany
	Segmentation of kidney structures	Pinaki Sarder, USA
10:30 – 11:00	Coffee break	
11:00 – 12:00	Session 8: Current opportunities and challenges in computational (nephro-)pathology	
	How can morphometry contribute to kidney biopsy evaluation?	Peter Boor, Germany
	How to overcome restrictive data regulations by federated learning	Anirban Mukhopadhyay, Germany
12:00 – 14:00	Lunch	