K1/K2 Seminar Series 2016

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Novel Concepts in Diagnosis and Therapy of Chronic Kidney Diseases (CKD)

When: Wednesday 2nd of March, 14.15 - 15
Where: Store Auditorium, 3rd floor, Sentralblokken

Chronic kidney diseases (CKD) requiring dialysis and/or renal transplantation reflect a considerable burden on patients and on the society. On a global scale, CKD ranks among the seven causes of increasing age-standardised death rates. Thus, novel approaches for timely detection and therapy of CKD are warranted.

Bergen is the home of the Norwegian Kidney Biopsy Registry with more than 13,000 biopsy entries. We have opened up these tissue archives by the development of proteomics and transcriptome sequencing of formalin-fixed, paraffin embedded (FFPE) kidney biopsies in a variety of renal disorders. These techniques also enable us to embark on novel therapeutic avenues.

Kidney fibrosis is the common pathways of CKD irrespective of their origin, including diabetic nephropathy, hypertensive nephrosclerosis, and glomerulonephritis. Epithelial-to-mesenchymal transition (EMT) reflects one of the important mechanisms in CKD leading to renal fibrosis, which is reversible in its early stage. Therefore, we have initiated a close collaboration with BerGenBio (a local clinical stage BioTech company developing EMT targeting drugs) to inhibit EMT with the goal to ameliorate experimental kidney fibrosis.

Thus, the current focus of our research consists in the omics-based exploitation of archival kidney biopsies from the Norwegian Kidney Biopsy Registry to detect novel markers and therapeutic targets of CKD. As a consequence, interventional studies in the respective animal models are in progress.

Part of the Course FSKLI902 «Perspectives in translational medicine», 1 studiepoeng (1ECTS).

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