

# CCR – IMPROMPTU

Wednesday, October 16<sup>th</sup>, 2024, 10:00 AM

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### Characterization of pre-diagnostic antibody repertoires in inflammatory bowel disease

This talk will inform on pre-diagnostic antibody signatures of inflammatory bowel diseases (IBDs), encompassing Crohn's disease (CD) and ulcerative colitis (UC). IBDs are characterized by immunological alterations early in their development, including alterations in adaptive immunity. Biomarkers predicting the onset of IBDs are highly sought after, which may be found in preclinical CD- and UC-specific antibody repertoires. Using phage-display immunoprecipitation sequencing (PhIP-Seq), a method allowing parallelized detection of hundreds of thousands of antigens, we performed high-throughput and high-resolution characterization of antibody epitope repertoires in samples from individuals who developed IBD as part of two distinct population-based cohort studies, including the Lifelines Cohort Study (Netherlands) and the PREDICTS cohort (United States). Our recent findings highlight the diversity of early immunological changes preceding IBD development up to several years and are suggestive of infectious diseases as potential drivers of the disease and/or early alterations in host immunity.

**Venue:** Lecture Hall B1, Borschkegasse 4a

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**Host:** Thomas Vogl



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