

CCR – Impromptu Seminar

Thursday, January 18th, 2024, 10:15am

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Host and environmental factors shaping the gut microbiome

The gut microbiome is a complex organ that is highly dynamic and is influenced by both environmental and host factors. In a large microbiome study in Dutch population cohort Lifelines, we study the effect of environment, shared household, and individual genetics on the composition of gut microbiome in adults, and explore the dynamics of the gut microbiome in families during pregnancy and early life. The environment has a major effect on interindividual differences in the microbiome. In particular, individual diet, medication, diseases, and exposures to smoking, pets and pollutants are influencing the gut ecosystem. Individuals in the same household have more similar microbiomes, which is largely explained by the shared environment. Host genetics affects a subset of heritable bacteria and can be linked to functional variations in bacterial genes and gene clusters.

Venue: Lecture Hall B2, Borschkegasse 4a

Time: Thursday, January 18th, 2024 at 10:15

Host: Thomas Vogl