Prof. Max Nieuwdorp, M.D., Ph.D

Professor Nieuwdorp studied Medicine at Utrecht University and received his Ph.D. in diabetes at the Academic Medical Center of the University of Amsterdam (AMC-UvA; under supervision of Professor John Kastelein). After a residency in Internal Medicine and fellowship in Endocrinology at the AMC-UvA he performed a postdoctoral fellowship on glycobiology at University of California, San Diego in the department of Cellular and Molecular Medicine under Professor Jeff Esko. Professor Nieuwdorp is currently chair of the AmsterdamUMC Diabetes Center as well as chair of (Experimental) Vascular Medicine department; 21 Ph.D. students have defended their thesis under his promotorship, currently he has 40 Ph.D. students and 4 postdoctoral fellows. His group focuses on translational research aimed at dissecting the causal role of (small) intestinal bacterial strains in development of type 1/type 2 diabetes mellitus, NAFLD-NASH and cardiometabolic disease with a special interest in the gut-brain axis. Prof Nieuwdorp has published > 300 peer reviewed articles including papers in Nature Medicine, Science, Cell Host Microbes, NEJM, Cell Metabolism, Gut and Gastroenterology. He also recently published his book for the laypublic entitled " We are our hormones" at Bezige Bij publisher, which is currently translated in 9 languages.

Publication :

Gutmicrobiota and (cancer) cachexia: using FMT to dissect causality from asociation

Abstract :

Alterations in intestinal microbiota are associated with aberrant human metabolism. We recently showed that both oral and fecal microbiota are associated with cachexia (Fluitman, Sci Reports 2021 and JCSM 2022). Moreover, in the latter study we showed that fecal transplantation studies (infusing intestinal microbiota from cachexia elderly donors) affected germ free mice microbiota composition with differential responderse on metabolism and cachexia markers in these mice. Interestingly, we found in a human FMT study in cancer cachexia (using obese donors) that overall survival was prolonged by 3 month upon donor FMT (DeClercq, Clin Cancer Research 2021). Combined our data thus suggest that specific intestinal bacterial strains might be developed as diagnostics and therapeutics for better treatment in (cancer) cachexia potentially via modulation of the gutbrain axis.