

3. VAAM Industry-Academia Panel

15.9.2022, 17h via Zoom

Topic: Microbial Metabolomics

Jason Winnike, PhD

Sr. Study Director, Discovery & Translational Sciences, Metabolon Inc., Morrisville, NC, USA

Using Metabolomics to Measure Changes in the Microbiome That Affect Health

The presentation will highlight how metabolomics can be leveraged to understand how the microbiome can influence host health. Case studies highlighting the effects of alterations/dysbiosis of the microbiome on the host will be presented.



Dr. Winnike joined Metabolon in 2020 and is a Senior Study Director in the department of Discovery and Translational Sciences, where he serves as a scientific and technical liaison for Metabolon's academic and government clients. Prior to this he was the Group Leader of Metabolomics & NMR at the David H. Murdock Research Institute (DHMRI) where he provided scientific expertise in Metabolomics and small molecule analysis. Jason graduated from the University of North Carolina with a bachelor's degree in Applied Science. He received his Doctorate in Biomedical Engineering from the Joint Department of Biomedical Engineering at UNC and North Carolina State University. After graduating, he worked as a postdoctoral associate at the University of Louisville using stable isotope metabolomics to study the effects of selenium containing compounds on lung cancer cell lines.

Prof. Dr. Uwe Sauer Institute of Molecular Systems Biology, ETH Zürich, CH

Metabolomics as a hypothesis generator

I will discuss challenges and strategies in generating testable hypotheses from metabolomics data on metabolic interactions between microbes and in cellular regulation.



Uwe Sauer studied biology at the University Göttingen, where he obtained his PhD in microbiology with Professor P. Dürre in 1993. After two years of postdoctoral research at the Institute of Biotechnology (ETH Zurich), he headed the Microbial Metabolic Engineering group under the supervision of Prof. Bailey at the same Institute from 96-99. Starting in 2000, he developed the independent research group Applied Systems Biology and was elected professor for systems biology in 2006 at the Institute of Molecular Systems Biology. His research focusses on the regulation of complex metabolic networks, in particular the interaction between metabolites and proteins. His lab has pioneered technology development in the area of metabolomics and flux analysis with isotopic tracers, and on data integration within computational models. Since 2012 he is full Professor for Systems Biology, since 2015 he is president of the ETH Research Commission.

Next VAAM Industry Academia Panel: Cell Factories

17.11.2022, 17h via Zoom

Information & Registration:

VAAM Industry Academia Panel / VAAM - Vereinigung für Allgemeine und Angewandte Mikrobiologie e.V.