



Vereinigung für  
Allgemeine und  
Angewandte  
Mikrobiologie



## 20. VAAM Industry-Academia Panel

### „Synthetic Microbiology Driven Drug Discovery“

17.07.2025, 4 pm



**Dr. Steven Schmitt, Myria Biosciences AG, Basel, CH**

***From enzymes to platform: Translating engineering of non-ribosomal peptide synthetases into high-throughput drug discovery***

*In this talk, I will introduce how Myria Biosciences is transforming non-ribosomal peptide synthetase (NRPS) engineering into a scalable platform for drug discovery. I will present the GEMMS (Genetically Engineered Modular Molecule Scaffolds) platform, which integrates synthetic biology, machine learning, and microfluidics to design, produce, and test thousands of novel compounds each week. The focus will be on how Myria decodes and harnesses nature's logic and modularity to bridge the gap between academic innovation and therapeutic application.*



**Prof. Dr. Helge Bode, Max Planck-Institute for Terrestrial Microbiology, Marburg**

***Engineering of non-ribosomal peptide synthetases for drug development (?)***

*In my talk I will briefly introduce microbial non-ribosomal peptide synthetases (NRPS), which are responsible for the production of many clinically used drugs. I will highlight recent approaches of my lab allowing mix and match of different NRPS parts, enabling also the connection of peptides with polyketide parts and will discuss current possibilities and challenges.*