

RNA-based infection research

Dr. Jörg Vogel,
Universität Würzburg, IMIB, Institute for Molecular Infection Biology
Director Chair Molecular Biology 1
Würzburg, Germany

Professor Jörg Vogel is one of the world's leading researchers in the field of RNA biology in prokaryotes. He performed pioneering work that contributed to our understanding of regulatory RNA molecules in infection biology and has developed several high-throughput sequencing methods for the analysis on RNA-based data. Using these methods, he has studied the influence of pathogens on host cells and the host's transcriptional response. Professor Vogel and his group have also studied how small regulatory RNA molecules control protein synthesis / RNA breakdown and they co-discovered tracrRNA (trans-activating RNA), which made the application of the CRISPR/Cas9 system possible. Professor Vogel thus uncovered novel biological principles which are of major importance for our understanding of pathogenic microorganisms and the development of new therapeutic approaches.

Professor Jörg Vogel is head of the Institute for Molecular Infection Biology at the University of Würzburg and founding director of the recently established Helmholtz Institute for RNA-based Infection Research (HIRI). In his talk, he will highlight the significance of RNA molecules in infectious processes and how RNAs interact with various molecules of the host cell and of pathogens.