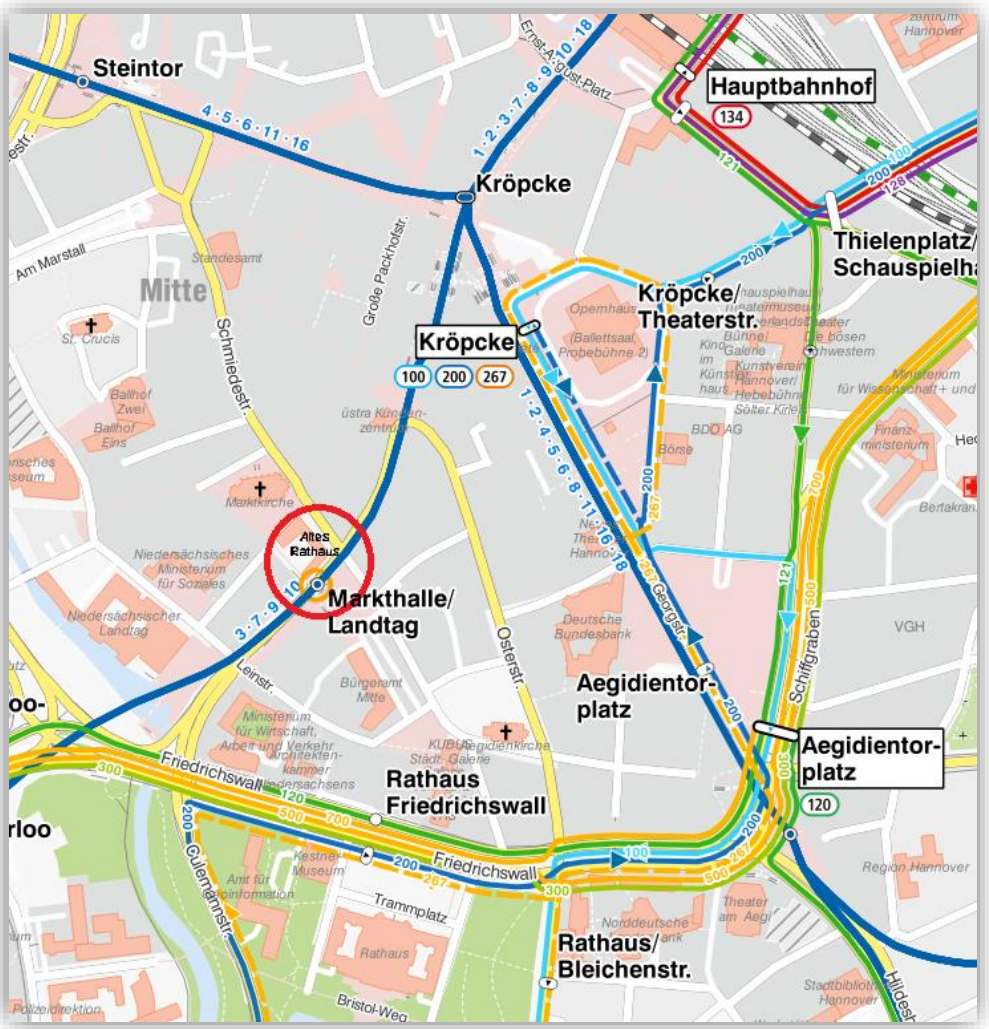
BMWZ SYMPOSIUM

The Double Face of Microorganisms: Source of Infections and of Anti-Infective Agents

October 11th 2018, Altes Rathaus, Karmarschstr. 42, 30159 Hannover

9:00	Opening Remarks, **Teresa Carlomagno**
Session 1	**Molecular Machines Synthesizing New Therapeutic Compounds** *Chair:* ***Russell Cox***
9:10	**Timm Maier** (Biozentrum Basel) *The Structural Biology of Multienzymes in Fatty Acid and Polyketide Biosynthesis*
10:00	**Megha Karanth** (LUH) *Structural Insights into the Peptide-Bond Condensation Reaction in Non-Ribosomal Peptide Synthetases*
10:30	Coffee Break
Session 2	**Microorganisms as Source of Infections** *Chair:* ***Juliane Buschmann***
11:00	**Cynthia Sharma** (University of Würzburg) *Regulatory RNAs in Pathogenic Epsilonproteobacteria*
11:50	**Orsolya Barabas** (EMBL Heidelberg) *Transposition of Antibiotic Resistance: From Mechanisms to Intervention*
12:40	Lunch Break
Session 3	**Chemical Biology and Bioengineering of Cellular Factories** *Chair:* **Kürsad Turgay**
14:30	**Jason Micklefield** (University of Manchester) *Exploiting Enzymes from Secondary Metabolism to Create New Synthetic Pathways*
15:15	**Russell Cox** (LUH) *Understanding and Engineering Fungal Biosynthetic Pathways*
16:00	Coffee Break
Session 4	**Development of Novel Therapeutic Strategies** *Chair:* ***Oliver Plettenburg***
16:30	**Barrie Wilkinson** (John Innes Centre, Norwich) *Evolving Molecular Diversity*
17:20	**Kürsad Turgay** (LUH) *Bacterial AAA+ Protease Complexes in Protein Homeostasis and Stress Response: New Targets for Antibiotics?*
18:10	Closing Remarks, **Russell Cox**

For the third time, scientists from various fields come together to share ideas and latest discoveries on interdisciplinary topics at the BMWZ Symposium. This year, the event focuses on the importance of microorganisms: on the one hand as a source of infections and on the other as a provider of anti-infective reagents. Microorganisms produce numerous natural products that can be either beneficial or dangerous to humans - the range of metabolites already discovered is enormous. Understanding how these products are made by microorganisms and how to use these processes to our advantage is the core theme of this symposium. For example, researching and exploiting molecular machines, large multi enzyme complexes, from microorganisms can contribute to the development of new antibacterial or fungicidal substances, especially if these machines can be modified to a desired outcome. The increasing danger of multi-resistant bacteria is also discussed, e.g. how the spread of resistance genes works and how to address this problem by developing new therapeutic strategies. We are proud to present an impressive selection of speakers for this symposium who will share their ideas, insights and experiences with us.



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