

The logo for the Mol Micro Meeting Vienna is a blue rectangular box. On the left side, there is a 2x2 grid of dark blue squares, each containing a white letter: the top row has two 'M's and the bottom row has an 'M' and a 'V'. To the right of this grid is a grey rectangular area containing the text 'Mol Micro Meeting Vienna' in a large font, followed by 'Max. F. Perutz Laboratories' and 'University of Vienna' in a smaller font. Below the grey area, the dates 'September 16-18, 2015' are written in a smaller font.

**M M**  
**M V**

**Mol Micro Meeting  
Vienna**  
**Max. F. Perutz Laboratories  
University of Vienna**

September 16-18, 2015

## **VENUE**

Universitätscampus  
Spitalgasse 2, 1090 Vienna  
Lecture Hall C2

# PROGRAM

## Wednesday, September 16, 2015

**11:30 – 13:20 Registration**

**13:20 – 13:30 Udo Bläsi, Introductory remarks**

### **First Session - Chair: Udo Bläsi**

13:30 – 14:00 **Davide Roncarati**  
Sensing the heat: the *Helicobacter pylori* HrcA transcriptional repressor is an intrinsic protein thermosensor

14:00 – 14:30 **John S. Parkinson**  
Mechanistic studies of transmembrane signalling in the *E. coli* serine chemoreceptor

14:30 – 15:00 **Kevin M. Devine**  
The PhoPR two-component signal transduction system monitors anionic polymer metabolism in *Bacillus subtilis*

15:00 – 15:30 **Karl Forchhammer**  
Not only for bacteria: PII signalling as a central hub for carbon/nitrogen anabolism

15:30 – 15:50 **Eva Hentschel**  
Phosphatase activity of the histidine kinases ensures insulation of the heme-responsive two-component systems HrrSA and ChrSA in *Corynebacterium glutamicum*

### **Coffee break**

16:20 – 16:50 **Stewart Cole**  
Inhibiting intracellular growth of *Mycobacterium tuberculosis*

16:50 – 17:20 **Dirk Hofreuter**  
*Campylobacter* forages cysteine- and sulfur-containing substrates present in the gastrointestinal environment of its hosts to overcome its restricted metabolic capacity

17:20 – 17:40 **Raffael Schaffrath**  
A yeast model to study the diphthamide target for bacterial ADP ribosylase toxins

17:40 – 18:00 **Vecerek Branislav**  
The RNA chaperone Hfq is required for virulence of *Bordetella pertussis*

**18:00 – 20:30 Poster Session (Drinks & Snacks)**

## Thursday, September 17, 2015

### Second Session - Chair: Boris Görke

- 09:00 – 09:30 **Veronica Godoy-Carter**  
Understanding the unusual regulation of the *Acinetobacter baumannii* DNA damage response
- 09:30 - 10:00 **Andres Vazquez-Torres**  
Sensing of oxidative and nitrosative stress by cysteines in the zinc finger of the RNA polymerase regulator DksA is important for bacterial pathogenesis
- 10:00 - 10:30 **Kenneth McDowall**  
Further elaboration of the “direct entry” mechanism for the post-transcriptional control of gene expression in *Escherichia coli*
- 10:30 – 10:50 **Agamemnon Carpousis**  
Conserved structural features and molecular physiology of the membrane-associated RNA degradosome

### Coffee break

- 11:20 – 11:50 **Christopher Hayes**  
The proton-motive force is required for translocation of CDI toxins across the inner membrane of target bacteria
- 11:50 – 12:20 **Angelika Gründling**  
Lipoteichoic acid synthesis and function in Gram-positive bacteria
- 12:20 – 12:50 **John Helmann**  
*Bacillus subtilis* Sigma-M and cell wall homeostasis

### 13.00 – 14.30 Lunch

### Third Session - Chair: Vladimir Kaberdin

- 14:30 – 15:00 **Carmen Buchrieser**  
Virulence and metabolism: CsrA mediated regulations in *Legionella pneumophila*
- 15:00 – 15:30 **Jörg Vogel**  
The biochemical RNA landscape of a cell revealed by Grad-seq

15:30 – 15:50 **Sabine Brantl**  
Type I toxin-antitoxin systems from *Bacillus subtilis*

**Coffee break**

**Fourth Session - Chair: Jörg Vogel**

16:20 – 16:50 **Reinhold Brückner**  
Five related small non-coding RNAs control quorum sensing leading to competence development in *Streptococcus pneumoniae*

16:50 – 17:20 **Annegret Wilde**  
The role of the cyanobacterial RNA chaperone Hfq in phototaxis

17:20 – 17:50 **Vanessa Khemici**  
How to suppress the cold-sensitivity of the DEAD-box RNA helicase CshA of *Staphylococcus aureus*: preliminary analysis of a genetic screen

**19:00 Reception at the “Wiener Rathaus – Vienna Cityhall”**

## Friday, September 18, 2015

### Fifth Session - Chair: Isabella Moll / Sue Lin-Chao

- 09:00 – 09:30 **Ute Römling**  
A novel protein quality control system of world-wide distributed *Pseudomonas aeruginosa* clone C involved in stress resistance
- 09:30 - 10:00 **Karin Sauer**  
It's all about taste and sense: Role of NicD in nutrient-induced dispersion by *Pseudomonas aeruginosa*
- 10:00 - 10:30 **Urs Jenal**  
The role of a small signalling molecule in coordinating development and cell cycle control
- 10:30 – 10:50 **Rachel Duchesne**  
The absence of the *Pseudomonas aeruginosa* OprF protein leads to increased biofilm formation through variation in c-di-GMP levels

### Coffee break

- 11:20 – 11:50 **Bert Poolman**  
Bacterial cell volume regulation and traffic & translocation in crowded environments
- 11:50 – 12:10 **Anton Meinhart**  
Killing me softly: How toxin antitoxin systems shape bacterial physiology
- 12:10 – 12:30 **Natalia Bednarska**  
Selective seeding of protein aggregation in bacterial cytoplasm as a new method to fight pathogens
- 12:30 – 12:50 **Karin Schnetz**  
Characterization of structural features controlling activity of LeuO, a pleiotropic transcriptional regulator and H-NS antagonist

### Concluding remarks / Poster prizes