

**Priority Program 1316:  
Host-adapted Metabolism  
of Bacterial Pathogens**

Metabolism Meets Virulence 2 is supported by:



Alfried Krupp von Bohlen  
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Leopoldina  
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**April 06.-09.2014 Osnabrück, Germany**

# **Metabolism Meets Virulence 2**

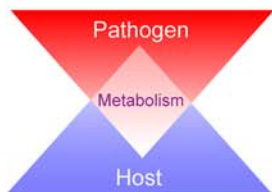
**2<sup>nd</sup> International Symposium on  
Metabolism and Bacterial Pathogenesis**

## **Main topics:**

- Metabolomic profiling of pathogenic bacteria
- Modelling bacterial metabolism
- Global regulation of bacterial metabolism
- Adaptation to extracellular lifestyles
- Metabolism of intracellular bacteria
- Perspectives in bacterial pathogenesis and metabolism

**Registration on: [www.metabolism-meets-virulence.org](http://www.metabolism-meets-virulence.org)**





April 06.-09.2014 Osnabrück, Germany

# Metabolism Meets Virulence 2

**DFG**  
Priority Program  
**SPP1316**

## Preliminary program

6. April. 2014, University Osnabrück, Palace

Welcome by the speaker of SPP1316

Keynote Lecture

Andreas J. Bäuml, Davis, USA

How the host response feeds *Salmonella*

Reception and get together

7. April 2014, Steigenberger Hotel Remarque

Session 1: Adaptation to extracellular lifestyles 1

Richard Proctor, Madison, USA:

*Staphylococcus aureus* SCV persists: Multiple metabolic mechanisms

Christine Josenhans, Hannover, D:

Energy sensing in pathogenic  $\epsilon$ -proteobacteria: hub between metabolism and virulence functions

Short presentations selected from abstracts and projects of SPP1316

Session 2: Adaptation to extracellular lifestyles 2

Andreas Peschel, Tübingen, D:

Nutrient limitation governs *Staphylococcus aureus* niche adaptation in the human nose

Emanuel Hanski, Jerusalem, Israel:

An extracellular bacterial pathogen modulates host metabolism to regulate its own sensing and proliferation - group A *Streptococcus* as a paradigm

Short presentations selected from abstracts and projects of SPP1316

Session 3: Metabolism of intracellular bacteria

John McKinney, Lausanne, CH:

Non-growing but metabolically active (NGMA) phenotypic variants

Michael Hensel, Osnabrück, D:

A new view on the intracellular habitat of *Salmonella enterica*

Short presentations selected from abstracts and projects of SPP1316

Poster session

8. April 2014, Steigenberger Hotel Remarque

Session 4: Host microbiota and bacterial pathogens

Tyrell Conway, Oklahoma, USA:

The Restaurant hypothesis of intestinal colonization

Dirk Bumann, Basel, CH:

*Salmonella* metabolism heterogeneity in infected host tissues

Short presentations selected from abstracts and projects of SPP1316

Session 5: Global regulation of bacterial metabolism

Jay C. D. Hinton, Liverpool, UK:

Lag is the forgotten growth phase: What happens during the earliest stage of growth of a bacterial cell?

Jörg Stülke, Göttingen, D:

c-di-AMP an emerging essential secondary messenger that links nutrient availability to cell wall synthesis

Short presentations selected from abstracts and projects of SPP1316

Varus battleground, Kalkriese

Excursion: Visit of the 'Varus battleground Teutoburger Wald'

Session 6: Regulation of metabolism during host colonization

Kai Papenfort, Princeton, USA:

Conserved and specific functions of the small regulatory RNA SgrS in *Salmonella*

Andrew Roe, Glasgow, UK:

Sending pathogenic *E. coli* on an acid trip

Short presentations selected from abstracts and projects of SPP1316

Conference Dinner

9. April 2014, Steigenberger Hotel Remarque

Session 7: Modeling bacterial metabolism during infection

Nassos Typas, Heidelberg, D:

From high-throughput approaches to molecular mechanism

Kyu Y. Rhee, New York, USA:

Mycobacterial metabolomics: towards a chemical understanding of essentiality

Short presentations selected from abstracts and projects of SPP1316

Session 8: Future challenges in host-adapted bacterial metabolism

Michael Horn, Vienna, A:

The metabolism of host-free chlamydiae

Michael Lalk, Greifswald, D:

Metabolomics insights in infection-related adaptations of *Staphylococcus aureus*

Conclusion and closing remarks

Registration until 15. March 2014  
Full conference package:  
(accommodation, meals, social event)  
senior scientists 700.- €  
students, junior scientists 500.- €  
(proof of student status required)  
75.- € discount for double room

Deadline for abstract submission:  
15. March 2014

Registration on: [www.metabolism-meets-virulence.org](http://www.metabolism-meets-virulence.org)

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