



## Invitation



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**Opening Ceremony** 

RTG 1870 "Bacterial Respiratory Infections -Common and Specific Mechanisms of Pathogen Adaptation and Immune Defence"

14 July 2014

Respiratory tract infections are a major health threat worldwide, imposing a huge burden on patients and health care systems. In the RTG 1870 "Bacterial Respiratory Infections - Common and Specific Mechanisms of Pathogen Adaptation and Immune Defence" (BacRes) specialists in infection biology, microbiology, immunology, functional genomics, and bioinformatics will study pathogenesis mechanisms of three multifaceted respiratory bacterial pathogens that pose serious treatment problems: Burkholderia pseudomalleii, Streptococcus pneumoniae (pneumococci), and Staphylococcus aureus. A better understanding of the rapid adaptation processes enabling pathogens to colonize new host habitats is a prerequisite for developing urgently needed therapeutic strategies and vaccines. Analysis of how bacteria maintain fitness while changing their environmental niches and resist attacks by the host immune system requires interdisciplinary efforts and state-of-the-art technologies. Here, we will assess the regulation and expression of virulence factors, explore OMICS signatures of bacteria and host cells during colonization and infection, determine structurerelationships of surface-exposed lipoproteins and transporters, and study mechanisms of immune defence. Specific added value will be derived from comparing the three bacterial species in the same experimental systems to identify shared or unique molecular mechanisms employed to meet the challenges of proliferating in a respiratory environment.

**Opening Ceremony** 

RTG 1870 "Bacterial Respiratory Infections -Common and Specific Mechanisms of Pathogen Adaptation and Immune Defence" Monday, 14 July 2014, 17:00, Aula of the University Greifswald, Domstr. 11, 17489 Greifswald

#### Welcome

Rector, Ernst Moritz Arndt University Greifswald Prof. Dr. Johanna Eleonore Weber

Speaker of the RTG 1870 Prof. Dr. Sven Hammerschmidt

### **Key Note Speech**

Prof. Dr. Susanne Häußler (Braunschweig) "The therapeutic challenge of *Pseudomonas aeruginosa* infections"

**Finger Food Buffet** 

For confirmation of attendance please contact the RTG 1870 Coordination Office until July 4, 2014

Ernst Moritz Arndt University Greifswald Interfaculty Institute for Genetics and Funtional Genomics Dept. Genetics of Microorganisms Prof. Dr. Sven Hammerschmidt Friedrich Ludwig Jahn Str. 15A 17489 Greifswald

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