








**Review Meeting of the Priority Program SPP1617**  
**“Phenotypic Heterogeneity and Sociobiology of Bacterial Populations”**  
**Herrsching am Ammersee, March 11<sup>th</sup>-12<sup>th</sup> 2015**

**PROGRAM**

**Wednesday, March 11<sup>th</sup>**

16:00 - 16:10	Dr. K. Hartmann, DFG	Welcome
16:10 - 16:20	K. Jung, Coordinator	Introduction and overview
<i>Short Talks of the new applicants, Chair: Dr. K. Hartmann, DFG</i>		
16:20 - 16:30	Akos Kovacs, Jena	Phenotypic heterogeneity and population dynamics in biofilms
16:30 - 16:40	Christian Kost, Jena	Phenotypic heterogeneity and the evolution of metabolic cross-feeding interactions
16:40 - 16:50	Ralf Metzler, Potsdam	Stochasticity in bacterial signalling
16:50 - 17:00	Stefan Schuster, Jena	Modelling and computer simulations of bacterial biofilms
17:00 - 17:10	Regine Hengge, Berlin	Heterogeneity of matrix production in bacterial biofilm formation
17:10 - 17:40		<i>Coffee Break</i>
17:40 - 17:50	Athanasios Typas, Heidelberg	The role of the Rcs signaling system in cell growth and size heterogeneity
17:50 - 18:00	Jörg Soppa, Frankfurt	Ploidy and heterogeneity of gene expression in <i>Escherichia coli</i>
18:00 - 18:10	Bärbel Stecher, München Burkard Hense, München	Interaction of prophages and colicin Ib at the single-cell and population-wide level
18:10 - 18:20	Jörg Stülke, Göttingen	Control of bistable gene expression in <i>Bacillus subtilis</i> by the transcription factor SinR and the phosphodiesterase YmdB
18:20 - 18:30	Jörg Willenborg, Hannover	Characterization of phenotypic heterogeneity in <i>Streptococcus suis</i> populations in vitro and in vivo
18:30 - 18:40	Philippe Schmitt-Kopplin, München	Assessing phenotypical heterogeneity on metabolite level with micro analytical approaches/metabolomics
18:40 - 18:50	Christina Kuttler, München	Modelling of heterogeneity and spatio-temporal dynamics in bacterial populations
19:00 - 20:00		<i>Dinner at the restaurant</i>
20:00 - 21:00	Principal Investigators (without reviewers)	PI Meeting, General Discussion

Thursday, March 12<sup>th</sup>

7:30 – 8:30		Breakfast
08:30 – 11:30	Poster Session of the follow-up applicants	
11:30 – 12:30		Lunch
12:30		Departure

Posters		
Poster 1	Erwin Frey, München Madeleine Opitz, München	Heterogeneity in colicin E2 expression of <i>Escherichia coli</i>
Poster 2	Berenike Maier, Köln Stefan Klumpp, Potsdam	Phenotypic heterogeneity as a strategy for speeding up adaptive evolution at minimal cost
Poster 3	Thorsten Mascher, München Georg Fritz, Marburg	Heterogeneous cell wall homeostasis as a survival strategy in stationary phase: balancing cell growth, antibiotic production, and envelope stress response in <i>Bacillus subtilis</i>
Poster 4	Kirsten Jung, München	Phenotypic heterogeneity generated by histidine kinases based signaling networks
Poster 5	Ulrich Gerland, München	Characterization and analysis of bacterial sugar utilization strategies employing regulated phenotypic heterogeneity
Poster 6	Daniel López, Würzburg	Isolation and physiological characterization of cell types from heterogeneous aggregates of <i>Staphylococcus aureus</i> using transcriptomic analysis
Poster 7	Wilma Ziebuhr, Würzburg	Heterogeneous gene expression, metabolic variability and differentiation in <i>Staphylococcus epidermidis</i> biofilms
Poster 8	Thilo Fuchs, München	Bistability in inositol utilization by <i>Salmonella</i>
Poster 9	Ralf Heermann, München	Regulation of phenotypic switching and heterogeneity in <i>Photorhabdus luminescens</i> cell populations
Poster 10	Helge B. Bode, Frankfurt	Heterogeneity in the secondary metabolism of <i>Photorhabdus</i> and <i>Xenorhabdus</i>
Poster 11	Petra Dersch, Braunschweig	Underlying principles of bistability in the expression of the pivotal virulence regulator RovA in <i>Yersinia pseudotuberculosis</i> and role for virulence
Poster 12	Wolfgang Streit, Hamburg	Molecular switches and networks involved in regulation of phenotypic heterogeneity in <i>Sinorhizobium fredii</i> NGR234
Poster 13	Anke Becker, Marburg Peter Pfaffelhuber, Freiburg Matthew McIntosh, Marburg	Molecular mechanisms and benefits of phenotypic heterogeneity in <i>Sinorhizobium meliloti</i> populations
Poster 14	Dieter Jahn, Braunschweig Johannes Müller, München Richard Münch, Braunschweig	Phenotypic heterogeneity during heterologous protein production in <i>Bacillus megaterium</i>
Poster 15	Heinrich Jung, München Erwin Frey, München	Maintenance and evolution of cooperation in synthetic microbial ecosystems
Poster 16	Kai Thormann, Gießen	Heterogeneity in flagella-mediated motility

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<b>Poster 17</b>	Julia Frunzke, Jülich Dietrich Kohlheyer, Jülich Wolfgang Wiechert, Jülich Katharina Nöh, Jülich	Spontaneous induction of cryptic prophages in populations of the model species <i>Corynebacterium glutamicum</i> and <i>Escherichia coli</i>
<b>Poster 18</b>	Katja Bettenbrock, Magdeburg Ilka Bischofs-Pfeifer, Heidelberg	Influence of cAMP signaling and metabolism on heterogeneous expression of the <i>lac</i> operon of <i>E. coli</i>