



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN




DEPARTMENT BIOLOGIE I
BEREICH MIKROBIOLOGIE




Review Meeting of the Priority Program SPP 1617/1
“Phenotypic Heterogeneity and Sociobiology of Bacterial Populations”
Herrsching am Ammersee, February 22nd-23rd 2012

PRELIMINARY PROGRAMM

Wednesday, February 22nd

14:00 - 14:10	K. Jung, Munich	Welcome
<i>Chair: D. Jahn</i>		
14:10 - 14:30	Frey, Munich Leisner, Munich	Heterogeneity in Colicin E2 expression of <i>Escherichia coli</i>
14:30 - 14:50	Stecher, Munich	Quantitative single-cell analysis of colicin Ib expression in <i>Salmonella enterica</i> serovar Typhimurium and its role in competition against commensal <i>E. coli</i> in the gut
14:50 - 15:10	Maier, Cologne	Phenotypic heterogeneity as a strategy for speeding up adaptive evolution at minimal cost
15:10 - 15:30	Sourjik, Heidelberg	Phenotypic heterogeneity and bet hedging in chemotaxis of <i>Escherichia coli</i>
15:30 - 15:50	Thormann, Marburg	Heterogeneity in flagella-mediated motility
15:50 - 16:10	Schmitt-Kopplin, Munich	Novel high resolving microanalytical approaches to access phenotypical heterogeneity on a molecular level
16:10 - 16:30		<i>Coffee Break</i>
<i>Chair: U. Gerland</i>		
16:30 - 16:50	Fuchs, Freising	Bistability in inositol utilization by <i>Salmonella</i>
16:50 - 17:10	Jousset, Göttingen	Pleiotropy, multitrophic interactions and the stability of cooperation
17:10 - 17:30	Frunzke, Juelich Kohlheyer, Juelich Wiechert, Juelich	Spontaneous prophage induction in a subpopulation of <i>Corynebacterium glutamicum</i> cells - Assessment of trigger and consequence
17:30 - 17:50	Bertram, Tübingen	Genetics and dynamics of staphylococcal persister cells
17:50 - 18:10		<i>Coffee Break</i>
18:10 - 18:30	López, Würzburg	Molecular Characterization of the distinct cell types required for the development of <i>Staphylococcus aureus</i> biofilms
18:30 - 18:50	Ziebuhr, Würzburg	Heterogeneous gene expression, metabolic variability and differentiation in <i>Staphylococcus epidermidis</i> biofilms
18:50 - 19:10	Heermann, Munich	Regulation of phenotypic switching and heterogeneity in <i>Photobacterium luminescens</i> cell populations
19:10 - 19:30	Bode, Frankfurt	Heterogeneity in the secondary metabolism of <i>Photobacterium</i> and <i>Xenorhabdus</i>
20:00		<i>Dinner</i>

Thursday, February 23rd

Chair: T. Mascher		
8:00 - 8:20	K. Jung, Munich	Phenotypic heterogeneity of autoinducer-regulated processes in <i>Vibrio harveyi</i>
8:20 - 8:40	Hense, Munich Kuttler, Munich Müller, Munich	Heterogeneity induced by Quorum sensing and Quorum quenching: Modelling mechanisms and evolutionary stability
8:40 - 9:00	Hartmann, Munich	Conditions inducing phenotypic heterogeneity of quorum sensing / quorum quenching related activities in the rhizosphere bacterium <i>Pseudomonas putida</i> IsoF
9:00 - 9:20	Streit, Hamburg	Determinants of phenotypic heterogeneity in the broad host range and symbiotic alpha-proteobacterium <i>Sinorhizobium</i> sp. NGR234 and its close relatives
9:20 - 9:40	Becker, Marburg Kostina, Marburg Pfäffelhuber, Freiburg	Molecular mechanisms and benefits of phenotypic heterogeneity in <i>Sinorhizobium meliloti</i> populations
9:40 - 10:00	Gerland, Munich Rädler, Munich	Optimization of sugar utilization strategies employing regulated phenotypic heterogeneity
10:00 - 10:30		Coffee Break
Chair: K. Jung		
10:30 - 10:50	Bettenbrock, Magdeburg	Bet-hedging and communication in <i>E. coli</i> ? Investigations of heterogeneous gene expression of carbohydrate uptake systems
10:50 - 11:10	Mascher, Munich	Heterogeneity of the LiaFSR-dependent stress response switch PliaI of <i>Bacillus subtilis</i>
11:10 - 11:30	Jahn, Braunschweig	Phenotypic heterogeneity during heterologous protein production in <i>Bacillus megaterium</i>
11:30 - 11:50	Frey, Munich H. Jung, Munich	Maintenance and evolution of cooperation in synthetic microbial ecosystems
11:50 - 12:10	Hilbi, Munich	Inter-kingdom communication and phenotypic heterogeneity of <i>Legionella</i> in phagocytes
12:10 - 12:30	Dersch, Braunschweig	Underlying principles of bistability in the expression of the pivotal virulence regulator RovA in <i>Yersinia pseudotuberculosis</i> and role for virulence
12:30 - 12:45	K. Jung, Munich	Final Remarks
12:45		Departure