






PROGRAM



SPP1617
Phenotypic heterogeneity
and sociobiology of
bacterial populations



Monday, March 5th 2018

12:00 – 13:00		<i>Lunch Snack & Registration</i>
13:00 – 13:10	Kirsten Jung, München Jörg Stülke, Göttingen	<i>Opening Remarks</i>
<p>Design Principles of Bacterial Phenotypic Heterogeneity <i>Chair: Jörg Stülke, Göttingen</i></p>		
13:10 – 13:40	Matthew McIntosh, Marburg	The how and why of heterogenic signal production in social populations of <i>Sinorhizobium meliloti</i> (Project Becker)
13:40 – 14:10	Ulrich Gerland, Garching/München	What can we learn from bacterial growth transitions? (Project Gerland)
14:10 – 14:40	Ilka Bischofs, Marburg	Phenotypic heterogeneity and phenotypic memory in spore revival (Project Bischofs)
14:40 – 15:30		Coffee Break
<p>Evolution of Bacterial Phenotypic Heterogeneity <i>Chair: Regine Hengge, Berlin</i></p>		
15:30 – 17:30		Poster Session
17:30 – 18:00	Fabian Commichau, Göttingen	Visualization of mutations in <i>Bacillus subtilis</i> single cells
18:00 – 18:30	Christian Kost, Osnabrück	Synergistic coevolution speeds up molecular evolution (Project Kost)
18:30 – 19:00	Matthias Lechner, München	Optimal time-distributions for toxin release by cell lysis (Project Frey)
19:00 – 20:00		<i>Dinner, Alte Mensa Göttingen</i>
20:00		<i>Get together</i>

Tuesday, March 6th 2018

Biological Significance of Bacterial Phenotypic Heterogeneity I Chair: Helge B. Bode, Frankfurt am Main		
09:00 – 09:30	Simone Eckstein, München	Phenotypic heterogeneity of <i>Photobacterium luminescens</i> - a way from insects to plants? (Project Heermann)
09:30 – 10:00	Susann Fragel, Köln	Characterization of structural features controlling activity of LeuO, a pleiotropic transcriptional regulator and H-NS antagonist (Project Schnetz)
10:00 – 10:30	Heinrich Jung, München	Heterogeneity of pyoverdine production of <i>Pseudomonas putida</i> KT2440 (Project H. Jung)
10:30 – 11:00		Conference Foto and Coffee Break
11:00 – 11:30	Max Hünnefeld, Jülich	Regulatory interactions between <i>Corynebacterium glutamicum</i> and the prophage CGP3 (Project Frunzke)
11:30 – 12:00	Anna Dragos, Jena	Division of labor during biofilm matrix production (Project Kovacs)
12:00 – 14:00		Lunch, Central Mensa
Biological Significance of Bacterial Phenotypic Heterogeneity II Chair: Ralf Heermann, München		
14:15 – 14:45	Jan Kampf, Göttingen	Selective pressure for biofilm formation in <i>Bacillus subtilis</i> : Differential effect of mutations in the master regulator SinR on bistability (Project Stülke)
14:45 – 15:15	Philipp Popp, Dresden	Physiological relevance and heterogeneity in cannibalism toxin production and the resulting stress responses of <i>Bacillus subtilis</i> (Project Mascher)
15:15 – 15:45	Kirsten Jung, München	General Discussion
15:45 – 16:15		Coffee Break/Meeting of the steering committee
16:15 – 19:00		Social Program (16.15 -17.00 Town hall, Apéro, 17.00 Guided tours)
19:00 – 21:00		Dinner, Boccadoro, Albanikirchhof 6-7 www.boccadoro-restaurant.de
21:00		Get together

Wednesday, March 7th 2018

Biological Significance of Bacterial Phenotypic Heterogeneity III <i>Chair: Wolfgang Streit, Hamburg</i>		
09:00 – 09:30	Wilma Ziebuhr, Würzburg	Heterogeneously expressed non-coding RNAs influence matrix composition in <i>Staphylococcus epidermidis</i> biofilm communities (Project Ziebuhr)
09:30 – 10:00	Cláudia Vilhena, München	A pyruvate sensing network in <i>Escherichia coli</i> and the benefits of phenotypic heterogeneity (Project K. Jung)
10:00 – 10:30	Hilke Duin, Hamburg	Identification of small molecule key regulators controlling plasmid copy number and influencing phenotypic heterogeneity in the plant symbiont <i>Sinorhizobium fredii</i> NGR234 (Project Streit)
10:30 – 11:00		<i>Coffee Break</i>
11:00 – 11:30	Regine Hengge, Berlin	Heterogeneity of matrix gene expression is crucial for micro-architecture and macro-morphology of macrocolony biofilms of <i>E. coli</i> (Project Hengge)
11:30 – 12:00	Knut Drescher, Marburg	Machine learning phases and heterogeneity during bacterial swarm development (Project Drescher)
12:00 – 12:30	Eugen Pfeiffer, Jülich	RNA-Seq of prophage induced subpopulations and the evolution of <i>Corynebacterium glutamicum</i> towards higher growth rates (Project Frunzke)
12:30 – 12:35	Kirsten Jung, München	<i>Closing Remarks</i>
12:35 – 13:00		<i>Lunch Snack & Departure</i>