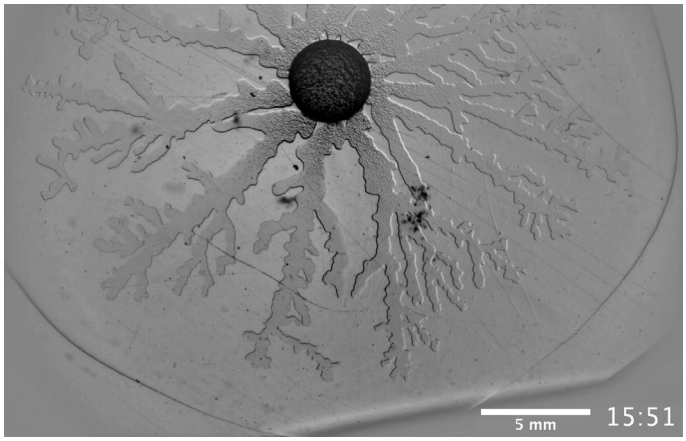
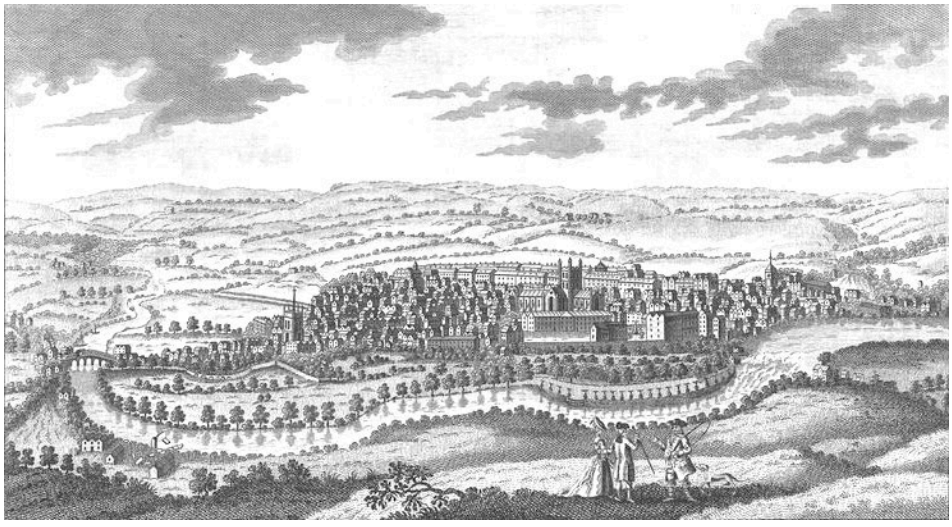
Bacell in Bath
12th – 13th June 2018



Programme



Tuesday 12th June

8:30 – 8:55 Registration - Chancellors' Building, ground floor foyer

8:55 Welcome - Chancellors' Building, room 1.12

9:00 - 10:30 Session 1 – Regulation Chancellors' Building, room 1.12

Chair David Leak

9:00 Ciarán Condon - Suppression of the essential nature of RNase M16 (YqfG), required for 3' maturation of *B. subtilis* 16S ribosomal RNA, by deletion of RNase R

9:15 Roland Hartman - Function and regulation of two 6S RNAs in *Bacillus subtilis*

9:30 Matthias Mack - A dual control mechanism synchronizes riboflavin and sulphur metabolism in *Bacillus subtilis*

9:45 Hermann Rath - A SigB-dependent antisense RNA affects osmotic induction of *opuB* expression in *Bacillus subtilis*

10:00 Laura Teichmann - Suppressor analysis illuminates the structure/function relationship of the glycine betaine synthesis repressor GbsR

10:15 Sylvain Durand - sRNA-mediated activation of gene expression by inhibition of 5'-3'exonucleolytic mRNA degradation

10:30 – 11:00 Tea and Coffee - Chancellors' Building, ground floor foyer

11:00 – 12:30 Session 2 – Cell Division Chancellors' Building, room 1.12

Chair – TBC

11:00 Henrik Strahl - *Bacillus subtilis* does not form microscopically detectable cardiolipin domains

11:15 Jeanine Rismondo - Discovery of genes required for lipoteichoic acid glycosylation predicts two distinct mechanism for wall teichoic acid glycosylation

11:30 Edward de Koning - Divisome maturation in *Bacillus subtilis* single cells

11:45 Seamus Holden - Treadmilling by FtsZ filaments drives *Bacillus subtilis* peptidoglycan synthesis and bacterial cell division

12:00 Dirk-Jan Scheffers - PBP2B PASTA domains interact with DivIB to stabilize cell division

12:15 Yongqiang Gao - Cell division in the cell wall-less bacterium *Acholeplasma laidlawii*

12:30 – 14:30 Lunch and Poster Session 1 - Chancellors' Building, ground floor foyer

14:30 – 16:00 Session 3 – Interesting Biology Chancellors' Building, room 1.12

Chair – Colin Harwood

14:30 Jörg Stülke - DNA topoisomerases in *Bacillus subtilis*: A tale on mutants and suppressors

14:45 Hannah Gaimster - Lethal depletion of essential cell envelope proteins can be rescued by slowing DNA replication in *Bacillus subtilis*

15:00 Alexandre Deloupy - Stochastic gene expression in *Bacillus subtilis*

15:15 Sabine Schneider- Development of a reporter gene system to characterise riboswitch function and to identify riboswitch modulators by high-throughput screening

15:30 Kenichi Yoshida - Rapid conjugative mobilization of a 100 kb segment of *Bacillus subtilis* chromosomal DNA is mediated by a helper plasmid with no ability for self-transfer

15:45 **Anna A. Toymentseva** - Mobilization and transfer of plasmids and chromosomal DNA mediated by optimized ICEBs1 conjugative element

16:00 – 16:30 Tea and Coffee - Chancellors' Building, ground floor foyer

16:30 – 17:30 Session 4 – Antibiotics 1 Chancellors' Building, room 1.12

Chair – Ulrike Mäder

16:30 **Carolin Kobras** - Exploring the substrate specificity of the antimicrobial peptide resistance transporter BceAB in *Bacillus subtilis*

16:45 **Luiza P. Morawska** - Preadaptation of *Bacillus subtilis* to mild osmostress contributes to increased antibiotic resistance

17:00 **Mary K. Phillips-Jones** - Characterisation of the VanA-type VanS histidine kinase involved in glycopeptide resistance in Gram-positive bacteria and its ligand interactions

17:15 **Gabriela Henriques** - Towards the understanding of the regulation of SppA by YteJ in *Bacillus subtilis*.

Free evening in Bath

Wednesday 13th June

9:00 - 10:30 Session 5 Biotechnology Session Chancellors' Building, room 1.12

Chair – Anne Breüner

9:00 **Andreas Knapp** - The spacer region in the 5´-UTR strongly affects recombinant protein production in *Bacillus subtilis*

9:15 **Alexandria Holland** - Investigating protein secretion in *Geobacillus thermoglucosidaius*

9:30 **Matthew Styles** - Engineering Parageobacillus for the Production of Terpenes: Building Better Chassis Organisms for Industrial Biotechnology

9:45 **Luca Longanesi** - γ-PGA production through Consolidated Bioprocessing in engineered *B. subtilis* lab strains

10:00 **Matteo Cavaletti** - Optimization of γ-PGA biosynthesis supported by synthetic biology and metabolic engineering strategies

10:15 **Ioannis Mougiakos** - Characterizing a thermostable Cas9 for bacterial genome editing and silencing

10:15 - 10:45 Tea and Coffee - Chancellors' Building, ground floor foyer

10:45 – 12:30 Session 6 - Sporulation and development Chancellors' Building, room 1.12

Chair – TBC

10:45 **Imrich Barák** - What we (don't) know about the asymmetric septum in *Bacillus subtilis*

11:00 **Munehiro Asally** - Quality monitoring during sporulation in *B. subtilis*

11:15 **Ilka Bischofs** - Phenotypic memory links different stages of the *B. subtilis* life cycle

11:30 **Akos Kovacs** - Cheating promotes evolution of hyper-cooperators by shifting phenotypic heterogeneity in biofilms

11:45 **Sven Halbedel** - Novel *gpsB* suppressor genes contributing to regulatory proteolysis and cell division

12:00 **Sofia Arnaouteli** - Exploring the role of pulcherrimin in *Bacillus subtilis* biofilm formation

12:15 **Karin Bjerre** - Investigating of *Bacillus subtilis* and *Bacillus amyloliquefaciens* spores and vegetative cells in fecal samples from pigs

12:30 – 14:30 Lunch and Poster Session 2 - Chancellors' Building, ground floor foyer

14:30 – 16:00 Session 7 – Antibiotics 2 Chancellors' Building, room 1.12

Chair – Kevin Devine

14:30 **Auke J. van Heel** - BAGEL4: A user-friendly web server to mine RiPPs and bacteriocins

14:45 **Amanda Y. van Tilburg** - *Bacillus subtilis* as heterologous production host for lantibiotics

15:00 **Nina Lautenschlaeger** - A novel heterologous whole-cell biosensor in *Bacillus subtilis* for the comprehensive detection of b-lactam antibiotics

15:15 **Marjorie Gibbon -** Towards understanding signalling between the bacitracin resistance transporter BceAB and histidine kinase BceS of *Bacillus subtilis*

15:30 – 16:00 Tea and Coffee - Chancellors' Building, ground floor foyer

16:00 – 17:00 Session 8 – Cereus Group Chancellors' Building, room 1.12

Chair – Cinzia Calvio

16:00 **Monika Ehling-Schulz** - *Bacillus cereus*, a multifaceted pathogen: The challenge of discriminating high and low enteropathogenic strains

16:15 **Nick Waterfield -** *Bacillus cereus* G9241 – to anthrax and back again

16:30 **Ludivine Rousset** - Oligotrophy induces phenotypic diversification of *Bacillus cereus* AH187

16:45 **Jan Maarten van Dijl** - Can *Bacillus thuringiensis* and other microorganisms isolated from chronic wounds 'pacify' *Staphylococcus aureus*?

17:00 Closing Remarks

19:00 – 23:00 Social event at The Terrace, The Roman Baths, generously supported by BACIP – to include the prize giving for best posters and talks from PhD/Postdocs.