

Conference Schedule

August 7	Monday	
1:00 – 7:00 PM	Registration, Check In	Memorial Union, Sunset Lounge
5:00 PM	Opening Reception and Buffet	Memorial Union, Sunset Lounge
6:50 PM	Introduction and Sternberg Award	Shannon Hall
7:10 PM	Keynote Address A Scientific Journey: From Bacterial Pathogenesis to Bacterial Physiology	Eduardo Groisman
Oral Session 1 8:00 – 9:30 PM	Regulation Chair: David Hendrixson	Shannon Hall
8:00 PM	Regulation of Flagellar Number, Flagellar Placement and Cell Division in <i>Campylobacter jejuni</i>	David Hendrixson
8:30 PM	Coordinate Control of Surface Attachment by Multiple Two-Component Systems in <i>Caulobacter crescentus</i>	Leila Reyes Ruiz
8:45 PM	Growth- and Stress-induced PASTA Kinase Phosphorylation in <i>Enterococcus faecalis</i>	Christopher Kristich
9:00 PM	The Nucleoid Occlusion Protein SlmA is a Direct Transcriptional Activator of Chitobiose Utilization in <i>Vibrio cholerae</i>	Catherine Klancher
9:15 PM	The <i>Pseudomonas aeruginosa</i> RhIR quorum-sensing receptor controls pathogenesis and biofilm development independently of its canonical homoserine lactone autoinducer	Sampriti Mukherjee
9:30 PM	Refreshments	Sunset Lounge/ Terrace

All events are held in Memorial Union unless otherwise noted.

August 8 Tuesday Morning		
8:00 AM – 5:00 PM	Registration	Memorial Union, Sunset Lounge
Oral Session 2 9:00AM – 12:00PM	Metabolism Chair: Shelley Copley	Shannon Hall
9:00 AM	Promiscuity, serendipity and metabolic innovation	Shelley Copley
9:30 AM	The Cytochrome c Peroxidase Allows <i>Escherichia coli</i> to Exploit Environmental H ₂ O ₂ as a Terminal Oxidant for Anaerobic Respiration	Maryam Khademian
9:45 AM	A Fundamental Lack: Balancing the Carbon-to-Magnesium Ratio of Peptide-Based Media Results in More Cell Density and Less Protein Acetylation	David Christensen
10:00 AM	Membrane remodeling in <i>Vibrio cholerae</i> EI Tor by a cyclic GMP-AMP signaling system located on a genomic island	Chris Waters
10:15 AM	Reciprocal control of translation and phosphate homeostasis during low Mg ²⁺ stress	Mauricio Pontes
10:30 AM	Coffee Break	Sunset Lounge
11:00 AM	Identification of the Lyso-Form <i>N</i> -Acyl Intramolecular Transferase in Low-GC Firmicutes	Krista Armbruster
11:15 AM	Pathways of Metabolic Electron Flow in <i>Pseudomonas aeruginosa</i> Biofilms	Yu-Cheng Lin
11:30 AM	Metabolic, Epigenetic, and Transgenerational Impact of Microbial Choline Utilization	Kymberleigh Romano
11:45 AM	Electrophoretic Fractionation of Microbiomes	Bonnie Jaskowski Huge

August 8 Tuesday Afternoon		
12:00 PM	Lunch	Sunset Lounge/ Terrace
Poster Session I 2:30 – 5:00 PM	Odd Number Poster Presentations #P100 – P337	Pyle Center
5:00 PM	Dinner	Sunset Lounge/Terrace
Oral Session 3 7:00 – 9:00 PM	Development Chair: Yves Brun	Shannon Hall
7:00 PM	Obstruction of Pilus Retraction Stimulates Bacterial Surface Sensing	Yves Brun
7:30 PM	Regulatory Mechanisms Controlling Cell Fate Segregation During the <i>Myxococcus xanthus</i> Developmental Program	Penelope Higgs
7:45 PM	Role of DNA methylation in <i>Brevundimonas subvibrioides</i> gene regulation and comparison with the <i>Caulobacter crescentus</i>	Satish Adhikari
8:00 PM	Birth and Resuscitation of (p)ppGpp Induced Persister Cells	Szabolcs Semsey
8:15 PM	Role of ATP in Regulated Intramembrane Proteolysis of Pro- σ^K by SpoIVFB during <i>Bacillus subtilis</i> sporulation	Daniel Parrell
8:30 PM	Regulated Proteolysis of an Anti-Sigma Factor by ClpCP During <i>Bacillus subtilis</i> Sporulation	Rachel Salemi
8:45 PM	Regulation of cell division during heterocyst development in <i>Anabaena</i>	Loralyn Cozy
9:00 PM	Refreshments	Sunset Lounge/ Terrace

August 9		Wednesday Morning	
8:00 AM – 5:00 PM	Registration		Memorial Union, Sunset Lounge
Oral Session 4 9:00 AM – 12:05 PM	CRISPR/Phage Chair: Kristin Parent		Shannon Hall
9:00 AM	Host recognition, genome transfer, and evolution in <i>Shigella</i> Phages		Kristin Parent
9:30 AM	Bacteriophage λ RexA Protein Promotes Prophage Induction and Cell Dormancy		Lynn Thomason
9:45 AM	Combined Effects of Cro Repression and DNA Replication Mediated Stochastic Cell-Fate Selection by Bacteriophage Lambda		Qiuyan Shao
10:00 AM	Suppressor analysis of the fusogenic lambda spanins		Jesse Cahill
10:15 AM	Recruitment of CRISPR-Cas systems by Tn7-like transposons		Joseph Peters
10:30 AM	Coffee Break		Sunset Lounge
11:00 AM	Investigating genetic (in)compatibility between temperate phages and CRISPR-Cas systems in <i>Staphylococcus aureus</i>		Gregory Goldberg
11:25 AM	Prevalence, Diversity, Impact, and Applications of CRISPR-Cas Inhibitors		April Pawluk
11:50 AM	A single competition mechanism of an enteric pathogen affects host health and longevity		Stefan Pukatzki

August 9		Wednesday Afternoon	
12:05 PM	Lunch		Sunset Lounge/ Terrace
Poster Session II 2:30 – 5:00 PM	Even Number Poster Presentations #P100 – P337		Pyle Center
5:30 PM	Dinner		Lakeshore Picnic (see map)
Oral Session 5 7:00 – 9:00 PM	Translation Chair: Ken Keiler		Shannon Hall
7:00 PM	Ribosome rescue in diverse bacteria		Ken Keiler
7:30 PM	Translation Fidelity in Single Cells and Implications for Bacterial Fitness		Jiqiang Ling
7:45 PM	Conserved GTPase LepA (Elongation Factor 4) functions in biogenesis of the 30S subunit of the 70S ribosome		Michelle Gibbs
8:00 PM	Carbonyl reduction by YmfI in <i>Bacillus subtilis</i> prevents accumulation of an inhibitory EF-P modification state		Katherine Hummels
8:15 PM	Modulating Bacterial Flagella with Small RNAs		Sahar Melamed
8:30 PM	Mechanistic insights into anti-adaptor IraP mediated regulation of RpoS proteolysis		Arti Tripathi
8:45 PM	<i>Escherichia coli</i> responds to environmental changes using enolase degradosomes		Sue Lin-Chao
9:00 PM	Refreshments		Sunset Lounge/ Terrace

August 10 Thursday Morning		
8:00 AM – 5:00 PM	Registration	Memorial Union, Sunset Lounge
Oral Session 6 9:00 AM – 12:05 PM	Cell Shape and Division Chair: Erin Goley	Shannon Hall
9:00 AM	FtsEX-mediated regulation of the final stages of cell division suggests morphogenetic plasticity on <i>Caulobacter</i>	Erin Goley
9:30 AM	Non-canonical Peptidoglycan Crosslinks are Important for Rod Shape Maintenance in Mycobacteria	Kasia Baranowski
9:45 AM	Regulatory Function for MreC and PBP2 in Controlling Cell Wall Polymerization by the Rod System in <i>Escherichia coli</i>	Patricia Rohs
10:00 AM	Structural organization and functional analysis of the FtsB FtsL hetero-tetrameric complex of the bacterial divisome	Alessandro Senes
10:15 AM	Cell Biology of Starvation: Polyphosphate granules biogenesis in <i>Pseudomonas aeruginosa</i>	Lisa Racki
10:30 AM	Coffee Break	Sunset Lounge
11:00 AM	Negative and positive regulation of FtsZ polymerization by an essential cell division protein in <i>Staphylococcus aureus</i>	Prahathees Eswara
11:15 AM	A Comprehensive Screen Identifying Connections Between Central Carbon Metabolism, Cell Growth, and Cell Size in <i>E.coli</i>	Corey Westfall
11:30 AM	Characterization of YisK, a modulator of Mbl activity and putative enzyme in <i>Bacillus subtilis</i>	Anthony Sperber
11:45 AM	Elucidating how the LptB motor drives lipopolysaccharide transport	Brent Simpson

August 10 Thursday Afternoon		
12:00 PM	Lunch	Sunset Lounge/ Terrace
Oral Session 7 2:00 – 4:00 PM	Transcription Chair: Michi Taga	Shannon Hall
2:00 PM	Auxotrophy, Biosynthesis and Crossfeeding: The ABCs of Nutrient Sharing	Michi Taga
2:30 PM	Single Amino Acid Changes in RNA Polymerase That Differentially Affect Alternative Sigma Factor Activity in <i>Bacillus subtilis</i>	Heng Zhao
2:45 PM	Genome-Wide Effects of ppGpp Binding to RNA Polymerase on Gene Expression in <i>E. coli</i>	Patricia Sanchez-Vazquez
3:00 PM	Mechanisms of Transcriptional Regulation by the Slow Growth-Specific Factor Suta in <i>Pseudomonas aeruginosa</i>	Megan Bergkessel
3:15 PM	RNA capping by non-canonical initiating nucleotides (NCINs): promoter sequence determinants for NAD ⁺ capping by bacterial RNAP, and NAD ⁺ capping by mitochondrial RNAP	Jeremy Bird
3:30 PM	Global RNA turnover and processing in <i>Bacillus subtilis</i> require the conserved Y-complex (YlbF, YmcA, and YaaT) through a direct interaction with RNase Y	Aaron DeLoughery
3:45 PM	Csps and RNase R mediate initial translation recovery after cold shock by restoring mRNA structure and degradation in <i>E. coli</i>	Yan Zhang
4:30 PM	Hatch Echols Tennis Tournament	Nielsen Tennis Courts
Poster Session III 7:00 – 9:00PM	Reception & All Posters Presentations	Pyle Center

August 11 Friday Morning		
8:00 AM – 5:00 PM	Registration	Memorial Union, Sunset Lounge
Oral Session 8 9:00 AM-12:00 PM	DNA Repair and Replication Chair: Mark Sutton	Shannon Hall
9:00 AM	Mechanisms underlying DNA polymerase switching in <i>E. coli</i>	Mark Sutton
9:30 AM	The <i>E. coli</i> RarA protein commits cells to translesion DNA synthesis	Tyler Stange
9:45 AM	The DNA Recombinase RecV Mediates Phase Variation of <i>Clostridium difficile</i> Flagella and Toxins	Brandon Anjuwon-Foster
10:00 AM	Structural Basis of Replication Fork-Specific Recognition by the PriA DNA Helicase	Tricia Windgassen
10:15 AM	Gene orientation-specific R-loop formation orchestrates bacterial stress survival and pathogenesis	Kevin Lang
10:30 AM	Coffee Break	Sunset Lounge
11:00 AM	Why is DnaA-ATP the Active Form of the Initiator Protein?	Julia Grimwade
11:15 AM	ppGpp Seems Necessary and Sufficient for Control of Bacterial DNA Synthesis Initiation	Llorenç Fernandez-Coll
11:30 AM	The stringent response inhibits replication initiation in <i>E. coli</i> by modulating origin supercoiling	James Kraemer
11:45 AM	Nucleoid-associated proteins establish heterochromatin-like regions on bacterial chromosomes	Peter Freddolino

August 11		Friday Afternoon	
12:00 PM	Lunch	Sunset Lounge/ Terrace	
Oral Session 9 2:00 – 4:00 PM	Cell Interactions Chair: Melanie Blokesch	Shannon Hall	
2:00 PM	Killing for DNA – how <i>Vibrio Cholerae</i> steals genes from its neighbors	Melanie Blokesch	
2:30 PM	ESX secretion systems mediate mycobacterial interactions	Todd Gray	
2:45 PM	Pterin-Dependent Regulation of Surface Attachment in <i>Agrobacterium tumefaciens</i>	Clay Fuqua	
3:00 PM	Metabolic remodeling during <i>Bacillus subtilis</i> biofilm development	Tippapha Pisithkul	
3:15 PM	Receptor Binding Facilitates Export of CdiA and Insertion into Target Cells	Josephine Nguyen	
3:30 PM	Mechanism of the type IV pili alignment complex in surface sensing and cyclic-di-GMP signaling	Shanice Webster	
3:45 PM	From single cells to multicellular context: How do cells manage to synchronize their movements during rippling?	Eugénie Martineau	
5:30 PM	Reception and Banquet	Union South Varsity Hall	
8:30 PM	Late Night Reception/Dessert	Union South Varsity Hall	