



# FASEB

Federation of American Societies  
for Experimental Biology

## Science Research Conferences

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### **Microbial Glycobiology**

Scottsdale, Arizona

June 17-22, 2018

Organizers:

#### **Mario Feldman**

Washington University School of Medicine, St Louis

#### **Amanda Lewis**

Department of Molecular Microbiology, Washington University School of Medicine

#### **Michael Jennings**

Institute for Glycomics

#### **Jochem Zimmer**

University of Virginia

Sunday, June 17, 2018

4:00 p.m. – 9:00 p.m.	Conference Registration	
6:00 p.m. – 7:00 p.m.	Welcome Reception	
7:00 p.m. – 8:00 p.m.	Dinner	
8:00 p.m. – 9:00 p.m.	<b><u>Keynote Speaker</u></b>  <b>The many wonders of the bacterial cell surface</b>	Chris Whitfield, University of Guelph, CA

Monday June 18, 2018

7:30 a.m. – 12:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	<b>Breakfast</b>	
9:00 a.m. – 9:30 a.m.	<p><b>Cell Surface Exposed Glycans of Bacteria and Archaea</b></p> <p>Session Chair: Mario Feldman</p> <p>Remodeling the Bacterial Cell Envelope During Growth and Differentiation</p>	David Rudner, Harvard Medical School, USA
9:30 a.m. – 10:00 a.m.	Lipopolysaccharide modification in Gram-negative bacteria during chronic infection	Miguel Valvano, Queens University, Belfast, Ireland
10:00 a.m. – 10:20 a.m.	Two short talks	
10:20 a.m. – 10:40 a.m.	<i>Coffee Break</i>	
10:40 a.m. – 11:10 a.m.	Diversity of archaeal surface structures	Sonja Albers, University of Freiburg, Germany
11:10 a.m. – 11:40 a.m.	Glycan:glycan interactions: High affinity biomolecular interactions that can mediate binding of pathogenic bacteria to host cells	Chris Day, Griffith University, Australia,
11:40 a.m. – 12:00 p.m.	Two short talks	
12:00 p.m. – 1:00 p.m.	Lunch	
1:00 p.m. – 2:00 p.m.	<b>Meet the Expert</b>	
1:00 p.m. – 4:00 p.m.	Free time	
4:00 p.m. – 6:00 p.m.	Poster Session	
6:00 p.m. – 7:00 p.m.	Dinner	
7:00 p.m. – 7:30 p.m.	<p><b>Bacterial Protein Glycosylation</b></p> <p>Session Chair: Michael Jennings</p> <p>Bacterial protein glycosylation - is this becoming the norm?</p>	Christine Szymanski, University of Georgia, USA
7:30 p.m. – 8:00 p.m.	Molecular mechanisms of N-linked protein glycosylation	Markus Aebi, ETH Zurich
8:00 p.m. – 8:20 p.m.	2 Short talks	

8:20 p.m. to 8:30 p.m.	Break	
8:30 p.m to 9:00 p.m	Bacterial protein glycosylation - the dark matter of microbiology.	Brendan Wren, London School of Hygiene and Tropical Medicine
9:00 p.m to 9:30 p.m	Posttranslational modifications of mycobacterial proteins.	John Belisle, Colorado State University, USA

Tuesday, July, 19, 2017

7:30 a.m. – 12:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	Breakfast	
9:00 a.m. – 9:30 a.m.	<p><b>Vaccines and Glyco-engineering</b></p> <p>Session Chair: Michael Kowarik</p> <p>Use of bacterial glycoproteins for diagnostics of bacterial infections.</p>	Juan Ugalde, Universidad de San Martin, Argentina
9:30 a.m. – 10:00 a.m.	Conjugate vaccines for livestock infections	Mariela Segura, Univerisity of Montreal, Canada
10:00 a.m. – 10:20 a.m.	<i>Two short talks</i>	
10:20 a.m. – 10:40 a.m.	<i>Coffee Break and *Group Photo</i>	
10:40 a.m. – 11:10 a.m.	Developing the new generation of bioconjugate vaccines	Michael Kowarik, Limmatech Inc, Switzerland,
11:10 a.m. – 11:40 a.m.	Novel strategy for production of glycoconjugate vaccines	Francesco Berti, GSK, Italy
11:40 a.m. – 12:00 p.m.	<i>Two short talks</i>	
12:00 p.m. – 1:00 p.m.	Lunch	
1:00 p.m. – 2:30 p.m.		

2:30 p.m. – 4:30 p.m.	Free time	
4:30 p.m. – 6:30 p.m.		
6:30 p.m. – 8:00 p.m.	Dinner	
	<b>Structure &amp; Function of Carbohydrate Active Enzymes</b>	
	Session Chair: Jochen Zimmer	
7:00 p.m. – 7:30 p.m.	Transport of biopolymers across biological membranes	Jochen Zimmer, University of Virginia School of Medicine, USA
7:30 p.m. – 8:00 p.m.	Mycobacterial glycosyltransferases: structures, functions, and mechanisms	Marcelo Guerin, Universidad del País Vasco, Spain
8:00 p.m. – 8:20 p.m.	Two short talks	
8:20 p.m. to 8:30 p.m.	Break	
8:30 p.m to 9:00 p.m	Structural basis for sialoglycan binding by the Streptococcus sanguinis SrpA adhesion	Tina Iverson, Vanderbilt University School of Medicine, USA
9:00 p.m to 9:30 p.m	Glycosaminoglycan polysaccharide biosynthesis and production: today and tomorrow	Paul De Angelis, University of Oklahoma, USA

Wednesday, July 20, 2017

7:30 a.m. – 9:00 a.m.	Breakfast	
	<b>Glycans in Microbial Symbiosis and Dysbiosis</b>	
	Session Chair: Nathalie Juge	
9:00 a.m. – 9:30 a.m.	Roles of bacterial sialidases in the pathogenesis of bacterial vaginosis	Amanda Lewis, Washington University School of Medicine, USA
9:30 a.m. – 10:00 a.m.	Carbohydrate-active enzymes in the human gut metagenomes	Bernard Henrissat, CNRS, France
10:00 a.m. – 10:20 a.m.	Two short talks	
10:20 a.m. – 10:40 a.m.	<i>Coffee Break</i>	

10:40 a.m. – 11:10 a.m.	Coevolution of yeast mannan digestion: an example of trans-Kingdom interactions in the human gut	David Bolam, Newcastle University
11:10 a.m. – 11:40 a.m.	Recognition and degradation of plant cell wall polysaccharides in the human gut microbiota	Elisabeth Lowe, Newcastle University, United Kingdom
11:40 a.m. – 12:00 p.m.	<i>Two short talks</i>	
12:00 p.m. – 1:00 p.m.	Lunch	
1:00 p.m. – 2:30 p.m.	Career Development workshop	
2:30 p.m. – 4:30 p.m.	Free time	
4:30 p.m. – 6:30 p.m.		
6:00 p.m. – 7:00 p.m.	Dinner	
7:00 p.m. – 7:30 p.m.	<b>Glycans in Microbial Communities and Biofilms</b> Session Chair: Tina Schaeffer Biofilm exopolysaccharides of pathogenic fungi: lessons from bacteria	Lynne Howell, University of Toronto, Canada
7:30 p.m. – 8:00 p.m.	Fungal biofilm composition and opportunities in drug discovery.	Lynette Cegelski, Stanford University, USA
8:00 p.m. – 8:20 p.m.	Two short talks	
8:20 p.m. to 8:30 p.m.	Break	
8:30 p.m to 9:00 p.m	Cyclic-di-GMP signaling in bacterial biofilm formation and stress responses	Regina Hengge, Humboldt University Berlin, Germany
9:00 p.m to 9:30 p.m	Glycobiology of oral biofilms	Tina Schaeffer, BOKU University, Austria

Thursday, July 21, 2017

7:30 a.m. – 9:00 a.m.	Breakfast	
	<b>Glycobiology of Eukaryotic Pathogens</b>	

9:00 a.m. – 9:30 a.m.	<p>Session Chair: Richard Cummings</p> <p>Extracellular carbohydrates in oomycetes.</p> <p>The Leishmania surface glycoalyx.</p> <p>Two short talks</p>	Vincent Bulone, University of Adelaide, Australia
9:30 a.m. – 10:00 a.m.		Stephen Beverley, Washington University School of Medicine, USA
10:00 a.m. – 10:20 a.m.		
10:20 a.m. – 10:40 a.m.	<i>Coffee Break</i>	
10:40 a.m. – 11:10 a.m.	<p>Helminth glycomics - glycan repertoires and host-parasite interactions.</p> <p>Parasite glycobiology and anti-parasitic strategies.</p> <p>2 short talks</p>	Cornelis Hokke, University of Leiden, Netherlands
11:10 a.m. – 11:40 a.m.		Francoise Routier, Hannover Medical School, Germany
11:40 a.m. – 12:00 p.m.		
12:00 p.m. – 1:00 p.m.	Lunch	
1:00 p.m. – 2:00 p.m.		
2:00 p.m. – 4:30 p.m.	Free time	
4:30 p.m. – 6:00 p.m.		
6:00 p.m. – 7:00 p.m.	Dinner	
	<p><b>Diverse Roles of Carbohydrates in Bacterial Pathogenesis</b></p> <p>Session Chair: Amanda Lewis</p> <p>Bacterial glycosyltransferase toxins</p> <p>Functions of translocated bacterial glycosyltransferases</p> <p>Two short talks</p> <p>Break</p> <p>Interplay between bacterial surface glycans and host immunity: implications for antimicrobial therapies.</p> <p>Glycobiology of a Superbug</p>	
7:00 p.m. – 7:30 p.m.		Klaus Aktories, University of Freiburg, Germany
7:30 p.m. – 8:00 p.m.		Phil Hardwidge, Kansas State University, USA
8:00 p.m. – 8:20 p.m.		
8:20 p.m. to 8:30 p.m.		
8:30 p.m to 9:00 p.m		Nina Van Sorge, Utrecht University, Netherlands
9:00 p.m to 9:30 p.m	Mario Feldman, Washington University School of Medicine, USA.	

Friday, July 22, 2017

7:30 a.m. – 9:00 a.m.	Breakfast and Departure Lunch boxes available.	
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**END OF CONFERENCE**

For additional information contact:  
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