




SCIENTIFIC PROGRAM

ABS= abstract number
B= poster board number
PS= poster session



Sunday, November 5, 2017		Abs #
8:00AM – 6:00PM	Registration <i>Plaza Foyer</i>	
9:00AM – 3:00PM	Satellite 3: Trainee Mentoring Program <i>Chairs: Lance Wells (CCRC, University of Georgia) and Karen Colley (University of Illinois at Chicago)</i> <i>Broadway 3/4</i>	
9:00AM – 1:00PM	Satellite 2: Glycoprotein Technologies <i>Chair: Parastoo Azadi (CCRC, University of Georgia)</i> <i>Broadway 1/2</i>	
10:00AM – 5:00PM	Satellite 1: Bioinformatics <i>Chair: Rene Ranzinger (CCRC, University of Georgia)</i> <i>Broadway 1/2</i>	
3:30PM – 5:00PM	Board of Directors Meeting <i>Broadway 3/4</i>	
5:30PM – 7:15PM	Session 1: Meyer and Kornfeld Awards Lectures <i>Pavilion Ballroom</i> <i>Chair: Karen Colley (University of Illinois at Chicago)</i>	
5:30-5:45	Conference Opening Remarks	
5:45-6:30	Karl Meyer Award Lecture <i>Jamey Marth (University of California, Santa Barbara)</i> <i>Introduced by Jeff Esko (University of California, San Diego)</i>	
6:30-7:15	Rosalind Kornfeld Award Lecture <i>Gillian Air (University of Oklahoma)</i> <i>Introduced by Christopher West (University of Georgia)</i>	
7:30PM – 9:30PM	Welcome Reception & Exhibits <i>Plaza Foyer and Atrium Ballroom</i>	
Monday, November 6, 2017		
7:30AM – 4:00PM	Registration <i>Plaza Foyer</i>	
7:30AM – 8:30AM	Continental Breakfast <i>Plaza Foyer</i>	
8:30AM – 10:00AM	Session 2: Glycans in metabolic regulation and development <i>Pavilion Ballroom</i> <i>Chair: Kelley Moremen (CCRC, University of Georgia)</i>	
8:30- 9:00	“Heparan sulfate in lipid and iron homeostasis” <i>Jeff Esko (University of California, San Diego) and Maura Poli (University of Brescia, Brescia, Italy)</i>	1
9:00-9:20	“Studying atypical dystroglycanopathies using zebrafish models” <i>Chiara Manzini (George Washington University)</i>	2
9:20-9:50	“Cell-specific regulation and roles of O-GlcNAc: key to understanding brain function” <i>Jerry Hart (Johns Hopkins) and Olof Lagerlöf (Karolinska Institute)</i>	3
9:50-9:55	<u>Poster talk (#B1)(PS1): “Structures of human O-GlcNAcase and its complexes reveal a new substrate recognition mode”</u> <i>Jiaoyang Jiang (University of Wisconsin-Madison)</i>	4
9:55-10:00	<u>Poster talk (#B2)(PS2): “Dynamic splicing of a glycosyltransferase modulates enzyme activity and secretory granule morphology”</u>	5

	<i>Leslie Revoredo (NIH/NIDCR, Developmental Glycobiology Section)</i>	
10:00AM – 10:30AM	Coffee Break <i>Plaza Foyer</i>	
10:30AM – 12:30PM	Session 3: Glycan biosynthesis and function <i>Pavilion Ballroom</i> <i>Chair: Nancy Dahms (Medical College of Wisconsin)</i>	
10:30-11:00	“Stress, glycomics, and disease-A combined perspective” <i>Stuart Haslam (Imperial College London) and Matthew Shoulders (MIT)</i>	6
11:00-11:05	Poster talk (#B22)(PS2): “Siglec-8 Is an activating receptor on human eosinophils mediating integrin-dependent adhesion, ROS generation and apoptosis” <i>Daniela J. Carroll (Northwestern University Feinberg School of Medicine)</i>	7
11:05-11:25	“Orchestration of mucin type O-glycosylation by the multiple activities of the ppGalNAc-T family of transferases” <i>Tom Gerken (Case Western Reserve University)</i>	8
11:25-11:45	“Targeting site-specific O-glycosylation for novel therapeutics” <i>Adam Linstedt (Carnegie Mellon University)</i>	9
11:45-11:50	Poster talk (#B23)(PS1): “Bone marrow macrophage galectin-3 regulates platelet production through recognition of O-glycans on megakaryocytes” <i>Melissa M. Lee-Sundlov (Blood Research Institute, BloodCenter Wisconsin and Brigham & Women's Hospital & Harvard Medical School)</i>	10
11:50-12:20	“Structural and functional perspectives on the glycan-mediated tuning of Notch activity” <i>Robert Haltiwanger (CCRC, University of Georgia) and Vincent Luca (Moffitt Cancer Center)</i>	11
12:20-12:25	Poster talk (#B24)(PS2): “C-mannosylation of thrombospondin repeats” <i>Hans Bakker (Hannover Medical School)</i>	12
12:25-12:30	Poster talk (#B69)(PS1): “Mapping sites and molecular functions of O-glycosylation” <i>Katrine T. Schjoldager (University of Copenhagen)</i>	47
12:30PM – 1:30PM	Lunch on your own	
12:30PM – 1:30PM	Glycobiology Editorial Board Meeting (<i>Invitees only</i>) <i>Broadway 3/4</i>	
1:30PM – 4:00PM	Poster Session I and Exhibits <i>Plaza Foyer and Atrium Ballroom</i> <i>Coffee break provided</i>	
3:00PM – 3:55PM	“NIH Listens, Discussion with NIH Program Staff” <i>Pamela Marino (NIH)</i> <i>Broadway 3/4</i>	
4:00PM – 5:30PM	Session 4: Glycan related diseases and disorders I <i>Pavilion Ballroom</i> <i>Chair: Susan Bellis (University of Alabama at Birmingham School of Medicine)</i>	
4:00-4:30	“Genetic and pharmacologic regulation of the oligosaccharyltransferase” <i>Reid Gilmore (University of Massachusetts Medical School) and Joe Contessa (Yale University)</i>	13
4:30-4:35	Poster talk (#B63)(PS1): “Anti-inflammatory functions of Siglec-E and Siglec-9 and alteration of their ligands in mouse airway inflammation and lung emphysema” <i>Zhou Zhu (Yale University School of Medicine)</i>	14
4:35-4:55	“Glycans and their binding proteins in ocular surface disease” <i>Pablo Argüeso (Schepens Eye Research Institute/Massachusetts Eye and Ear, Harvard)</i>	15
4:55-5:00	Poster talk (#B64)(PS2): “Regulatory functions of heparan sulfate in prostate stem/progenitor cell activities and prostatic tumorigenesis” <i>Lianchun Wang (CCRC, University of Georgia)</i>	16
5:00-5:20	“Mucin-type O-glycans in intestinal mucus barrier homeostasis and disease” <i>Lijun Xia (Oklahoma Medical Research Foundation)</i>	17

5:20-5:25	Poster talk (#B65)(PS1): 'IgA Nephropathy: An autoimmune kidney disease involving the clustered O-glycans of IgA1 as autoantigens" <i>Matthew B. Renfrow (University of Alabama at Birmingham)</i>	18
5:25-5:30	Poster talk (#B66)(PS2): "A semantic approach to Molecular Glycophenotype classification for disease diagnostics" <i>Jean-Philippe F. Gourdine (Oregon Health and Science University and Undiagnosed Diseases Network)</i>	19
5:30PM – 6:30PM	Session 5: Innovator Award Lecture <i>Kevin Campbell (Howard Hughes Medical Institute, University of Iowa)</i> <i>Introduced by Lance Wells (CCRC, University of Georgia)</i> <i>Pavilion Ballroom</i>	

Tuesday, November 7, 2017

7:30AM – 8:30AM	Continental Breakfast <i>Plaza Foyer</i>	
8:00AM – 4:00PM	Registration <i>Plaza Foyer</i>	
8:30AM – 10:00AM	Session 6: Glycolipids in health and disease <i>Pavilion Ballroom</i> <i>Chair: Anant Menon (Weill Medical College, Cornell University)</i>	
8:30-8:55	"ABC transporters as glucosyl ceramide flippases in glycosphingolipid biosynthesis" <i>Clifford Lingwood (The Hospital for Sick Children, University of Toronto)</i>	20
8:55-9:20	"Transport of lipopolysaccharides across the bacterial cell envelope" <i>Natividad Ruiz (The Ohio State University)</i>	21
9:20-9:45	"Glycolipid scramblases for protein glycosylation in the endoplasmic reticulum" <i>Anant Menon (Weill Medical College, Cornell University)</i>	22
9:45-9:55	Poster talk (#B100)(PS2): "A new hypothesis for Lec5" <i>Mark Lehrman (UT Southwestern Medical Center)</i>	23
9:55-10:00	Poster talk (#B101)(PS1): "LmeA, a periplasmic membrane-bound protein, is critical for lipomannan biosynthesis and cell envelope integrity in mycobacteria" <i>Yasu S. Morita (University of Massachusetts, Amherst)</i>	24
10:00AM – 10:30AM	Coffee Break <i>Plaza Foyer</i>	
10:30AM – 12:15PM	Session 7: Glycans in pathogenesis and infection <i>Pavilion Ballroom</i> <i>Chair: Christopher West (University of Georgia)</i>	
10:30-10:55	"Making home sweet and sturdy: Investigations into the roles of glycosylation in the cyst wall of <i>Toxoplasma gondii</i> " <i>Louis Weiss (Albert Einstein College of Medicine)</i>	25
10:55-11:10	"Elucidating glycomic contributions to <i>Toxoplasma</i> biology and virulence" <i>Christopher West (University of Georgia)</i>	26
11:10-11:15	Poster talk (#B106)(PS2): "Neoglycoproteins as biomarkers for cutaneous leishmaniasis" <i>Katja Michael (University of Texas at El Paso)</i>	27
11:15-11:20	Poster talk (#B107)(PS1): "Identifying the in vitro Arginine-GlcNAcylation targets of the NleB/SseK family of effectors" <i>Nichollas E. Scott (University of Melbourne)</i>	28
11:20-11:40	"Active roles for heparan sulfonated proteoglycans and growth factors in human papillomavirus infectious entry: A Trojan horse mechanism" <i>Michelle Ozbun (University of New Mexico)</i>	29
11:40-11:45	Poster talk (#B108)(PS2): "Changes in cell surface glycans in women with bacterial vaginosis and impact on <i>Fusobacterium</i> vaginal colonization" <i>Kavita Agarwal (Washington University in St. Louis)</i>	30
11:45-11:50	Poster talk (#B109)(PS1): "Antibody fucosylation restricts Fc gamma receptor IIIA (CD16A) N-glycan motion to reduce affinity" <i>Dan Falconer (Iowa State University)</i>	31

11:50-12:10	"Sialic acid structures and linkages - variation within animals and effects on virus interactions" <i>Colin Parrish (Cornell University College of Veterinary Medicine)</i>	32
12:10-12:15	Poster talk (#B110)(PS2): "Inhibition of O-glycan biosynthesis using hexosamine analogs" <i>Sriram Neelamegham (State University of New York Buffalo)</i>	33
12:15PM – 1:30PM	Lunch on your own	
1:30PM – 4:00PM	Poster Session II and Exhibits <i>Plaza Foyer and Atrium Ballroom</i> <i>Coffee break provided</i>	
4:00PM – 4:45PM	SFG Business Meeting (<i>open to all attendees</i>) <i>Pavilion Ballroom</i>	
4:45PM – 6:15PM	Session 8: MCP and Glycobiology Significant Achievement Award Lectures <i>Pavilion Ballroom</i> <i>Chair: Kelley Moremen (CCRC, University of Georgia)</i>	
4:45-5:30	Molecular and Cellular Proteomics Award Lecture <i>Stuart Haslam (Imperial College London)</i> <i>Introduced by Richard Cummings (Beth Israel Deaconess Medical Center, Harvard Medical School)</i>	
5:30-6:15	Glycobiology Significant Achievement Award Lecture <i>Hamed Jafar-Nejad (Baylor College of Medicine)</i> <i>Introduced by Robert Haltiwanger (CCRC, University of Georgia)</i>	
6:15PM – 7:00PM	Break	
7:00PM – 11:00PM	Banquet <i>Atrium Ballroom</i> <i>Ticket purchase required. Extra tickets for guests may be ordered.</i>	
Wednesday, November 8, 2017		
8:00AM – 8:30AM	Continental Breakfast <i>Plaza Foyer</i>	
8:30AM – 1:00PM	Registration <i>Plaza Foyer</i>	
8:30AM – 9:50AM	Session 9: Expect the unexpected from microbes <i>Pavilion Ballroom</i> <i>Chair: Christine Szymanski (CCRC, University of Georgia)</i>	
8:30-9:00	"New insights into glycoconjugate receptors for cholera toxin" <i>Jennifer Kohler (UT Southwestern Medical Center) and Ulf Yrlid (University of Gothenburg)</i>	34
9:00-9:05	Poster talk (#B145)(PS1): "Understanding influenza A specificity: An evolution of paradigms" <i>Robert J. Woods (CCRC, University of Georgia)</i>	35
9:05-9:25	"Unique features of the machinery that pathogenic and commensal microbes use to attack host glycans" <i>Alisdair Boraston (University of Victoria)</i>	36
9:25-9:30	Poster talk (#B146)(PS2): "Nascent microbiome and early metabolism are perturbed by pre- and post-natal exposure to artificial sweeteners" <i>Stephanie Olivier-Van Stichelen (NIH/NIDDK)</i>	37
9:30-9:50	"Who will win? The endless battle between campylobacters and bacteriophages in the gut" <i>Christine Szymanski (CCRC, University of Georgia)</i>	38
9:50AM – 10:15AM	Coffee Break <i>Plaza Foyer</i>	
10:15AM – 11:45AM	Session 10: Glycoengineering and glycan related therapeutics <i>Pavilion Ballroom</i> <i>Chair: Don Jarvis (University of Wyoming)</i>	
10:15-10:35	"Plant based glycan engineering for the production of therapeutic proteins" <i>Herta Steinkellner (Universität für Bodenkultur Wien)</i>	39

10:35-10:55	"Rapid mapping of glycoprotein structure-activity relationships by shotgun scanning glycomutagenesis" <i>Matthew DeLisa (Cornell University)</i>	40
10:55-11:15	"Developing anti-inflammatory drugs targeting selectins" <i>Richard Cummings (Beth Israel Deaconess Medical Center, Harvard Medical School)</i>	41
11:15-11:45	News from the NIH: Information and Q&A <i>Lawrence Tabak, Principal Deputy Director (NIH)</i>	
11:45AM – 1:00PM	Lunch on your own	
1:00PM – 2:20PM	Session 11: Glycan related diseases and disorders II <i>Pavilion Ballroom</i> <i>Chair: Stuart Haslam (Imperial College London)</i>	
1:00-1:30	"Mutations in the gene for O-GlcNAc transferase are causal for X-linked intellectual disability" <i>Lance Wells (CCRC, University of Georgia) and Charles Schwartz (Greenwood Genetic Center)</i>	42
1:30-1:50	"Aberrant glycosylation in breast cancer results in modulation of the immune micro-environment" <i>Joy Burchell (Kings College London)</i>	43
1:50-2:10	"The consequences of human ganglioside deficiency" <i>Michael Tiemeyer (CCRC, University of Georgia)</i>	44
2:10-2:20	<u>Poster talk (#B67)(PS1):</u> "A family of carbohydrate tumor antigens with a proposed common mechanism of action" <i>Fred Brewer (Albert Einstein College of Medicine)</i>	45
2:20-2:25	<u>Poster talk (#B68)(PS2):</u> "Fut2 is required for methacholine-induced airway hyperreactivity in a mouse model of allergic asthma" <i>Dorota S. Raclawska (University of Colorado Denver)</i>	46
2:25 PM – 2:40PM	Closing Remarks	