

## THURSDAY, NOVEMBER 12

8:30 am – 5:30 pm

**SATELLITE MEETING: GLYCANS IN CELL COMMUNICATION**

Annual meeting of the Consortium for Functional Glycomics Participating Investigators.

Attendance is open to all interested scientists and is free of charge.

Go to <http://glycomics.scripps.edu/PI2009.html> for program information.**Please notify Anna Crie (<mailto:annacrie@scripps.edu>) before October 9**

8:30 am – 12:30 pm

**SATELLITE SYMPOSIUM: ADVANCES IN GLYCOPROTEIN TECHNOLOGIES**

Organized by Qun Zhou, Genzyme Corp, Cambridge, MA

and Samnang Tep, Biogen Idec, Cambridge, MA, \$40

7:00 – 7:10 pm

**OPENING REMARKS**Program Chair, **Thomas N. Oeltmann***Vanderbilt University, Nashville, TN*

7:10 – 8:25 pm

**SESSION I: GLYCOBIOLOGY OF THE IMMUNE SYSTEM, *Kon Tiki Ballroom***Chair, **Karen J. Colley**, *University of Illinois, Chicago, IL*

Time

Abstract Number

|      |   |   |
|------|---|---|
| 7:10 | <b><i>Trypanosoma Cruzi</i> Subverts Host Cell Sialylation and Compromises Antigen-Specific CD8+ T Cell Responses;</b> Leonardo Freire-De-Lima <sup>1</sup> , Frederico Alisson-Silva <sup>1</sup> , Sebastião Carvalho <sup>1</sup> , Maurício Rodrigues <sup>2</sup> , George Dosreis <sup>1</sup> , Lucia Mendonça-Previato <sup>1</sup> , José Previato <sup>1</sup> , <b><u>Adriane R Todeschini</u></b> <sup>1</sup> ; <sup>1</sup> <i>Universidade Federal Do Rio De Janeiro, Rio De Janeiro, Brazil;</i> <sup>2</sup> <i>Universidade Federal De São Paulo, São Paulo, Brazil</i> ..... | 1 |
| 7:35 | <b>Innate-Like Immune Responses to Bacterial Glycolipids by Natural Killer T Cells;</b> Mitchell Kronenberg; <i>La Jolla Institute for Allergy &amp; Immunology, La Jolla, CA</i> .....   | 2 |
| 8:00 | <b>Host-Bacterial Mutualism by a Microbial Carbohydrate of a Human Gut Commensal Directs Mucosal Tolerance;</b> Sarkis Mazmanian; <i>California Inst of Technology, Pasadena, CA</i> .....  | 3 |

8:30 – 9:00 pm

**ROSALIND KORNFELD AWARD FOR LIFETIME ACHIEVEMENT IN GLYCOBIOLOGY***Kon Tiki Ballroom*

2009 Recipients

**Mary Catherine Glick**, *University of Pennsylvania, Philadelphia, PA**Introduction by Tom Scanlin*

&amp;

**Roland Schauer**, *Christian Albrechts University, Germany**Introduction by Ajit Varki*

9:00 – 10:00 pm

**WELCOME RECEPTION**, *Aviary Ballroom*

## FRIDAY, NOVEMBER 13

7:30 – 8:30 am

CONTINENTAL BREAKFAST, *Aviary Ballroom*

8:30 – 10:00 am

SESSION II: GLYCOBIOLOGY OF DISEASE, *Kon Tiki Ballroom*Chair, **Robert S. Haltiwanger**, *SUNY Stony Brook, Stony Brook, NY*

| <i>Time</i> |  | <i>Abstract Number</i> |
|-------------|--|------------------------|
| 8:30        | <b>Update on Congenital Disorders of Glycosylation</b> ; Hudson H. Freeze; <i>The Burnham Institute for Medical Research, La Jolla, CA</i> .....   | 4                      |
| 8:55        | <b>Role of Heparan Sulfate in Brain Development and Function</b> ; <u>Yu Yamaguchi</u> , Fumitoshi Irie; <i>The Burnham Institute., La Jolla, CA</i> .....   | 5                      |
| 9:20        | <b>Humanizing Mouse Sialylation Humanizes Disease Progression in the Mdx Mouse Model for Duchenne Muscular Dystrophy</b> ; Kumaran Chandrasekharan <sup>1</sup> , Jung Hae Yoon <sup>1</sup> , Ying Xu <sup>3</sup> , Sarah Devries <sup>1</sup> , Marybeth Camboni <sup>1</sup> , Paulus Janssen <sup>3</sup> , Ajit Varki <sup>2</sup> , <u>Paul Martin</u> <sup>1</sup> ; <sup>1</sup> <i>Nationwide Children's Hospital/Ohio State University, Columbus, OH</i> ; <sup>2</sup> <i>University of California San Diego, La Jolla, CA</i> ; <sup>3</sup> <i>Ohio State University College of Medicine, Columbus, OH</i> ..... | 6                      |

8:30 – 10:00 am

SESSION II: GLYCOBIOLOGY OF DISEASE, *Kon Tiki Ballroom*Chair, **Robert S. Haltiwanger**, *SUNY Stony Brook, Stony Brook, NY*

| <i>Time</i> |   | <i>Abstract Number</i>             |
|-------------|---|------------------------------------|
| 9:45        | <b>CD22 Regulates TLR Signaling in B Cells</b> ; <u>Norihito Kawasaki</u> , James Paulson; <i>The Scripps Reserach Institute, San Diego, CA</i> .....   | poster number 18 on Friday ..... 7 |
| 9:50        | <b>Pathogen Molecule-Induced Toll-Like Receptor Activation and Cell Function is Dependent on Neu1 Sialidase</b> ; <u>Schammim Ray Amith</u> <sup>1</sup> , Preethi Jayanth <sup>2</sup> , Susan Franchuk <sup>2</sup> , Sarah Siddiqui <sup>2</sup> , Volkan Seyrantepe <sup>3</sup> , Katrina Gee <sup>2</sup> , Sam Basta <sup>2</sup> , Rudi Beyaert <sup>4</sup> , Alexey Pshezhetsky <sup>3</sup> , Myron Szewczuk <sup>2</sup> ; <sup>1</sup> <i>University College Dublin, Belfield, Ireland</i> ; <sup>2</sup> <i>Queen's University, Kingston, Canada</i> ; <sup>3</sup> <i>Ste Justine Hospital, University of Montreal, Montreal, Canada</i> ; <sup>4</sup> <i>Dept. of Molecular Biomedical Research, VIB-Ghent, Ghent, Belgium</i> ..... | poster number 19 on Friday ..... 8 |
| 9:55        | <b>Complex Formation of <math>\beta</math>3GnT1 with LARGE/LARGE2 in Functional Glycosylation of <math>\alpha</math>-Dystroglycan</b> ; <u>Xingfeng Bao</u> , Minoru Fukuda; <i>Burnham Institute for Medical Research, San Diego, CA</i> .....   | poster number 51 on Friday ..... 9 |

10:00 – 10:30 am

COFFEE BREAK, *Aviary Ballroom*

## FRIDAY, NOVEMBER 13

10:30 am – 12:20 pm

SESSION III: GLYCOBIOLOGY IN DEVELOPMENT, *Kon Tiki Ballroom*Chair, **Hudson H. Freeze**, *The Burnham Institute, La Jolla, CA*

| <i>Time</i> |   | <i>Abstract Number</i> |
|-------------|---|------------------------|
| 10:30       | <b>O-Fucosylation of Thrombospondin Type 1 Repeats is Essential for Early Mouse Embryogenesis</b> ; <u>Robert S. Haltiwanger</u> <sup>2</sup> , Jianguang Du, Christina Leonhard-Melief, Deepika Vasudevan, Jean-Luc Chaubard, Bernadette C. Holdener; <i>Stony Brook University, Stony Brook, NY</i> .....   | 10                     |
| 10:55       | <b>O-linked GlcNAc Modification on EGF Domains of Notch Receptors</b> ; Tetsuya Okajima; <i>Nagoya University Graduate School of Medicine, Nagoya, Japan</i> .....  | 11                     |
| 11:20       | <b>Regulation of Notch Signaling by the Glycosyltransferase Rumi</b> ; Rodrigo Fernandez-Valdivia <sup>1</sup> , Jessica Leonardi <sup>1</sup> , Hideyuki Takeuchi <sup>2</sup> , Mario Lopez <sup>1</sup> , Yi-Dong Li <sup>1</sup> , Robert S. Haltiwanger <sup>2</sup> , <u>Hamed Jafar-Nejad</u> <sup>1</sup> ; <sup>1</sup> <i>UT Health Science Center-Houston, Houston, TX</i> ; <sup>2</sup> <i>Stony Brook University, Stony Brook, NY</i> ..... | 12                     |
| 11:45       | <b>Regulation of Multiple Signaling Pathways by Proteoglycans and O-Sulfotransferases in Cardiac Development</b> ; H. Joseph Yost; <i>University of Utah, Salt Lake City, UT</i> .....  | 13                     |
| 12:10       | <b>Matrix Disruptions, Growth and Degradation of Diastrophic Dysplasia Cartilage with Impaired Sulfation</b> ; <u>Edward Mertz</u> <sup>1</sup> , Antonio Rossi <sup>2</sup> , Marcella Facchini <sup>2</sup> , Benedetta Gualeni <sup>2</sup> , Antonella Forlino <sup>2</sup> ; <sup>1</sup> <i>NIH, Bethesda, MD</i> ; <sup>2</sup> <i>University of Pavia, Pavia, Italy</i> ..... poster number 52 on Friday .....                                    | 14                     |
| 12:15       | <b>Highly Efficient Drug Delivery Targeted to Malignant Tumors by Carbohydrate Mimicry Peptide IF7</b> ; <u>Shingo Hatakeyama</u> , Naoaki Tamura, Tomoya Akama, Minoru Fukuda, Michiko N. Fukuda; <i>The Burnham Institute, La Jolla, CA</i> ..... poster number 3 on Saturday ...   | 131                    |

1:30 – 2:15 pm

OPEN MIC SESSION: NHLBI Funding Opportunities for Glycosciences, *Kon Tiki Ballroom*Dr Rita Sarkar, Program Director, *Thrombosis & Hemostasis Branch, NHLBI*

2:00 – 4:00 pm

POSTERS AND EXHIBITS, *Aviary Ballroom & Boardroom*

## FRIDAY, NOVEMBER 13

4:00 – 5:50 pm

**SESSION IV: GLYCOBIOLOGY OF RECOGNITION:  
PROTEIN-CARBOHYDRATE INTERACTIONS, Kon Tiki Ballroom**  
Chair, **Rita Gerardy-Schahn**, *Medizinische Hochschule, Hannover, Germany*

| <i>Time</i> | <i>Abstract Number</i>   |
|-------------|--|
| 4:00        | <b>Biological Implications of the Biochemical Modification of the N-Acyl Side Chain of Hexosamines;</b> Hua Fan, Maria Kontou, Jing Hu, <u>Werner Reutter</u> ; <i>Charite Campus Benjamin Franklin, Berlin-Dahlem, Germany</i> ..... 16   |
| 4:25        | <b>Anti-Carbohydrate Antibodies of Normal Sera: Findings, Surprises and Challenges;</b> Margaret Huflejt <sup>1</sup> , <u>Nicolai V. Bovin</u> <sup>2</sup> ; <sup>1</sup> <i>NY Univ Sch Med, Dept. of Cardiothoracic Surgery, New York, NY;</i> <sup>2</sup> <i>Shemyakin Inst Bioorg Chem, Moscow, Russian Federation</i> ..... 17   |
| 4:50        | <b>Cation-Independent Mannose 6-Phosphate Receptor: A Composite of Distinct Phosphomannosyl Binding Sites;</b> <u>Nancy Dahms</u> <sup>1</sup> , Richard Bohnsack <sup>1</sup> , Xuezheng Song <sup>2</sup> , Linda Olson <sup>1</sup> , Mariko Kudo <sup>3</sup> , Russell Gotschall <sup>3</sup> , William Canfield <sup>3</sup> , Richard Cummings <sup>2</sup> , David Smith <sup>2</sup> ; <sup>1</sup> <i>Medical College of Wisconsin, Milwaukee, WI;</i> <sup>2</sup> <i>Emory University School of Medicine, Atlanta, GA;</i> <sup>3</sup> <i>Genzyme Corporation, Oklahoma City, OK</i> ..... 18 |
| 5:15        | <b>Siglec Recognition and Signaling in Immune and Inflammatory Responses;</b> Paul Crocker; <i>University of Dundee, Dundee, United Kingdom</i> ..... 19   |
| 5:40        | <b>Hyposialylation of Various Glomerulopathies and Possible Rescue by N-Acetylmannosamine;</b> <u>Marian Huizing</u> <sup>1</sup> , Justin Poling <sup>1</sup> , Carla Ciccone <sup>1</sup> , Lisa Vincent <sup>1</sup> , Tal Yardeni <sup>1</sup> , Heidi Dorward <sup>1</sup> , Daniel Darvish <sup>2</sup> , William A Gahl <sup>1</sup> ; <sup>1</sup> <i>NIH/Nhgri, Bethesda, MD;</i> <sup>2</sup> <i>Hibm Research Group, Encino, CA</i> ..... poster number 1 on Saturday ..... 20  |
| 5:45        | <b>Notch Xylosyltransferases;</b> <u>Maya Sethi</u> <sup>1</sup> , Falk F. R. Buettner <sup>1</sup> , Vadim Krylov <sup>3</sup> , Hideyuki Takeuchi <sup>2</sup> , Nikolay Nifantiev <sup>3</sup> , Robert S. Haltiwanger <sup>2</sup> , Rita Gerardy-Schahn <sup>1</sup> , Hans Bakker <sup>1</sup> ; <sup>1</sup> <i>Hannover Medical School, Hannover, Germany;</i> <sup>2</sup> <i>Stony Brook University, Stony Brook, NY;</i> <sup>3</sup> <i>Zelinsky Institute of Organic Chemistry, Moscow, Russian Federation</i> ..... poster number 27 on Saturday ..... 21                                    |

7:30 – 8:30 am

**CONTINENTAL BREAKFAST, Aviary Ballroom**

8:30 – 10:00 am

**SESSION V: PATHOGEN GLYCOBIOLOGY, Kon Tiki Ballroom**  
Chair, **Salvatore J. Turco**, *University of Kentucky, Lexington, KY*

| <i>Time</i> | <i>Abstract Number</i>  |
|-------------|---|
| 8:30        | <b>Pathogenic Helminths: Glycans and Anti-glycans in Immune Responses;</b> Richard Cummings; <i>Emory University, Atlanta, GA</i> ..... 22  |
| 8:55        | <b>Modulation of Oxygen Sensing by Cytoplasmic Glycosylation of Skp1 in Dictyostelium;</b> <u>Christopher M. West</u> , Zhuo A. Wang, Hanke Van Der Wel; <i>University of Oklahoma Health Sciences Center, Oklahoma City, OK</i> ..... 23   |
| 9:20        | <b>Microbial Glyco-Conjugates and Elicitation of Innate Immunity;</b> Antonio Molinaro; <i>Università Di Napoli Federico II, Napoli, Italy</i> ..... 24   |
| 9:45        | <b>Neuronal Expression of Mgat1 Rescues the Mgat1-Null Mutant Phenotype and Dramatically Increases Drosophila Lifespan;</b> <u>Harry Schachter</u> , Mohan Sarkar, Peter A. Leventis, Konstantin Iliadi, Gabrielle L. Boulianne; <i>The Hospital for Sick Children, Toronto, Canada</i> ..... poster number 28 on Saturday ..... 25 |

## SATURDAY, NOVEMBER 14

8:30 – 10:00 am

SESSION V: PATHOGEN GLYCOBIOLOGY, *Kon Tiki Ballroom*  
Chair, **Salvatore J. Turco**, *University of Kentucky, Lexington, KY*

| <i>Time</i> |   | <i>Abstract Number</i> |
|-------------|---|------------------------|
| 9:50        | <b>Disturbance of CMP-Sia Homeostasis Results in Breakdown of Renal Function;</b> <u>Birgit Weinhold</u> <sup>1</sup> , Melanie Oschlies <sup>1</sup> , Wiebke Schaper <sup>1</sup> , Sebastian Galuska <sup>2</sup> , Hildegard Geyer <sup>2</sup> , Rudolf Geyer <sup>2</sup> , Stefanie Gross <sup>3</sup> , Mario Schiffer <sup>4</sup> , Rita Gerardy-Schahn <sup>1</sup> , Anja Muenster-Kuehnel <sup>1</sup> ; <sup>1</sup> <i>Hannover Medical School, Cellular Chemistry, 30625 Hannover, Germany</i> ; <sup>2</sup> <i>Justus-Liebig-University Giessen, Biochemistry, 35392 Giessen, Germany</i> ; <sup>3</sup> <i>Hannover Medical School, Cellular Biology, 30625 Hannover, Germany</i> ; <sup>4</sup> <i>Hannover Medical School, Nephrology, 30625 Hannover, Germany</i> ..... poster number 54 on Saturday ..... 26 |                        |
| 9:55        | <b>Structural Insight into the Mechanism and Specificity of Mammalian Sialyltransferases;</b> Francesco Rao <sup>1</sup> , Jamie Rich <sup>1</sup> , Bojana Rakic <sup>1</sup> , Warren Wakarchuk <sup>3</sup> , Shawn Defrees <sup>2</sup> , Steve Withers <sup>1</sup> , <u>Natalie Strynadka</u> <sup>1</sup> ; <sup>1</sup> <i>Ubc, Vancouver, Canada</i> ; <sup>2</sup> <i>Neose Technologies, Philadelphia, USA</i> ; <sup>3</sup> <i>Nrc, Ottawa, Canada</i> ..... poster number 55 on Saturday ..... 27   |                        |

10:00 – 10:30 am

COFFEE BREAK, *Aviary Ballroom*

10:30 am – 12:20 pm

SESSION VI: *ASMB Guest Society Session:*  
GLYCOBIOLOGY AND THE EXTRACELLULAR MATRIX, *Kon Tiki Ballroom*  
Chair, **Jeffrey D. Esko**, *UC San Diego, La Jolla, CA*

| <i>Time</i> |   | <i>Abstract Number</i> |
|-------------|---|------------------------|
| 10:30       | <b>Proteoglycan-Mediated Transport of High Molecular Weight Cargo by Guanidinylated Glycosides;</b> Stephane Sarrazin, Beth Wilson, Ryan Burriss, Bryan Thacker, Yitzhak Tor, <u>Jeffrey D. Esko</u> ; <i>University of California, San Diego, La Jolla, CA</i> ..... 28  |                        |
| 10:55       | <b>Heparin-Protein Interactions: A Three-Dimensional Approach;</b> <u>Barbara Mulloy</u> <sup>1</sup> , Sanaullah Khan <sup>2</sup> , Stephen Perkins <sup>2</sup> , Mark Forster <sup>3</sup> ; <sup>1</sup> <i>Nibsc, Potters Bar, United Kingdom</i> ; <sup>2</sup> <i>University College London, London, United Kingdom</i> ; <sup>3</sup> <i>Syngenta, Bracknell, United Kingdom</i> ..... 29  |                        |
| 11:20       | <b>Key Proteoglycan Functions in Cancer and Angiogenesis;</b> Renato Iozzo; <i>Thomas Jefferson University, Philadelphia, PA</i> ..... 30   |                        |
| 11:45       | <b>Deciphering Mechanical and Chemical Signals in a Fibronectin Matrix;</b> Jean Schwarzbauer; <i>Princeton University, Princeton, NJ</i> ..... 31  |                        |
| 12:10       | <b>Quantitative Sugar-Binding Analysis of DC-SIGN-Related Lectins by Frontal Affinity Chromatography: Their Extended Specificities to Agalactosylated N-Glycans;</b> <u>Rikio Yabe</u> , Hiroaki Tateno, Jun Hirabayashi; <i>Aist, Tsukuba, Japan</i> ..... poster number 56 on Saturday ..... 32   |                        |
| 12:15       | <b>A Requirement for GDP-L-Fucose in <i>Leishmania</i> Inferred by Rescue of D-Arabinopyranose/L-Fucose Salvage Mutants (<i>Fkp40</i>/<i>Afkp80</i>) By Expression Of GDP-L-Fuc Synthetic Enzymes;</b> <u>Hongjie Guo</u> <sup>1</sup> , Natalia M. Novozhilova <sup>2</sup> , Giulia Bandini <sup>3</sup> , Timothy Notton <sup>1</sup> , Salvatore J. Turco <sup>2</sup> , Michael A. J. Ferguson <sup>3</sup> , Stephen M. Beverley <sup>1</sup> ; <sup>1</sup> <i>Washington University, St Louis, MO</i> ; <sup>2</sup> <i>Dept. of Biochemistry, Univ Kentucky Med. Ctr., Lexington, KY</i> ; <sup>3</sup> <i>College of Life Science, University Of Dundee, Dundee, Scotland, United Kingdom</i> ..... poster number 18 on Sunday ..... 33 |                        |
| 12:20       | <b>Zebrafish Model of CDG-Ij;</b> Ela Knapik; <i>Vanderbilt University Medical Center, Nashville, TN</i> ..... poster number 86 on Saturday ..... 15  |                        |

**SATURDAY, NOVEMBER 14**

**2:00 – 4:00 pm**  
**POSTERS AND EXHIBITS, Aviary Ballroom & Boardroom**  
**4:00 – 4:30 pm**  
**BUSINESS MEETING, Kon Tiki Ballroom**

**4:45 – 5:30 pm**  
**KARL MEYER AWARD AND LECTURE, Kon Tiki Ballroom**  
**James Paulson, The Scripps Reserach Institute, San Diego, CA**  
*Introduction by Mary O'Reilly*

**7:00 – 9:30 pm**  
**BANQUET.** Nominal fee. Extra tickets for guests may be ordered.

**SUNDAY, NOVEMBER 15**

**7:30 – 8:30 am**  
**CONTINENTAL BREAKFAST, Aviary Ballroom**

**8:30 – 10:00 am**  
**SESSION VII: GLYCOBIOLOGY AND THE NERVOUS SYSTEM, Kon Tiki Ballroom**  
 Chair, **Mark Lehrman, UT-Southwestern Medical Center, Dallas, TX**

| <i>Time</i> | <i>Abstract Number</i>  |
|-------------|---|
| 8:30        | <b>O-Man, Brain and Branches ; <u>Michael Pierce</u><sup>1</sup>, Karen Abbott<sup>1</sup>, Hua-Bei Guo<sup>1</sup>, Jae-Min Lim<sup>1</sup>, Lance Wells<sup>1</sup>, Richard Matthews<sup>2</sup>, Jin-Kyu Lee<sup>1</sup>; <sup>1</sup>CCRC, Univ. Of Georgia, Athens, GA; <sup>2</sup>Neurosciences Program, Syracuse University, Syracuse, NY.....</b> 34  |
| 8:55        | <b>The Polysialylation of the Neural Cell Adhesion Molecule; <u>Karen J Colley</u>, Deirdre Foley, Kristin Swartzentruber, Matthew Thompson; <i>University of Illinois College Of Medicine, Chicago, IL</i>.....</b> 35   |
| 9:20        | <b>Glycosylation and Dystroglycan Function in Congenital Muscular Dystrophy; <u>Kevin P. Campbell</u><sup>1</sup>, Renzhi Han<sup>1</sup>, Takako Yoshida-Moriguchi<sup>1</sup>, Erik Rader<sup>1</sup>, Motoi Kanagawa<sup>1</sup>, Stefan Kunz<sup>3</sup>, Ulrike Mayer<sup>2</sup>, Michael Oldstone<sup>3</sup>, John Faulkner<sup>4</sup>; <sup>1</sup>University of Iowa, Iowa City, IA; <sup>2</sup>University of East Anglia, Norwich, United Kingdom; <sup>3</sup>Scripps Research Institute, La Jolla, CA; <sup>4</sup>University of Michigan, Ann Arbor, MI.....</b> 36 |
| 9:45        | <b>Isolation of a Transgenic Insect Cell Line to Produce Sulfated, Terminally Galactosylated N-Glycans and Application for Influenza Subunit Vaccine Development; <u>Donald L. Jarvis</u><sup>1</sup>, Jared Aumiller<sup>1</sup>, Kyle Chitty<sup>1</sup>, Vipin Deo<sup>1</sup>, Joseph Rininger<sup>2</sup>, Richard Bowen<sup>3</sup>; <sup>1</sup>University of Wyoming, Laramie, WY; <sup>2</sup>Protein Sciences Corporation, Meriden, CT; <sup>3</sup>Colorado State University, Fort Collins, CO.....</b><br>..... poster number 19 on Sunday ..... 37                     |
| 9:50        | <b>A Combination of Sugar Analogs and Three Dimensional Growth Substrates Modulates Cancer and Embryonic Cell Behavior; <u>Pao-Lin Che</u><sup>1</sup>, Jian Du<sup>1</sup>, Elaine Tan<sup>1</sup>, Kevin Yarema<sup>1</sup>, Prabhani Atukorale<sup>2</sup>; <sup>1</sup>The Johns Hopkins University, Baltimore, MD; <sup>2</sup>Massachusetts Institute of Technology, Cambridge, MA.....</b><br>..... poster number 41 on Sunday ..... 38  |
| 9:55        | <b><math>\beta</math>3GnT1 Glycosylation is Required for Maintaining Adenylate Cyclase Signaling in Olfactory Sensory Neurons; <u>Timothy Henion</u>, Gerald Schwarting; <i>UMass Medical School, Worcester, MA</i>.....</b><br>..... poster number 46 on Sunday ..... 39   |

**10:00 – 10:30 am**  
**COFFEE BREAK, Aviary Ballroom**

## SUNDAY, NOVEMBER 15

**10:30 am – 12:20 pm**  
**SESSION VIII: CYTOPLASMIC GLYCOSYLATION, METABOLISM**  
**AND O-GLCNAC MODIFICATION, Kon Tiki Ballroom**  
 Chair, **Michael Pierce, CCRC, University of Georgia, Athens, GA**

| <i>Time</i> |  | <i>Abstract Number</i>                   |
|-------------|--|--|
| 10:30       | <b>Extensive Crosstalk between GlcNAcylation &amp; Phosphorylation: Roles in Signaling &amp; Human Disease;</b> Gerald W. Hart; <i>John Hopkins University School of Med, Baltimore, MD</i> .....  | 40                                       |
| 10:55       | <b>Roles for O-GlcNAc Glycosylation in Transcription and Neuronal Signaling;</b> Linda Hsieh-Wilson; <i>Caltech and Howard Hughes Medical Institute, Pasadena, CA</i> .....  | 41                                       |
| 11:20       | <b>Diabetic Cardiomyopathy, O-GlcNAcylation and Mitochondrial Function;</b> Wolfgang Dillmann, <i>UC San Diego, La Jolla, CA</i> .....   | 42                                       |
| 11:45       | <b>Protein O-GlcNAcylation: A Critical Regulator of the Cellular Response to Stress;</b> <u>John Chatham</u> , Luyun Zou, Laszlo Not, Boglarka Laczy, Richard Marchase; <i>University of Alabama, Birmingham, AL</i> .....   | 43                                       |
| 12:10       | <b>Evaluation of Polysialyltransferase-NCAM Interactions;</b> <u>Matt Thompson</u> , Karen Colley; <i>University of Illinois, Chicago, IL</i> .....  | poster number 47 on Sunday .... 44       |
| 12:15       | <b>A Cycle of O-GlcNAcylation Targeting the Human RNA Polymerase II CTD is Necessary for Transcription Initiation;</b> <u>Brian Lewis</u> <sup>1</sup> , Gerald Hart <sup>2</sup> , Kaoru Sakabe <sup>2</sup> ; <sup>1</sup> <i>Metabolism Branch, CCR/NCI/NIH, Bethesda, MD;</i> <sup>2</sup> <i>Johns Hopkins University School of Medicine, Baltimore, MD</i> ..... | ..... poster number 63 on Sunday .... 45 |

**2:00 – 4:00 pm**  
**POSTERS AND EXHIBITS, Aviary Ballroom & Boardroom**

**4:00 – 5:40 pm**  
**SESSION IX: GLYCAN RECOGNITION IN THE ER, Kon Tiki Ballroom**  
 Chair, **Gerald W. Hart, The Johns Hopkins School of Medicine, Baltimore, MD**

| <i>Time</i> |  | <i>Abstract Number</i> |
|-------------|--|------------------------|
| 4:00        | <b>Regulated Disposal of Lipid-Linked Oligosaccharides;</b> Mark Lehrman; <i>UT-Southwestern Medical Center, Dallas, TX</i> .....  | 46                     |
| 4:25        | <b>OS-9 and XTP3-B, the MRH Domain-Containing Lectins in Mammals are Involved in ERAD;</b> Nobuko Hosokawa; <i>Institute for Frontier Medical Sciences, Kyoto Uni, Kyoto, Japan</i> .....  | 47                     |
| 4:50        | <b>The Glycan Dependent Pathway of ER Quality Control;</b> Davis Ng; <i>National University of Singapore, Singapore</i> .....  | 48                     |
| 5:15        | <b>The Latest on Malectin - a Lectin of the Endoplasmic Reticulum;</b> Yan Liu <sup>1</sup> , Angelina S. Palma <sup>1</sup> , Wengang Chai <sup>1</sup> , Claudia Muhle-Goll <sup>2</sup> , Yukishige Ito <sup>3</sup> , <u>Ten Feizi</u> <sup>1</sup> ; <sup>1</sup> <i>Imperial College, Harrow, United Kingdom;</i> <sup>2</sup> <i>Karlsruhe Institute of Technology, Eggenstein-Leopoldshafen, Germany;</i> <sup>3</sup> <i>RIKEN Advanced Science Institute, Saitama, Japan</i> ..... | 49                     |