

International Symposium on Molecular Immunology of Complex Carbohydrates— 3

Program

July 9

Time	Moderator	Title/Speaker
8:50-9:00	Andrew H.-J. Wang Tsun-Yee Chiu	Opening Remarks
Keynote Lecture 09:10-10:00	Ming-Daw Tsai	Post-Translational Glycosylation: Challenges and Opportunities/ Chi-Huey Wong
Session 1. Biomedical Importance of Glycotopes		
Plenary lecture 1 10:30-11:10	Yuan-Chuan Lee Shin-Ichiro Nishimura	Conformational and Biological Characterization of Synthetic Mucin Glycopeptides/ Shin-Ichiro Nishimura
11:10-11:30		Development of New Methodologies for Carbohydrate Synthesis/ Shang-Cheng Hung
11:30-11:50		Application of Functionalized Nanoparticle in Protein Isolation, Detection and Targeting/ Chun-Cheng Lin
11:50-12:10		Comprehensive Analysis of Protein-Derived Glycans of Tumor Cells-Target for Clinical Diagnosis/ Kazuaki Kakehi
Session 2. Biomolecular Interactions		
Plenary lecture 2 13:50-14:30	Hay-Hooi Khoo Els JM Van Damme	Serendipity in Scientific Discoveries: Some Examples in Glycosciences/ Yuan-Chuan Lee
Plenary lecture 3 14:30-15:10		Studying the Carbohydrate Self-Recognition in Marine Sponges Using Synthetic Aggregation Factor Epitopes/ Hans Kamerling
15:10-15:30		Non-Carbohydrate Mediated Interaction of Lectins with Plant Proteins/ V.P. Bhavanandan
15:30-15:50		Novel Concepts about the Role of Lectins in the Plant Cell and their Applications / Els JM Van Damme & Willy Peumans
15:50-16:10		Recognition Factors of Applied Lectins/ Tanuja Singh
Session 3. Functions of Glycans and Glyco-enzymes (I)		
16:30-16:50	Chun-Cheng Lin Kiyoshi Furukawa	Biological Significance of Galactose on N-Glycans at Cell Surface/ Kiyoshi Furukawa
16:50-17:10		Structure and Mechanism of <i>Helicobacter pylori</i> Fucosyltransferase : Ongoing Challenges in Drug Discovery/ Chun-Cheng Lin
17:10-17:25		The α 1,3-Fucosyltransferase III, V, and VI and α 2,3-Sialyltransferase III Are Involved in the <i>Helicobacter pylori</i> -induced Sialyl-Lewis x Expression on the Gastric Epithelial Cells/ Cheng-Chan Lu
17:25-17:40		Vitreous and Subretinal Glycoconjugates in Retinal Detachment Patients/ Wei-Chi Wu

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Session 4. Functions of Glycans and Glyco-enzymes (II)		
Plenary lecture 4 08:50-09:30	Shih-Hsiung Wu Chitra Mandal	From Mass Spectrometry-Based Glycomic Analysis to Glycobiology/ Hay-Hooi Khoo
09:30-09:50		Isolation, Identification and Biological Functions of Glycolipids and Phosphoglycolipids from Indigenous Thermophilic Bacteria/ Shih-Hsiung Wu
09:50-10:10		A Unique Endo- β -Galactosidase that Cleaves both Blood Group A and B Glycotopes/ Su-Chen Li
10:10-10:25		Novelties in N-linked Glycans of Ancient Protozoan Parasites/ Kuo-Yuan Hwa

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Plenary lecture 5 10:45-11:10	Shih-Hsiung Wu Chitra Mandal	The Role of O-Acetylated Sialic Acids in Innate and Acquired Immunity/ Roland Schauer
11:10-11:30		Ganglioside GD1a Suppression of Metastatic Properties of FBJ-cells: Regulation of Caveolin-1, Stim1 and Metalloproteinase-9 Expression by Ganglioside GD1a / Tatsuya Yamagata
11:30-11:50		9-O-Acetylated GD3 in Lymphoid and Erythroid Cells/ Chitra Mandal
Special Session		
11:50-12:05	Yuan-Chuan Lee	Mechanism of Human Occurrence of KDN and its Elevated Expression in Certain Cancer Cells/ Sadako Inoue
12:05-12:35		My 30 Years Devotion to N-Linked Oligosaccharide Structure Analysis/ Noriko Takahashi
Session 5. Sialic Acids, Lipopolysaccharides, Vaccine and Viral Agglutinins		
Plenary lecture 6 13:30-14:10	Roland Schauer James C. Richards	Receptor Binding Specificity of H5N1 Highly Pathogenic Avian Influenza Viruses – Detecion of the Initial Molecular Signals for next Influenza Pandemic / Yasuo Suzuki
14:10-14:30		Polysialic Acid Bioengineering of Cancer and Neuronal Cells by N-acyl Sialic Acid Precursor Treatment/ H. Jennings
14:30-14:50		Towards an LPS-Based Vaccines to Protect against Meningococcal Disease/ James C. Richards
14:50-15:10		Molecular Mechanism on the Interactions of Flaviviruses with Host Cells/ Kazuya Hidari

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Session 6. Adhesion Molecules/ Microbial, Plant and Animal Lectins (I)		
Plenary lecture 7 09:00-09:40	Reiji Kannagi Pamela Stanley	Functional Roles of Carbohydrate Determinants in Cancer Progression/ Reiji Kannagi
Plenary lecture 8 09:40-10:10		Roles of N- and O-Glycans in Development and Notch Signaling/ Pamela Stanley
10:10-10:30		Vascular Adhesion of Colon Carcinoma Cells: Roles of CD44v and Alternative Sialofucosylated Selectin Ligands/ Konstantinos Konstantopoulos
Session 7. Adhesion Molecules/ Microbial, Plant and Animal Lectins (II)		
Plenary lecture 9 10:50-11:20	Nan-Chi A. Chang Fu-Tong Liu	Galectins in Regulation of Apoptosis/ Fu-Tong Liu
11:20-11:40		The Five Bacterial Lectins: PA-II, PA-III, RSL, RS-III and CV-III Interactions with Diverse Animal Cells and Glycoproteins/ Nechama Gilboa-Garber
11:40-12:00		Interaction and Biological Activities of Different Glycosylated Isoforms of Mistletoe Lectins with Lectin Targets and Antibodies/ Uwe Pfüller
12:00-12:20		Molecular Characterization of A Novel Mammalian Lectin Ym1/ Nan-Chi A. Chang

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Session 8. Functions of Glycans and Glyco-enzymes (III)		
Plenary lecture 10 09:00-09:40	Wei-Chieh Cheng Dipak K. Banerjee	The N-Linked Sugar Chains of Immunoglobulin G: Their Unique Pattern and their Functional Roles/ Akira Kobata
09:40-10:00		Enzymes that Synthesize Mucin Glycan Branch Structures/ Pi-Wan Cheng
10:00-10:20		Mannosylphospho Dolichol Synthase and its Role in Angiogenesis/ Dipak K. Banerjee
Session 9. Roles of Glycosphingolipids and Glycan		
10:40-11:00	Subhash C. Basu Alessandro Prinetti	Role of Gangliosides and of Plasma Membrane Associated Sialidase in the Process of Cell Membrane Organization/ Sandro Sonnino

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11:00-11:20	Subhash C. Basu Alessandro Prinetti	Aberrant Glycosphingolipid Expression and Membrane Organization in Tumor Cells: Consequences on Tumor-Host Interactions / Alessandro Prinetti
11:20-11:40		Regulation of Glycolipid Glycosyltransferases in Apoptotic Breast Carcinoma Cells / Subhash C. Basu
11:40-11:55		On the Differential Sialic Acid Specificity of Lectins from Different Parts of <i>Saraca indica</i> / B. P. Chatterjee
11:55-12:10		Profiling of Polysaccharides by Recombinant Innate Immunity Receptor.Fc Fusion Proteins / Shie-Liang Hsieh
12:10-12:25		Role of Glycoproteins on Spontaneous Tolerance in Rat Orthotopic Liver Transplantation by Functional Proteomics / Tai-Long Pan
12:25-12:40		Heparan Sulfate Modified CD44V3 Isoform Mediated MMP-7 Proteolysis Involved in Neuron Protection and Neuroblastoma Formation / Wei-Hsuan Yu
12:40-13:00		Closing Remarks and Announcements / Pamela Stanley, Akira Kobata, Hay-Hooi Khoo, Pi-Wan Cheng