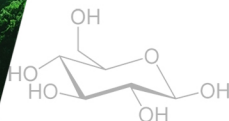
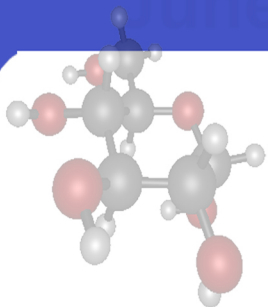


22nd International Symposium on Glycoconjugates



Dalian, China
June 23-28, 2013

PROGRAMME



中国科学院大连化学物理研究所
DALIAN INSTITUTE OF CHEMICAL PHYSICS,
CHINESE ACADEMY OF SCIENCES

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GENERAL INFORMATION

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Conference Venue

The 22nd International Symposium on Glycoconjugates, GLYCO 22, will take place from Sunday, June 23 through Friday, June 28, at Dalian Institute of Chemical Physics (DICP), Chinese Academy of Sciences.

Lectures

All plenary lectures will be presented in the Hall 1# (Convention Center 1st Floor). Invited and contributed oral presentations will be presented in parallel in Hall 2# (Biotechnology Building) and Hall 4# (No.1 Energy Source Building). Workshops will take place in the Hall 6# (Convention Center 2nd floor Room 204).

The organizer reserves the right to make program changes if necessary. No full or partial refunds are available in the event of cancellations by speakers or other changes in the main program.

Program changes will be posted on the board of service desk at the entrance of Hall 1# (Convention Center 1st Floor).

Posters

Posters will be displayed in the Arcade courtyard in two sessions (time schedule see below). The size of your poster should be **120 cm (height) × 80 cm (width) in portrait format**. Material for poster mounting will be provided.

Presenters can mount posters on Sunday, June 23rd, 2013 from 15:00; by the latest, it is requested that posters are mounted on Tuesday, June 25th, 2013 by 13:00. Presenters are asked to remove their poster on Thursday, June 27th, 2013 after the last poster session until 19:00 at the latest; otherwise the congress staff will dispose of it.

Presenting authors should be available for explanations and discussions. There will be poster prizes for all sections to be presented at the Closing Ceremony on Friday.

Poster Sessions

Poster Session I: Tuesday, June 25th, 2013 15:25 – 17:20

Poster Session II: Thursday, June 27th, 2013 15:35 – 17:00



Exhibition

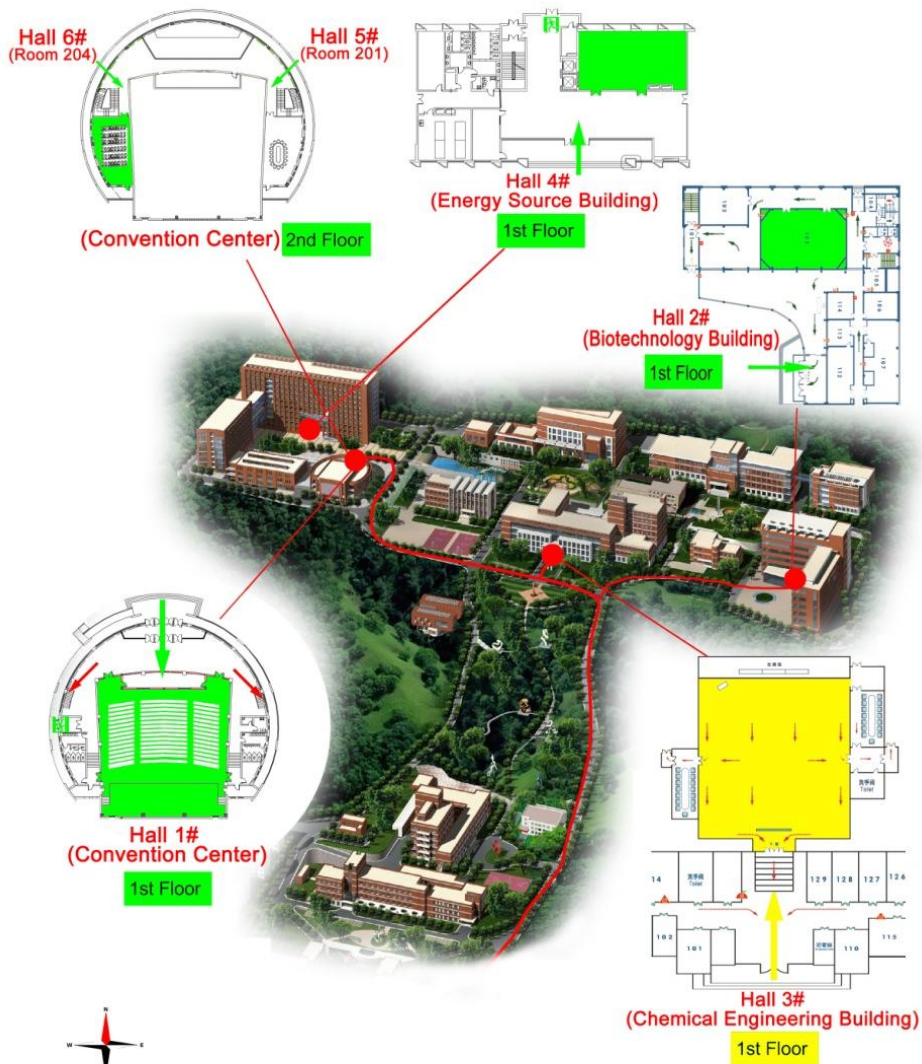
The Organizing Committee for GLYCO 22 gratefully acknowledges the generous financial support given by organizations and companies.

The Symposium exhibition is located in the main lobby of the Hall 3# (Chemical Engineering Building) and the advertisement can be found at the entrance of hall 1#, hall 2# and hall 4#.

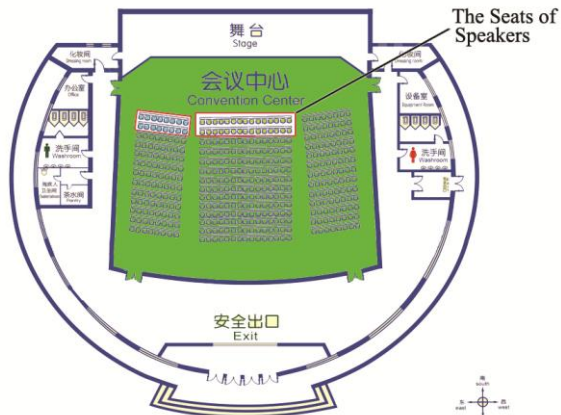
Exhibits will be displayed from Sunday, June 23rd, through Friday, June 28th.

Venue Information

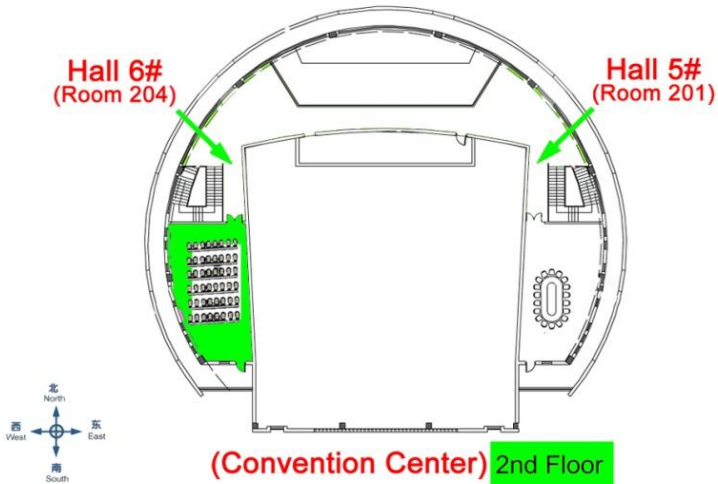
■ Oral Sessions ■ Poster Sessions and Exhibition



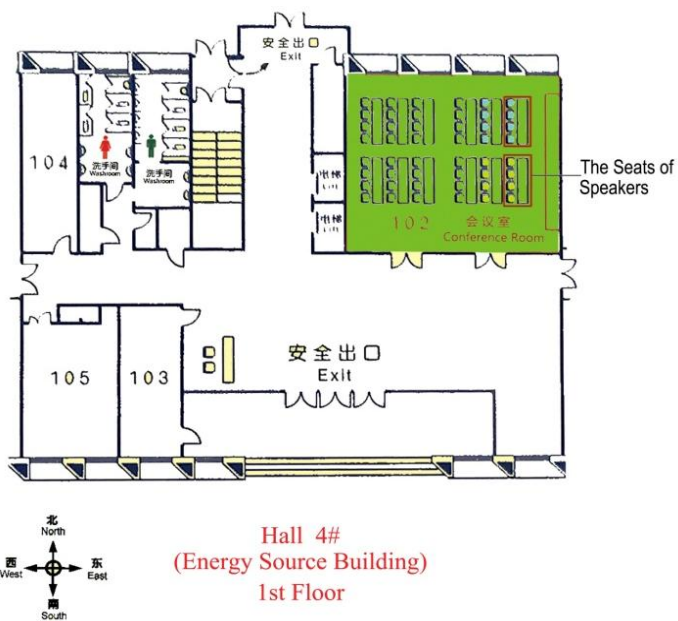
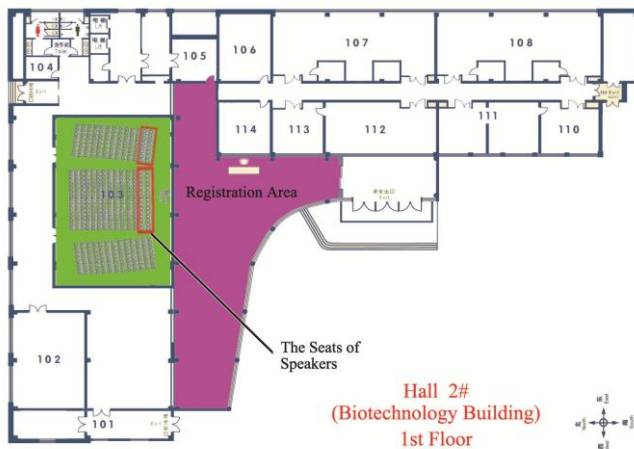
Floor Plans



Hall 1#
(Convention Center)
1st Floor



(Convention Center) 2nd Floor



Scientific Programme - Sunday, June 23, 2013

	Hall 1# (Convention Center 1st Floor)	Hall 2# (Biotechnology Building)	Hall 3# (Chemical Engineering Building)	Hall 4# (No.1 Energy Source Building)	Hall 5# (Convention Center 2nd floor) (Room 201)	Hall 6# (Convention Center 2nd floor) (Room 204)
15:00-15:40	Opening Ceremony					
15:40-16:20	IGO Award 2013 Lecture (Plenary lecture 001) <i>Kurt Drickamer</i>					
16:30-17:00	IGO Young Glycoscientist Awards Lecture 1 <i>Amanda Lewis</i>					
17:05-17:35	IGO Young Glycoscientist Awards Lecture 2 <i>Wen Yi</i>					
18:00-20:00	Welcome Reception (Bayshore Hotel Dalian)					

Scientific Programme - Monday, June 24, 2013

	Hall 1# (Convention Center 1st Floor)	Hall 2# (Biotechnology Building)	Hall 3# (Chemical Engineering Building)	Hall 4# (No.1 Energy Source Building)	Hall 5# (Convention Center 2nd floor) (Room 201)	Hall 6# (Convention Center 2nd floor) (Room 204)
09:00-09:35	Plenary lecture 002 <i>Anne Dell</i>					
09:40-10:50	Glycoproteomics I Keynote Lecture 013 <i>Ten Feizi</i> & 3 oral presentations			Biosynthesis & Metabolism of Glycoconjugates I Keynote Lecture 028 <i>Chun-Hung Lin</i> & 3 oral presentations		Workshop I Current and future glycan-related databases and informatics 4 oral presentations
10:50-11:20	Coffee Break					
11:20-12:30	Glycoproteomics II Keynote Lecture 018 <i>Nicolle H Packer</i> & 3 oral presentations			Biosynthesis & Metabolism of Glycoconjugates II Keynote Lecture 032 <i>Hans Bakker</i> & 3 oral presentations		Workshop I Current and future glycan-related databases and informatics 3 oral presentations
12:30-14:00	Lunch Break				Glycoconjugate J. Editorial Board Meeting	
14:00-14:35	Plenary lecture 003 <i>Naoyuki Taniguchi</i>					
14:40-15:50	Biosynthesis & Metabolism of Glycoconjugates III Keynote Lecture 036 <i>Sandro Sommino</i> & 3 oral presentations	GlycoproteomicsIV 3 oral presentations		Glycoproteomics III Keynote Lecture 023 <i>Haojie Lu</i> & 3 oral presentations		
15:50-16:20	Coffee Break					
16:25-17:00	Plenary lecture 004 <i>Christopher M. West</i>					
17:00-18:00	Guest Session-Society for Glycobiology (SIG) Model Systems in Glycobiology (4 oral presentations)					
18:30	Symposium Reception (Xinghai Square Exhibition Center)					

Scientific Programme - Tuesday, June 25, 2013

	Hall 1# (Convention Center 1st Floor)	Hall 2# (Biotechnology Building)	Hall 3# (Chemical Engineering Building)	Hall 4# (No.1 Energy Source Building)	Hall 5# (Convention Center 2nd floor) (Room 201)	Hall 6# (Convention Center 2nd floor) (Room 204)
09:00-09:35	Plenary lecture 005 <i>Iain B. H. Wilson</i>					
09:40-11:05	Development & Differentiation I Keynote Lecture 040 <i>Cheng Jin</i> & 4 oral presentations			Infection & Immunity I Keynote Lecture 050 <i>Gordan Lauc</i> & 3 oral presentations		
11:05-11:30	Coffee Break					
11:30-12:30	Young Glycoscientists' Symposium I 4 oral presentations	Young Glycoscientists' Symposium IV 3 oral presentations		Young Glycoscientists' Symposium II 4 oral presentations		Young Glycoscientists' Symposium III 4 oral presentations
12:30-14:00	Lunch Break					
14:00-15:25	Infection & Immunity II Keynote Lecture 055 <i>Kazuhisa Iwabuchi</i> & 3 oral presentations			Development & Differentiation II Keynote Lecture 045 <i>Minoru Fukuda</i> & 4 oral presentations		
15:25-17:20	Coffee Break	IGO Board Meeting	Poster Session I	Coffee Break		
17:25-18:00	Plenary lecture 006 <i>James C. Paulson</i>					
20:00	Night Scene Tour					

Scientific Programme - Wednesday, June 26, 2013

	Hall 1# (Convention Center 1st Floor)	Hall 2# (Biotechnology Building)	Hall 3# (Chemical Engineering Building)	Hall 4# (No.1 Energy Source Building)	Hall 5# (Convention Center 2nd floor) (Room 201)	Hall 6# (Convention Center 2nd floor) (Room 204)
09:00-09:35	Plenary lecture 007 <i>Hisashi Narimatsu</i>					
09:40-10:50	Glyco(bio)technology I Keynote Lecture 060 <i>Zhongwu Guo</i> & 3 oral presentations			Glyco(bio)technology II Keynote Lecture 067 <i>Neil E. Olszewski</i> & 3 oral presentations		
10:50-11:15	Coffee Break					
11:15-12:15	Glyco(bio)technology III 3 oral presentations			Glyco(bio)technology IV 4 oral presentations		
12:15-13:15	Lunch					
12:15	Free Afternoon					

Scientific Programme - Thursday, June 27, 2013

	Hall 1# (Convention Center 1st Floor)	Hall 2# (Biotechnology Building)	Hall 3# (Chemical Engineering Building)	Hall 4# (No.1 Energy Source Building)	Hall 5# (Convention Center 2nd floor) (Room 201)	Hall 6# (Convention Center 2nd floor) (Room 204)
09:00-09:35	Plenary lecture 008 <i>Richard D. Cummings</i>					
09:40-10:40	Carbohydrate & Disease I 4 oral presentations			Structural & Chemical Glycobiology and Glycomics I 4 oral presentations		
10:40-11:05	Coffee Break					
11:05-12:30	Carbohydrate & Disease II Keynote Lecture 074 <i>Celso A. Reis</i> & 3 oral presentations			Structural & Chemical Glycobiology and Glycomics II Keynote Lecture 089 <i>Michael Pierce</i> & 3 oral presentations		
12:30-14:00	Lunch Break					
14:00-14:35	Plenary lecture 009 <i>Biao Yu</i>					
14:35-15:35	Structural & Chemical Glycobiology and Glycomics III 4 oral presentations			Carbohydrate & Disease III 3 oral presentations		
15:35-17:00	Coffee Break		Poster Session II	Coffee Break		
17:00-18:25	Structural & Chemical Glycobiology and Glycomics IV Keynote Lecture 098 <i>Vernon Reinhold</i> & 4 oral presentations			Carbohydrate & Disease IV Keynote Lecture 081 <i>Tamao Endo</i> & 4 oral presentations		
19:30	Symposium Banquet					

Scientific Programme - Friday, June 28, 2013

	Hall 1# (Convention Center 1st Floor)	Hall 2# (Biotechnology Building)	Hall 3# (Chemical Engineering Building)	Hall 4# (No.1 Energy Source Building)	Hall 5# (Convention Center 2nd floor) (Room 201)	Hall 6# (Convention Center 2nd floor) (Room 204)
09:00-10:25	Cell Biology I Keynote Lecture 107 <i>Jin Won Cho</i> & 4 oral presentations			Physiology & Signalling 5 oral presentations		Workshop II -Proteoglycans Keynote Lecture 134 <i>J. E. Turnbull</i> & 6 oral presentations
10:25-11:20	Cell Biology II 3 oral presentations			Cell Biology III 3 oral presentations		
11:20-11:50	Coffee Break					
11:50-12:25	Plenary lecture 010 <i>Gerald W. Hart</i>					
12:25-12:40	Closing Ceremony					
12:50-14:00	Lunch					

DAILY SCIENTIFIC PROGRAMME

Sunday, June 23, 2013

15:00-15:40

Hall 1#

Opening Ceremony

15:40-17:30 Award Lectures

Hall 1#

Chair: Iain Wilson

15:40-16:20

Plenary lecture 001-A structural and genomic view of receptors for cell surface glycans

Kurt Drickamer (International Glycoconjugate Organisation Award 2013)

16:30-17:00

011-Degradation, Foraging and Depletion of Mucus Sialoglycans by the Vagina-Adapted Actinobacterium *Gardnerella vaginalis*

Amanda Lewis (The IGO Young Glycoscientist Awards 2013 supported by Genos)

17:05-17:35

012-Protein O-GlcNAcylation Regulates Cancer Metabolism and Cell Growth

Wen Yi (The IGO Young Glycoscientist Awards 2013 supported by Genos)

18:00

Bayshore Hotel Dalian

Welcome Reception

Monday, June 24, 2013

09:00-09:35

Hall 1#

Chair: James C. Paulson

Plenary lecture 002-Glycomics and glycoproteomics: Windows to glycan function

Anne Dell

09:40-10:50 **Glycoproteomics I**

Hall 1#

Chair: Michael Pierce

09:40-09:55 014-Age- and sex-associated differences in the glycopatterns of human salivary glycoproteins and their roles against influenza A virus

Yannan Qin, Yaogang Zhong, Minzhi Zhu, Liuyi Dang, Zhuo Chen, Hanjie Yu, Xiorong Wang, Hua Zhang, Zheng Li

09:55-10:10 015-Analysis of glycan and lectin arrays printed on functionalized ITO slides by Mass Spectrometry and Fluorescence

Ana Beloqui, Javier Calvo, Manuel Martin-Lomas, Niels-Christian Reichardt

10:10-10:25 016-Identification of metastasis related glycans on breast cancer cells

Shu-Min Zhou, Li Cheng, Shu-Juan Guo, Sheng-Ce Tao

10:25-10:50 Keynote Lecture 013- Oligosaccharide microarrays: past, present and future tools in glycoscience

Ten Feizi

09:45-10:55 **Biosynthesis & Metabolism of Glycoconjugates I**

Hall 4#

Chair: Dipak K. Banerjee

09:45-10:10 Keynote Lecture 028- Development of Glyco-enzyme Inhibitors

Chun-Hung Lin

- 10:10-10:25 029-Sequencing pond life in the search for CAZymes
Ellis O'Neill, Martin Trick, Bernard Henrissat, Robert A. Field
- 10:25-10:40 030-1,3/6-Linked Galactotrioses for the Identification of Arabinogalactan Biosynthetic Enzymes
Matilde Aguilar-Moncayo, Stephan Goetz, Robert A. Field
- 10:40-10:55 031-Synthesis of sialyllactose derivatives by bio-conversion
Jae Kyung Sohng

09:40-11:00 Workshop I -Current and future glycan-related databases and informatics Hall 6#

Chair: Hisashi Narimatsu

- 09:40-10:00 133-CSDB and other carbohydrate databases
Philip Toukach
- 10:00-10:20 129-UniCarbKB: Building a Glycomics Platform in the Cloud
Matthew Campbell
- 10:20-10:40 132-Enhancement of the search function in JCGGDB
Toshihide Shikanaï
- 10:40-11:00 130-MIRAGE: Minimum Information Required for A Glycomics Experiment
Rene Ranzinger

10:50-11:20 Coffee Break

11:20-12:30 Glycoproteomics II Hall 1#

Chair: Niels-Christian Reichardt

- 11:20-11:35 020-LC-MS/MS Quantification of Neu5Ac, Neu5Gc and KDN Levels in Urine and Potential Health & Disease in 3-5 Years Old Children
Yue Chen, Lili Pan, Ni Liu, Frederic A. Troy II, Bing Wang
- 11:35-11:50 021-Quantitative Glycomics Reveals specific N-glycans change of cell-secreted proteomes in Metastasis of Epithelial Ovarian Cancer
Xingwang Zhang, Yisheng Wang, Yifan Qian, Shifang Ren, Congjian Xu, Jianxin Gu
- 11:50-12:05 022-Monoclonal IgM cryoglobulins show patient specific glycosylation patterns that differ from average polyclonal human IgM
Daniel Kolarich, Pia H. Jensen, Mariel Bartley, Vicky Vallas, William Farrugia, Nicole H. Packer, Paul A. Ramsland

- 12:05-12:30** Keynote Lecture 018- Enabling glycoanalysis with informatics: discovery of glycans involved in infection
Arun Everest-Dass, Wai Yuen Cheah, Terry Nguyen-Khuong, Liisa Kautto, Robyn Petersen, Frederique Lisacek, Daniel Kolarich, Matthew P. Campbell, Nicolle H Packer

11:20-12:30 Biosynthesis & Metabolism of Glycoconjugates II Hall 4#

Chair: Sandro Sonnino

- 11:20-11:45** Keynote Lecture 032- *C. elegans* DPY-19 is a C-mannosyltransferase
Hans Bakker
- 11:45-12:00 033-*In vitro* catalytic properties of ER α -mannosidase I
Jun-ichi Aikawa, Yoichi Takeda, Ichiro Matsuo, Yukishige Ito

12:00-12:15 034-Expression regulation of glycosyltransferase gene β Gn-T8 by transcription factor c-jun in gastric cancer cell line SGC-7901
Zhi Jiang, Lan Xu, Ying-hui Zhou, Shi-liang Wu

12:15-12:30 035-Epigenetic regulation of glycosyltransferase gene expression
Yasuhiko Kizuka, Shinobu Kitazume, Naoyuki Taniguchi

11:20-12:20 Workshop I -Current and future glycan-related databases and informatics Hall 6#

Chair: Hisashi Narimatsu

11:20-11:40 128-WURCS: Unique Representation of Carbohydrate Structures for Semantic Web
Issaku Yamada

11:40-12:00 131-Informatics Tools for Glycoscience Research
Kiyoko Aoki-Kinoshita

12:00-12:20 127-Recent Efforts of Global Collaborations for Interconnecting Glycan-related Databases on the Semantic Web
Hirohichi Sawaki

12:30-14:00 Lunch break

12:30-14:00 Glycoconjugate Journal Editorial Board Meeting with Lunch Hall 5#

14:00-14:35 Plenary lecture 003-The complex interplay of "yin and yang" in branched N-glycans: from bisecting GlcNAc to core fucose Hall 1#

Chair: Sen-tiroh Hakomori

Plenary lecture 003-The complex interplay of "yin and yang" in branched N-glycans: from bisecting GlcNAc to core fucose

Naoyuki Taniguchi

14:40-15:50 Biosynthesis & Metabolism of Glycoconjugates III Hall 1#

Chair: Ken Kitajima

14:40-14:55 086-Sialin as a Therapeutic Target for Solid Tumors
Roger A Laine, Ioan Horia Negulescu

14:55-15:10 038-Inhibition of nucleotide sugar transport in Trypanosoma brucei alters surface glycosylation
Li Liu, Yu-Xin Xu, Kacey L. Caradonna, Emilia K. Kruzal, Barbara A. Burleigh, James D. Bangs, Carlos B. Hirschberg

15:10-15:25 039-POFUT1/2 Promotes Embryonic Cell Adhesion and Migration at Fetal-Maternal Interface
Shuai Liu, Xuesong Yang, Jiao Wang, Xiaoqi Wang, Qiu Yan

15:25-15:50 Keynote Lecture 036- Plasma membrane glycohydrolases and new strategies for medical diagnosis and therapeutic treatments
Sandro Sonnino, Nicoletta Loberto, Rosaria Bassi, Vanna Chigorno, Alessandro Prinetti, Massimo Aureli

14:40-15:50 Glycoproteomics III Hall 4#

Chair: Ten Feizi

14:40-15:05 Keynote Lecture 023- Mass spectrometry-based strategies for qualitative and quantitative glycoproteomics
Haojie Lu, Pengyuan Yang

- 15:05-15:20 024-Characterization of the Yeast Glycoproteome by Using Hydrophilic Affinity Enrichment Coupled to Mass Spectrometry
Long Yu, Xinmiao Liang
- 15:20-15:35 025-The GlycoFilter: A Simple and Comprehensive Sample Preparation Platform for Proteomics, N-Glycomics and Glycosylation Site Assignment
Hui Zhou, John W. Froehlich, Andrew C. Briscoe, Richard S. Lee
- 15:35-15:50 026-Selective Enrichment of N-linked Glycopeptides Using Hydrophilic Interaction Chromatography-based Materials
Xiuling Li, Bingcheng Yang, Yanyan Zhao, Xinmiao Liang

14:40-15:35 Glycoproteomics IV

Hall 2#

Chair: Nicole H. Packer

- 14:40-15:05 017-A Computational Framework for Identification and Quantification of Intact Glycopeptides in Complex Proteome Samples
Haixu Tang, Anoop Mayampurath, Chuan-yih Yu, Ehwang Song, Yehia Mechref
- 15:05-15:20 027-Glycoproteomics in the diagnosis and understanding the pathogenesis of Rheumatoid Arthritis
Ashish Saroha, Sagarika Biswas, Sarvanan Kumar, Hasi R Das, Bishnu P Chatterjee
- 15:20-15:35 A1-Positive mode LC-MS/MS of saccharide oxonium ions originating from glycopeptides for the assignment of glycan core structure
Jonas Nilsson, Adnan Halim, Ulla Rüetschi, Göran Larson

15:50-16:20 Coffee Break

**16:20-18:00 Guest Session-Society for Glycobiology
Model Systems in Glycobiology**

Hall 1#

Co-Chairs: Christopher M. West and Michael Tiemeyer

16:25-17:00

Hall 1#

Plenary lecture 004-Cytoplasmic Glycosylation Targets a Polyubiquitin Ligase to Control Oxygen Sensing in Protists

Christopher M. West, M. Osman Sheikh, Christopher M. Schafer, Hanke Van Der Wel, and Ira Blader

- 17:00-17:15 123-Pathways Regulating the Expression of N- and O-linked Glycans in Drosophila
Michael Tiemeyer, Varshika Kotu, Marion Marshall, Nickita Mehta, Mindy Porterfield, Tadahiro Kumagai, Toshihiko Katoh, Kazuhiro Aoki
- 17:15-17:30 124-Sialoglycoconjugates in Organ Development: A Study in Mouse and Zebrafish
Anja-Katharina Muenster-Kuehnel, Wiebke Schaper, Birgit Weinhold, Rita Gerardy-Schahn
- 17:30-17:45 125-Heparan sulfate Modifications in Development and Disease
Hannes E. Biflow
- 17:45-18:00 126-O-glycoprotein podoplanin initiates and maintains separated blood and lymphatic vascular systems
Lijun Xia

18:30

Xinghai Square Exhibition Center

Symposium Reception

Tuesday, June 25, 2013

09:00-09:35

Hall 1#

Chair: Hans Vliegenthart

Plenary lecture 005-Complicated N-linked glycans in simple organisms

Iain B. H. Wilson, Shi Yan, Alba Hykollari, Birgit Schiller, Dubravko Rendic, Simone Kurz, Katharina Paschinger

09:40-11:05 **Development & Differentiation I**

Hall 1#

Chair: Minoru Fukuda

- 09:40-09:55 041-Differential Targeting of the Dolichol Pathway Develops Uneven Cellular Responses
Zhenbo Zhang, Aditi Banerjee, Elena A. Carasquillo, Krishna Baksi, Dipak K. Banerjee
- 09:55-10:10 042-GPI-anchor synthesis is indispensable for the germline development of the nematode *Caenorhabditis elegans*
Daisuke Murata, Kazuko H. Nomura, Ayako Matsuda, Sayaka Akiyoshi, Katsufumi Dejima, Lance Wells, Karen L. Abbott, Nana Kawasaki, Keiko Gengyo-Ando, Eriko Kage-Nakadai, Shohei Mitani, Kazuya Nomura
- 10:10-10:25 043-Novel Marker Antibodies for Human iPS/ES Cells and their Application
Kawasaki, T., Nakao, H., Matsumoto, S., Toyoda, H., Kusuda Furue, M., Kawasaki, N.
- 10:25-10:40 044-The role of multiple exopolysaccharides in the communities of *Pseudomonas aeruginosa* and their coordinate regulation
Luyan Ma
- 10:40-11:05 Keynote Lecture 040- Transcriptome and biochemical analysis reveals that suppression of GPI-anchor synthesis leads to autophagy and necroptosis in *Aspergillus fumigatus*
Jianghong Yan, Ting Du, Wan Zhao, Cheng Jin

09:40-10:50 **Infection & Immunity I**

Hall 4#

Chair: Akira Kobata

- 09:40-10:05 Keynote Lecture 050- Genes affecting glycosylation of human IgG show pleiotropy with autoimmune diseases and haematological cancers
Gordan Lauc
- 10:05-10:20 051-Glycobiology aspects of the periodontal pathogen *Tannerella forsythia*
Gerald Posch, Andrea Koerdt, Laura Neumann, Friedrich Altmann, Paul Messner, Christina Schiffer
- 10:20-10:35 052-The Impact of Carbohydrate Microarrays in Studies of the Molecular Basis of Virus-host Interactions
Yan Liu, Angelina S. Palma, Wengang Chai, Kerstin Reiss, Ursula Neu, Luisa Stroeh, Thilo Stehle, Feizi Ten
- 10:35-10:50 053-Interaction of lectins from pathogens with bacterial surfaces visualised by fluorescence microscopy
Lenka Malinová, Lenka Adamová, Michaela Wimmerová

11:05-11:30 Coffee Break

11:30-12:30 Young Glycoscientists' Symposium I Hall 1#

Chair: *Lianli Chi*

- 11:30-11:45 141-Structural glycobiology of influenza virus receptors in respiratory tissues of humans and other animal models
Nan Jia, John M. Nicholls, Anne Dell, Stuart M. Haslam
- 11:45-12:00 142-Improved O-glycan Analysis Methods
Radoslaw P. Kozak, Louise Royle, Richard A. Gardner, Gerhild Zauner, Emanuela Lonardi, Andr e M. Deelder, Daryl L. Fernandes and Manfred Wuhrer
- 12:00-12:15 143-Quick and convenient diagnostic method for Guillain-Barr e syndrome using sugar-chain immobilized fluorescent nano-particles
Hiroyuki Shinchi, Nobuhiro Yuki, Hideharu Ishida, Koichi Hirata, Masahiro Wakao, Yasuo Suda
- 12:15-12:30 144-NMR analyses of conformational dynamics and interactions of oligosaccharides by employing paramagnetic probes
Ying Zhang, Takumi Yamaguchi, Sayoko Yamamoto, Yoshinori Uekusa, Maho Yagi-Utsum, Koichi Kato

11:30-12:30 Young Glycoscientists' Symposium II Hall 4#

Chair: *Jianguo Gu*

- 11:30-11:45 148-Biological activity of the tandem-repeat type Galectin-8 is related to the length of the linker region
Myriam Friedel, Sabine Andr e, Hans-Joachim Gabius, Reinhard Schwartz-Albiez
- 11:45-12:00 149-GD1a activates MAPK pathway via calcium signaling to suppress NOS2 expression in mouse osteosarcoma cells in an EGFR-independent manner
Xiao-Yan Yang, Lan Zhang, Xiao Zhang, Sadako Yamagata, Tatsuya Yamagata
- 12:00-12:15 150-Characterization of Cell Surface Glycosylation in Ovarian Cancer Leads to Identification of Dysregulation in MGAT3 and *ST6GAL-1* Gene Expression
Merrina Anugraham, Sheri Nixdorf, Francis Jacob, Viola Heinzlmann-Schwarz, Nicole H. Packer
- 12:15-12:30 151-Accumulation of β 1,6-N-acetylglucosamine-branched N-glycans Promoted PTPRT's Dimerization and Decreased its Catalytic Activity
Jingjing Qi, Na Li, Kun Fan, Liying Wang, Xiliang Zha

11:30-12:30 Young Glycoscientists' Symposium III Hall 6#

Chair: *Amanda Lewis*

- 11:30-11:45 145-Expression and characterization of the first snail-derived UDP-N-acetyl- α -D-galactosamine: polypeptide N-acetylgalactosaminyltransferase
Christopher Taus, Chantal Lucini, Takeshi Sato, Kiyoshi Furukawa, Reingard Grabherr, Erika Staudacher
- 11:45-12:00 146-Fucosylated glycan epitopes of the malaria mosquito *Anopheles gambiae*
Simone Kurz, Jonas King, Rhoel Dinglasan, Michael Tiemeyer, Iain B. H. Wilson
- 12:00-12:15 147-The Ribosome-inactivating Proteins (RIPs) from elderberry (*Sambucus nigra*) in the Battle Against Cancer??
Chenjing Shang, Mariusz Madej, Winnok De Vos, Els J.M. Van Damme

- 12:15-12:30 154-*Pseudomonas aeruginosa* changes the N-glycan profile of the sputum proteins from cystic fibrosis patients
Vignesh Venkatakrishnan, Morten Thaysen-Andersen, Helena Nevalainen, Nicolle H. Packer

11:30-12:15 Young Glycoscientists' Symposium IV

Hall 2#

Chair: *Wen Yi*

- 11:30-11:45 152-Profilng the O-GlcNAcylation of the Kinome using Kinase Microarray
Guanghui Han, Johnathan Neiswinger, Heng Zhu, Gerald W. Hart
- 11:45-12:00 155-ManLAM of virulent *Mycobacterium tuberculosis* induces IL-10-producing Breg cells
Chun-Hui Yuan, Xiao-Lei Tang, Qin Pan, Xiao-Lian Zhang
- 12:00-12:15 153-Glycomic Investigation of Neuromuscular Junction Disorders by Mass Spectrometry
Qiushi Chen, Juliane S. Müller, Steven H. Laval, Hanns Lochmüller, Stuart Haslam, Anne Dell

12:30-14:00 Lunch break

14:00-15:10 Infection & Immunity II

Hall 1#

Chair: *Gordan Lauc*

- 14:00-14:25 Keynote Lecture 055- Role of Glycolipids in Innate Immune Response
Kazuhisa Iwabuchi
- 14:25-14:40 056-Reveal the molecular basis of N-glycan core chitobiose modifications
Shi Yan, Sonia Serna, Niels-Christian Reichardt, Katharina Paschinger, Iain B. H. Wilson
- 14:40-14:55 058-The galectin CvGall from the eastern oyster (*Crassostrea virginica*) binds to blood group A oligosaccharides on the hemocyte surface
 Chiguang Feng, Anita Ghosh, Mario A. Bianchet, Barbara Giomarelli, Surekha Sridhar, Aditi Banerjee, Mohammed Amin, Lai-Xi Wang, Iain B. H. Wilson, Gerardo R. Vasta
- 14:55-15:10 054-Ficolin-2 inhibits HCV infection, while ApoE3 mediates viral immune escape
 Yinglan Zhao, Yushan Ren, Xuping Zhang, Ping Zhao, Xiao-Lian Zhang

14:00-15:25 Development & Differentiation II

Hall 4#

Chair: *Erika Staudacher*

- 14:00-14:15 046-3-O-sulfated heparan sulfate structure contributes to the differentiation of mouse embryonic stem cells by activating Fas signaling
Shoko Nishihara, Kazumi Hirano, Norihiko Sasaki, Toin H. Van Kuppevelt, Taichi Miura, Tomomi Ichimiya
- 14:15-14:30 047-The expression of chondroitin sulphate glycosaminoglycans in the development of human foetal articular cartilage
Siyuan Li, Rongliang Xue, Antony J Hayes, Caterson Bruce, Clare E. Hughes, Junling Cao
- 14:30-14:45 048-Direct interaction of FGF2 with polysialic acid regulates the cell growth, but not cell survival
 Sayaka Ono, Masaya Hane, Ken Kitajima, Chihiro Sato
- 14:45-15:00 049-Novel regulation of the intracellular Ca²⁺ by microdomain-localized GPI-anchored glycans in animal sperm
Ken Kitajima, Takeru Kanazawa, Estelle Garénaux, Waraporn Kasekarn, Kazuki Hori, Andr s D. Maturana, Hiroshi Yasue, Chihiro Sato

15:00-15:25 Keynote Lecture 045- Roles of Heparan Sulfate in Normal and Cancer Stem Cells in intestine
Minoru Fukuda

15:25-17:20 Coffee Break Hall 3#

Poster Session I

17:25-18:00 Hall 1#

Chair: Naoyuki Taniguchi

Plenary lecture 006-Targeting siglecs for modulation of immune responses

Mathew S. Macauley, Fabian Pfrengle, Christoph Rademacher, Corwin M. Nycholat, Cory D. Rillahan, Andrew J. Gale, Annette von Drygalski, James C. Paulson

20:00 Night Scene Tour

Wednesday, June 26, 2013

09:00-09:35

Hall 1#

Chair: Anne Dell

Plenary lecture 007-Large-scale identification of in vivo target proteins of glycosyltransferases by Lectin-IGOT-LC/MS, an LC/MS-based glycoproteomic approach using knock-out mouse

Hisashi Narimatsu

09:40-10:50 Glyco(bio)technology I

Hall 1#

Chair: Bishnu P Chatterjee

09:40-10:05 Keynote Lecture 060- Synthetic and biological studies of GPIs and GPI-anchored proteins

Zhongwu Guo

10:05-10:20 071-Probing Glucan Oligosaccharide Sequences by Negative-Ion Electrospray Tandem Mass Spectrometry and their Recognition by Glucan-Binding Proteins using a Designer Microarray

Angelina S. Palma, Yan Liu, Hongtao Zhang, Yibing Zhang, Barbara Mulloy, Ten Feizi, Wengang Chai

10:20-10:35 072-Exploring sugar code via macromolecular self-assembly

Guosong Chen

10:35-10:50 073-Two-step Hydrolysis for Preparing Low- and High-molecular Weight β -1,3-glucan Oligosaccharides from Curdlan

Jing Li, Li Zhu, Zhi-Yong Zheng, Xiao-Bei Zhan, Chi-Chung Lin , Hong-Tao Zhang

09:40-10:50 Glyco(bio)technology II

Hall 4#

Chair: Robert A. Field

09:40-09:55 061-Engineering of Cyclodextrin Glucanotransferase as an O-Glycosylase

Chao Li, Hee-Jeong Ahn, Jin-Hyo Kim, Young-Wan Kim

09:55-10:10

062-Biotransformation of Ginseng Pectin and Its Application in Structure-activity Relationship Study

Yifa Zhou, Di Wu, Lin Sun

10:10-10:25 063-Characterization of The Anti-HIV-1 Mechanism of a Pseudoproteoglycan Produced by Conjugating Unsulfated Dextran with Poly-L-lysine

Haruko Ogawa, Fumie Kano, Takahiro Otsuki, Hiroo Hoshino, Kosuke Nakamura, Haruyo Mori, Hiromi Sakagami

10:25-10:50

Keynote Lecture 067- N-GlcNAc And O-GlcNAc Modification Of Plant Proteins: Origin and Function

Neil E. Olszewski

10:50-11:15 Coffee Break

11:15-12:00 Glyco(bio)technology III

Hall 1#

Chair: Wengang Chai

11:15-11:30 064-A novel approach to studying the protein-carbohydrate interactions employing cancer cells grown on a QCM biosensor surface

Xueming Li, Yuxin Pei, Teodor Aastrup, Zhichao Pei

11:30-11:45 065-Structure-Function Studies on Glycosyltransferases:

Design of Novel Glycosyltransferases for the Site-Specific Conjugation of Biomolecules

Pradman Qasba, Boopathy Ramakrishnan and Natalia Mercer

11:45-12:00 066-High-throughput screening for discovering glycosidase from metagenomic libraries using droplet-based microfluidics
Xiaohui Wang, Runtao Zhong, Bingcheng Lin, Yuguang Du

11:15-12:15 Glyco(bio)technology IV

Hall 4#

Chair: Neil Olszewski

11:15-11:30 068-Marine oligosaccharides production and application in plant protection
Heng Yin, Xiaoming Zhao, Yuguang Du

11:30-11:45 069-The mitogenic and antioxidant properties of *Andrias davidianus* glycopeptides
Li Wei, Min Qu, Changqing Tong, Qiao Jin, Wenli Wang, Xinying Yu, Lukyanov Pavel

11:45-12:00 070-Chitosan Oligosaccharides: A New Feed Additive
Qingsong Xu, Yuguang Du

12:00-12:15 A3-Carbohydrate-based Marine Drug study
Guangli Yu

12:15-13:00

Lunch break

12:15

Free afternoon

Thursday, June 27, 2013

09:00-09:35

Hall 1#

Chair: *Gerald W. Hart*

Plenary lecture 008-Roles of O-glycans in Cellular Interactions and Cancer

Richard D. Cummings, Yingchun Wang, Xiaokun Ding, Sean Stowell, Tongzhong Ju

09:40-10:40 **Carbohydrate & Disease I**

Hall 1#

Chair: *Tamao Endo*

09:40-09:55 075-The modification of aggrecan sulphation in articular cartilage from KBD children
Mingxiu Luo, Jinghong Chen, Siyuan Li, Clare E Hughes, Bruce Caterson, Junling Cao

09:55-10:10 076-Developmental process and tumor progression are mediated by carbohydrate to carbohydrate interaction
Sen-itiroh Hakomori, Kazuko Handa

10:10-10:25 077-Gene regulations during apoptotic induction in metastatic breast cancer and in embryonic brain cells
Subhash Basu, Manju Basu and Rui Ma

10:25-10:40 088-Another method of controlling Glc assimilation at high α -amylase concentrations in intestine through N-glycan-specific interactions
K. Date, N. Kawasaki, N. Hashii, H Sakagami I, H.Ogawa

09:40-10:40 **Structural & Chemical Glycobiology and Glycomics I**

Hall 4#

Chair: *Yoshiki Yamaguchi*

09:40-09:55 090-Mapping the glycome of Erythropoietin
Sureyya Ozcan, Myung Jin Oh, Rudolf Grimm, Hyun Joo An

09:55-10:10 091-Glycomics analysis using solid-phase glycan extraction on chip and chipLC-MS
Shuang Yang, Yan Li, Hanching Chiu, Shadi Toghi Eshghi, Don L. DeVoe, Hui Zhang

10:10-10:25 092-Whole-Body Imaging of Glycan-Dependence on Tumor Metastasis
Katsunori Tanaka, Kenta Moriwaki, Eiji Miyoshi, Koichi Fukase

10:25-10:40 093-Human serum N-glycome: milestone to the Human Glycome Atlas
Chanyoung Han, Hyun-Joo An, Carlito Lebrilla, Jeahan Kim

10:40-11:05 **Coffee Break**

11:05-12:15 **Carbohydrate & Disease II**

Hall 1#

Chair: *Tadashi Suzuki*

11:05-11:30 Keynote Lecture 074- Alterations of glycosylation in gastric carcinogenesis
Celso A. Reis

11:30-11:45 078-Galectin-binding fine specificities, from small saccharides to glycoproteins --mechanisms, evolution, functions and medical use
Michael Carlsson, Barbro Kahl-Knutson, Ulf Ryde, Derek Logan, Mikael Akke, Ulf J Nilsson, Hakon Leffler

11:45-12:00 120-The mechanism underlying uptake of polysaccharides via Clathrin / Dynamin / Eps15 and Rab5 dependent pathway
Wenfeng Liao, Dianxiu Cao, Ying Wang, Kan Ding

12:00-12:15 080-Roles of sialidase in cancer initiation and progression
Taeko Miyagi, Kohta Takahashi, Masahiro Hosono, Koji Yamamoto, Kazuo Nitta

11:05-12:15 Structural & Chemical Glycobiology and Glycomics II Hall 4#

Chair: *Zhongwu Guo*

- 11:05-11:20 094-Endowing Metabolic Glycan Labeling with Specificity
Wei Lin, Ran Xie, Senlian Hong, Jie Rong, Xing Chen
- 11:20-11:35 095-A Novel Membrane Electrophoresis Compatible with Glycoconjugate Analysis
Weijie Dong, Yu-ki Matsuno, Akihiko Kameyama
- 11:35-11:50 097-Donor substrate specificity provides insights into sugar donor-OGT recognition and discriminatory proteomic substrate analysis of sOGT and ncOGT
Hui Yan, Xiaofeng Ma, Xiaoyan Liu, Feng Zhou, Yuqiu Wang, Lianwen Zhang

11:50-12:15 Keynote Lecture 089- Glycomics technologies identify stem cell and cancer biomarkers
Michael Pierce, Samuel Dolezal, Hua-bei Guo, Jin-Kyu Lee, Michael Tiemeyer, Lance Wells, Karen Abbott

12:15-14:00 Lunch break

14:00-14:35 Hall 1#

Chair: *Akemi Suzuki*

Plenary lecture 009-General Tactics and New Glycosylation Methods for the Assembly of Naturally Occurring Glycosides
Biao Yu

14:35-15:35 Structural & Chemical Glycobiology and Glycomics III Hall 1#

Chair: *Xing Chen*

- 14:35-14:50 099-Experimental and theoretical approaches to understand the conformational differences in isomeric glycan pairs
Yoshiki Yamaguchi, Kana Matsumoto, Kenji Hirose, Wataru Nishima, Suyong Re, Yuji Sugita
- 14:50-15:05 100-Structure of Gal/GalNAc-specific lectin from marine mussel *Crenomytilus grayanus*
Oleg V. Chernikov, Irina V. Chikalovets, Valentina I. Molchanova, Pavel A. Lukyanov
- 15:05-15:20 101-Bacterial cell wall peptidoglycan fragment library/array for investigation of their protein recognition
Yukari Fujimoto, Ning Wang, Akiyoshi Hirata, Kiyoshi Nokihara, Koichi Fukase
- 15:20-15:35 102-Structures of Pectin Related to Galectin-3 Inhibition
Guihua Tai, Xiaoge Gao, Huiting Xue, Yifa Zhou

14:45-15:30 Carbohydrate & Disease III Hall 4#

Chair: *Celso Reis*

- 14:45-15:00 082-A Rationally Designed Glycomimetic Antagonist of E, P, and L-selectins Inhibits Functional Biomarkers in Sickle Cell Disease Patients in a Phase I Clinical Trial
John T. Patton, Daniel D. Myers, Scott I. Simon, Ted Wun, Helen Thackray, John L. Magnani
- 15:00-15:15 083-Hepatitis B virus sensitizes IL-6 stimulation and confers sorafenib resistance via N-glycosylation-mediated gp130 membrane retention in hepatocellular carcinoma
Jiejie Xu, Haiou Liu, Jianxin Gu

15:15-15:30 084-Serum glycome profiling - a biomarker for diagnosis of ovarian cancer
Karina Biskup, Elena I. Braicu, Jalid Sehouli, Christina Fotopoulou, Rudolf Tauber, Markus Berger, Véronique Blanchard

15:35-17:00 Coffee Break

Hall 3#

15:35-17:00

Hall 3#

Poster Session II

17:00-18:25 Structural & Chemical Glycobiology and Glycomics IV

Hall 1#

Chair: Biao Yu

17:00-17:25 Keynote Lecture 098- The Structural Epitopes of Glycomic Function
Vernon Reinhold, David Ashline, Andrew Hanneman, Hailong Zhang

17:25-17:40 103-Analysis of Glycosphingolipids by LC-MS
Akemi Suzuki, Hideshi Fujiwaki, and Yoshikatsu Umemura

17:40-17:55 104-Interactions of carbohydrates with biomolecules Role of the CH/ π interactions
Michaela Wimmerová, Stanislav Kozmon, Josef Houser, Radek Matuška, Jaroslav Koča

17:55-18:10 105-Evidence for a species-wide general O-glycosylation system for extracellular proteins in *Lactobacillus buchneri*
Julia Anzengruber, Martin Pabst, Laura Neumann, Friedrich Altmann, Christina Schaffer, Paul Messner

18:10-18:25 106-Sequence analysis and domain motifs in the decorin glycosaminoglycan chain
Xue Zhao, Bo Yang, Robert J. Linhardt, Lingyun Li

17:00-18:25 Carbohydrate & Disease IV

Hall 4#

Chair: Jin Won Cho

17:00-17:15 085-Soluble slyoid precursor protein 770 is secreted in a O-glycosylated form from inflamed endothelial cells
Shinobu Kitazume, Akiomi Yoshihisa, Takayoshi Yamaki, Masayoshi Oikawa, Yuriko Tachida, Kazuko Ogawa, Rie Imamaki, Yoshiaki Hagijwara, Noriaki Kinoshita, Yasuchika Takeishi, Nobuhisa Iwata, Takaomi Saido, Naomasa Yamamoto, Naoyuki Taniguchi

17:15-17:30 079-Caveolin-1 up-regulates ST6Gal-I expression and integrin $\alpha 2,6$ -sialylation to promote integrin $\alpha 5\beta 1$ -dependent hepatocarcinoma cell adhesion and FAK signaling
Shujing Wang, Shengjin Yu, Jianhui Fan, Linhua Liu, Lijun Zhang, Nanyang Li, Jianing Zhang

17:30-17:45 087-O-glycome of *Ascaris suum* and *Acanthocheilonema viteae*
Chunsheng Jin, Iain H Wilson, William Harnett, Niclas Karlsson

17:45-18:00 A2-Harnessing novel biomarkers of human embryonic stem cells for cancer diagnosis and therapy
John Yu

18:00-18:25 Keynote Lecture 081- Protein O-mannosylation and its pathological role
Tamao Endo

19:30

Dalian International Financial Conference Center

Symposium Banquet

Friday, June 28, 2013

09:00-10:25 Physiology & Signalling

Hall 4#

Chair: *Hakon Leffler*

- 09:00-09:15 118-Functional crosstalk between cell-cell adhesion and cell-ECM adhesion via different expression of N-glycans
Jianguo Gu
- 09:15-09:30 119-Hydrophobically modified polysaccharides as effective sorbents of alimental cholesterol
Andriy SYNYTSYA, Jan TŮMA, Tomáš TAUBNER, Milan MAROUNEK, Dagmar DUŠKOVÁ, Jana ČOPÍ KOVÁ
- 09:30-09:45 037-Exploring the “life” of N-glycans on glycoproteins
Tadashi Suzuki
- 09:45-10:00 121-Involvement of Ganglioside GD3-raft Signaling in the Growth Cone Behavior of Cerebellar Granule Neurons
Kohji Kasahara
- 10:00-10:15 122-Network-based identification of microRNA-modulated programmed cell death pathways in plant lectin-induced cancer death
Leilei Fu, Jingchun Zhang, Yongxi Liu, Jinku Bao

09:00-10:25 Cell Biology I

Hall 1#

Chair: *Richard D. Cummings*

- 09:00-09:15 108-O-GlcNAc of p120 inhibits the interaction between p120 and E-cadherin
Haiyang Liu, Cuifang Han, Xinling Zhang, Chuanlin Bi, Leina Ma, Wengong Yu, Yuchao Gu
- 09:15-09:30 116-Tumorigenic potential of MEF cells transformed with polyoma virus onco-gene correlates with β -1,4-galactosyltransferase V gene dosage
Chiemi Tareyanagi, Takeshi Sato, Yukiha Ishikawa, Kiyoshi Furukawa
- 09:30-09:45 110-Modification of Transforming growth factor β -activated kinase 1 (TAK1)-binding protein 2(TAB2) by O-linked-N-cetylglucosamine(O-GlcNAc) in pro-inflammatory signaling
Zengxia Li, Guanghui Han, Junfeng Ma, Gerald W. Hart
- 09:45-10:00 111-Regulation of integrin α V expression by sulphated cerebroside scaffolding in hepatocellular carcinoma cells
Wei Wu, Yi Wei Dong , Peng Cheng Shi , Xing Zhong Wu
- 10:00-10:25** Keynote Lecture 107- O-GlcNAcylation on Transcription Factor Mef2c Regulates Terminal Differentiation of Skeletal Myogenesis
Jin Won Cho , Hanbyeol Kim, Jürgen Roth

10:25-11:10 Cell Biology II

Hall 1#

Chair: *John Yu*

- 10:25-10:40 112-N-glycan structure and function of cancer stem cell marker CD133
Liu Ying, Wei Yuanyan, Jiang Jianhai
- 10:40-10:55 113-The role of beta 1,4-galactosyltransferase I in glia activation during neuroinflammation
Aiguo Shen

10:55-11:10 114-Core fucosylation of mu heavy chains regulates the assembly of precursor B cell receptors and its intracellular signaling
Wenzhe Li, Jinhua Jin, Akihiro Kondo, Jianguo Gu, Naoyuki Taniguchi

10:25-11:10 Cell Biology III

Hall 4#

Chair: Huabei Guo

10:25-10:40 115-O-GlcNAc Transferase Mediates the Regulation of 26S Proteasome Functionality by Endothelial Nitric Oxide Synthase Derived Nitric Oxide
Hongtao Liu, Shujie Yu, Hua Zhang, Yu Li1, Yu-Guang Du, Jian Xu

10:40-10:55 109-Ribosomal RACK1 is stabilized by O-GlcNAc modification under hypoxic conditions and promotes IRES-mediated translation in hepatocellular carcinoma
Yuanyuan Ruan, Jianxin Gu

10:55-11:10 117-Endoplasmic Reticulum Located ppGalNAc-T18 (GALNTL4) is Involved in Cell Survival and Apoptosis
Yan Zhang, AiDong Shan, Xing Li, Wei Li, AiGuo Shen

09:00-11:20 Workshop II -Proteoglycans

Hall 6#

Co-Chairs: J. E. Turnbull and Jian Liu

09:00-09:20 Keynote Lecture 134- Exploiting the heparan sulphate interactome: from biology to synthetic chemistry to therapeutic applications
J. E. Turnbull

09:20-09:40 135-Synthesis of Heparan Sulfate Hexa- to Dodecasaccharides as Inhibitors of the Alzheimer's Disease Target β -Secretase
Ralf Schw rer, Jeremy E. Turnbull, Peter C. Tyler, Olga V. Zubkova

09:40-10:00 136-Developing an enzymatic approach to synthesize heparin and heparin
Jian Liu

10:00-10:20 137-RAGE: A proteoglycan-associated receptor
Ding Xu, Jeffrey Young, Kevin D. Corbett, Walter J. Chazin, Lars C. Petersen, Jeffrey D. Esko

10:20-10:40 138-Receptor for Advanced Glycation End-products (RAGE) Functions as Receptor for Sulfated Glycosaminoglycans (GAGs): Anti-RAGE Antibody or Sulfated GAGs Inhibit Lung Metastasis of Tumor Cells
Kazuyuki Sugahara, Jun Takahashi, Shuji Mizumoto

10:40-11:00 139-Heparan Sulfate Is Required For Prostate Cancer Initiation And Progression
Xuanyang Li, Alison Nairn, Tamas Nagy, Fen Wang, Yu Yamaguchi, Kelley Moremen, Lianchun Wang

11:00-11:20 140-Role of high endothelial venule-expressed heparan sulfate in chemokine presentation and lymphocyte homing
Hiroto Kawashima, Koichiro Tsuboi

11:25-11:50 Coffee Break

11:50-12:25

Hall 1#

Chair: Jeffrey D. Esko

Plenary lecture 010-Linking Nutrients to Signaling: Many Kinases are Regulated by O-GlcNAcylation

Gerald W. Hart

12:25-12:40

Hall 1#

Closing Ceremony

12:50-14:00 Lunch

15:25-17:20

POSTER SESSION I

Tuesday, June 25, 2013

156: A Novel Approach to Enriching Azido Labeled Glycopeptides from Metabolically Labeled Cells

Sheng Wang, Xiu Zhang, Wenxian Xie, Xia Zou, Yan Zhang

157: Purification of Novel α -Galactoside-binding Lectins from Aquatic Animals and their Distinct Cell Regulatory Activities

Imtiaj Hasan, Yasuhiro Koide, S. M. Abe Kawsar, Ryo Matsumoto, Yuki Fujii, Yukiko Ogawa, Shigeki Sugawara, Masahiro Hosono, Kazuo Nitta, Yasuhiro Ozeki

158: Comparative Analysis of the surface N-linked Glycoproteomes of HC-04 and HepG2 hepatocyte cell lines by a highly sensitive online integrated system

Dingyin Tao, Jonas G. King, Philipp Jost, Justin Boddey, Rhoel R. Dinglasan

159: Characterization of O-Glycans of Ovomucin Isolated from Hen Egg White Based on the One-pot Procedure by Electrospray Ionization Mass Spectrometry

Weibo Xing, Chengjian Wang, Xiaohua Li, Zhongfu Wang, Linjuan Huang

160: Multivalent Hydrazide Functionalized Magnetic Nanoparticles for Glycopeptides Enrichment and Identification

Qi C. Cao, Wan T. Ying, Xiao H, Qian

161: In-depth profiling of the sialylated N-glycoproteome of human plasma using optimized strategy based on metal oxide enrichment

Wantao Ying, Xinyuan Zhao, Xiaohong Qian

162: Multiplex Profiling of Glycoproteins Using Novel Bead-based Lectin Array

Hong Li, Hong Wang, Wei Zhang, LimingWei, Hongxiu Yu, Pengyuan Yang

163: Optimal sample choice for the analysis of protein antennary fucosylation as screening tool for HNF1A-MODY

Novokmet M, Thanabalasingham G, Kattla J, Huffman J, Rudan I, Wright AF, Campbell H, Owen K, Rudd PM, McCarthy MI, Lauc G

164: Recent Technical Advances in Mass Spectrometrybased Glyco proteomic Applications

Kay-Hooi Khoo, Sz-Wei Wu, Chu-Wei Kuo, Shui-Hua Wang

165: Development of glyco-biomarker for liver disease

Makoto Ocho, Akira Togaychi, Hiroyuki Kaji, Atsushi Kuno, Etsuko Iio, Maki Sogabe, Yasuhito Tanaka, Yuzuru Ikehara, Masashi Mizokami, and Hisashi Narimatsu

166: Development of novel marker for cholangiocarcinoma glyco-diagnosis

Atsushi Matsuda, Atsushi Kuno, Hideki Matsuzaki, Toru Kawamoto, Tatsuro Irimura, Toshihide shikanai, Yasuni Nakanuma, Masakazu Yamamoto, Nobuhiro Ohkohchi, Yuzuru Ikehara, Junichi Shoda, Jun Hirabayashi, Hisashi Narimatsu

167: Glycoproteomics of serum proteins in hepatitis B and hepatitis C induced liver cirrhosis

Gautam Mondal, Yogesh K Chawla, Hirokazu Yagi, Koichi Kato, Bishnu P Chatterjee

168: N-glycan Analysis of Immunoglobulin G by Enzymatic Release with Remove-iT Endo S and LC-MS

Xiaofeng Shi, Elizabeth McLeod, Paula Magnelli, Alicia Beliek, Ellen Guthrie

169: Simplified Quantitative Glycomics Using the Stable Isotope Label Girard's Reagent P by Electrospray Ionization Mass Spectrometry

Chengjian Wang, Zhiyu Wu, Jiangbei Yuan, Bo Wang, Ping Zhang, Ying Zhang, Zhongfu Wang, Linjuan Huang

170: A Robust Method for the Relative Quantitative Analysis of N-Glycan

Weiqian Cao, Wei Zhang, Jiangming Huang, Pengyuan Yang

171: An efficient approach to prepare boronic acid functional core-shell polymer nanoparticles for enrichment of glycoproteins via RAFT media precipitation polymerization

Jianxi Liu, Kaiguang Yang, Yanyan Qu, Lihua Zhang, Zhen Liang and Yukui Zhang

172: An integrated platform for quantitative glycoproteome analysis

Yejing Weng, Yanyan Qu, Lihua Zhang, Huiming Yuan, Hao Jiang, Zhigang Sui and Yukui Zhang

173: Boronic acid functionalized graphene oxide composites for specific recognition of N-linked glycopeptides

Jiang Bo, Yang Kaiguang, Liang Zhen, Zhang Lihua, Zhang Yukui

174: Gold nanoparticles modified hydrophilic polymer monoliths functionalized with boronate acid for specific capture of glycoproteins

Ci Wu, Yu Liang, Qun Zhao, Yanyan Qu, Zhen Liang, Lihua Zhang, and Yukui Zhang

175: Preparation of amide functionalized hydrophilic monolith by in situ photo-polymerization for highly selective enrichment of glycopeptides

Hao Jiang, Huiming Yuan, Yu Liang, Yanyan Qu, Qi Wu, Lihua Zhang, Yukui Zhang

176: Tandem dimethyl and solid-phase ^{18}O stable isotope labeling for N-glycoproteome quantitation

Yanyan Qu, Yejing Weng, Kaiguang Yang, Lihua Zhang, Zhen Liang, Yukui Zhang

177: Analysis of highly complex glycan mixture derived from human fluid by MALDI-TOF/TOF, nano-LC/Chip Q-TOF and UPLC-Triple Quadruple Mass Spectrometry

Su Hee Kim, Bum Jin Kim, Jae Han Kim and Hyun Joo An

178: SimianTools: A software suite for the interpretation of high throughput glycomics mass spectrometry data

Ren éRanzinger, Ki Tae Myoung, Mindy Porterfield, Michael Tiemeyer and William S. York

179: Cell-Selective Metabolic Glycan Labeling Based on Ligand-Targeted Liposomes
Ran Xie, Senlian Hong, Lianshun Feng, Jie Rong, and Xing Chen

180: Detection and Isolation of Dendritic Cells Using Lewis X-functionalized Magnetic Nanoparticles
Sara H. Rouhanifard, Ran Xie, Guoxin Zhang, Xiaoming Sun, Xing Chen and Peng Wu

181: Functional Similarities and Differences between New Lectin Systems in Human Organism: Protein Hormone and Probiotic Bacterial
Mikhail V. Lakhtin, Vladimir M. Lakhtin, Andrey V. Aleshkin, Stanislav S. Afanasiev, Vladimir A. Aleshkin

182: Neolectins with tailored valency as tools in Glycobiology
Julie Arnaud, Julie Claudinon, Kevin Tröndle, Annabelle Varrot, Winfried Römer, Aymeric Audfray, Anne Imberty

183: Chitosan Coupling Makes Bacterial Biofilm Susceptible to Antibiotics
Amin Zhang, Haibo Mu, Jinyou Duan

184: Metrology for the characterization of Biomolecular Interfaces for Diagnostic Devices (BioSurf)
Véronique Blanchard, Aryaline Kamalakumar, Rudolf Tauber, Wolfgang Unger and Paul Dietrich

185: High-throughput substrate profiling of the UDPGalNAc: polypeptide N-acetylgalactosaminyltransferase using human proteome microarrays
Wenxian Xie, Xing Li, Zhijue Xu, Jing Wang, Shumin Zhou, Shengce Tao and Yan Zhang

186: An Extra Fragment within the GH Module of an Endo- β -agarase from *Flammeovirga* sp. MY04 is Involved in the Degradation of Agarose

Wen-Jun Han, Jing-Yan Gu, Hui-Hui Liu, Fu-Chuan Li, Zhi-Hong Wu, Yue-Zhong Li

187: Ribosome-Inactivating Proteins (RIPs) in Apple (*Malus* sp.)

Chenjing Shang, Willy J. Peumans, Els J.M. Van Damme

188: Recombinant human butyrylcholinesterase produced in plants: the synthesis of biologically active multi-sialylated glyco-forms

Jeannine D. Schneider, Alexandra Castilho, Laura Neumann, Friedrich Altmann, Andreas Loos, Latha Kannan, Tsafirir S. Mor, and Herta Steinkellner

189: Engineering of sialylated mucin-type O-glycosylation in plants

Martina Dicker, Alexandra Castilho, Laura Neumann, Daniel Maresch, Herta Steinkellner Friedrich Altmann, Richard Strasser

190: Effects of Chitosan Oligosaccharides on Improving Cold Resistance in Crops

Meng Y. Wang, Wen X. Wang, Heng. Yin, Li S X. Huang, Xiao M. Zhao , Yu G. Du

191: Heterochitooligosaccharides: Enzymatic Preparation and Analysis by MALTI-TOF MS

Yong Zhao, Jianping Zhang, Yuguang Du

192: Sulfonyl Hydrazine-functionalized Polymer as a Specific Capturer of Reducing Glycans from Complex Samples for High-throughput Analysis by Electrospray Ionization Mass Spectrometry

Chengjian Wang, Xiaohua Li, Jiangbei Yuan, Zhongfu Wang, Linjuan Huang

193: Production of human saposin B with mannose-6- phosphate-type N-glycans in the methylotrophic yeast *Ogataea minuta*

Toru Watanabe, Ikuo Kawashima, Yuki Takaoka, Akihiko Kameyama, Seiji Matsuda, Hitoshi Sakuraba and Yasunori Chiba

194: Natural Oligosaccharides Library Preparation

Wang wenxia, Li Shuguang, Tuo Yaqin, Guo Zhimou, Yin Heng, Shi Bo, Du Yuguang

195: Differences and Similarities Between New Probiotic Bifidobacterial and Lactobacillus Lectin Systems Interacting to Glycoconjugates

Mikhail V. Lakhtin, Vladimir M. Lakhtin, Andrey V. Aleshkin, Stanislav S. Afanasiev, Vladimir A. Aleshkin

196: Enzymatic synthesis of N-acetylneuraminic acid derivatives of 5-bromo-4-chloroindolyl 4,7-di-Omethyl- β -D-galactopyranoside to determine α -2,3- and α -2,6-specific neuraminidase activity

Juana Elizabeth Reyes Martinez, Robert Sardzik, Josef Voglmeir, Sabine L Flitsch

197: The Study on Oligochitosan Inducing Cotton Resistance against *Verticillium dahliae* kleb

Xiao M. Zhao, Heng. Yin, Wen X. Wang, Meng Y. Wang, Yu G. Du

198: Advance in Application of Oligochitosan on Crops

Xiao M. Zhao, Heng. Yin, Wen X. Wang, Meng Y. Wang, Yu G. Du

199: Systematic Analysis of Drug Glycosylation Critical Quality Attributes (GCQAs)

Louise Royle, Radoslaw P. Kozak, Li Phing Liew, Robert J. Emery and Daryl L. Fernandes

200: Metabolic Engineering of *Escherichia Coli* for Mannose Production

Hailong Cao, Yuguang Du

201: Efficient Adhesion-based Plasma Membrane Isolation for Cell Surface N-glycan Analysis

Ji-Young Mun, Kyung Jin Lee, Hoon Seo, Ohsuk Kwon and Doo-Byoung Oh

202: Enhancement of N-glycan Isomer Separation for Glycomic Characterization of

Biotherapeutics and Biosimilars

Min Kyung So, Myung Jin Oh, Serenus Hua and Hyun Joo An

203: Gas1 Engineering for Selection of a Yeast Strain with Improved Protein Secretion

Hoon Seo, Dong Hyeun Hwang, Ji-Young Mun, Jin Young Gil, Kyung Jin Lee, Ohsuk Kwon, Sang Ki Rhee and Doo-Byung Oh

204: Rapid oligosaccharides sequencing by exoenzymatic digestion on the basis of microfluidic device

Benwei Zhu, Runtao Zhong, Bingcheng Lin, Yuguang Du

205: Inactivation of the gene rmlA remodels Burkholderia kururiensis exopolysaccharide reducing ability to promote rice growth and colonization

Let íia Hallack, F, Priscila A.V. Oliveira, Luciana L. Penha, Bruna G. Coutinho, Daniel Passos da Silva, Jose Osvaldo Previato, Lucia Mendonça-Previato

206: Refining the specificities of anti-I and anti-i antibodies using neoglycolipid-based array technologies and applications in the immuno-sequencing of poly-N-acetyllactosamine backbones

Chao Gao, Angelina S. Palma, Wengang Chai, Yan Liu, Robert A. Childs, Ten Feizi

207: Lectin microarray assists development of the glycodiagnostic systems for direct measurement

Atsushi Kuno, Takashi Sato, Atsushi Matsuda, Yuzuru Ikehara, Hisashi Narimatsu

208: Molecular cloning and functional expression of lectin from Datura stramonium seeds

Suguru Oguri, Kaori Tanaka, Keisuke Nishimoto, Takahiro Murakami, Hikaru Sakamoto

209: Unique gangliosides synthesis by sialyltransferases from marine bacteria

Hisashi Kamimiya, Yusuke Suzuki, Anila Mathew, Shinobu Watarai, Toshiki Mine,

Takeshi Yamamoto, and Yasunori Kushi

210: Characterisation and manipulation of N-glycans in insect cells

Rhiannon Stanton, Dieter Palmberger and Iain B. H. Wilson

211: Generation of Complete Series α -2,8-sialic Acid Oligosaccharides from Polysialic Acid Produced by Escherichia coli CCTCCM208088

Li Zhu, Xiao-bei Zhan, Hong-Tao Zhang, Jiang-Rong Wu, Zhi-Yong Zheng

212: SPRi-based Lectin Array Chip Powerful Glycoprotein Analysis Tool

John Zhang, Yue Yuan, Trevor Johnston, Christopher Lausted, Bridget Sexauer, Andrew Weber, Hong Liu, Jingsong Zhu

213: A high throughput screening of ligands to multiple targets by Surface Plasmon Resonance Imaging (SPRi) Platform, PlexArray®

John Zhang, Christopher Lausted, Trevor Johnston, Yue Yuan, Bridget Sexauer, Andrew Weber, Hong Liu, Jingsong Zhu

214: Synthesis of Thioglycoside Analogues of KRN7000

Xiangming Zhu, Ravindra T. Dere, Junyan Jiang

215: Polysaccharide isolated from *Lonicera japonica* Thunb, a novel inhibitor of amyloid beta peptide aggregation

Peipei Wang, Jianping Fang, Qin Liu, Kan Ding

216: Structural Characterization of polysaccharides from *Lonicera japonica* Thunb and their protective effects on islet β cells

Peipei Wang, Lina Lu, Qin Liu, Kan Ding

217: Preparation and Antitumor Activity of Sulfated Polysaccharides

Qun Dong, Xinyan Ni, Kan Ding

218: Immunological Effects and Chemical Structure of *Antrodia cinnamomea* Polysaccharides

Feng-Ling Yang, Shih-Hao Zhan, Yu-Liang Yang, Kuo-Feng Hua, Jung-Feng Hsieh, and Shih-Hsiung Wu

219: Structural Characterization of Two Homogalacturonans from the Recycled Residue of Green Tea and Anticomplementary Activity of Their Sulfated Derivatives

Huijun Wang, Songshan Shi, Bin Bao, Chao Zhu, Shunchun Wang

220: Top-down synthesis of a library of high mannose type glycans: preparation of various high mannose glycans from a tetradeca-saccharide precursor by glycosidase digestions

Akira Seko, Ichiro Matsuo, Yoichi Takeda, Akihiko Koizumi, Masakazu Hachisu, Maki Takatani, Junichi Aikawa, and Yukishige Ito

221: The Presence of Immunoglobulin Specific for N-linked Glycan without Terminal Galactose in Rheumatoid Arthritis

Xiukun Xu, Yanping Wang, Yunsen Li

222-Preparation and characterization of guluronic acid oligosaccharides degraded by a rapid microwave irradiation method

Ting Hu, Chunxia Li, Xia Zhao, Guangsheng Li, Guangli Yu, Huashi Guan

223: Aberrant Fucosylation of Glycosphingolipids in Human Hepatocellular Carcinoma Tissues

Yanping Wang, Jian Zhu, Yunsen Li

224: Structural analysis of extracellular polysaccharide from micro-algae *Dunaliella tertiolecta*

Bon Geun Goo, Yong Il Park, Andriy Synytsya, Choul-Gyun Lee, Jae Kweon Park

225: A Novel Lectin from Mussel *Mytilus trossulus* Induces Cytokines Production

Aleksandra S. Kondrashina, Irina V. Chikalovets, Oleg V. Chernikov

226: Synergistic effects of ginseng pectic polysaccharides on inhibition of L-929 cell migration

Yuying Fan, Guihua Tai, Yifa Zhou

227: Anti-HRP epitopes in lower eukaryotes Stefan Mereiter, Alba Hykollari, Birgit Schiller,

Katharina Paschinger, Shi Yan and Iain Wilson

228: Generation, Structural Validation and Utilization of A Large Library of Diverse Xyloglucan-derived Oligosaccharides for Analytical Purposes

Sami T. Tuomivaara, Utku Avci, Michael G. Hahn, and William S. York

229: Changes in content, density and localization of gangliosides in obstructive cholestatic rat livers and the influence of activity of heme oxygenase-1

Smid Vaclav, Petr Tomas, Vitek Libor, Smid Frantisek, Muchova Lucie

230: Mass Spectrometry-based glycan profiling for characterization of liver tissue from wild type and genetically modified mice mimicking hepatocellular carcinoma

Tianhua Wang, Lyn Chiin Sim, Jianxin Huo, Muriel Bardor and Kong-Peng Lam

231: Betel nut lectin: quantum dot nanoconjugate in the identification of serum glycoproteins

Urmimala Chatterjee, Partha P Bose , Shuvendu Singha, Gautam Mondal, Bishnu P Chattejee

232: Characterization of novel glycoposphosphingolipids found in insect parasite protozoa

Tatiana C. Garcez, Marilza Corrêa, Jorick Vanbeselaere, Bernadette Coddeville, Emmanuel Maes, Yann Guérandel, Lucia Mendonça Previato, Jose Osvaldo Previato

233: Chemoenzymatic synthesis of mono- and difluorinated Thomsen-Friedenreich (T) antigens and their sialylated derivatives

Jun Yan, Xi Chen, Fengshan Wang and Hongzhi Cao

234: Crystal structure of anti-polysialic antibody single chain Fv fragment in complex with alpha2-8 linked oligosialic acids

Masamichi Nagae, Akemi Ikeda, Shinya Hanashima, Ken Kitajima, Chihiro Sato, and Yoshiki Yamaguchi

235: Synthesis of Mycobacterium Peptidoglycan (PGN) Fragments Containing N-Glycolylmuramic Acid

Qianqian Wang, Fukase Matsuo, Yukari Fujimoto, Koichi Fukase

236: Typing of Blood-Group Antigens of Neutral Oligosaccharides by Negative-Ion Electrospray Ionization Tandem Mass Spectrometry

Hongtao Zhang, Shuang Zhuang, Guanjun Tao, Yibing Zhang, Barbara Mulloy, Xiaobei Zhan, Wengang Chai

237: Conformational properties of alpha- and betaglycolipids as Mycoplasma cytoplasmic-membrane components

Mengfei Yuan, Ryoko Matsunaga, Hirofumi Dohi, Sachie Matsuda, Kazuhiro Matsuda, Yoshihiro Nishida

238: Mass spectrometry based sulfoglycomics of lymphoid tissues

Shin-Yi Yu, Chu-Wen Cheng, Ming-Yi Ho, Kay-Hooi Khoo, Reiji Kannagi

239: Total cellular glycomics: a glycomic approach to describe cells and streamline the discovery of cellular biomarkers

Yasuro Shinohara, Naoki Fujitani, Jun-ichi Furukawa, Jinhua Piao

240: Structural Analysis of a Heteropolysaccharide from Saccharina Japonica by ESI -CID-MS/MS

Weihua Jin, Jing Wang, Wenjing Zhang, Quanbin Zhang

241: The *Pseudomonas Aeruginosa* RetS periplasmic sensor domain reveals an intriguing CBM-like fold

Florence Vincent, Adam Round, Aline Reynaud, Christophe Bordi, Alain Filloux and Yves Bourne

242: N-glycosylation of β -1,3-glucanosyltransferases is vital for cell wall synthesis in *Aspergillus fumigatus*

Zhao Wan, Jin Cheng

243: One-pot three enzymes catalyzed synthesis of UDPsugars and their derivatives

Jun Liu, Yang Zou, Mengyang Xue, Xueer Zhao, Junkai Dong, Wenjun Wang, Jie Shen, Peng George Wang, Min Chen

244: Snail glycosylation—a continuous challenge

Chantal Lucini, Christopher Taus, Reingard Grabherr, Erika Staudacher

245: Identification and characterization of endo- β -N-acetylglucosaminidase from methylotrophic yeast *Ogataea minuta*,

Satoshi Murakami, Yuki Takaoka, Hisashi Ashida, Kenji Yamamoto, Hisashi Narimatsu⁴ and Yasunori Chiba

246: Expression of Poly-N-acetyllactosamine on the Surface of Human Hepatocarcinoma Cells and Its Enzymatic Mechanism

Hao Qiu, Wei P.Wang, Mei F. Jin, Mei H. Miao, Hui, L. Chen

247: Essentiality and a colorimetric assay of mycobacterial MurA

Liming Xu, Dongting Wu, Qi Zheng, Liang Liu¹, Yufang Ma

248: Roles of N-acetylglucosaminyltransferase III in Epithelial-to-mesenchymal Transition Induced by TGF- β 1

Qingsong Xu, Jianguo Gu, Yuguang Du

249: *M. tuberculosis* Rv1096, a novel peptidoglycan deacetylase

Shufeng Yang, Jian Kang, Wenli Zhang, Yufang Ma

250: Construction and characterization of *M. smegmatis* glmM gene knockdown strain

Jian Kang, Liming Xu, Yi Xin, Yufang Ma

251: UDP-N-acetylglucosamine pyrophosphorylase is essential for cell wall biogenesis in *Aspergillus fumigatus*

Ting Du, Cheng Jin

252: Withdraw

253: The insect CMP-sialic acid synthetases: New features in the enzyme activity and intracellular localization

Di Wu, Akiko Fujita, Kayo Hamaguchi, Anne, Harduin-Lepers, Philippe Delannoy, Vladislav M. Panin, Chihiro Sato, Ken Kitajima

254: Purification and Characterization of a Fucoidan Degrading Enzyme from *Sphingomonas paucimobilis* PF-1

Woo Jung Kim, Doo Jin Choi, Jisun Lee, Chang Won Lee, Seul Lee, Ji Won Choi, Yong Il Park

255: Fluorescence-based assays for plant glycopolymer biosynthesis

Irina Ivanova, Stephan Goetz, Sergey A. Nepogodiev, Robert A. Field

15:35-17:00

POSTER SESSION II

Thursday, June 27, 2013

256: Ubiquitous occurrence and biosynthesis of sulfated sialic acids in mammals

Thanyaluck Phitak, Hiroshi Fujita, Chihiro Sato, Ken Kitajima

257: Systematic identification of in vivo target proteins specific for a glycosyltransferases isozyme, β 1,4-galactosyltransferase-I

Daisuke Sugahara, Hiroyuki Kaji, Kazushi Sugihara, Masahide Asano, Hisashi Narimatsu

258: Function study of TGF β 1、 β 1,4-galactosyltransferase in embryo implantation and the correlation of them on other implantation factors expression

Yunpeng Xie, Ting Gong, Lin Zhang, Cheng Zhang, Ying Kong

259: Glycosylation of protodioscin by *Arthrobacter* sp.

Jingyuan Liu, Li Lu, Liping Kang, Heshui Yu, Yang Zhao, Chenqi Xiong, Liyan Yu, Baiping Ma

260: Rational design of synthetic pathway in *Escherichia coli* for direct N-acetylneuraminic acid production from glucose

Junhua Kang, Pengfei Gu, Qian Wang, Qingsheng Qi

261: Expression of chondroitin sulphate sulphation motifs and SLRPs in articular cartilage of Kashin-Beck disease

Jinghong Chen, Wei Wang, Mingxiu Luo, Siyuan Li, Zengtie Zhang, Boquan Yu, Clare E Hughes, Bruce Caterson, Junling Cao

262: Sulfatide/miR-223/Sp1/integrin α V Pathway Stimulates Migration of Hepatocellular Carcinoma Cells

Yi Wei Dong, Qianqian Cai, Rong Wang, Xing Zhong Wu

263: Fucoidan targeted to CTGF and inhibited glucose induced rat mesangial cell

proliferation

Jiejie Hao, Xin Liu, Xiaoliang Zhao, Guangli Yu

264: Mechanism study underlying the role of microRNAs in sulfated polysaccharide WSS25-inhibited angiogenesis

Fei Xiao, Kan Ding

265: Stereoselective synthesis and biological evaluation of 2-deoxy- α - glycosides and oligosaccharides

Guofang Yang, Qingbing Wang, Jiafen Zhou, Xiaosheng Luo, Jianbo Zhang, Jie Tang

266: GM3 but not GM2 interaction with tetraspanin CD82 leads to inhibition of EGFR-phosphorylation –dependent colon cancer cell sw620 motility

Xiaohua Huang, Ying Li, Jianing Zhang, Yuefei Xu, Yuxiang Tian, Keli Ma

267: Modular Synthesis Methodology for the Generation of Heparan Sulfate Oligosaccharides

Ralf Schwärer, Jeremy E. Turnbull, Peter C. Tyler, Olga V. Zubkova

268: Lowered level of core fucosylation is a possible noninvasive predictive marker for chronic obstructive pulmonary disease (COPD)

Congxiao Gao, Koichiro Kamio, Fumi Ota, Takeo Ishii, Kozui Kida, Naoyuki Taniguchi

269: Expression of β -1, 4 galactosyltransferase V in rat Schwann cells in vivo and in vitro

Meijuan Yan, Chun Cheng, Aiguo Shen

270: Helicobacter Pylori Infection Leads to Gastric Cancer with the co-expression of Lewis Y and CA724

Faisal Aziz, Xuesong Yang, Xiaoqi Wang, Yan Qiu

271: Gu-4 improves survival in experimental sepsis by inhibiting the release and proinflammatory activity of HMGB1

HuiTing Zhou, Qing Li, ZhongJun Li, ZhiHui Zhao

272: Effect of dietary Chitooligosaccharides on the Reproduction and Embryo development in the mouse

Lun X.Wang, YuG. Du

273: The elevated expression of chondroitin sulphated proteoglycans in human hepatocellular carcinoma

Xiaoli Jia, Shuangso Dang, Siyuan Li , Bruce Caterson, Clare E. Hughes & Junling Cao

274: Binding Specificity of the H1N1 Swine-Origin Influenza AVirus (S-OIV)

Laura Neumann, Florian Krammer , Miranda de Graaf, Cornelis H. Hokke , Friedrich Altmann

275: Consistent Gene Regulations of Toll-Like Receptors in Cultured Cancer Cells by Carbohydrate-Specific RP215 Monoclonal Antibody and Anti-Antigen Receptors

Yiting Tang, Hao Zhang, Gregory Lee

276: Synthesis of N-acyl and Ureido Derivatives of Diosgenyl Glycoside with Potent Antifungal and Antibacterial Activity

Daria GRZYWACZ, Henryk MYSZKA, Malgorzata DAWGUL, Wojciech KAMYSZ

277: Conformational Studies of the Furanosides, Important Components of Bacterial Glycans

Dominik Walczak, Daria Grzywacz, Andrzej Nowacki, Beata Liberek

278: The Inhibitory Effect of Marine Oligosaccharide Sulfate OMS against Influenza a H1N1 Virus

Wei Wang, Shi-Xin Wang, Chun-Xia Li, Guang-Li Yu, Hua-Shi Guan

279: Biological Activity of Diosgenyl 2-Amino-2-Deoxy- β -D-Glucopyranoside Hydrochloride and its N,N-Dialkyl Derivatives

Henryk Myszka, Daria Grzywacz, Malgorzata Dawgul, Wojciech Kamysz

280: Synthesis of Phosphono and Phosphate Derivatives of Hydroxyimino-D-alditols as New Potential Antifungal Agents

Magdalena Cyman, Henryk Myszka, Karolina Kwiatkowska, Slawomir Milewski, Beata LIBEREK

281: Convergent Approach to Glycoalkaloids: Syntheses of Solasonine and 25(R)-Solanine

Ming Li, Yannan Peng, Pengwen Chen, Peng Wang

282: Pectic polysaccharides from *Apocynum venetum* L. promote proliferation of beta-cells

Chengxin Sun, Xinzhi Li, Yuying Fan, Yifa Zhou

283: Intracellular Localization and Phosphorylation of Galectin-4 is Controlled by Src Family Kinases

Hiroko Ideo, Ikue Hoshi, Katsuko Yamashita, and Masaru Sakamoto

284: Epigenetic modulation of HeLa cell membrane N-glycome by epigenetic inhibitors and reversibility of inhibition effects in a drug-free environment

Tomislav Horvat, Darko Barišić, Martina Deželjin, Ana Mužinić, Maja Herak Bosnar³, Gordan, Lauc, Vlatka Zoldoš

285: Dissecting the impact of O-GlcNAc modification on insulin action using different OGA inhibitors

Chin Fen Teo, Lance Wells

286: Structure and Immunological Activities of Mannogalactoglucans from *Lentinus edodes* Fruiting Bodies

Iteku B. Jeff, Tao Zhang, Yifa Zhou

287: Plasma membrane-associated sialidase NEU3 confers neoplastic potential on colon cancer cells by regulating Wnt/ β -catenin signaling

Kohta Takahashi, Masahiro Hosono, Keiko Hata, Tadashi Wada, Kazunori Yamaguchi, Kazuo Nitta, Taeko Miyagi

288: Impairment of lipid metabolism in GD3 synthase knockout mice

Shuting Ji, Yuhsuke Ohmi, Yuki Ohkawa, Keiko Furukawa and Koichi Furukawa

289: Analysis of polySia-NCAM biosynthesized by a mutated polysialyltransferase ST8SIA2/STX found in a schizophrenic patient

Masaya Hane, Ken Kitajima, Chihiro Sato

290: Novel Glyco-biomarker for Epithelial Ovarian Cancer Selected by Glycoproteomic Approaches

Maki Sogabe, Hirofumi Nozaki, Tomomi Kubota, Atsushi Kuno, Hiroyuki Kaji, Akira Togayachi, Hayao Nakanishi, Toru Nakanishi, Nao Suzuki, Kazushige Kiguchi, Mikio Mikami, Yuzuru Ikehara, Hisashi Narimatsu

291: Identification of glycoproteins carrying the sialyl lewis x antigen in human lung adenocarcinoma cells

Songlin Jiang, Naoki Ikeda and Koichi Honke

292: Silencing of GnT-V Potentiates the Antitumor Activity of Gemcitabine against Bladder Cancer Cells

Jianhui Fan, Ying Tang, Jingna He, Shujing Wang, Lifan Wang, Jianing Zhang

293: Therapeutic effects of glycosaminoglycans on elastase-induced emphysema in mice

Satoshi Kobayashi, Reiko Fujinawa, Shiho Kobayashi, Congxiao Gao, Fumi Ota, Shinobu Kitazume, Takashi Angata, Keiichi Yoshida, Takayuki Yoshida, Tomoko

Betsuyaku, and Naoyuki Taniguchi

294: Detection of disease associated sialoglycoconjugate specific IgG in the sera of children with acute lymphoblastic leukemia

Sujata Ghosha, Sarika Kapoorb, Ram Marwahab

295: Potential importance of Maackia amurensis agglutinin in non-small cell lung cancer

Rakhee Chhetraa, SangeetaMehtab, Radhika Srinivasanc, Suresh C. Sharmab, Digambar Beherad & Sujata Ghosha

296: N-Glycans of IgG as a complementary biomarker to CA125 for ovarian cancer diagnosis

Yifan Qian, YishengWang, Xingwang Zhang, Shifang Ren, Congjian Xu , Jianxin Gu

297: Hydrolysis of secreted sialoglycoproteins in ex vivo and biochemical models of bacterial vaginosis

Warren G. Lewis, Lloyd S. Robinson, Amanda L.Lewis

298: Inhibiting activities of chitooligosaccharides on the growth of two different tumors

Haige Wu, Ziang Yao, Yuguang Du

299: Ginseng pectin potentiates TRAIL-induced apoptosis through upregulation of death receptors

Hairong Cheng, Qi Sun, Guihua Tai, Yifa Zhou

300: Chitosan Oligosaccharides Protect Human Monocytes U937 from LPS-induced Inflammatory Damage through Blockade p38 MAPK Phosphorylation and Increasing O-GlcNAcylation of Proteins

Yu Li, Qiang Peng, Qingsong Xu, Yuguang

301: The Creation of Clostridium difficile Glycoconjugate Vaccines

Yuening Jiao, Zuchao Ma, Doug Hodgins, Brittany Pequegnat, Lisa Bertolo, Luis Arroyo, Mario A. Monteiro;

302: N-Acetylglucosaminyltransferase V triggers overexpression of MT1-MMP and reinforces the invasive/metastatic potential of cancer cells

Juhee Lee, Jeong Gu Kang, Kyoungjin Song, Seong Kook Jeon, Sejeong Oh, Yong-Sam Kim and Jeong-Heon Ko

303: withdraw

304: HSF1 and Sp1 are involved in regulation of FUT4 gene expression and cell proliferation in breast cancer cells

Xuesong Yang, Shuai Liu, Qiu Yan

305: Effects of Cell Surface α 2,3-Sialic Acid on Osteogenesis

Lan Xu, Zhi Jiang, Shiliang Wu;

306: Regulation of the cell surface expression level of AMPA-type glutamate receptor by N-linked glycans

Jyoji Morise, Yusuke Takeuchi, Shogo Oka

307: Synthesis and antiviral activity of aminoglycoglycerolipids

Jun zhang, Chunxia Li, Huashi Guan

308: T synthase Glycosylates and Activates c-MET in Hepatocellular Carcinoma Cells

Min-Chuan Huang, Chiung-Hui Liu, Yao-Ming Wu, John Huang

309: Dietary of Chitooligosaccharides Supplementation Enhances the Reproductive Performance of Sows

Lun X. Wang, Yu G. Du

310: Human recombinant Intelectin-1 expressed in a heart capillary endothelial cell line displays unique carbohydrate binding specificity

Jin Kyu Lee, Jonathan Viola, Kiara Swanier and J.Michael Pierce

311: GOLPH3 regulates integrin-mediated cell migration via up-regulation of sialylation of $\beta 1$ integrin

Tomoya Isaji, Wei Gu, Tomohiko Fukuda and Jianguo Gu

312: Large protein complexes retained in the ER are dislocated by non-COPII vesicles and degraded by selective autophagy

Valerie Le Fourn, Sujin Park, Insook Jang, Katarina Gaplovska-Kysela, Bruno Guhl, Yangsin Lee, Jin Won Cho, Christian Zuber, Jürgen Roth

313: Selective autophagy receptors are involved in degradation of EDEM1

Insook Jang, Sujin Park, JinWon Cho and Jürgen Roth

314: GnT-V attenuates TGF- β -induced EMT and metastatic potential in lung cancer

Na Li, Haineng Xu, Xijun Liu, Kun Fan, Jingjing Qi, LiyingWang, Zengxia Li, Xiliang Zha

315: Glycan Profiling and Quantitation of Cancer Cell Exosomes and their Origin Cell Lines for Biomarker Discovery

Seunghyup Jeong, Serenus Hua, Do-Young Choi, Pyong-Gon Moon, Rudolf Grimm, Kwang Pyo Kim, Moon Chang Baek, and Hyun Joo An

316: Isolation and Identification of Hyaluronandegrading Bacterial Strain and Anti-obesity Effects of Low-molecular Weight Hyaluronan

ChangWon Lee, JooWoong Park, Woon Seop Shin, Doo Jin Choi, Jisun Lee, Seul Lee, Ji Won Choi, Young Hwan Kim, and Yong Il Park

317: The Identification of Nucleocytoplasmic Shuttling Mechanism of O-GlcNAcase and Its PTMs

Yeon Jung Kim, Jin Won Cho

318: The Connection between Increased O-GlcNAcylation by storage of Glucose and Cancer Metastasis

Eunah Kim, Jin Won Cho

319: Structural and functional analysis of the Alg1 glycosyltransferase involved in N-glycosylation of endoplasmic reticulum

Sha Xu, Sheng-Tao Li, Xiao-Dong Gao

320: Nuclear localization of O-GlcNAc transferase is regulated by its own O-GlcNAc modification

Hyeon Gyu Seo, Ryum Joo Hwan and Jin Won Cho;

321: Functional relationship between ATP synthase beta subunit and its O-GlcNAc modification

Joo-hwan Ryum, Jin-won Cho

322: Withdraw

323: During cell culturing the signal transduction in cells is affected by the decrease of glucose concentration in the media

Ho-Joong Seo, Hanbyeol Kim, Ji Young Yoon and Jin Won Cho

324: Self-Evolving Oxidative Stress With Identifiable Pre- and Postmitochondrial Phases in PC12 Cells

Ganlin Zhang, Xiaoxin Zhu, Morin Christophe, Ping Li, Xiaomin Wang, Guowang Yang, Dulce Papy-Garcia

325: HBV infection downregulates miR-122 contributes to Sorafenib resistance by targeting GALNT10 in hepatocellular carcinoma

Qian Wu, Jiejie Xu, Jianxin Gu

326: HBV promotes migration and invasion of hepatoma cells through miR-9 mediated down-regulation of GALNT4

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327: Galectin-9 affects phagocytosis in THP-1 cells

Chi-Shan Li, Dan Hsu, Fu-Tong Liu, Huan-Yuan Chen

328: Role of Galectins in Lung Cancer Progression

Po-Cheng Chiang, Dan Hsu, Fu-Tong Liu, Huan-Yuan Chen

329: Wnt/ β -catenin up-regulates hFUT8 expression in hepatocarcinoma cell SMMC-7721

Nanyang Li, Lijun Zhang, Linhua Liu, Shujing Wang, Jianhui Fan, Jianing Zhang

330: Shedding of GPI-anchored proteins by a GPI cleaving enzyme

Morihisa Fujita, Gun-Hee Lee, Yoshiko Murakami, Yusuke Maeda, and Taroh Kinoshita

331: Research on effect of expression of β 1,4-GalT-I by estrogen and progesterone and correlation with EGFR signaling pathway

Ying Xia, Yunpeng Xie, Cheng Zhang, Ting Gong, lin Zhang, Ying Kong

332: The Synergistic Inhibitory Effect of Tetraspanin CD82 and Gangliosides on Cell Migration through EGFR or cMet-activated PI3K/Akt signal pathway

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333: α 1, 6-Fucosylation bidirectionally regulates TGF- β /activin-mediated signaling

Wei Gu, Tomohiko Fukuda, Tomoya Isaji, Hirokazu Hashimoto, Yuqin Wang and Jianguo Gu

334: The effect of an alginic acid from Sargassum fusiforme on NF- κ B signaling pathway

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335: Structure characterization of a glucuronoxylan isolated from *Cassia obtusifolia* seeds and its effect on NF- κ B signaling pathway

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336: Mice lacking fucosyltransferase 8 exhibit abnormal behavioral abnormalities associated with a schizophrenialike phenotype

Tomohiko Fukuda, Wei Gu, Tomoya Isaji, Naoyuki Taniguchi, and Jianguo Gu;

337: GnT-V expression levels regulate colon cancer stem cells and colon adenoma progression of Apcmin/+ mice through a canonical Wnt signaling pathway

Huabei Guo, Heather Johnson, Tamas Nagy, and Michael Pierce

338: Study of Chitosan oligosaccharide inducing resistance to TMV virus on *Arabidopsis thaliana* and its resistance pathway

Qingshan Meng, Yin Heng, Duyu Guang

339: HCG to β 1,4-GalTI in embryonic implantation and the influence of role and regulation mechanism analysis

Lili Chen, Cheng Zhang, Ting Gong, lin Zhang, Ying Kong

340: Molecular Mechanisms of *Lycoris Aurea* Agglutinin-induced Apoptosis and G2/M Cell Cycle Arrest in Human Lung Adenocarcinoma A549 Cells both in *in vitro* and *in vivo*

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341: Molecular Mechanisms of *Agaricus Bisporus* Lectins induced Apoptosis and G1 Cell Cycle Arrest in Human Breast Adenocarcinoma MCF-7 Cells both in *in vitro* and *in vivo*

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342: The Regulatory Function of ppGalNAc-T13 in Neural Differentiation of P19 Embryonal Carcinoma Cells

Yingjiao Xu, Lei Zhang, Wenjie Pang, Wei Li, Yan Zhang

343: Characterization of an Immunologically Active Pectin from the Fruits of *Lycium ruthenicum*

Qiang Peng, Yuguang Du

344: A glycosyltransferase-related gene, Galnt15, is a functional molecule indispensable to mature sperm formation

Nobuyoshi Takasaki, Kouichi Tachibana, Satoshi Ogasawara, Hideki Matsuzaki, Keiji Mochida, Kimiko Inoue, Narumi Ogonuki, Atsuo Ogura, Toshiaki Noce, Chizuru Ito, Kiyotaka Toshimori, Hisashi Narimatsu

345: Identification of Genes Involved in Protein Glycosylation in Halophilic Archaea

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346: CLEC-2 was involved in the phagocytosis of microglia by interacting with its ligand podoplanin

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347: Two polysaccharides from fruit bodies of *Grifola frondosa* (Fr.) S. F. Gray, induce cytokines release by dectin-1 and toll-like receptor 2 in macrophages and inhibit tumor growth in vivo

Jianping Fang, Ying Wang, Kan Ding

348: Profiling Trypanosomatid-Pattern Recognition Receptors interaction

Laura Rangel, Laura Corvo, Miguel Ángel Pineda, Manuel Soto, Pedro Bonay

349: The functional studies of *M. tuberculosis* Rv0431, a cell wall protein

Guoying Deng, Jian Kang, Yufang Ma

350: Combined effects of DNA vaccination and Polysaccharide isolated from fruits of *Physalis alkekengi* L. var. *francheti* (Mast.) Makino enhances the protective immunity against systemic candidiasis in mice

Huimin Yang, Shuying Han, Danyang Zhao, Guohua Zhang, Guiyun Wang

351: *Cryptococcus neoformans* mannoproteins: cloning, expression and characterization in *Pichia pastoris*

Pedro Ant nio Castelo Teixeira, Isis Cristina Ferreira, Luciana Loureiro Penha, Diego Allonso , Ronaldo Mohana-Borges, Lucia Mendon a-Previato¹, Jos  Osvaldo Previato

352: Aptamers against ManLAM inhibited virulent *Mycobacterium tuberculosis* H37Rv infection in mice and rhesus monkey

Qilong Wang, Qin Pan, Min Li, Dongdong Shi, Xianru Xia, Xiao-Lian Zhang

353: Immunopotentiating and adjuvant effects of α -(1 \rightarrow 4)-glucan from *Isatis Indigotica* immunized with H1N1 influenza vaccine in mice

Junjie Shan, Qian Li, Ting Zhu, Peiyuan Jia, Hao Ma, Yuxia Wang

354: Matrix Metalloproteinases (MMPs) involved in degradation of glycoconjugates of extracellular matrix (ECM) during murine subcutaneous sporotrichosis

Andreia Dantas Medeiros, Pedro Antonio Castelo Teixeira, Lucia Mendon a-Previato, Jose Osvaldo Previato and Christina Maeda Takiya

355: The effect of exopolysaccharides production on swarming motility of *Pseudomonas aeruginosa* PAO1

Shiwei Wang, Zhenyin Zhang, Di Wang, Hongsheng Liu, Luyan Ma

096: Expression and purification of recombinant single subunit oligosaccharyl transferase from *Leishmania braziliensis*

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