

### ACGG 大会背景介绍:

亚洲糖科学与糖技术会议(ACGG)是一年一次在亚洲地区召开的国际性学术会议,第一、二届 ACGG 会议分别于 2009 年和 2010 年在日本筑波和台北成功举办。会议理念新颖,大力倡导和促进糖科学领域的年轻学者和知名教授之间的交流,每次会议会邀请数十名年轻学者和知名教授或在读研究生做口头报告,介绍他们在糖科学和糖技术领域的最新研究成果。亚洲糖生物学和糖技术会议从第一届举办开始就主张和推崇"少形式,多交流,低碳环保"的独特组织方式。第八届亚洲糖科学和糖技术会议地点设在中国无锡江南大学,会议时间: 2016.10.13-10.16,参会人员将来自中国、日本、韩国、新加坡、泰国和中国香港、台湾等国家和地区,集中了亚洲乃至于世界上最为优秀的糖科学研究者。会议设三大主题: 糖生物学、糖化学和糖技术。会议为亚洲地区糖科学家提供了交流新思想、新成果、并增进相互了解和合作的机会。

#### Aim of ACGG

Importance of Asia is increasing more and more in terms of economic, social, and scientific activities. We the Asian countries contribute to the progress of science together with Western countries.

ACGG was started as Asian Communications of Glycobiology and Glycotechnology in 2009, and changed its name to **Asian Community of Glycoscience and Glycotechnology** in 2013 at the 5th Annual Conference. Glycoscience is a new scientific area with huge potential. ACGG serves as a platform of collaboration of researchers in Asian countries through sharing the technologies, resources, and information toward further advancement of glycoscience.

## Time Schedule for The 8th ACGG

		(Thu) 13th	Day 2 (Fri) Oct. 14th	Day 3 Oct.	(Sat) 15th	Day 4 (Sun) Oct. 16th
8:30			8:20-8:30 Opening Remark			8:30-10:00
9:00			8:30-9:50 Session 1 Collaborative research among	Sess	10:00 sion 5 emistry II	Session 9 Glycobiology IV
			intra-Asian countries	0 "		0 " 5 1
10:00			Coffee Break & Photographing	Coffee	Break	Coffee Break
10:30				10:10-	-12:10	10:10-12:00
11:00			10:15-12:10 Session 2	Sess Glycotec	ion 6	Session 10 Glycobiology IV
11:30			Glycobiology I	2,,55.55		& Glycotechnology III
12:00						Awards & Closing Remarks
12:30			Lunch Break	Lunch	Break	
13:00						
13:30						
14:00	13:00-15:30 ACGG-DB		13:30-15:15	13:30-	-15:15	
14:30	<b>Meeting</b> (Changguangxi		Session 3 Glycobiology II	Sess Glycobi		
15:00	Hotel)	13:00-17:30	,			
		Registration (Changguangxi	Coffee Break	Coffee	Break	40.00
15:30	15:30-17:00 Steering	Hotel)		15:25	-16:55	13:30- City Tour
16:00	Committee Meeting		15:25-17:30 Session 4	Sess		
16:30	(Changguangxi Hotel)		Glycochemistry I	21,700,1001	molegy ii	
17:00					17:00-17:50 Technical Seminar	
17:30	· '		Supper	17:00-18:30 Poster Session	(in Chinese)	
18:00				. 00:01 00031011		
18:30						
19:00		-21:00				
19:30	9:30 Welcome Dinner & Two-Minute Talk (Changguangxi Hotel)		18:00- Night Excursion			
20:00					-21:00 quet	
20:30						
21:00						

There are 10 oral sessions including a special session "Collaborative research among intra-Asian countries". Therein contains 27 long talks (25 min) and 23 short talks (15 min). All the oral sessions and poster session are held in Wenhao Hall (文浩馆).

# Steering committee

China	Japan	Taiwan
Biao Yu	Hisashi Narimatsu	Kay-Hooi Khoo
Cheng Jin	Yukishige Ito	Chun-Hung Hans Lin
Kan Ding	Jin-ichi Inokuchi	Shih-Hsiung Wu
Hong Kong	Korea	Thailand
Xuechen Li	Yong Sam Kim	Sopit Wongkham
	Yong II Park	Voraratt Champattanachai
	Jae Kyung Sohng	Peraphan Pothacharoen
India	Singapore	
Nadimpalli Siva Kumar	Zhiwei Song	
Avadhesha Surolia	Xuewei Liu	
Musti J. Swamy	Peiqing Zhang	

# The 8th ACGG Conference organizing committee

#### Chair

Jianxin Gu (Fudan University) Xiao-Dong Gao (Jiangnan University)

### **Committee Member**

Jian Yin (Jiangnan University)

Hideki Nakanishi (Jiangnan University)

Zhimeng Wu (Jiangnan University)

Feng Guan (Jiangnan University)

Morihisa Fujita (Jiangnan University)

Yijian Rao (Jiangnan University)

## Event facilities

## Changguangxi Hotel (Registration, Welcome dinner)



Registration
West building, 1st floor (lobby)



Welcome dinner East building, 2<sup>nd</sup> floor (Taihu hall)



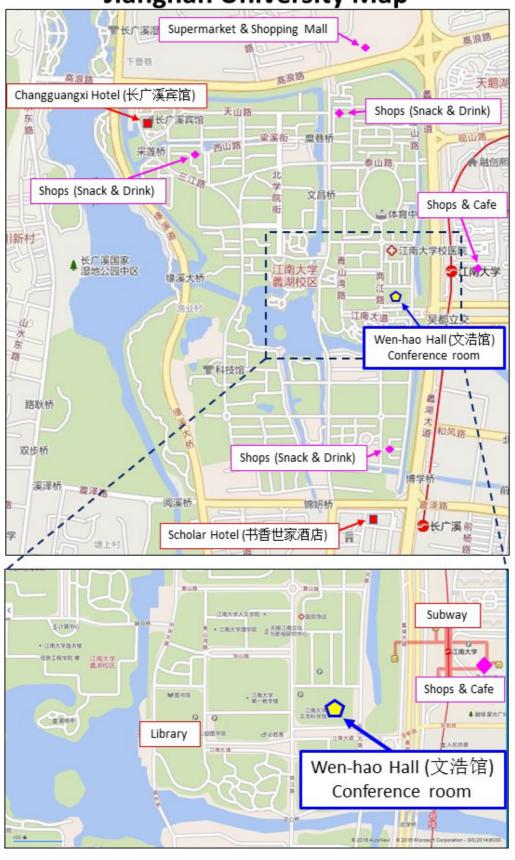
Wen-hao Hall (Oral and poster sessions)



1st floor, Main hall



Oral sessions: Main hall (1F) Poster session: Lobby (1F) Jiangnan University Map



# Scientific Program for the 8th ACGG Conference

# October 13th

13:30 - 17:30	Registration	(Changguangxi Hotel)
13:30 - 15:30	ACGG-DB meeting	(Changguangxi Hotel)
15:30 - 17:00	Steering committee meeting	(Changguangxi Hotel)
18:00 - 21:00	Welcome dinner and two-minute oral presentations by poste	r presenters (Changguangxi Hotel)

## October 14th

8:20 – 8:30 Opening remark: Zhengbiao Gu, Vice President of Jiangnan University

Session 1: Collaborative research among intra-Asian countries			
	Chair: Hisashi Narimatsu (Japan)		
8:30 - 8:40	S1-1: Hisashi Narimatsu, AIST (Japan)		
	Promotion of Asian glycoscience by collaborative research among intra-Asian countries		
8:40 - 9:05	S1-2: Kiyoko F. Aoki-Kinoshita, Soka University (Japan)		
L	GlyTouCan version Toco: Integration Glycan-related Databases using Semantic Web Technologies		
9:05 - 9:20	S1-3: Toshihide Shikanai, AIST (Japan)		
S	Conversion of JCGGDB to ACGG-DB by Semantic web application		
9:20 - 9:35	S1-4: Xia Zou, Shanghai Jiaotong University (China)		
S	A standardized method for differential tissue glycome mapping by laser microdissection and lectin microarray		
9:35 - 9:50	S1-5: Atsushi Kuno, AIST (Japan)		
S	Development of a new diagnostic system against liver fluke infection under the efforts of THA/LAO/JPN researchers in e-ASIA JRP		
9:50 - 10:15	Coffee break and photographing		

	Session 2: Glycobiology I
	Chair: Yong Il Park (Korea) and Cheng Jin (China)
10:15 - 10:40	S2-1: Cheng Jin, Chinese Academy of Sciences (China)
S	Glycosylation of the S-Layer Protein in Haloarcula hispanica
10:40 - 11:05	S2-2: Kuo-Feng Hua, National Ilan University (Taiwan)
L	The Immune Response to Klebsiella pneumoniae: Role of Capsular Polysaccharide
11:05 - 11:20	S2-3: Antonio Molinaro, University of Napoli Federico II (Osaka University, Japan)
S	Microbial Glycoconjugates: Structure and Immunological Properties
11:20 - 11:45	S2-4: Xiao-Lian Zhang, Wuhan University (China)
L	Mycobacterial tuberculosis glycolipid regulates host innate and adaptive immune responses
11:45 - 12:10	S2-5: Yong Il Park, The Catholic University of Korea (Korea)
L	Structural Features and Bioactivities of Seaweed Polysaccharides and Oligosaccharides
12:15 - 13:15	Lunch

	Session 3: Glycobiology II
	Chair: Sopit Wongkham (Thailand) and Jin Won Cho (Korea)
13:30 - 13:55	S3-1: Jin Won Cho, Yonsei University (Korea)
L	O-GlcNAcylation is Important for Regulating C2C12 Myoblast Differentiation
13:55 - 14:10	S3-2: Chatchai Phoomak, Khon Kaen University (Thailand)
S	High Glucose Enhances Aggressiveness of Cholangiocarcinoma Cells
14:10 - 14:35	S3-3: Atit Silsirivanit, Khon Kaen University (Thailand)
L	Expression of N-acetyl Galactosamine-associated Glycans Indicates Pathological Changes of Biliary Epithelia and Cholangiocarcinoma
14:35 - 15:00	S3-4: Chun-fang Gao, Eastern Hepatobiliary Surgery Hospital, Second Military Medical University (China)
L	Insight of glycoproteins and N-glycomics in clinical application
15:00 - 15:15	S3-5: Jiejie Xu, Fudan University (China)
S	Diametrical opposite functions of GALNT10 and GALNT4 in hepatocarcinogenesis
15:15 - 15:25	Coffee break

	Session 4: Glycochemistry I
	Chair: Xin-Shan Ye (China) and Shang-Cheng Hung (Taiwan)
15:25 - 15:50	S4-1: Shang-Cheng Hung, Academia Sinica (Taiwan)
L	Cell-Surface Heparan Sulfate Saccharides and Proteins
15:50 - 16:05	S4-2: Cheng-Hsiu Chang, Academia Sinica (Taiwan)
S	Synthesis of the Heparin-Based Anticoagulant Drug Fondaparinux
16:05 - 16:20	S4-3: Chao Cai, Ocean University of China (China)
S	Chemoenzymatic synthesis of heparin and heparan sulfate oligosaccharides
16:20 - 16:35	S4-4: Guochao Liao, Guangzhou University of Chinese Medicine (China)
S	Synthesis of Linear and 6-Branched Oligosaccharides of $\beta$ -Glucan As Antigens for Antifungal Vaccine Development
16:35 - 17:00	S4-5: Toshiki Nokami, Tottori University (Japan)
L	Electrochemical Methods as Enabling Tools for Synthesis of Oligosaccharides
17:00 - 17:15	S4-6: Akihiro Ishiwata, RIKEN (Japan)
S	Stereoselective synthesis of 1,2-cis- $\beta$ -arabinofuranosylated oligosaccharides and glycoconjugates from plant
17:15 - 17:30	S4-7: Peng Peng, Shandong University (China)
S	2-Nitro-thioglycosides: $\alpha\text{-}$ and $\beta$ Selective Generation and Their Potential as $\beta$ Selective Glycosyl Donors
18:00 - 21:00	Night Excursion

# October 15th

	Session 5: Glycochemistry II
	Chair: Lee Chiang Lo (Taiwan) and Yukishige Ito (Japan)
8:30 - 8:55	S5-1: Yoshiki Yamaguchi, RIKEN (Japan)
L	Glycan dynamics analysed by combined NMR and X-ray crystallography
8:55 - 9:20	S5-2: Lee Chiang Lo, National Taiwan University (Taiwan)
L	Development of activity-based probes for imaging glycosidases in cells
9:20 - 9:45	S5-3: Yukishige Ito, RIKEN (Japan)
L	Analysis of ER Glucosyltransferase by Means of Chemical Synthesis

9:45 - 10:00	S5-4: Kiyohiko Angata, AIST (Japan)
S	Analyses of Glycogene Expression by RNA Sequencing to Determine the Different Glycan Synthesis
10:00 - 10:10	Coffee break

	Session 6: Glycotechnology I
	Chair: Peng George Wang (China) and Shih-Hsiung Wu (Taiwan)
10:10 - 10:35	S6-1: Peng George Wang, Shandong University (China)
L	Probes for Visualization and Identification of Glycoproteins in Cells
10:35 - 11:00	S6-2: Li Chen, Fudan University (China)
L	PNGase F- $\amalg$ , a novel N-glycosidase with unique biochemical and biological function
11:00 - 11:15	S6-3: Yasunori Chiba, AIST (Japan)
S	Mn2+ Concentration Affects Production of Human Core 3 O-glycan in Yeast
11:15 - 11:40	S6-4: Shang-Te Danny Hsu, Academia Sinica (Taiwan)
L	Dual thio-digalactoside-binding modes of human galectins as the structural basis for the design of potent and selective inhibitors
11:40 - 11:55	S6-5: Hongzhi Cao, Shandong University (China)
S	Enzymatic Modular Assembly of Histo-blood Group Carbohydrate Antigens
11:55 - 12:10	S6-6: Hao Cui, University of Uppsala (Beijing Institute of Transfusion Medicine, China)
S	Heparanase expression upregulates platelet adhesion activity and thrombogenicity
12:15 - 13:15	Lunch

	Session 7: Glycobiology III
	Chair: Kei-ichiro Inamori (Japan) and Takashi Sato (Japan)
13:30 - 13:55	S7-1: Takashi Sato, AIST (Japan)
L	Characterization of Wisteria Floribunda lectin and Its Application for Glycoproteomics Study
13:55 - 14:10	S7-2: Tetsuya Hirata, Osaka University (Japan)
S	The mechanism for the addition of GPI side-chain by PGAP4, a GPI-GalNAc transferase, predicted from its 3D model
14:10 - 14:35	S7-3: Kei-ichiro Inamori, Tohoku Med. Pharm. Univ. (Japan)
L	Investigation of the roles of gangliosides in leptin and melanocortin signaling
14:35 - 15:00	S7-4: Kenichi G. N. Suzuki, Kyoto University (Japan)
L	Regulation mechanisms of EGF receptor activity by gangliosides as revealed by single-molecule imaging
15:00 - 15:15	S7-5: Chunxia Li, Ocean University of China (China)
S	The anticoagulant activities and FGF/FGFR1c signaling activation of negatively charged derivatives of low-molecular-weight polymannuronate and polyguluronate
15:15 - 15:25	Coffee break

	Session 8: Glycotechnology II
	Chair: John Nicholls (Hongkong) and Jian Yin (China)
15:25 - 15:50	S8-1: John Nicholls, The University of Hong Kong (Hongkong)
L	Using glycomic analysis to determine influenza species tropism
15:50 - 16:15	S8-2: Jae Kyung Sohng, SunMoon University (Korea)
L	Production of sialyllactose and Broad-spectrum neutralization of avian influenza viruses
16:15 - 16:40	S8-3: Guosong Chen, Fudan University (China)
L	Carbohydrate-based Macromolecular Self-Assembly
16:40 - 16:55	S8-4: Quan Zhang, Jiangnan University (China)
S	Glyconanoparticles for targeted drug delivery and photodynamic therapy
17:00 -17:50	Technical Seminar (Wen-hao hall)
17:50 - 18:30	Poster Session (Lobby of the Wen-hao hall)
19:00 - 21:00	Banquet

# October 16th

Session 9: Glycobiology IV	
	Chair: Yan Zhang (China) and Feng Guan (China)
8:30 - 8:55	S9-1: Sopit Wongkham, Khon Kaen University (Thailand)
L	Membranous High Mannose N-glycans Associate with Metastasis of Cholangiocarcinoma Cells
8:55 - 9:20	S9-2: Ubon Cha'on, Khon Kaen University (Thailand)
L	Upregulation of Lactate Dehydrogenase A is Correlated with Poor Prognosis in Cholangiocarcinoma
9:20 - 9:45	S9-3: Weicheng Wu, Fudan University (China)
L	Functional crosstalk between platelet attachment and activation via podoplanin and TGF- $\beta$ 3 enhances hematogenous metastasis in HCC
9:45 - 10:00	S9-4: Yinjiao Xu, Shanghai Jiao Tong University (China)
S	ppGalNAc-T13 Contributes to Neurogenesis via Stabilizing the Mucin-Type O-Glycoprotein Podoplanin
10:15 - 10:10	Coffee break

	Session 10: Glycobiology IV & Glycotechnology III
	Chair: Wei-Chieh Cheng (Taiwan) and Xiao-Dong Gao (China)
10:10 - 10:25	S10-1: Feng Guan, Jiangnan University (China)
S	Sialidase NEU1 suppresses tumor progression of human bladder cancer cells by inhibiting fibronectin/ integrin $\alpha5\beta1$ interaction and the Akt signaling pathway
10:25 - 10:50	S10-2: Shujing Wang, Dalian Medical University (China)
L	ST6Gal-I Modulates Docetaxel Sensitivity in Human Hepatocarcinoma Cells via the p38 MAPK/caspase pathway
10:50 - 11:05	S10-3: Xu Xu, Shenzhen University (China)
S	Alginate-derived oligosaccharide improves aberrant immune response in neurodegeneration
11:05 - 11:30	S10-4: Wei-Chieh Cheng, Academia Sinica (Taiwan)
L	Synthesis and Functional Study of Bacterial Peptidoglycan Components and Derivatives
11:30 - 11:45	S10-5: Tsung-Che Chang, Osaka University (Japan)
S	Synthesis of Clustered TriSTn Antigens as Anticancer Vaccine via Self-Adjuvanting Strategy and Evaluation of Immunogenicity
11:45 - 12:00	S10-6: Zhifang Zhou, Jiangnan University (China)
S	Fully Synthetic Self-Adjuvanting Globo H- Based Antitumor Vaccine
12:00 - 12:40	Awards and Closing Remarks
13:30 - 17:00	City Tour