# Scientific program for the 7<sup>th</sup> ACGG conference

#### ■November 12, 2015

12:00 -	17:30	Registration
17:00 -	17:45	Steering committee meeting
18:00 -	21:00	Welcome dinner and two-minute oral presentations by poster presenters

#### ■November 13, 2015

08:00 - 08:15 Opening remarks: Jin-ichi Inokuchi (Chair, Organizing committee)

Sessi	Session 1: Glycoscience			
Chair	: Ji	in-ichi l	Inokuchi and Kazuhisa Iwabuchi	
08:15	-	08:40	S1-1: Hisashi Narimatsu (Japan)	
			Latest Developments of GlyTouCan	
08:41	-	09:06	S1-2: Kah Fai Chan (Singapore)	
			Inactivation of GDP-fucose transporter (SLC35C1) gene in CHO cells by ZFNs, TALENs and CRISPR/Cas9 for producing fucose-free antibodies	
09:07	-	09:32	S1-3: Ryan Haryadi (Singapore)	
			CHO glycosylation mutants as potential hosts for producing recombinant therapeutics with enhanced efficacy	
09:33	-	09:48	S1-4: Kazuhisa Iwabuchi (Japan)	
			Role of Lactosylceramide-enriched lipid microdomains in innate immune response of human	
			phagocytes	
09:48	-	10:03	Tea break	
10:03	-	10:18	S1-5: Youngsuk Seo (Korea)	
			Glycosylation of Therapeutic Glycoprotein depends on Host Cell Lines	
10:19	-	10:34	S1-6: I-Ming Lee (Taiwan)	
			Structural basis for recognition and depolymerization of Acinetobacter baumannii surface	
			polysaccharide by the bacteriophage $\Phi AB6$ tailspike protein: Implication for glycoconjugate	
10.25		10.50		
10:35	-	10:50	S1-7: Shoko Nishihara (Japan)	
10:51		11:06	Drosophila core 1 $\beta$ 1,3-galactosyltransferase mutants cannot maintain hematopoietic stem cells	
10.51	-	11.00	<b>S1-8: Tzu-Ching Meng (Taiwan)</b> Interplay between glycosylation and phosphorylation of receptor-like protein tyrosine phosphatase	
			RA (PTPRA)	
11:07	_	11:22	S1-9: Kiyohiko Angata (Japan)	
11.07		11.22	Novel LacdiNAc structures on N- and O-glycans synthesized in vivo by β3GalNAcT2	
11:30	-	12:30	Lunch	

#### Session 2: Glycoscience

Chair	Chair: B. M. Swamy and Kyung-Hee Chun			
13:00	-	13:25	S2-1: B. M. Swamy (India)	
			Exploiting the carbohydrate specificity of a monocot mannose binding lectin from Remusatia	
			vivipara for developing pest resistant transgenic plants	
13:26	-	13:51	S2-2: Yuh-Ling Chen (Taiwan)	
			Galectin-1 accelerates wound repair through binding of neuropilin-1	
13:52	-	14:17	S2-3: Kyung-Hee Chun (Korea)	
			Role of galectin-3 in gastric cancer progression and metastasis	
14:18	-	14:33	S2-4: Shashikala R. Inamdar (India)	
			A core fucosylated N-glycan specific mitogenic lectin from cephalosporium curvulum and its role	
			in mediating host parasite interaction leading to mycotic keratitis.	
14:34	-	14:49	S2-5: Josef Voglmeir (China)	
			Oligomerization of Microcystis aeruginosa lectin (MVN) for mimicing C-type lectin structures	
14:49	-	15:04	Tea break	

Session 3: Glycotechnology		
Chair: Haojie I	u and Hiroyuki Kaji	
15:04 - 15:29	S3-1: Po-Chiao Lin (Taiwan)	
	Chemical Strategies for Traceless Labeling of Glycoproteins	
15:30 - 15:55	S3-2: Hyun Joo An (Korea)	
	Analytical Platform for Glycomic Characterization of Biotherapeutic Glycoproteins: From Glycan	
	Analysis to Site-Specific Glycoform mapping	
15:56 - 16:11	S3-3: Unyong Kim (Korea)	
	Novel Approach for Comprehensive O-Glycosylation Profiling of Therapeutic Glycoproteins	
16:12 - 16:27	S3-4: Shifang Ren (China)	
	Glycomic Profiling of ovarian cancer stem cells	
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			Poster session
16:30	-	18:00	and
			ACGG – Database demonstration

18:00 -	20:00	Dinner
19:00 -	21:00	Excursion: Entsuin-temple light up

### ■November 14, 2015

Session 4: Glycoscience			
Chair	<b>:: C</b>	'huan-F	Fa Chang and Kan Ding
08:00	-	08:25	
			Glycobiology of Enterovirus 71 interacting proteins and infection
08:26	-	08:51	
			The structure and function of glycans from herbal medicine
08:52	-	09:07	
			Story of Ngly1: Beauty of Basic Research
09:08	-	09:23	S4-4: Kei-ichiro Inamori (Japan)
			Ablation of the GM3 synthase gene in KK-Ay mice improved the obese phenotype: implication
			for its role in leptin and melanocortin signaling
09:24	-	09:39	S4-5: Yasuhiro Hashimoto (Japan)
			Subgroup differences in "brain-type" transferrin and a-synuclein in Parkinson's disease and
			multiple system atrophy
09:40	-	09:55	S4-6: Kazuyuki Sugahara (Japan)
			Genetic Diseases Caused by Mutations of Biosynthetic Enzymes for The GAG-Protein Linkage
			Region of Proteoglycans
09:56	-	10:11	S4-7: Fuchuan Li (China)
			Marine bacterium-derived glycosaminoglycan-degrading enzymes
10:11	-	10:26	Tea break

## Session 5: Glycotechnology

Chair	: Sł	nin-ichi	ro Shoda and Hai Dong
10:26	-	10:51	S5-1: Hiroshi Tanaka (Japan)
			Development of new methodology for a-sialyaltion and Synthesis of glycopolymers from
			sialylated allene monomers.
10:52	-	11:17	S5-2: Hai Dong (China)
			Transesterification Controlled by H-bonding and Its Application on The Synthesis of
			Thio-containing Glycosides
11:18	-	11:43	S5-3: Cheng-Chung Wang (Taiwan)
			Concise synthesis of glycoconjugates via TMSOTf-catalyzed HMDS silylation of sugars
11:44	-	12:09	S5-4: Perali Ramu Sridhar (India)
			Synthesis of Septano Oligo-saccharides
12:10	-	12:25	S5-5: Shin-ichiro Shoda (Japan)
			Specifically Hemiacetal-Oriented Direct Activation in Water
12:26	-	12:41	S5-6: Jinsong Yang (China)
			Total Synthesis of Marine Glycosphingolipid Vesparioside B
12:45	-	13:45	Lunch

Session 6: Glycotechnology 📗			
Chair	:: Sł	hinya F	ushinobu and Petety Balaji
13:45	-	14:10	S6-1: Haojie Lu (China)
			Advancements in MS-based N-glycoproteomics and N-glycomics:Towards more specific, more
		1126	accurate and more sensitive
14:11	-	14:36	S6-2: Hiroyuki Kaji (Japan)
			LC/MS-based large-scale analysis of site-specific glycan heterogeneity of mouse glycoproteins
14:37	-	14:52	S6-3: Wen-Bin Yang (Taiwan)
			Tagging N-linked glycan with 2,3-naphthalenediamine dye for glycoproteins analysis
Chair	:: Po	o-Chiao	) Lin and Hyun Joo An
14:53	-	15:18	S6-4: Shinya Fushinobu (Japan)
			Structural study of enzymes from beneficial gut bacteria for degradation of human glycans
15:19	-	15:44	S6-5: Petety Balaji (India)
			Protein - carbohydrate interactions: the contribution of C-Hpi interactions to binding and
			specificity
15:45	-	16:00	S6-6: Yi-Chi-Chen (Taiwan)
			Metabolic labeling of cholesteryl glucoside derivatives in Helicobacter pylori
16:00	-	16:15	Tea break

### Session 7: Glycoscience IV

Chair	Chair: Jin Won Cho and Xiao-Dong Gao			
16:15	-	16:40	S7-1: Jin Won Cho (Korea)	
			Elucidation of nuclear translocation of O-GlcNAc transferase	
16:41	-	17:06	S7-2: Atit Silsirivanit (Thailand)	
			Dynamic changes of O-GlcNAcylation in Glioma stem cells	
17:07	-	17:32	S7-3: Voraratt Champattanachai (Thailand)	
			Aberrant O-GlcNAcylation of extracellular proteins from cancer cell secretion	
17:33	-	17:58	S7-4: Xiao-Dong Gao (China)	
			Construct the system of N-acetylglucosamine transferase (OGT) active assay in saccharomyces	
			cerevisiae	
17:59	-	18:14	S7-5: Shinji Go (Japan)	
			Regulation of glycosphingolipidexpression by O-GlcNAc modification	
18:15	-	18:30	S7-6: Yan Zhang (China)	
			Whether the tumor suppressor p53 has a novel glycosyl-modification	
18:31	-	18:46	S7-7: Yuanyuan Ruan (China)	
			O-GlcNAcylation of RACK1 promotes hepatocellular carcinogenesis	

19:00 - 21:00 Banquet

#### ■November 15, 2015

Session 8: Glycoscience V		
Chair: Jianxin	Gu and Sopit Wongkham	
08:00 - 08:25	S8-1: Jianguo Gu (Japan)	
	Roles for glycans in cell adhesion and migration	
08:26 - 08:51	S8-2: Sopit Wongkham (Thailand)	
	Alteration of glycosylation related to progression of cholangiocarcinoma	
08:52 - 09:07	S8-3: Jishun Lu (Japan)	
	The interplay of N-acetylglucosaminyltransferase III and sialyltransferases in the regulation of	
	cell motility	
09:08 - 09:23	S8-4: Kohta Takahashi (Japan)	
	Sialidase NEU3 defines invasive potential of human glioblastoma cells by regulating	
	calpain-mediated proteolysis of focal adhesion proteins	
09:24 - 09:39	S8-5: Lan Wang (Taiwan)	
	Role of CLEC-2 In gastric cancer metastasis	
09:40 - 09:55	S8-6: Shan-Shan Li (Hong Kong)	
	Communicating via glycan: a new view to ovarian cancer metastasis	
09:55 - 10:10	Tea break	

### Session 9: Glycotechnology V

Chair: Hongzh	i Cao and Hideharu Ishida
10:10 - 10:35	S9-1: Hongzhi Cao (China)
	Chemical evolution of enzyme-catalyzed glycosylation
10:36 - 10:51	S9-2: Wei Li (China)
	Synthesis of Bradyrhizose, a Unique Inositol-fused Monosaccharide Relevant to a Nod-factor
	Independent Nitrogen Fixation
10:52 - 11:07	S9-3: Yasunori Chiba (Japan)
	Production of IgG Fc region with homogeneous glycan by glycosynthase
11:08 - 11:23	S9-4: Hideharu Ishida (Japan)
	Synthesis of the Lewis A tandem repeat for elucidating the recognition mechanism of MBP
11:24 - 11:39	S9-5: Yuxin Pei (China)
	Glyco-vesicles with Cationic Ferrocenium: The Glycosylation-mediated Targeted and
	Redox-responsive Carriers for Drug/siRNA Co-delivery
11:40 - 11:55	S9-6: Yoshiko Miura (Japan)
	Biosensing with Glycopolymer-Gold Conjugates
11:56 - 12:11	S9-7: John Whitelock (Australia)
	Engineered Heparan Sulfates as Growth Factor and Cytokine Delivery Systems for Regenerative
	Medicine
12:15 - 12:45	Poster Award
	Closing
12:45 - 15:30	The memorial tour for the Great East Japan Earthquake