

The 4th Symposium of Japanese Consortium for Glycobiology and Glycotechnology
Integration from functional analysis of sugar chains to system glycobiology
 October 23-24, 2006
 Tokyo Conference Center (Shinagawa)

October 23, 2006

Chairperson	Lecture	
	Yoshitaka Nagai (President of JCGG)	<i>Opening address</i>
	Kohei Tamao (RIKEN)	<i>The 20th anniversary of RIKEN Frontier Research System</i>
Invitation Lecture		
Akemi Suzuki (RIKEN)	Akihiko Nakano (RIKEN)	<i>Molecular mechanisms of membrane trafficking and protein sorting</i>
Approach from membrane microdomain		
Yasunori Kozutsumi (RIKEN)	Toshihide Kobayashi (RIKEN)	<i>Heterogeneity of lipid rafts</i>
	Yoshio Hirabayashi (RIKEN)	<i>Lipid rafts formation by glucosylated lipids and neuronal functions</i>
	Kamiguchi Hiroyuki (RIKEN)	<i>Glycolipid-mediated axon guidance</i>
Luncheon Seminar	(Immuno-Biological Laboratories Co., Ltd)	
	Takaomi C. Saïdo (RIKEN)	<i>Metabolic regulation of amyloid beta peptide and Alzheimer's disease</i>
Processing of glycoproteins		
Toshihide Kobayashi (RIKEN)	Yasuhiro Hashimoto (RIKEN)	<i>Pathophysiology of glycosyltransferase processing by Alzheimer's β-secretase</i>
	Yukishige Ito (RIKEN)	<i>Synthetic chemistry and glycobiology: Toward understanding the glycoprotein processing mechanism</i>
Cell migration and organogenesis		
Yoahio Hirabayashi (RIKEN)	Kiyoji Nishiwaki (RIKEN)	<i>Glycosylation of an ADAMTS protease essential for cell migration in <i>C. elegans</i></i>
	Hitoshi Okamoto (RIKEN)	<i>Aberrant migration of the precursors of the vagus motor neurons in the mutant zebrafish embryos defective in the protein modification by fucosylation</i>
Immune functions		
Hironobu Hashimoto (NIAD-UE)	Yasunori Kozutsumi (Kyoto Univ.)	<i>Expression analysis of glycochain-related genes using correlation index-based DNA microarray</i>
	Masaru Taniguchi (RIKEN)	<i>NKT cell activation and immunotherapy by α-galactosylceramide</i>
	Takeshi Tsubata (Tokyo Medic.Dental Univ.)	<i>Role of glycan signals in humoral immune responses</i>
	Yasunobu Miyake (RIKEN)	<i>Generation and analysis of siglec-1⁺ macrophage depletion mice</i>
Clinical and industrial applications		
Toshisuke Kawasaki (Ritsumeikan Uni)	Shinji Satomura (Wako Co.)	<i>Clinical significances of AFP-L3 % (fucosylated AFP)</i>
	Shigeharu Fukuda (Hayashibara Co.)	<i>Development and application of trehalose: From basic research to business</i>
	Tomoya Ogawa (RIKEN)	<i>Glycoscience in RIKEN</i>
	Banquet	

October 24, 2006

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	Koichi Furukawa (Nagoya Univ.)	<i>Opening: Mext "Glycomics" project: Attainment and perspective</i>
Regulation of signaling		
Tamao Endo (TMIG)	Koichi Furukawa (Nagoya Univ.)	<i>Towards integrated understanding of signal regulation mechanisms with glycosylation</i>
	Yumiko Saga (National Inst. of Genetics)	<i>Function of Notch signaling in somitogenesis via glycosylation</i>
Advances in structural analysis		
Yukishige Ito (RIKEN)	Hiroaki Kato (Kyoto Univ.)	<i>The structure and function of a glycosidase analyzed by ultra-high resolution crystallography</i>
	Nana Kawasaki (Natl. Inst. Health Sci.)	<i>Significance of glycosylation analysis in cell therapy and challenges to characterization of cellular therapy products based on glycosylation</i>
	Koichi Tanaka (Shimadzu Co.)	<i>Structural characterization of protein and carbohydrates using MALDI-MS "</i>
	Minoru Suzuki (RIKEN)	<i>Structural characterization of glycopeptides and glycosphingolipids by mass spectrometry</i>
Luncheon Seminar	(Shimadzu Corpotion)	
	Mitsutoshi Seto (IMS)	<i>MS imaging of glycolipid</i>
	Masaki Yamada (Shimadzu Co.)	<i>Post-translational modification analysis of a cryoglobulin derived from a myeloma patient using mass spectrometry</i>
Nuero-muscular functions		
Naoyuki Taniguchi (Osaka Univ.)	Hideyuki Okano (Keio Univ.)	<i>A carbohydrate binding proteim, Galectin-1, promotes proliferation of adult neural stem cells</i>
	Shogo Oka (Kyoto University)	<i>The function of the HNK-1 carbohydrate</i>
	Tamao Endo (TMIG)	<i>Protein O-mannosylation and a-dystroglycanopathies</i>
Extracellular matrices		
Koji Kimata (Aichi Medical Univ.)	Ken Kitajima (Biosci. Biotech. Center, Nagoya University)	<i>Polysialic acid: its frequent occurrence, structural diversity and functions</i>
	Kiyotoshi Sekiguchi (Institute for Protein Research, Osaka Univ.)	<i>Customization of the extracellular microenvironment and an emerging concept of matriome</i>
	Naoki Itano (Shinshu Univ.)	<i>Formation of the tumor angiogenic microenvironment by hyaluronan-rich matrix</i>
	Michinari Hamaguchi (Nagoya Univ.)	<i>A role for oligosaccharide-based signaling in tumor invasion and metastasis</i>
	Akemi Suzuki (Chairman, Organizer)	<i>Closing Address</i>