理研国際シンポジウムのご案内

理化学研究所システム糖鎖生物学研究グループは 10 年間の研究業務を終え、2018 年３月に終了します。本グループはこの間、多くの国際的な研究業績をあげ、また、数々の国際交流においても貢献してまいりました。

本研究グループの終了に際し、下記の国際シンポジウムを開催いたします。本シンポジウムでは、グループの研究に携わった研究者および共同研究者、海外の先進的な研究者をお招きし、システム糖鎖生物学研究とその社会貢献、展望などについて様々な角度から討議、考察いたします。

システム糖鎖生物学と展望

―基礎研究と応用研究の橋渡しをめざして―

Systems Glycobiology and Beyond

―Toward :a bridge between fundamental research and applied science

日程：2017 年 11 月 16 日（木）13:30 ～17 日（金）17:40

場所：理化学研究所　鈴木梅太郎記念ホール

主催：理化学研究所システム糖鎖生物学研究グループ

後援：日本糖質学会、日本生化学会、日本糖鎖科学コンソーシアム
水谷糖質科学振興財団

公用語：英語

参加者数：150 名（定員）、公開シンポジウム

参加費：無料

参加方法：ウェブサイトから申込
（http://www.jcgg.jp/05/symposium171116.html）

Program

November 16 (Thu)

13:30

Opening remarks　**Kohei Tamao** (RIKEN)

13:40-15:20

Session 1: Glycoscience and Metabolic Significance

Chairs, Tamao Endo (TMGH-IG) and Michael Pierce (Univ Georgia)

Michael Pierce (Univ Georgia)

"*Glycoscience impacts cancer research and treatment on multiple levels*"

Yoichiro Harada (Kagoshima Univ)

"N-Glycosylation meets exosome biology"

Yoshio Hirabayashi (RIKEN)

"Lipid glucosylation in the ER as essential system for cellular homeostasis"

François Foulquier (Univ Lille 1)

"*Insights into the regulation of the N-glycosylation process*"

15:40-17:40

Session 2: Recent Advances in Systems Glycobiology (Group Research Summary)

Chairs, Yukishige Ito (RIKEN) and Nicolle Packer (Macquarie Univ)

Naoyuki Taniguchi (RIKEN)

"*Systems glycobiology in disease and N-glycan branching* "

Shinobu Kitazume (RIKEN)

"*Vascular endothelial APP: beyond amyloid beta deposition* "

Yasuhiko Kizuka (RIKEN)

"Detection and disease involvement of bisecting GlcNAc and fucosylated glycans"

Tadashi Suzuki (RIKEN)

"NGLY1 and non-lysosomal catabolism of glycans - Summary of Glycometabolome Team"

Yoshiki Yamaguchi (RIKEN)

"Structural Glycobiology: Glycan Structure, Dynamics and Interaction"

18:30-20:30 Get together discussion

November 17 (Fri)

9:00-10:40

Session 3: Glycoscience in Disease

Chairs, Shoko Nishihara (Soka Univ) and Hamed Jafar-Nejad (Baylor Coll Med)

Rita Gerardy-Schahn (MH-Hannover)

"*Mechanisms Causing Embryonic Lethality of CMP-Sialic Acid Knockout Mivery* "

Eiji Miyoshi (Osaka Univ)

"Application of glyco-science to the early detection and preemptive management of pancreatic cancer"

Jianguo Gu (Tohoku Med Pharm Univ)

"Functional expression of N-glycans in cell adhesion and EMT"

Hamed Jafar-Nejad (Baylor Coll Med)

"Regulation of Drosophila development by N-glycanase 1"

11:10-12:30

Session 4: Protein and Glycan Interaction

Chairs, Akemi Suzuki (Tohoku Med Pharm Univ) and James Paulson (Scripps Res Inst)

Nicolle Packer (Macquarie Univ)

"Multipurpose sugars: exploiting glycan structural diversity"

Takashi Angata (Academia Sinica)

"Identification of Siglec ligands by proximity labeling method"

Koichi Honke (Kochi Univ)

"*Identification of the sialyl Lewis X antigen carrying glycoprotein that is involved in human lung adenocarcinoma cells* "

12:30-14:00 Poster Session

14:00-15:10

Kazuaki Ohtsubo (Kumamoto Univ)

"Glycosylation regulates nutrition sensor functions in pancreatic beta cells"

Miyako Nakano (Hiroshima Univ)

"Glycomic Approach for Biomarker Discovery"

James Paulson (Scripps Res Inst)

"*Siglec targeted nanoparticles for desensitization of mast cells* "

15:30-17:30

Session5: Expectations for Glycoscience and Road Ahead

Chairs, Ken Kitajima (Nagoya Univ) and Gerald Hart (Johns Hopkins Med)

Kenji Kadomatsu (Nagoya Univ)

"*Proteoglycans and neural plasticity* "

Katsunori Tanaka (RIKEN)

"Therapeutic In vivo Synthetic Chemistry: Glycoconjugates as new drug delivery system"

Shinya Hanashima (Osaka Univ)

"*Lipid-protein interaction study using heavy atom labeled glycosphingolipid derivatives"*

Hiroyuki Osada (RIKEN)

"Chemical array screening, a powerful approach for exploring small molecule inhibitors against proteins"

Gerald Hart (Johns Hopkins Med)

"Fundamental Roles of O-GlcNAc in Signaling, Transcription and in Neuronal Functions: Vast Opportunities for Future Discovery"

17:30

Closing remarks **Naoyuki Taniguchi** (RIKEN)