About The Sialic Acids Society

Aims and Activities of Sialic Acids Society
Organization of the Sialic Acids Society
Organized Symposia

Aims and Activities of Sialic Acids Society

The Sialic Acids Society supports lectures and meetings covering the studies of sialic acids.

Since the 19th annual meeting held in 1997, Japanese Society for Carbohydrate Research (JSCR) selects poster awards in every annual meeting and the Sialic Acids Society provides financial support for the awards.

Japanese Consortium for Glycoscience and Glycotechnology (JCGG) started Tamio Yamakawa Award in 2016. The award internationally honors a scientist who has made great contributes to Glycoscience every two years and was realized with great efforts by Prof. Haruo Ogura and the financial support by the Sialic Acid Society.

The Society activities are supported by funds kindly donated by the Society supporting members. Their kind and generous supports are essential and are very much appreciated.
Organization of the Sialic Acids Society

President:
Tamio Yamakawa

Secretary General:
Haruo Ogura

Board Members:

Auditors:
Yoshiyasu Shitori, Satoshi Toyoshima

Advisory Members:
Masyuki Ishikawa, Tamao Endo, Makoto Kiso, Yasuyuki Tsuda, Hisashi Narimatsu, Taeko Miyagi, Keiichi Yoshida, Teruo Yoshino, Tetsuo Ichiji (Combi), Noriaki Inamura (Seikagaku Kogyo), Tomomasa Fukuda (Toyo Life Service), Yuji Matsuzaki (Tokyo Chemical Industry CO., LTD)
S. Hakomori, R. Schauer, R. R. Schmidt

August 2016

August, 2006

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Kitajima, Akira Kobata, Masaki Saito, Akemi Suzuki, Shigeo Suzuki,
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Shigeki Sato (JPS), Yasuo Kondo (Shionogi), Yuji Matsuzaki (Tokyo Chem.)
S. Hakomori, R. Schauer, R. R. Schmidt

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Haruo Ogura
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Organized Symposia

The 1st Symposium on Sialic Acids
on June 21, 1980, at Kitasato Institute
Organized by Haruo Ogura (Kitasato University)

Program
Kimio Furuhata (Kitasato University):
  Studies on sialic acids – Chemistry of N-acetylneuraminic acid –
Shojiro Ito (Kohno Clinical Medical Research Inst.):
  Microcalorimetry and Sialic acids
Yoko Yamada (Kohno Clinical Medical Research Inst.):
  Sialic acids and heat reaction – Relation with sialic acid content of red blood cells and plasma –

The 2nd Symposium on Sialic Acids
on February 14, 1981, at Kanto-ishi-seiyaku Co. Ltd., Mitsui Building Meeting Room
Organized by Haruo Ogura (Kitasato University)

Program
Toshiaki Osawa (The University of Tokyo):
  T cell subsets and sialic acids
Arihiro Tomita (Jikei Medical College):
  Effect of neuraminidase on human leukocytes
Kimio Furuhata (Kitasato University):
  Synthesis of sialic acids derivatives

The 3rd Symposium on Sialic Acids
on July 21, 1981, at Nenkin-Kaikan, Seven city
Organized by Haruo Ogura (Kitasato University)
Program
Krishna C. Agrawal (Tulane University, School of Medicine):
   Studies of sialic acids derivatives as inhibitory agents for cell
   membrane formation
Kimio Furuhata (Kitasato University):
   Synthesis of N-acetyleneuraminic acid

The 4th Symposium on Sialic Acids
on December 27, 1982, at Nenkin-Kaikan, Seven city
Organized by Haruo Ogura (Kitasato University)

Program
Haruo Ogura (Kitasato University):
   Synthesis of sialic acid derivatives
Satoshi Toyoshima (The University of Tokyo):
   Sialic acid derivatives and their biological activities

The 5th Symposium on Sialic Acids
on June 21, 1983, at Yakugaku-kaikan Hall
Organized by Haruo Ogura (Kitasato University)

Program
Tamio Yamakawa (Tokyo Metropolitan Inst. of Medical Science):
   Stories on sialic acids

*Prof. Ogura asked Prof. Tamio Yamakawa to be the president of the Sialic
Acids Society, and we decided to organize future symposia publicly
opened.
The 6th Symposium on Sialic Acids
on December 27, 1983, at Kanto–ishi–seiyaku Co. Ltd., Meeting Room
Organized by Sialic Acids Society (Convener: Haruo Ogura)

Program
Tamio Yamakawa (Society President):
   Opening address
Akemi Suzuki (Tokyo Metropolitan Inst. of Medical Science):
   Genetic control of sugar chains of glycolipids
Tomoya Ogawa (Institute of Physical and Chemical Research):
   Recent topics about synthesis of sialic acids derivatives
General discussion

The 7th Symposium on Sialic Acids
On July 28, 1984, at Gakusi–kaikan Bunshitu
Organized by Sialic Acids Society (Convener: Haruo Ogura)

Program
Tamio Yamakawa (Society President):
   Opening address
Tadashi Tai (Tokyo Metropolitan Inst. of Medical Science):
   Ganglioside GM2 and GD2 identified as cancer related antigens
Yoshitaka Nagai (The University of Tokyo):
   Biomembrane functions of sialic acid containing glycolipids
General discussion

The 8th Symposium on Sialic Acids
on July 2, 1985, at Yakugaku–kaikan Hall
Organized by Sialic Acids Society (Convener: Haruo Ogura)

Program
Tamio Yamakawa (Society President):
Opening address
Akira Kobata (Inst. of Medical Science):
A relation between differentiation of blood cells and the structure of cell surface sugar chains
Juji Yoshimura (Tokyo Institute of Technology):
Synthetic studies on branched sugar derivatives
General discussion
The 9th Symposium on Sialic Acids
(The first International Conference)
on November 16, 1985, at Sumitomo Hall

STRUCTURE AND FUNCTION OF GLYCOCONJUGATES
–RECENT PROGRESS–
Organized by Sialic Acids Society and Institute of Physical and Chemical Research

Program
Tamio Yamakawa (Sialic Acids Society President):
  Opening Address
10:00–10:50 chaired by Shoshichi Nojima
Tetsuo Shiba (Osaka University):
  Recent Progress on Chemistry of Lipopolysaccharide
10:50–11:40 chaired by Tetsuo Suami (Keio University)
Seiichiro Ogawa (Keio University):
  Synthesis of Biologically Active Compounds Containing Cyclitols
11:40–12:30 chaired by Koichi Shudo
Tomoya Ogawa (RIKEN):
  Synthetic Studies on Glycosphingolipids
13:30–14:30 chaired by Juji Yoshimura
H. Paulsen (University of Hamburg):
  Synthesis of Complex Oligosaccharide–Chains of Glycoconjugates
14:30–15:20 chaired by Toshio Miyazaki
Toshiaki Ohsawa (University of Tokyo):
  Biological Activities of Sialic Acid Nucleoside
15:50–16:40 chaired by Akira Kobata
Yoshitaka Nagai (University of Tokyo):
  Studies of Bioactive Gangliosides
16:40–17:40 chaired by Haruo Ogura
R.Schauer (University of Kiel):
  Biochemistry of Sialic Acids
17:40–17:50
Haruo Ogura (Kitasato University):
Closing remarks

18:00–20:00 Banquet

*There were more than 300 attendants.
The 10th Symposium on Sialic Acids
(The Second International Conference)
on October 13, 1986 at Keio Plaza Hotel
FRONTIERS OF GLYCOCONJUGATE RESEARCH
Organized by Sialic Acids Society

Program
Tamio Yamakawa (Sialic Acids Society President):
  Opening address
9:30–10:30 chaired by Shoshichi Nojima
Ikuo Yamashina (Kyoto University):
  Monoclonal Antibodies Recognizing Cancer–associated Alterations of
  Carbohydrate Chains of Glycoproteins
10:30–11:30 chaired by Akira Kobata
Victor Ginsburg (NIH):
  Monoclonal Antibodies Directed against Sialic Acid–containing
  Glycoconjugates
11:30–12:30 chaired by Toshiaki Ohsawa
Sen–ichiro Hakomori (Fred Hutchinson Cancer Res. Ctr.):
  Chemistry of Tumor–associated and Allogenic Glycolipid Antigens with
  New Structures

14:00–15:00 chaired by Akemi Suzuki
Donald M. Marcus (Baylor College of Medicine):
  Idiotypes and Regulation of Antibodies Directed against Carbohydrate
  Determinants
15:00–15:45 chaired by Juji Yoshimura
Haruo Ogura (Kitasato University):
  Studies on Glycosylation Reactions of Sialic Acid
16:15–17:00 chaired by Tomoya Ogawa
Masao Iwamori (University of Tokyo):
  Application of FAB–MS to Glycolipid Chemistry –Structure and
  Metabolism of Thymus Glycolipids–
17:00–18:00 chaired by Yoshitaka Nagai
Heinz Egge (University of Bonn):
Structural Studies on Sialylated Glycoconjugaes

18:00–20:00 Banquet

*More than 440 attendants.

Organized by Sialic Acids Society

FRONTIERS OF GLYCOCONJUGATE RESEARCH
The 2nd International Meeting of Sialic Acids Society

Abstracts

October 13, 1986
Keio Plaza Hotel

Sialic Acids Society
The 11th Symposium on Sialic Acids
on October 24, 1987, at Kitasato University
Organized by Sialic Acids Society (Convener: Haruo Ogura)

Program
Tamio Yamakawa (Society President):
   Opening address
Chairperson: Haruo Ogura
Shinkiti Koto (Kitasato University):
   Syntheses of sugar chains under a dehydration condensation
Chairperson: Shonosuke Zen
Kimio Furuhata (Kitasato University):
   About ester derivatives of sialic acids
Chairperson: Kazuo Achiwa
Mamoru Sugimoto (MECT Co., Ltd.):
   Synthetic studies on glycolipids containing sialic acids
Chairperson: Tomoya Ogawa
Akira Hasegawa (Gifu University):
   Synthetic studies on sialic acids derivatives and their complex glycosides
Chairperson: Juji Yoshimura
Toshio Goto (Nagoya University):
   Synthetic studies on gangliosides
The 12th Symposium on Sialic Acids
(the Third International Conference)
May 18~21, 1988, at Japan and Germany Center, Berlin
Sponsored by Sialic Acids Society
Organizing Committee: Roland Schauer; Tamio Yamakawa
Secretaries: Gerd Reuter; Elfriede Schauer; Akemi Suzuki
Venue Address:
Japanisch–Deutsches Zentrum Berlin
Tiergartenstr. 24–27 D–1000 Berlin 30

Program
May 18
Opening Ceremony
T. Yamakawa:
  Brief History of the Japanese Sialic Acids Society
E. Friese:
  Support of German Science by Hajime–Hoshi and Gunshiro Mothizuki
H. Faillard:
  The Early History of Sialic Acids

May 19
Chairmen: H. Paulsen and A. Hasegawa
8:30 H. Ogura:
  Synthesis of Sialic Acid Glycosides
9:00 E. Zbiral:
  Synthesis of Sialic Acid Analogues and their Behavior towards Enzymes
  of the Sialic Acid Metabolism
9:30 M. Sugimoto, M. Numata, and T. Ogawa:
  Recent Aspects in Ganglioside Synthesis
10:30 Y. A. Knirel:
  New Sialic Acid–like Sugars: Components of Bacterial
  Lipopolysaccharides
11:00 A. Venot and R. M. Ratcliffe:
  Synthesis of Sialyl Le(a) and Le(x) Glycosides
11:15 K. G. I. Nilsson and B.–M. E. Gudmundsson:
Synthesis of CMP–Neu5Ac and Neu5Ac(\(\alpha 2\)–3)Gal(\(\beta 1\)–3)Gal NAc(\(\alpha\))–OEt with Immobilised Cytidin–5'–Monophosphosialate Synthase and \(\beta\)–D–Galactoside (\(\alpha 2\)–3)Sialyltransferase

11.30 Posters

Chairmen: H. Egge and T. Osawa
14:30 H. J. Jennings, F. E. Ashton, J.–R. Brisson, A. Gamian, F. Michon, and R. Roy:
   Sialic Acid–Containing Bacterial Polysaccharides
15:00 B. D. Livingston, R. D. McCoy, J. L. Jacobvs, M. C. Glick, and F. A. Troy:
   Structure, Synthesis, Function of Polysialosyl–Containing Glycoproteins on Cells of Neural Origin
15:30 J. H. Krauss, G. Reuter, R. Schauer, and H. Mayer:
   Sialic Acids in the Lipopolysaccharides of Purple Nonsulfur Bacteria
15:45 J. P. Kamerling, J. B. L. Damm, K. J. Hard, and J. F. G. Vliegenthart:
   Analysis of N,O–Acylneuraminic Acid–Containing Carbohydrate Chains in N–Glycoproteins
16:30 M. Sekine, K. Nakamura, M. Suzuki, F. Inagaki, T. Yamakawa, and A. Suzuki:
   Genetic Control of Globo glycolipid Expression in Mouse Kidney
16:45 P. Vischer, C. Hagemeier, and E. Buddecke:
   Investigations on the Biosynthesis of Sialic Acid in Aortic Tissue and Cultured Arterial Wall Cells

17:00 Posters

May 20
Chairmen: H. Rahmann and A. Kobata
8:30 E. U. Lee, J. Weinstein, J. C. Paulson:
   Expression of \(\beta\)–Galactoside \(\alpha 2,6\) Sialyltransferase in Chinese Hamster Ovary Cells Alters Terminal Glycosylation Sequences of N–Linked Carbohydrate Groups
9:00 D. H. Van den Eijnden and W. E. C. M. Schiphorst:
Specificity and Inhibition of Sialyltransferases
9:30 J. Roth:
Subcellular Distribution of Sialyltransferase and Sialic Acid Residues
10:30 G. Tettamanti, R. Ghidoni, and M. Trinchera:
The Intracellular Routes of Ganglioside Metabolism
11:00 C. Scholtissek:
Myxovirus Sialidases: Structure, Specificity, Biosynthesis, Genetics and Function

11:30 Posters

Chairmen: E. Buddecke and Y. Suzuki
14:30 A. Lepers, R. Cacan, and A. Verbert:
Study of the Mechanism of CMP–NeuAc Transport in Normal and
CMP–NeuAc Carrier Deficient CHO Cells Using Plasma Membrane Permeabilization Technique
14:45 A. Varki, A. Manzi, S. Diaz, and H. Higa:
Acetylation and De–Acetylation of Sialic Acids in the Rat Liver
15:00 L. Shaw and R. Schauer:
The Biosynthesis of N–Glycoloylneuraminic Acid Occurs by
Hydroxylation of the CMP–Glycoside of N–Acetylneuraminic Acid
15:15 R. Schauer and G. Reuter:
Metabolism of O–Acetylated Sialic Acids

Chairman: Graf von Brockdorff
16:00 E. Friese:
Support of German Science by Hajime Hoshi and Gunshiro Mochizuki
16:45 Films and Information on Berlin

Chairmen: E. Buddecke and Y. Suzuki
20:00 Y. Suzuki, E. Nanba, A. Tsuji, and K. Omura:
Molecular Heterogeneity of Protective Protein in Galactosialidosis
20:15 E. R. Vimsr, L. Lawrisuk, J. Galen, and J. B. Kaper:
Cloning and Molecular Analysis of Neuraminidase Genes from Vibrio cholerae and Salmonella typhimurium
20:30 S. Tsuiki and T. Miyagi:
Isolation and Properties of Rat Liver Sialidase

21:00 K. Sandhoff, D. Klein, G. Pohlentz, and G. Schwarzmann:
Gangliosides as Substrates for Sialidases and Sialyltransferases

21:30 M. Cantz, B. Ulrich–Bott, and M. Lieser:
Lysosomal Sialidase Deficiency

May 21
Chairmen: K. Decker and I. Yamashina
8:30 Y. Nagai, Y. Sanai, and H. Nakaishi:
Role of Oncogenes in Ganglioside Biosyntheses
9:00 V. Schirrmacher and P. Altevogt:
Sialic Acids in Cancer Metastasis: Experimental Studies
9:30 T. Osawa:
Inhibition of Tumor Metastasis with Sialic Acid Derivatives
10:30 D. Roelcke:
Immunology of Sialic Acids on the Erythrocyte Surface
11:00 A. Kobata:
Structures of Sialic Acid–Containing N–Glycans in Cancer Cells

11.30 Posters

Chairmen: W. Reutter and K. Tomita
14:00 K. Jann, B. Jann, H. Hoschutzky, and T. Moch:
Sialic Acid Specific Recognition Protein of Pathogenic Escherichia coli
14:30 I. Yamashina:
Monoclonal Antibodies Directed Against Sialylated Oligosaccharides from Malignant Tissues
15:00 A. P. Corfield, S. A. Wagnaer, R. Roe, W. van Dijk, and J. R. Clamp:
CMP–Sialic Acid Hydrolase. A Cell Surface Enzyme Implicated in Colorectal Cancer
15:15 M. Saito, H. Nojiri, S. Kitagawa, T. Ogawa, H. Ogura, M. Ito, and Y. Nagai:
Gangliosides and their Structurally–Related Synthetic Sialoglyco Compounds Play Crucial Roles in Both the Differentiation–Induction
and the Determination of Differentiation–Directions of Human Myelogenous Leukemia Cells

Chairmen: Y. Nagai and R. Schauer

16:00 K. Zenita, K. Hirashima, K. Shigeta, N. Hiraiwa, and R. Kannagi:
VH Gene Expression in the Monoclonal Antibodies Directed to Gangliosides Having Various Sialic Acid Linkages

16:15 R. J. Wieser and F. Oesch:
The Biological Activity of the Plasma Membrane Glycoproteins Involved in Contact–Dependent Inhibition of Growth is Dependent upon the Degree of Sialylation

16:30 I. U. Pardoe and A. T. H. Burness:
The Role of Sialic Acid in the Attachment of Encephalomyocarditis Virus to Human Erythrocytes

16:45 S. D. Rosen, S.-I. Chai, D. True, M. S. Singer, and T. A. Yednock:
In vivo Desialylation of High Endothelial Venules Inactivates Attachment Sites for Blood–Bjorne Lymphocytes

17:00 ROUND TABLE DISCUSSION
Recent progress and future trends in sialic acid research

*The poster presentations: SYNTHESIS 15, ANALYSIS and STRUCTURE 16, BIOSYNTHESIS 9, CLONING 2, DEGRADATION 14, ROLE IN MALIGNANCY 13, BIOLOGICAL PHENOMENA 25: in total 94.
Because it was held as a part of grand opening ceremony of a new building in refurbishing "Japan and Germany Center" (former Japan Embassy), this Japan and Germany Sialic Acids Symposium was great success in this sense. By effort of Professor Schauer, proceedings were published as "SIALIC ACIDS 1988". Participants gathered from various European countries other than Japan and Germany. This Japan and Germany sialic acids symposium was not publicly opened, but the following international sialic acids symposia were held on the basis of this symposium afterwards in Europe at first and then various countries in the world. In Japan, it was held in 2006, as “Sialoglycoscience 2006” (Fifth International Conference), in Mishima, July 30, 2006.
SIALIC ACIDS 1988

PROCEEDINGS
of the
Japanese-German Symposium on Sialic Acids
May 18-21, 1988
Japanisch-Deutsches Zentrum Berlin

R. Schauer, T. Yarnakawa (Eds.)

Sialic acids represent a group of about 30 acidic sugars which differ in their substitution patterns at the amino and the hydroxyl functions. They are found in all higher animals and sometimes in microorganisms, mainly as components of oligosaccharides, glycoproteins, gangliosides, and polysaccharides. In these Proceedings from the Japanese-German Symposium on Sialic Acids (Japanisch-Deutsches Zentrum Berlin, May 18-21, 1988) the most recent progress made in the chemical synthesis, structural analysis, metabolism and biological role of sialic acids and their derivatives is described. The latest trends in this field of research are genetic aspects, regulation of cellular and molecular recognition, the role of sialic acids in tumor biology and their application in the treatment of diseases.

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Bärbel Mende
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The 13th Symposium on Sialic Acids
(the Fourth international Conference)
Sponsored by Sialic Acids Society
as FUJI’90 POST–SYMPOSIUM (Satellite Symposium of XVth International Carbohydrate Symposium Aug.12–17, 1990 Yokohama)
August 18–21, 1990
Fuji Training Center, The Fuji Training Institute, Susono City, Shizuoka

1990 August 18 (Sat)
13:30–14:00 Opening Remarks
Prof. T. Suami
Prof. J. Yoshimura
Prof. P. J. Garegg

14:00–15:50 Moderators; H. Paulsen, H. Ogura
R. Schauer:
The use of synthetic oligosaccharides in the study of the galactose receptor of macrophages
R. R. Schmidt:
New aspects of glycosylation reactions
E. Zbiral:
Sialic acid analogues as useful probes for structure activity relationships

16:20–17:50 Moderators; P. Sinay, T. Ogawa
D. Horton:
Stereochemical regulation in synthesis of polyfunctional carbocycles by chirality transfer from unsaturated sugar derivatives
R. U. Lemieux:
The synthesis and immunochemical properties of extensively deoxygenated derivatives of the H–type 2 blood group determinant

August 19 (Sun)
9:00–10:10 Moderators; F. W. Lichtenthaler, S. Nishiyama
J. Thiem:
Combined classical and chemoenzymic glycosylations

P. Kovac:
New strategies in the synthesis of β-D-galactooligosaccharides. A synthetic heptasaccharides reveals the 'Groove–binding' character of a monoclonal antibody

10:40–11:50 Moderators; L. Anderson, S. Ogawa

V. Pozsgay:
Recent results in the synthesis of oligosaccharides related to cell–wall glycans

L. Hough:
From sugars to alkaloids morpholines and spiroacetals

August 20 (Mon)
9:00–10:10 Moderators; D. Horton, T. Machinami

G.D. Daves, Jr.:
Glycals and C–glycosides synthesis

S. Czernecki:
Recent results in stereo–controlled synthesis of C–glycosides and C–nucleosides

10:40–11:50 Moderators; A.C. Richardson, E. Kaji

G. Descotes:
Radical functionalization of the anomeric center of carbohydrates and synthetic applications

F. W. Lichtenthaler:
Recent results in stereo–controlled synthesis of C–glycosides and C–nucleosides

13:00–14:50 Moderators; R.U. Lemieux, A. Hasegawa

L. Anderson:
Improvements in the synthesis of trehalose–based mycobacterial lipids

A. C. Richardson:
Synthesis of phenolic glycosides as chromogenic substrates for the assay of glycosidases

H. Paulsen:

Synthesis of structures of the inner core region of lipopolysaccharides

*Based on this international conference, published was
"Carbohydrate–Synthetic Methods and Applications in Medicinal Chemistry" Edited by H. Ogura, A. Hasegawa and T. Suami from KODANSHA–VCH.

A summary of this meeting can be found in “Search for Physiological Active Substances Starting from Sialic Acids as a Leading Compound”. [Haruo Ogura, YAKUGAKU ZASSHI, 114(5)] 277–303 (1994) ]
FUJI ’90 POST-SYMPOSIUM

“Recent Progress of Synthetic Methods in Carbohydrates and Their Applications to Medicinal Chemistry”

Abstracts
Carbohydrates
Synthetic Methods and Applications in Medicinal Chemistry
Edited by H. Ogura, A. Hasegawa and T. Suami
KODANSHA
The 14th Symposium on Sialic Acids
on November 29, 1996, at Keio Plaza Hotel
Organized by Sialic Acids Society (Convener Haruo Ogura)

Program
Tamio Yamakawa (Society President):
  Opening address
Yoshitaka Nagai (Institute of Mitsubishi Life Sciences):
  Recent progress of sialic acid–related study

The 15th Symposium on Sialic Acids
on November 21, 1997, at University of Tokyo, Sanjyokaikan Hall.
Organized by Sialic Acids Society (Convener Haruo Ogura)

Program
Tamio Yamakawa (Society President):
  Opening address
Tatsuo Irimura (University of Tokyo):
  Recent progress in carbohydrate chains and carbohydrate recognition molecules related to pathological conditions

The 16th Symposium on Sialic Acids
on November 24, 1998, at Nagai Memorial hall
Organized by Sialic Acids Society (Convener Haruo Ogura)

Program
Tamio Yamakawa (Society President):
  Opening address
Masaki Saito (National Cancer Institute):
  In search of biological functions of gangliosides as sialoglycolipids
  – Molecular cloning of GM3 synthetic sialyltransferase
The 17th Symposium on Sialic Acids
on November 24, 1999, at Nagai Memorial Hall
Organized by Sialic Acids Society (Convener Haruo Ogura)

Program
Tamio Yamakawa (Society President):
  Opening address
Akemi Suzuki (RIKEN Frontier Research System):
  Expression control of N-glycolylneuraminic acid

The 18th Symposium on Sialic Acids
on November 22, 2000, at Nagai Memorial Hall
Organized by Sialic Acids Society (Convener Haruo Ogura)

Program
Tamio Yamakawa (Society President):
  Opening address
Yoshihiro Kawaoka (Inst. of Medical Sci., The University of Tokyo):
  Host and receptor specificity of influenza virus

The 19th Symposium on Sialic Acids
on November 22, 2001, at Nagai Memorial Hall
Organized by Sialic Acids Society (Convener Haruo Ogura)

Program
Tamio Yamakawa (Society President):
  Opening address
Taeko Miyagi (Miyagi Cancer Center):
  Relation of sialidases and cancer or diabetes
The 20th Symposium on Sialic Acids
on November 28, 2002, at Nagai Memorial Hall
Organized by Sialic Acids Society (Convener Haruo Ogura)

Program
Tamio Yamakawa (Society President):
  Opening address
Makoto Kiso (Gifu University):
  Chemical approach to sialo–glycobiology

The 21st Symposium on Sialic Acids
as GlycoTOKYO 2003 Symposium
on November 22, 2003, at Kitasato University Convention Hall
Organized by Sialic Acids Society and GlycoTOKYO

GLYCOCONJUGATE IN LIFE SCIENCE
Program
13:00 Opening
13:05 2003 GlycoTOKYO Young Scientist Award Lecture
Ichiro Matsuo (RIKEN):
  Chemical study of ER–related asparagine linked glycans – Aiming at
  elucidation of quality control machinery of glycoproteins –
Tsuyosi Miura (Noguchi Institute):
  Development of quick sugar chain synthesis using fluorous–tag
  method

13:50 Eisuke Kaji (Kitasato University):
  Effective synthesis of sugar chains based on position–selective
  activation of sugar hydroxyl groups
14:20 Hideji Ishida (Gifu University):
  Chemical approach to elucidation of pathological mechanism of
  self–immune neuronal diseases – Synthetic studies of Campylobacter
  Jejuni lipoooligosaccharides
15:10 break

15:30 Takeshi Honda (Sankyo Co., Ltd.):
Synthesis and biological activities of novel inhibitors for influenza sialidase

16:20 Hisashi Narimatsu (AIST/Tsukuba University):
Novel understanding obtained by comprehensive analysis of human glycogenes – Application to drug discovery–

17:10 Haruki Yamada (Kitasato University/Kitasato Inst.):
Structures and pharmacological activities of glycoconjugates prepared from Japanese and Chinese medicines

17:40 Business meeting of Sialic Acids Society

18:00 Social gathering at main dinning room of Kitasato University

**The 22th Symposium on Sialic Acids**
on November 6, 2004, at Kitasato University
Organized by Sialic Acids Society (Convener Haruo Ogura)

- **WHAT ARE SIALIC ACIDS –**

  **Program**
  14:00
  Tamio Yamakawa (Society President):
  Opening address
  14:05–15:05
  Roland Schauer (Kiel University):
  Sialic acids: fascinating sugars in higher animals and man
  15:05–16:05
  Yasuo Suzuki (Shizuoka Prefectural University, CREST, JST; COE 21th Century):
  Sialo–biology of influenza
  16:05–17:30
Chomei So (Kiyoken):
  The medicine and food as same source and a bird's nest
17:30–19:30
Social gathering (Kitasato University main dining room)
"Bird's nest dessert" offered by Chomei So

The 23th Symposium on Sialic Acids
on December 3, 2005, at Kitasato University Convention Hall
Organized by Sialic Acids Society (Convener Haruo Ogura)

Program
Tamio Yamakawa (Society President):
  Opening address
Ken Kitajima (Nagoya University):
  New function of polysialic acids chain length in the nervous system
Tatunori Seki (Juntendo University):
  Neurogenesis still continues in adult brain: Polysialic acids express a new brain neurology