

The 62nd Japanese Peptide Symposium

October 21 (Tuesday)

9:30–9:35 **Opening Remarks (Yuji Ito)**

9:35–10:30 **Young Investigator's Oral Presentations** (8 min talk, 2 min discussion, 1 min speaker exchange)

Session 1 (chairs: Kazuya Kobayashi, Keitaro Suyama)

Y-01 Diastereoselective synthesis of fluoroalkene dipeptide isosteres as peptidomimetics and their applications to amyloid beta-related peptides

Marisa Arioka, Takuya Kobayakawa, Kohei Tsuji, Hirokazu Tamamura (Laboratory for Biomaterials and Bioengineering, Institute of Integrated Research, Institute of Science Tokyo)

Y-02 Development of peptide ligation methodology using *N*-aminoacyl-*N*-hydroxy amino acid (NAHA) residue

Junya Hayashi, Ayane Masui, Masaya Denda, Akira Otake (Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University)

Y-03 New methods for late-stage site-specific modification of native peptides

Yisa Xiao¹, Haiyan Zhou^{1,2}, Pengfei Shi¹, Xueqian Zhao³, Han Liu¹, Xuechen Li¹ (¹Department of Chemistry, State Key Laboratory of Synthetic Chemistry, The University of Hong Kong, ²Chemistry and Chemical Engineering Guangdong Laboratory, The University of Hong Kong, ³Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University)

Y-04 Fluoroalkene dipeptide isosteres in tau-derived peptides elucidate the role of prolyl amide isomerization in tau aggregation

Chihiro Iio¹, Kohei Sato², Nobuyuki Mase², Tetsuo Narumi^{1,2} (¹Graduate School of Medical Photonics, Shizuoka University, ²Graduate School of Integrated Science and Technology, Shizuoka University)

Y-05 A platform for *de novo* thiazole-containing macrocyclic peptide ligands via an *in vitro* posttranslational chemoenzymatic synthesis

Akihiro Saito¹, Hiroyuki Kimura², Hiroyasu Onaka³, Hiroaki Suga², Yuki Goto¹ (¹Graduate School of Science, Kyoto University, ²Graduate School of Science, The University of Tokyo, ³Faculty of Science, Gakushuin University)

10:30–10:45 **Break**

10:45–11:40 **Young Investigator's Oral Presentations** (8 min talk, 2 min discussion, 1 min speaker exchange)

Session 2 (chairs: Akira Shigenaga, Jumpei Morimoto)

Y-06 Chemical synthesis and functional analysis of NICOL with *O*-linked glycosylation

Kenta Nagahama¹, Toshiki Takei¹, Shun Ito¹, Toshifumi Takao¹, Daiji Kiyozumi², Hironobu Hojo¹ (¹Institute for Protein Research, The University of Osaka, ²Research Organization of Science and Technology, Ritsumeikan University)

Y-07 Solid phase synthesis of axinellin A and stylissamide H and reconfirmation of these chemical structures

Kenta Nakajima, Yitong Li, Hiroyuki Konno (Department of Chemistry and Biological Engineering, Graduate School of Science and Engineering, Yamagata University)

- Y-08 New lasso peptide in rare actinomycete *Nonomuraea jiangxiensis***
Atsushi Kawakami¹, Takeshi Tsunoda², Tohru Dairi², Yasushi Ogasawara² (¹Grad. Sch. Chem. Sci. Eng., Hokkaido University, ²Grad. Sch. Eng., Hokkaido University)
- Y-09 Development of highly efficient synthesis method of *N*-methyl peptides**
Haruhiko Takahashi, Ayano Nakashima, Tomomi Shiraishi, Kazuki Sato, Takeshi Wada (Department of Medicinal and Life Sciences, Tokyo University of Science)
- Y-10 Boronic acid-catechol reversible dimerization for high-affinity peptide and peptoid ligands**
Elizabeth Bredice¹, Madeline Swanson¹, Thomas Kodadek², Skander Abboud^{1,2} (¹University of North Carolina at Wilmington, ²UF Scripps Institute)
- 11:40–11:50 **Break**
- 11:50–12:50 **Lunch Break & Luncheon Seminar (3F, Main Hall)**
- 12:50–13:00 **Break**
- 13:00–14:06 **Young Investigator's Oral Presentations** (8 min talk, 2 min discussion, 1 min speaker exchange)
Session 3 (chairs: Atsuhiko Taniguchi, Gosuke Hayashi)
- Y-11 Calmodulin-binding peptide: a natural peptide aptamer that alter target proteins in a metal ion-dependent manner**
Haruaki Inoue¹, Hidenao Arai¹, Hiroaki Tomioka², Koji Matsuoka^{1,3}, Naoto Nemoto^{1,3} (¹Graduate School of Science and Engineering, Saitama University, ²Graduate School of Education, Saitama University, ³Medical Innovation Research Unit (MiU), Advanced Institute of Innovative Technology (AIIT), Saitama University)
- Y-12 Investigation of regulatory roles of branch architectures on proteolytic functions of K48/K63 polyubiquitin chains**
Takafumi Furuhashi¹, Choi Bumkyu¹, Takuya Tomita², Yusuke Sato^{3,4}, Kei Okatsu⁵, Shuya Fukai⁵, Yasushi Saeki², Akimitsu Okamoto¹ (¹Graduate School of Engineering, The University of Tokyo, ²The Institute of Medical Science, The University of Tokyo, ³Graduate School of Engineering, Tottori University, ⁴Center for Research on Green Sustainable Chemistry, Tottori University, ⁵Graduate School of Science, Kyoto University)
- Y-13 A cardiolipin-targeting α -helical peptide, 3029, makes strong hydrophobic interaction with the target, stabilizing inner membrane and rejuvenating dysfunction of mitochondria**
Hyeon Woon Choe^{1,2}, Yan Lee¹, Jaehoon Yu^{2,3} (¹Department of Chemistry, Seoul National University, ²CAMP Therapeutics, ³Department of Chemistry & Education, Seoul National University)
- Y-14 Mechanism of action of a coiled-coil peptide analogue promoting *E. coli* growth in the stationary phase**
Ryutaro Tatei, Koudai Ueno, Yuna Nunokawa, Rui Kamada, Natsumi Nakagawa, Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)
- Y-15 Targeted delivery of oligonucleotide-peptide conjugates for enhanced kidney-specific therapy**
Morgane Mannes¹, Dora Chigoho², Charlotte Martin¹, Thomas Barlow¹, Tine Hectors³, Tom Govaerts³, Pieterjan Kayaert³, Kirsten De Ridder², Carole Delachaume⁴, Béatrice Vayssière⁴, Martin Andrews³,

Sophie Hernot², Steven Ballet¹ (¹Research Group of Organic Chemistry, Vrije Universiteit Brussel, ²Molecular Imaging and Therapy (MITH) research group, Vrije Universiteit Brussel, ³Galapagos NV, ⁴Galapagos SASU)

Y-16 Development and evaluation of lipid nanoparticles carrying a CD9-binding peptide

Kyoko Aratani¹, Shogo Saito¹, Masatoshi Maeki², Manabu Tokeshi², Mina Okochi¹ (¹School of Materials and Chemical Technology, Institute of Science Tokyo, ²Faculty of Engineering, Hokkaido University)

14:06–14:21 **Break**

14:21–15:27 **Young Investigator's Oral Presentations** (8 min talk, 2 min discussion, 1 min speaker exchange)
Session 4 (chairs: Toshiki Takei, Kentaro Takayama)

Y-17 Inhibition of SARS-CoV-2 3CL protease maturation by an irreversible inhibitor

Yuki Yamauchi¹, Sho Konno^{1,2}, Ayane Shirahama², Arashi Homma², Akihiro Taguchi^{1,2}, Atsuhiko Taniguchi^{1,2}, Atsushi Kawaguchi³, Yoshio Hayashi^{2,4} (¹Graduate School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, ²School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, ³Institute of Medicine, Transborder Medical Research Center, University of Tsukuba, ⁴School of Life Sciences, Tokyo University of Pharmacy and Life Sciences)

Y-18 Rational peptide design targeting MDM2 via *in silico*-guided grafting strategy

Minami Fujita^{1,2}, Tsuyoshi Konuma¹, Noriaki Arakawa³, Yosuke Demizu^{1,2} (¹Graduate School of Medical Life Science, Yokohama City University, ²Division of Organic Chemistry, National Institute of Health Sciences, ³Division of Medicinal Safety Science, National Institute of Health Sciences)

Y-19 *In vivo* analysis of peptide metabolism for tumor diagnostic applications

Hiroyuki Yatabe¹, Yutaro Saito¹, Yoichi Takakusagi^{2,3}, Keita Saito², Murali Cherukuri Krishna⁴, Kazutoshi Yamamoto⁴, Shinsuke Sando¹ (¹Graduate School of Engineering, The University of Tokyo, ²National Institutes for Quantum Life Science and Technology, ³Center of Quantum Life Science for Structural Therapeutics (cQUEST), Chiba University, ⁴National Institutes of Health)

Y-20 Development of JA signaling-targeted TF inhibitors enabled by peptide delivery chemocarriers in plants

Ruiqi Liu^{1,2}, Koshiki Mino³, Akiko Idei³, Minoru Yoshida³, Minoru Ueda^{1,4}, Yousuke Takaoka² (¹Graduate School of Science, Tohoku University, ²Graduate School of Agriculture, Kyoto University, ³RIKEN Center for Sustainable Resource Science, ⁴Graduate School of Life Sciences, Tohoku University)

Y-21 Insights into the recognition of triple-helical peptides by collagen VII

Moe Hashimoto¹, Hiroya Oki², Kazuki Kawahara³, Kazunori K. Fujii¹, Takaki Koide¹ (¹Department of Chemistry and Biochemistry, School of Advanced Science and Engineering, Waseda University, ²Department of Infection Metagenomics, Genome Information Research Center, Research Institute for Microbial Diseases, The University of Osaka, ³Graduate School of Pharmaceutical Sciences, The University of Osaka)

Y-22 Identification of essential amino acid residues in the collagen triple-helix recognized by von Willebrand factor A-like domain 1 of matrilin-1

Tomoki Kamai, Kazunori K. Fujii, Takaki Koide (Department of Chemistry and Biochemistry, School of Advanced Science and Engineering, Waseda University)

15:27–15:42 **Break**

- 15:42–16:48 **Young Investigator's Oral Presentations** (8 min talk, 2 min discussion, 1 min speaker exchange)
Session 5 (chairs: Kazunori Matsuura, Rui Kamada)
- Y-23 Stepwise phase behavior in mixtures of short-chain elastin-like peptides with minimal structural differences**
Naoki Tanaka¹, Keitaro Suyama^{1,2}, Elissa Mai¹, Takeru Nose^{1,2} (¹Department of Chemistry, Faculty and Graduate School of Science, Kyushu University, ²Faculty of Arts and Science, Kyushu University)
- Y-24 Structural insight into the mechanism of rare peptide nitration by cytochrome P450 enzyme**
Yongwei Zhao¹, Yohei Katsuyama^{1,2}, Yasuo Ohnishi^{1,2} (¹The laboratory of Fermentation Microbiology, The Graduate School of Agricultural and Life Sciences, The University of Tokyo, ²Collaborative Research Institute for Innovative Microbiology, The University of Tokyo)
- Y-25 Capturing a key folding intermediate in a high-molecular-weight disulfide-containing protein using a novel peptide-based labeling reagent**
Nana Sakata¹, Orika Ashida¹, Miki Matsuzaki¹, Mitsuhiro Miyazawa², Shigeru Shimamoto¹, Yuji Hidaka¹ (¹Graduate School of Science and Engineering Research, Kindai University, ²PrevenTec Inc.)
- Y-26 Heterotypic polyubiquitin probes for comprehensive evaluation of binding preference of decoder proteins for branch structures**
Taiki Uno¹, Takafumi Furuhashi¹, Usano Toyoda¹, Takuya Tomita², Yusuke Sato^{3,4}, Kei Okatsu⁵, Shuya Fukai⁵, Yasushi Saeki², Akimitsu Okamoto¹ (¹Graduate school of Engineering, The University of Tokyo, ²The Institute of Medical Science, The University of Tokyo, ³Graduate school of Engineering, Tottori University, ⁴GSC center, Tottori University, ⁵Graduate school of Science, Kyoto University)
- Y-27 A novel soy protein derived octapeptide enhancing ghrelin secretion and food intake discovered by using comprehensive peptide analysis**
Rentaro Inoue, Kazuo Inoue, Kousaku Ohinata (Division of Food Science and Biotechnology, Graduate School of Agriculture, Kyoto University)
- Y-28 Peripheral arginine vasopressin receptor mediates anti-depressive and pro-cognitive effects in mice**
Biyun Zhang, Kohei Kawano, Kazuo Inoue, Kousaku Ohinata (Division of Food Science and Biotechnology, Graduate School of Agriculture, Kyoto University)

16:48–17:05 **Break**

17:05–18:45 **Poster Presentations** (50 min)
Session 1 (P-001-P-085)
Odd numbers: 17:05–17:55
Even numbers: 17:55–18:45

October 22 (Wednesday)

9:00–9:55 **Young Investigator's Oral Presentations** (8 min talk, 2 min discussion, 1 min speaker exchange)
Session 6 (chairs: Natsumi Nakagawa, Koushi Hidaka)

- Y-29 Photocontrol of microtubule structures by Tau-derived peptide-modified photoresponsive tetrameric protein**
Soei Watari¹, Hiroshi Inaba¹, Takashi Iwasaki², Akira Kakugo³, Kazunori Matsuura¹ (¹Graduate School of Engineering, Tottori University, ²Graduate School of Agricultural Science, Tottori University, ³Graduate School of Science, Kyoto University)
- Y-30 Hydrogels based on the self-assembly of collagen-mimetic peptides with constrained backbone structures**
Moeka Noto, Kazunori K. Fujii, Takaki Koide (Department of Chemistry and Biochemistry, School of Advanced Science and Engineering, Waseda University)
- Y-31 Detection of exosomes by peptide-modified graphene FET sensor**
Koki Toriumi, Shogo Saito, Mina Okochi (Okochi Laboratory, Institute of Science Tokyo)
- Y-32 Screening of triangular gold nanoplate mineralization peptides using machine learning**
Shogo Saito¹, Riona Oka¹, Masayoshi Tanaka^{1,2}, Mina Okochi¹ (¹School of Materials and Chemical Technology, Institute of Science Tokyo, ²School of Materials and Chemical Technology, Institute of Science Tokyo)
- Y-33 Design of stimuli-responsive self-assembling peptides utilizing benzanilide scaffold**
Jiameng Liu¹, Shohei Ishikawa², Takamasa Sakai², Tomohiko Ohwada¹, Yuko Otani¹ (¹Graduate School of Pharmaceutical Sciences, The University of Tokyo, ²Graduate School of Engineering, The University of Tokyo)
- 9:55–10:05 **Break**
- 10:05–11:55 **Invited Lectures** (25 minutes for K-1 and K-2; 30 minutes for I-1 and I-2)
Session 1 (chair: Hirokazu Tamamura, Yoshio Hayashi)
- K-1 Effect of conformational flexibility on membrane permeability of macrocyclic cyclosporin O derivatives**
Jiwon Seo, Dongjae Lee, Yeojin Yun, Namhee Kim (Department of Chemistry, Gwangju Institute of Science and Technology)
- K-2 Dimensional control of peptide assemblies enhancing myoblast bioactivity**
Yongju Kim^{1,2} (¹KU-KIST Graduate School of Converging Science and Technology, Korea University, ²Department of Integrative Energy Engineering, Korea University)
- I-1 Designing new synthetic routes and functional mimetics of insulin and related peptides**
M. Akhter Hossain (Florey Institute of Neuroscience and Mental Health, The University of Melbourne)
- I-2 Advancing sustainable peptide synthesis: green strategies for scalable and efficient automatized solid-phase manufacturing**
Anna Maria Papini (Interdepartmental Research Unit of Peptide and Protein Chemistry and Biology, Department of Chemistry “Ugo Schiff”, University of Florence)
- 11:55–12:05 **Break**
- 12:05–13:05 **Lunch Break & Luncheon Seminar (3F, Main Hall)**
- 13:05–13:15 **Break**

13:15–14:15	Japanese Peptide Society General Meeting
14:15–14:25	Break
14:25–15:55	Invited Lectures (30 min) Session 2 (chair: Shiroh Futaki, Kazuyasu Sakaguchi)
I-3	Triazolyl-bridged peptides with enhanced antimicrobial activity <u>Ines Neundorff</u> ¹ , Marco Drexelius ¹ , Joshua Grabeck ¹ , Jacob Mayer ¹ , Michele Casoria ² , Michael Quagliata ² , Anna Maria Papini ² , Denise Meinberger ³ , Andreas Klatt ³ , Isabelle Wielert ⁴ , Berenike Maier ⁴ (¹ University of Cologne, Institute for Biochemistry, ² Università degli Studi di Firenze, Dipartimento di Chimica “Ugo Schiff”, ³ University Hospital Cologne, Institute for Clinical Chemistry, ⁴ University of Cologne, Institute for Biological Physics)
I-4	Antiviral peptides against SARS-CoV-2 <u>Paolo Rovero</u> (PeptLab, Department of NeuroFarBa, University of Florence)
I-5	Design of nature-inspired stabilized peptides as next generation opioid drugs <u>Christian W. Gruber</u> (Center for Physiology and Pharmacology, Medical University of Vienna)
15:55–16:05	Break
16:05–16:43	Oral Presentations (15 min talk, 3 min discussion, 1 min speaker exchange) Session 1 (chairs: Hidehito Mukai, Ikuhiko Nakase)
O-01	Tag-assisted liquid phase peptide synthesis: a double bond enabled approach <u>Yohei Okada</u> , Sota Adachi, Shingo Shinjo-Nagahara, Yoshikazu Kitano (Department of Applied Biological Science, Tokyo University of Agriculture and Technology)
O-02	Development of a simple drug-loading system onto small extracellular vesicles using a curvature-sensing peptide that enhances cellular uptake of the vesicles <u>Kenichi Kawano</u> , Kenta Hosokawa, Aoi Taniguchi, Yuuto Oosugi, Yuki Kuzuama, Katsumi Matsuzaki (Graduate School of Pharmaceutical Sciences, Kyoto University)
16:43–17:00	Break
17:00–18:40	Poster Presentations (50 min) Session 2 (P-086-P-170) Odd numbers: 17:00–17:50 Even numbers: 17:50–18:40
18:40–19:00	Break (Move to the banquet place)
19:00–21:00	Banquet (Fukuoka Sunpalace Hotel & Hall, Palace Room)

October 23 (Thursday)

9:00–10:35 **Oral Presentations** (15 min talk, 3 min discussion, 1 min speaker exchange)

Session 2 (chairs: Yosuke Demizu, Yuki Goto)

O-03 A novel genome editing method by transient functional inhibition of the tumor suppressor protein p53 via hetero-oligomerization

Natsumi Nakagawa, Kodai Ueno, Yuna Nunokawa, Koharu Funakushi, Daiki Kurosu, Suzuka Hane, Manae Murata, Takara Imanari, Junya Wada, Rui Kamada, Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

O-04 Development of antigen epitope analysis method on peptide-modified glass slides

Saori Iida, Keigo Onishi, Shogo Saito, Mina Okochi (School of Materials and Chemical Technology, Institute of Science Tokyo)

O-05 Development of GLP-1 receptor agonists utilizing reversible covalent bonding to human serum albumin

Susumu Ebashi¹, Hisashi Yokomizo², Keitaro Suyama³, Yuichi Tsuchiya⁴, Seira Kusuda⁵, Mayako Uchida⁴, Akihiro Kishimura⁵, Takeru Nose³, Akira Otaka⁶, Shohta Kodama⁷, Daiji Kawanami², Yoshiki Katayama⁸, Takeshi Mori⁵ (¹Graduate school of Systems Life Sciences, Kyushu University, ²Department of Endocrinology and Diabetes, Fukuoka University School of Medicine, ³Faculty of Arts and Science, Kyushu University, ⁴Department of Pharmacy, Kyushu University Hospital, ⁵Department of Applied Chemistry, Faculty of Engineering, Kyushu University, ⁶Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University, ⁷Department of Regenerative Medicine and Transplantation, Faculty of Medicine, Fukuoka University, ⁸National Institute of Technology, Kitakyushu College)

O-06 Discovery of peptidic degraders enabled by click chemistry-based stapling

Yuri Takada, Hiroaki Kawanami, Yasunobu Yamashita, Yukihiro Itoh, Takayoshi Suzuki (SANKEN, The University of Osaka)

O-07 Structure-guided peptide engineering of a broad-spectrum inhibitor against variable SARS-CoV-2 spikes

Shun Nakamura^{1,2}, Yukihiro Tanimura¹, Risa Nomura¹, Hiroshi Suzuki¹, Kouki Nishikawa², Akiko Kamegawa^{1,2}, Nobutaka Numoto³, Atsushi Tanaka⁴, Shigeru Kawabata⁵, Shoichi Sakaguchi⁵, Akino Emi⁵, Youichi Suzuki⁵, Yoshinori Fujiyoshi^{1,2} (¹Institute of Integrated Research, Institute of Science Tokyo, ²CeSPIA Inc., ³Research Institute for Interdisciplinary Science, Okayama University, ⁴Research and Development Center, Osaka Medical and Pharmaceutical University, ⁵Faculty of Medicine, Osaka Medical and Pharmaceutical University)

10:35–10:45 **Break**

10:45–12:20 **Oral Presentations** (15 min talk, 3 min discussion, 1 min speaker exchange)

Session 3 (chairs: Taku Yoshiya, Makoto Oba)

O-08 Effects of cell-penetrating peptides on membrane structural formation of multivesicular endosomes

Nami Matsui¹, Satoko Arakawa², Shinya Nakai¹, Miho Nakabo¹, Yoshimasa Kawaguchi³, Shiroh Futaki³, Ikuhiko Nakase¹ (¹Graduate School of Science, Osaka Metropolitan University, ²Ochanomizu

Research Facility, Bioscience Center, Research Infrastructure Management Center, Institute of Science Tokyo, ³Institute for Chemical Research, Kyoto University)

O-09 Construction of microtubule superstructures by peptide-based display of Tau-derived peptide

Hiroshi Inaba¹, Daichi Kageyama¹, Akira Kakugo², Kazunori Matsuura¹ (¹Graduate School of Engineering, Tottori University, ²Graduate School of Science, Kyoto University)

O-10 Peptide-directed synthesis of anisotropic gold nanoparticle in DOPE-containing liposomes

Yuya Abe, Masayoshi Tanaka (School of Materials and Chemical Technology, Institute of Science Tokyo)

O-11 “Peptide cube” showing shear-stress-responsive drug release

Motoki Ueda, Shoichiro Asayama (Department of Applied Chemistry, Graduate School of Urban Environmental Sciences, Tokyo Metropolitan University)

O-12 Machine learning-based development of functional materials using peptide-displaying filamentous virus

Toshiki Sawada, Takashi Kishida, Haruka Takahashi, Michihiro Tanaka, Takeshi Serizawa (Department of Chemical Science and Engineering, School of Materials and Chemical Technology, Institute of Science Tokyo)

12:20–12:30 **Break**

12:30–13:30 **Lunch Break & Luncheon Seminar (3F, Main Hall)**

13:30–13:40 **Break**

13:40–15:15 **Oral Presentations** (15 min talk, 3 min discussion, 1 min speaker exchange)

Session 4 (chairs: Youhei Sohma, Hiroyuki Konno)

O-13 Photocaged arginine for regulation of bioactive peptides and proteins

Yuya Nakajima¹, Yoshiki Konda², Ryosuke Sakamoto², Akimitsu Okamoto², Hiroshi Murakami^{1,3,4}, Gosuke Hayashi¹ (¹Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, ²Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, ³Institute of Nano-Life-Systems, Institutes of Innovation for Future Society, Nagoya University, ⁴Research Institute for Quantum and Chemical Innovation, Institutes of Innovation for Future Society)

O-14 Cracking the code of PTMs on transcription factor-DNA interactions using synthetically modified proteins

Muhammad Jbara (School of Chemistry, Raymond and Beverly Sackler Faculty of Exact Sciences, Tel Aviv University Tel Aviv, Israel)

O-15 Synthesis of glycopeptides bearing two kinds of N-glycans and evaluation of deglycosylating enzyme activities

Tsuyoshi Takahashi¹, Haruka Inoue¹, Midori Aikyo¹, Satoshi Takahashi¹, Nozomi Ishii¹, Ichiro Matsuo¹, Yukiko Yoshida², Tadashi Suzuki³ (¹Graduate School of Science and Technology, Gunma University, ²Tokyo Metropolitan Institute of Medical Science, ³RIKEN)

O-16 De novo macrocyclic peptide inhibitors of the oligonucleotide activated sirtuin 7

Christian Adam Olsen (Center for Biopharmaceuticals and Department of Drug Design and Pharmacology, Faculty of Health and Medical Sciences, University of Copenhagen)

O-17 Dimerization strategies for potent peptides and peptoids

Madeline Swanson¹, Elizabeth Bredice¹, Weijun Gui², Thomas Kodadek², Skander Abboud^{1,2} (¹University of North Carolina, ²UF Scripps Institute)

15:15–15:25 **Break**

15:25–16:15 **Lectures of the Young Investigator Award** (25 min)
(chair: Tetsuo Narumi)

Expanding the chemical toolbox for peptide and protein synthesis

Kohei Sato (Graduate School of Integrated Science and Technology, Shizuoka University)
(chair: Hirokazu Tamamura)

Development of peptide-based bivalent molecules for medicinal chemistry

Kohei Tsuji (Laboratory for Biomaterials and Bioengineering, Institute of Integrated Research, Institute of Science Tokyo)

16:15–16:20 **Break**

16:20–17:00 **Lecture of the Japanese Peptide Society Award** (40 min)
(chair: Yoshiaki Kiso)

Innovative drug discovery and chemical modification technologies based on peptide chemistry

Yoshio Hayashi (Department of Medicinal Chemistry, Tokyo University of Pharmacy and Life Sciences)

17:00–17:15 **Award Ceremony**

17:15–17:20 **Closing Remarks** (Takeru Nose)