Poster Presentations

P-001-055: October 23 (Wednesday) 17:30-19:00

P-001 Chemo-enzymatic synthesis of glycopeptide bearing multiple glycans by orthogonal protection strategy

<u>Tomohiro Tanaka</u>, Kenji Osumi, Akio Matsuda, Mamoru Mizuno (The Noguchi Institute)

P-002 Synthesis of α -trifluoromethyl α -amino acids and conformational analysis of their peptides

Misuzu Ikeda¹, Takuya Kasae¹, Atsushi Ueda¹, Makoto Oba¹, Mitsunobu Doi², Masakazu Tanaka¹ (¹Graduate School of Biomedical Sciences, Nagasaki University, ²Osaka University of Pharmaceutical Sciences)

P-003 Development of chemical synthesis for peptidomimetic based on a chloroalkene dipeptide isostere and its application to a cyclic peptide

<u>Takuya Kobayakawa</u>, Hirokazu Tamamura (Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University)

P-004 Serine-containing oligopeptides of 6 amino-acid residues show self-assembly based on antiparallel β sheet

<u>Akira Takahashi</u>, Kazuki Kishimoto, Hisayuki Morii, Atsushi Kameyama (Faculty of Engineering, Kanagawa University)

P-005 Synthesis and structural characteristics of boron-containing azapeptides

<u>Kota Miyata</u>¹, Airi Narita¹, Ryota Fujisawa¹, Makoto Roppongi², Shingo Tamesue¹, Satoshi Ito¹, Toru Oba¹ (¹Graduate School of Engineering, Utsunomiya University, ²Advanced Instrumental Analysis Department, Center for Industry-University Innovation Support, Utsunomiya University)

P-006 Synthesis of p-borono-L-phenylalanine (BPA)-like aza-amino acids

Kota Miyata¹, <u>Airi Narita</u>¹, Ryota Fujisawa¹, Makoto Roppongi², Shingo Tamesue¹, Satoshi Ito¹, Toru Oba¹ (¹Department of Material and Environmental Chemistry, Graduate School of Engineering, Utsunomiya University, ²Advanced Instrumental Analysis Department, Center for Industry-University Innovation Support, Utsunomiya University)

P-007 Asymmetric Michael addition reaction using peptide-catalysts with a thiourea moiety

<u>Kazuki Sato</u>, Tomohiro Umeno, Atsushi Ueda, Masakazu Tanaka (Graduate School of Biomedical Sciences, Nagasaki University)

P-008 Miniaturization of a peptide structure that selectively recovers gold element

<u>Tatsuki Tonoda</u>¹, Masahiro Asano², Kin-ya Tomizaki¹ (¹Depertment of Materials Chemistry, Ryukoku University, ²Department of Environmental Solutions Technology, Ryukoku University)

P-009 Synthetic study on (Z)-chloroalkene dipeptide isosteres containing an α, α -disubstituted amino acid

<u>Saki Imai</u>¹, Yuki Kodama², Kohei Sato¹, Nobuyuki Mase^{1,2}, Tetsuo Narumi^{1,2} (¹Graduate School of Integrated Science and Technology, Shizuoka University, ²Graduate School of Science and Technology, Shizuoka University)

P-010 Solid-phase synthesis and biological evaluation of cherimolacyclopeptide E

Yuka Yoshida, Yuichi Masuda (Graduate School of Bioresources, Mie University)

P-011 Chemical synthesis of insulin-like androgenic gland factor from the freshwater prawn *Macrobrachium* rosenbergii

<u>Hidekazu Katayama</u>¹, Hiromichi Nagasawa² (¹Department of Applied Biochemistry, School of Engineering, Tokai University, ²Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo)

P-012 Synthetic study of Ralstonin A and Ralstoamide A: Construction of cyclic fragment and preparation of β-amino fatty acid Ahod moiety using Soloshonok ligand

<u>Kie Oyama</u>¹, Vadim A. Soloshonok^{2,3}, Hiroki Moriwaki⁴, Hiroyuki Konno¹ (¹Graduate School of Science and Engineering, Yamagata University, ²Department of Organic Chemistry I, Faculty of Chemistry, University of the Basque Country UPV/EHU, ³IKERBASQUE, Basque Foundation for Science, ⁴Hamari Chemicals Ltd)

P-013 A method for searching novel cell penetrating peptides using T7 phege random peptides library and high-throuput sequencing

Momoko Omura, Shohei Kosugi, Yosuke Nakashima, Yukiko Kato, Yuji Ito (Department of Chemistry and Bioscience, Graduate School of Science and Engineering, Kagoshima University)

P-014 Genome- and mass spectrometry-guided discovery of ralstoamides A and B from *Ralstonia* solanacearum species complex

Shoko Komatsu¹, Kouhei Ohnishi², Kenji Kai¹ (¹Graduate School of Life and Environmental Sciences, Osaka Prefecture University, ²Research Institute of Molecular Genetics, Kochi University)

P-015 Purification and characterization of a bioactive venom peptide from *Clavus davidgilmouri* (family drillidae)

<u>Victor Chua</u>^{1,2}, Joanna Gajewiak², Maren Watkins², Samuel S. Espino², Iris Bea Ramiro^{1,2}, Carla Omaga¹, Louis Paolo Carpio¹, Alexander Fedosov³, Helena Safavi-Hemami², Lilibeth Salvador-Reyes¹, Baldomero M. Olivera², Gisela P. Concepcion¹ (¹Marine Science Institute, University of the Philippines, ²School of Biological Sciences, University of Utah, ³Russian Academy of Sciences, Severtsov Institute of Ecology and Evolution)

P-016 Isolation and synthesis of u-Conotoxin from Conus striolatus

Abe Ernest Johann E. Isagan¹, Iris Bea L. Ramiro¹, Ansyl Marie B. Naraga², Oliver John V. Belleza², Julita S. Imperial³, Baldomero M. Oliver³, Aaron Joseph L. Villaraza², Gisela P. Concepcion¹ (¹The Marine Science Institute, University of the Philippines, ²Institute of Chemistry, University of the Philippines, ³Institute of Biology, University of Utah)

P-017 Highly efficient synthesis of pyrrole-imidazole amide sequence for application to DNA-binding polyamides

<u>Takahiko Murata</u>¹, Shohei Yamamoto², Akira Nishiyama¹ (¹Pharma & Supplemental Nutrition Solutions Vehicle, KANEKA CORPORATION, ²KANEKA AMERICAS HOLDING, INC.)

P-018 Application of ring-closing metathesis in water using unprotected peptide

Shun Masuda, Shugo Tsuda, Taku Yoshiya (Peptide Institute, Inc.)

P-019 Oxidation reaction of proline containing peptide by iron complex catalysis

<u>Arata Kawakami</u>¹, Masaki Kobayashi¹, Yasushi Obora^{1,2}, Yoshiaki Hirano^{1,2} (¹Faculty of Chemistry, Materials and Bioengineering, Kansai University, ²Organization for Research and Development of Innovative Science and Technology, Kansai University)

P-020 Lossen rearrangement-mediated preparation of N-glyoxylyl peptide without addition of oxidant

<u>Daishiro Kobayashi</u>, Kodai Nishida, Tsubasa Inokuma, Akira Shigenaga, Akira Otaka (Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University)

P-021 An external-thiol-free peptide C-terminus thioesterification method using cysteinylprolyl imide (CPI) peptide

<u>Koki Nakatsu</u>¹, Masafumi Yanase¹, Gosuke Hayashi², Akimitsu Okamoto^{1,3} (¹Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, ²Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, ³Research Center for Advanced Science and Technology, The University of Tokyo)

P-022 Chemical splicing of unprotected peptides towards protein semisynthesis

<u>Kento Iritani</u>, Ryo Okamoto, Yoko Amazaki, Yuta Maki, Yasuhiro Kajihara (Department of Chemistry, Graduate School of Science, Osaka University)

P-023 A novel amphipathic cell-penetrating peptide based on the N-terminal glycosaminoglycan binding region of human apolipoprotein E

Yuki Tamura¹, Mana Kotani¹, Takashi Ohgita¹, <u>Yuki Takechi-Haraya</u>², Kazuchika Nishitsuji³, Kenji Uchimura⁴, Koki Hasegawa⁵, Kumiko Sakai-Kato⁶, Kenichi Akaji⁷, Hiroyuki Saito¹ (¹Department of Biophysical Chemistry, Kyoto Pharmaceutical University, ²Division of Drugs, National Institute of Health Sciences, ³Department of Biochemistry, Wakayama Medical University, ⁴Unité de Glycobiologie Structurale et Fonctionnelle, ⁵Center for Instrumental Analysis, Kyoto Pharmaceutical University, ⁶Kitasato University, ⁷Department of Medicinal Chemistry, Kyoto Pharmaceutical University)

P-024 Development of antimicrobial peptide foldamers based on Magainin2 sequence

<u>Chihiro Goto</u>^{1,2}, Motoharu Hirano², Katsuhiko Hayashi², Takashi Misawa², Yutaka Kikuchi², Yukiko Kudo², Yosuke Demizu^{1,2} (¹Graduate School of Medical Life Sciences, Yokohama City University, ²National institute of Health Sciences)

- P-025 Development of a membrane curvature-sensing peptide based on a structure-activity correlation study

 Kenichi Kawano, Masaya Ogushi, Toshihiro Masuda, Shiroh Futaki (Institute for Chemical Research,

 Kyoto University)
- P-026 Studies on identification of active sites in oxytocin as a positive allosteric modulator of μ opioid receptor <u>Takaaki Mizuguchi</u>¹, Ami Yamazaki¹, Hideki Takahashi^{1,2}, Yuki Yoshida^{2,3}, Kanako Miyano², Yasuhito Uezono², Hideaki Fujii¹ (¹Laboratory of Medicinal Chemistry, School of Pharmacy, Kitasato University, ²Division of Cancer Pathophysiology, National Cancer Center Research Institute, ³Laboratory of Molecular Pathology and Metabolic Disease, Faculty of Pharmaceutical Sciences, Tokyo University of Science)
- P-027 Design and biophysical evaluation of β-hairpin peptides derived from single-domain VHH antibodies
 Koichi Yamamoto¹, Makoto Nakakido¹,², Daisuke Kuroda¹,², Satoru Nagatoishi⁴, Jumpei Morimoto², Shinsuke Sando¹,², Kouhei Tsumoto¹,²,3,⁴ (¹Department of Bioengineering, School of Engineering, The University of Tokyo, ²Department of Chemistry & Biotechnology, School of Engineering, The University of Tokyo, ³Medical Device Development and Regulation Research Center, School of Engineering, The University of Tokyo, ⁴Institute of Medical Science, The University of Tokyo)
- P-028 Unnatural peptides that prefer specific helical structures can be synthesized by β -residues with a cyclohexene-ring constraint

Jieun Lee, Seonho Shin, Soo Hyuk Choi (Department of Chemistry, Yonsei University)

P-029 Control of handedness by substituting residues of β -peptides containing *cis*-2-aminocycloheptanecarboxylic acid

Yonghan Kim, Ho Yang Son, Soo Hyuk Choi (Department of Chemistry, Yonsei University)

P-030 Effect of tryptophan residues on the stability of ion channel formed by peptides

<u>Keita Shigedomi</u>¹, Satoshi Osada¹, Masoud Jelokhani-Niaraki², Hiroaki Kodama¹ (¹Department of Chemistry and Applied Chemistry, Faculty of School and Engineering, Saga University, ²Department of Chemistry and Biochemistry, Wilfrid Laurier University)

P-031 De novo design of pore-forming α-helical peptides with GXXXG and GXXXXXXG motifs

<u>Masataka Usami</u>, Keisuke Shimizu, Yusuke Sekiya, Ryuji Kawano (Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)

P-032 Design and synthesis of β -strand conformation-fixed peptides inhibiting aggregation of amyloid β protein

Fumiya Tanaka, Kana Shibata, Yuichi Masuda (Graduate School of Bioresources, Mie University)

P-033 Structural parameters contributing to the ability of amphipathic peptides to induce membrane curvature

Motoki Nishimura¹, Toshihiro Masuda¹, Sergii Afonin², Kenichi Kawano¹, Anne S. Ulrich^{2,3}, Shiroh Futaki¹ (¹Institute for Chemical Research, Kyoto University, ²Institute of Biological Interfaces (IBG-2), Karlsruhe Institute of Technology (KIT), ³Institute of Organic Chemistry and CFN, KIT)

P-034 Development of leucyl-3-epi-deoxynegamycin derivative with a potent readthrough activity

Noriko Omura, Keisuke Hamada, Akihiro Taguchi, Keiju Shimano, Chikashi Sawada, Kentaro Takayama, Atsuhiko Taniguchi, Yoshio Hayashi (Department of Medicinal Chemistry, School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)

P-035 De novo design of β-hairpin peptide to construct nanopore structure in lipid membrane

<u>Keisuke Shimizu</u>¹, Shungo Sakashita², Yoshio Hamada², Kenji Usui², Batsaikhan Mijiddorj³, Izuru Kawamura³, Ryuji Kawano¹ (¹Department of Life Science and Biotechnology, Tokyo University of Agriculture and Technology, ²Faculty of Frontiers of Innovative Research in Science and Technology, Konan University, ³Department of Materials Science and Engineering, Yokohama National University)

P-036 Evolution of structure and stability for tetramerization domain in tumor suppressor protein p53

<u>Natsumi Nakagawa</u>, Fuki Kudoh, Junya Wada, Rui Kamada, Toshiaki Imagawa, Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

P-037 Toward an in vitro selection for constrained peptides that bind to transcription factor SMAD3 but not SMAD2

<u>Linh Khanh Huynh</u>^{1,2}, Kato Mitsuyasu², Peter ten Dijke^{3,4}, Christopher John Hipolito^{4,5} (¹Master's Program in Medical Science, Graduate School of Comprehensive Human Sciences, University of Tsukuba, ²Laboratory of Experimental Pathology, Faculty of Medicine, University of Tsukuba, ³Oncode Institute, Cell and Chemical Biology, Leiden University Medical Center, ⁴Laboratory of Cancer Signaling, Faculty of Medicine, University of Tsukuba, ⁵Peptide Core Facility, Transborder Medical Research Center, University of Tsukuba)

P-038 Structure-activity relationship study of an antibody-binding peptide focused on glycine residue at the position 9

Akane Fukuda¹, Kyohei Muguruma¹, Rento Osawa¹, Satoshi Kishimoto², Akihiro Taguchi¹, Kentaro Takayama¹, Atsuhiko Taniguchi¹, Yuji Ito², Yoshio Hayashi¹ (¹Department of Medicinal Chemistry, Tokyo University of Pharmacy and Life Sciences, ²Department of Chemistry and Bioscience, Graduate School of Science and Engineering, Kagoshima University)

P-039 Evaluation of the ring size of macrocyclic inhibitors for BACE1

<u>Takuya Otani</u>¹, Kazuya Kobayashi¹, Yasunao Hattori², Kenichi Akaji¹ (¹Department of Medicinal Chemistry, Kyoto Pharmaceutical University, ²Center for Instrumental Analysis, Kyoto Pharmaceutical University)

P-040 Structure-activity relationship studies of small molecular anti-HIV-1 compounds targeting a dipeptide site of HIV-1 capsid proteins

<u>Masaki Kurakami</u>¹, Takuya Kobayakawa¹, Masaru Yokoyama², Tsutomu Murakami³, Moemi Kaneko¹, Osamu Kotani², Hironori Sato², Hirokazu Tamamura¹ (¹Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, ²Infectious Disease Surveillance Center, National Institute of Infectious Diseases, ³AIDS Research Center, National Institute of Infectious Diseases)

P-041 Development of HIV-1 fusion inhibitors based on the C34 dimer derived from an HIV-1 envelope protein gp41

<u>Kento Ebihara</u>¹, Yuzuna Honda¹, Takuya Kobayakawa¹, Tsutomu Murakami², Hirokazu Tamamura¹ (¹Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University (TMDU), ²AIDS Research Center, National Institute of Infectious Diseases)

P-042 Development of peptidomimetic inhibitors for aggregation of amyloid beta

<u>Yuki Watanabe</u>¹, Takuya Kobayakawa¹, Atsuhiko Taniguchi², Yoshio Hayashi², Hirokazu Tamamura¹ (¹Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University (TMDU), ²School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)

P-043 Directed evolution of a novel cyclic peptoid-peptide chimera for cancer treatment

<u>Rina Iwamoto</u>¹, Daisuke Horiuti¹, Mizuki Yamamoto¹, Takashi Kawakami^{1,2} (¹Department of Biotechnology, Faculty of Life and Environmental Sciences, University of Yamanashi, ²JST, PRESTO)

P-044 Development of novel protein G-binding peptide tags for recombinant protein purification

<u>Keita Tsukamoto</u>¹, Yukio Takamori¹, Mizuki Yamamoto¹, Takashi Kawakami^{1,2} (¹Department of Biotechnology, Faculty of Life and Environmental Sciences, University of Yamanashi, ²JST, PRESTO)

P-045 Electrophysiological analysis of Aβ42 channel formation in planar lipid bilayer imitating nervous cellmembrane

<u>Yuri Numaguchi</u>, KeisukeShimizu, Kaori Tsukakoshi, Kazunori Ikebukuro, Ryuji Kawano (Department of Life Science and Biotechnology, Tokyo University of Agriculture and Technology)

P-046 Synthetic study on full-length hepatitis B virus core protein

<u>Keisuke Aoki</u>¹, Shugo Tsuda², Shinsuke Inuki¹, Hiroaki Ohno¹, Taku Yoshiya², Shinya Oishi¹ (¹Graduate School of Pharmaceutical Sciences, Kyoto University, ²Peptide Institute, Inc.)

P-047 Development of Borealin derived peptides for survivin targeting cancer treatment

<u>Iori Nozaki</u>¹, Takeshi Fuchigami¹, Natsumi Ishikawa¹, Yusuke Miyanari², Motohiro Yamauchi³, Riru Yamashita¹, Yumi Ikeda¹, Sakura Yoshida¹, Morio Nakayama¹ (¹Department of Hygienic Chemistry, Graduate School of Biomedical Sciences, Nagasaki University, ²Okazaki Institute for Integrative Bioscience, ³Department of Radiation Biology and Protection, Atomic Bomb Disease Institute, Nagasaki University)

P-048 Development of novel substrate identification method using oncogenic phosphatase PPM1D using the H107-mutants

Shunta Imai¹, Seiya Yagi¹, Megumi Ikeura¹, Kazuhiro Furukawa², Yoshiro Chuman¹ (¹Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Niigata University, ²Cell Regulation Laboratory in Biochemistry, Department of Chemistry, Faculty of Science, Niigata University)

P-049 Tumor cell imaging using MMP-2 activatable-on peptide- and tumor homing peptide-conjugated dendrimer

Kento Nagai, Tatsumi Sato, Chie Kojima (Graduate School of Engineering, Osaka Prefecture University)

P-050 Chemical stability of agonist peptides to neuromedin U receptor type 2

<u>Yu Sasaki</u>, Kentaro Takayama, Akihiro Taguchi, Atsuhiko Taniguchi, Yoshio Hayashi (Department of Medicinal Chemistry, Tokyo University of Pharmacy and Life Sciences)

P-051 Quality control of disulfide-coupled folding of a peptide hormone, uroguanylin, on molecular evolution

Aman Lall Maharjan, Toi Osumi, Mayu Fukutsuji, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

P-052 Enzyme activation mechanism of cocoonase

Mai Takegawa¹, TsubasaTagawa¹, Ayumi Ogata¹, Mitsuhiro Miyazawa², Shigeru Shimamoto¹, Yuji Hidaka¹ (¹Graduate School of Science and Engineering Research, Kindai University, ²Institute of Agrobiological Sciences, National Institute of Agriculture and Food Research Organization)

P-053 Cloning and functional analyses of digestive enzymes derived from Nephila clavata

<u>Tsubasa Tagawa</u>¹, Teruki Hagiwara¹, Mitsuhiro Miyazawa², Shigeru Shimamoto¹, Yuji Hidaka¹ (¹Graduate School of Science and Engineering Research, Kindai University, ²Institute of Agrobiological Sciences, National Institute of Agriculture and Food Research Organization)

P-054 Mechanism of the disulfide-coupled folding of a de novo designed prouroguanylin protein

<u>Mayu Fukutsuji</u>, Aman Lall Maharjan, Toi Osumi, Saya Nishihara, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

P-055 Head-to-tail cyclic α-ABpeptoids: a new class of peptidomimetic foldamers

<u>Eun-Kyoung Jee</u>, Nakeun Ko, Hyunchul Kwon, Eunsung Lee, and Hyun-Suk Lim (Department of Chemistry and Division of Advanced Material Science, Pohang University of Science and Technology (POSTECH))

P-101-154: October 24 (Thursday) 17:15-18:45

P-101 Synthesis of peptide carriers to improve nucleic acid release activity

<u>Yuta Uematsu</u>¹, Masayuki Yamasaki², Jun Hayashida³, Kin-ya Tomizaki¹ (¹Department of Materials Chemistry, Ryukoku University, ²Department of Food Science and Human Nutrition, Ryukoku University, ³Sogo Pharmaceutical Co.)

P-102 Synthesis of a novel collagen model peptide with carboxyl groups

Kisaki Nakamoto, Kin-ya Tomizaki (Department of Materials Chemistry, Ryukoku University)

P-103 Large-scale asymmetric synthesis of Fmoc-(S)-2-amino-6,6,6-trifluorohexanoic acid

<u>Toshio Miwa</u>¹, Hiroki Moriwaki¹, Hidenori Abe¹, Zizhen Yin², Jianlin Han², Vadim A. Soloshonok^{3,4} (¹Hamari Chemicals Ltd, ²College of Chemical Engineering Nanjing Forestry University, ³Department of Organic Chemistry I, Faculty of Chemistry University of the Basque Country, UPV/EHU, ⁴IKERBASQUE, Basque Foundation for Science)

P-104 Synthetic study of TIGIT protein for mirror-image screening

<u>Naoya Iwamoto</u>, Jumpei Sasaki, Keisuke Aoki, Shinsuke Inuki, Hiroaki Ohno, Shinya Oishi (Graduate School of Pharmaceutical Sciences, Kyoto University)

P-105 Supramolecules of peptidomimetics with multiple boronates

Kota Miyata¹, <u>Ryota Fujisawa</u>¹, Airi Narita¹, Makoto Roppongi², Shingo Tamesue¹, Satoshi Ito¹, Toru Oba¹ (¹Department of Material and Environmental Chemistry, Graduate School of Engineering, Utsunomiya University, ²Advanced Instrumental Analysis Department, Center for Industry-University Innovation Support, Utsunomiya University)

P-106 Synthesis and biological evaluation of S-octylsulfoniododecaborate containing L-amino acids for boron neutron capture therapy

<u>Yoshihide Hattori</u>¹, Miki Ishimura¹, Youichirou Ohta¹, Hiroshi Takenaka¹, Kouichi Matsumoto², Kouki Uehara³, Tomoyuki Asano³, Mitsunori Kirihata¹ (¹Research Center of BNCT, Osaka Prefecture University, ²Department of Chemistry, Faculty of Science and Engineering, Kindai University, ³Stella Pharma Co.)

P-107 2H-Azirines as novel precursors of peptidomimetics

Toru Oba¹, <u>Yuka Yoshizawa</u>¹, Shintaro Anju¹, Hiroto Takahashi¹, Kota Miyata¹, Shingo Tamesue¹, Satoshi Ito¹, Makoto Roppongi² (¹Department of Material and Environmental Chemistry, Graduate School of Engineering, Utsunomiya University, ²Advanced Instrumental Analysis Department, Center for Industry-University Innovation Support, Utsunomiya University)

P-108 Stalobacin: discovery of a new class of lipopeptide antibiotic with potent antibacterial activity against multidrug-resistant bacteria

Kouhei Matsui, Yukiko Kan, Junko Kikuchi, Keisuke Matsushima, Miki Takemura, Hideki Maki, Iori Kozono, Taichi Ueda, Kazuyuki Minagawa (Pharmaceutical Research Center, Shionogi & Co., Ltd.)

P-109 Bioactive peptides from the turrid turris normandavidsonii

Abe Ernest Johann E. Isagan¹, Oliver John V. Belleza², Aaron Joseph L. Villaraza², <u>Gisela P. Concepcion¹</u> (¹The Marine Science Institute, University of the Philippines, ²Institute of Chemistry, University of the Philippines)

P-110 Enzymatic stability of myostatin inhibitory peptides

<u>Miki Odagiri</u>, Kentaro Takayama, Akihiro Taguchi, Atsuhiko Taniguchi, Yoshio Hayashi (Department of Medicinal Chemistry, Tokyo University of Pharmacy and Life Sciences)

P-111 Mitocryptide-2: investigation of its pathophysiological roles utilizing a specific neutralizing monoclonal antibody

<u>Yoshito Takamuro</u>, Takenori Yamada, Hiroki Morikawa, Naoyuki Tamura, Tatsuya Hattori, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

P-112 Enhanced cellular uptake of extracellular vesicles via macropinocytosis induction by modification of cell-penetrating sC18 peptides on the vesicle membranes

<u>Kosuke Noguchi</u>¹, Tomoka Takatani-Nakase², Ines Neundorf³, Ikuhiko Nakase¹ (¹Graduate School of Science, Osaka Prefecture University, ²School of Pharmacy and Pharmaceutical Sciences, Mukogawa Women's University, ³Institute of Biochemistry, Department of Chemistry, University of Cologne)

P-113 Artificially designed pH-responsive α helical peptides that damage tumor cells selectively

<u>Haruka Sakurai</u>¹, Kanon Nishimura², Shota Yamamoto², Tatsuo Maruyama², Atsuo Tamura¹ (¹Graduate School of Science, Kobe University, ²Graduate School of Engineering, Kobe University)

P-114 Development of DNA photo-cross-linkable peptide containing 3-cyanovinylcarbazole amino acid

Zhiyong Qiu, Shigetaka Nakamura, Kenzo Fujimoto (School of Advanced Science and Technology, Japan Advanced Institute of Science and Technology)

P-115 Translocation activity of cell-penetrating peptides possessing a hydrophobic acyl group

Mizuho Hatano, Tomohiro Miyatake (Department of Materials Chemistry, Ryukoku University)

P-116 Inhibition of tau amyloid formation using catalytic photo-oxygenation

<u>Taka Sawazaki</u>¹, Takanobu Suzuki², Yusuke Shimizu¹, Yu Nemoto², Atsuhiko Taniguchi¹, Shuta Ozawa², Yukiko Hori², Taisuke Tomita², Youhei Sohma¹, Motomu Kanai¹ (¹Laboratory of Synthetic Organic Chemistry, Graduate School of Pharmaceutical Sciences, The University of Tokyo, ²Laboratory of Neuropathology and Neuroscience, Graduate School of Pharmaceutical Sciences, The University of Tokyo)

P-117 Interaction with plasma membrane and curvature inducibility of branched oligomeric EpN18

<u>Wei-Yuan Hsu</u>, Takayuki Sakai, Toshihiro Masuda, Shiroh Futaki (Institute for Chemical Research, Kyoto University)

P-118 In vitro selection of an alcohol dehydrogenase peptidic enzyme

<u>Yamato Komatsu</u>, Ryota Yokosuka, Yuki Goto, Hiroaki Suga (Graduate School of Science, The University of Tokyo)

P-119 Loosening of lipid packing by recruitment of amphiphilic peptides onto cell surface

<u>Takayuki Sakai</u>, Kenichi Kawano, Miki Imanishi, Shiroh Futaki (Institute of Chemical Research, Kyoto University)

P-120 Discovering protein-specific binders via tandem screening: combination of size exclusion chromatography and extended phage display

<u>Fumiko Hisamatsu</u>, Masumi Taki (The Graduate School of Informatics and Engineering, Dept. of Engineering Science, The University of Electro-Communications (UEC))

P-121 Screening of peptide ligands for Galectin-3 using a designed stapled α-helix peptide phage library

<u>Teerapat Anananuchatkul</u>, Takayuki Miki, Hiroshi Tsutsumi, Hisakazu Mihara (Department of Life Science and Technology, School of Life Science and Technology, Tokyo Institute of Technology)

P-122 Development of a novel small molecule-binding peptide tag and its application to bioimaging

<u>Mizuki Yamamoto</u>¹, Takehiro Ando¹, Rina Iwamoto¹, Keita Tsukamoto¹, Takashi Kawakami^{1,2} (¹Department of Biotechnology, Faculty of Life and Environmental Sciences, University of Yamanashi, ²JST, PRESTO)

P-123 Evaluation of the influence of amide-to-ester substitution on conformational preference of a cyclic peptide

<u>Yuki Hosono</u>¹, Jumpei Morimoto¹, Shinsuke Sando^{1,2} (¹Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, ²Department of Bioengineering, Graduate School of Engineering, The University of Tokyo)

P-124 A fluorophore-conjugated phage library for screening of a peptide-based fluorescent biosensor for Galectin-3

<u>Masahiro Hashimoto</u>, Takayuki Miki, Iou ven Chang, Hiroshi Tsutsumi, Hisakazu Mihara (School of Life Science and Technology, Tokyo Institute of Technology)

P-125 Development of membrane permeable cyclic peptides as STAT3 dimerization inhibitors: a conformational restriction strategy for regurating protein-protein interactions

<u>Takayuki Osada</u>¹, Kouhei Matsui², Katsumi Ota³, Koichi Fujiwara¹, Akira Asai³, Mizuki Watanabe^{1,4}, Satoshi Shuto¹ (¹Faculty of Pharmaceutical Sciences, Hokkaido University, ²SHIONOGI & CO., LTD., ³Graduate School of Pharmaceutical Societies, University of Shizuoka, ⁴AMED)

P-126 Generation of *de novo* inhibotor of IKK-epsilon from a phage-displayed helix-loop-helix peptide library tethering adenosine

<u>Natsumi Nakajima</u>, Kousuke Mihara, Daisuke Fujiwara, Ikuo Fujii (Department of Biological Science, Graduate School of Science, Osaka Prefecture University)

P-127 Development of fluorescent pH probes toward fluorescence imaging of extracellular environments using self-assembling peptides

Ren Aoki, Takayuki Miki, Hisakazu Mihara, Hiroshi Tsutsumi (School of Life Science and Technology, Tokyo Institute of technology)

P-128 Improvement of phage binding ability to target proteins in combination with his-tag and Ni(II)-complex interaction

<u>Kenta Seko</u>, Takayuki Miki, Teerapat Anananuchatkul, Hiroshi Tsutsumi, Hisakazu Mihara (School of Life Science and Technology, Tokyo Institute of Technology)

P-129 Fluorescence turn-on histone probe for visualization of nucleosome dynamics

<u>Takumi Ishii</u>¹, Gosuke Hayashi², Akimitsu Okamoto^{1,3} (¹Graduate School of Engineering, The University of Tokyo, ²Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, ³Research Center for Advanced Science and Technology, The University of Tokyo)

P-130 Chemical synthesis of intramolecular FRET histone protein visualizing H2A-H2B dimerization

Motoyuki Ogata¹, Gosuke Hayashi², Takuma Sueoka¹, Daisuke Sakakibara¹, Akimitsu Okamoto^{1,3} (¹Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, ²Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, ³Research Center for Advanced Science and Technology, The University of Tokyo)

P-131 Construction of gene expression control system using photolabile PNA peptide binding to guanine-rich DNA/RNA

Shungo Sakashita¹, Tamaki Endoh², Arisa Okada¹, Kenji Usui¹ (¹Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, ²Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University)

P-132 Studies on cell penetrating peptides containing 4-guanidino-L-proline residues

Kana Arai¹, Mami Yasukagawa², <u>Mutsumi Sugo</u>², Akinori Yokoyama¹, Yurie Kagawa¹, Toshitada Yoshihara³, Seiji Tobita³, Keiichi Yamada³ (¹Department of Chemistry and Chemical Biology, Gunma University, ²Materials and Bioscience Program, Graduate School of Science and Technology, Gunma University, ³Division of Molecular Science, Gunma University)

P-133 Creation of enveloped artificial viral capsid by electrostatic interaction between β-annulus peptide and lipid

<u>Hiroto Furukawa</u>¹, Hiroshi Inaba¹, Yoshihiro Sasaki², Kazunari Akiyoshi², Kazunori Matsuura¹ (¹Graduate School of Engineering, Tottori University, ²Graduate School of Engineering, Kyoto University)

P-134 Multimeric amphipathic cell penetrating peptides and applications using pH-sensitive self-cleaving linkers

<u>Sejong Choi</u>, Jae Hoon Oh, Seung-Eun Chong, Joon Hyung Ahn, Yan Lee (Department of Chemistry, Seoul National University)

P-135 Construction of artificial viral capsid decorated with green fluorescent protein on the surface

<u>Kazuki Shimomura</u>¹, Hiroshi Inaba¹, Takashi Iwasaki², Kazunori Matsuura¹ (¹Graduate School of Engineering, Tottori University, ²Faculty of Agriculture, Tottori University)

P-136 Quantitative analysis of formation of artificial viral capsids using fluorescence correlation spectroscopy Risako Kobayashi, Hiroshi Inaba, Kazunori Matsuura (Graduate School of Engineering, Tottori University)

P-137 Deformation of bilayer lipid membrane induced by transmembrane peptides

<u>Kayano Izumi</u>, Keisuke Shimizu, Ryuji Kawano (Department of Biotechnology and Life science, Tokyo University of Agriculture and Technology)

P-138 Construction of visible light responsive nanocatalyst by mineralization using designed peptide

<u>Makoto Ozaki</u>¹, Takaaki Tsuruoka¹, Takahito Imai², Kin-ya Tomizaki², Kenji Usui¹ (¹Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, ²Department of Materials Chemistry, Ryukoku University)

P-139 Self-assembling peptide materials functionalized with bioactive sequences for three dimensional MCF-7 cell culture

<u>Jyh Yea Chia,</u> Takayuki Miki, Hisakazu Mihara, Hiroshi Tsutsumi (School of Life Science and Technology, Tokyo Institute of Technology)

P-140 Electrophysiological observation of direct membrane penetration on cell penetrating peptides

<u>Chihiro Saito</u>, Yuri Numaguchi, Keisuke Shimizu, Ryuji Kawano (Department of Life Science and Biotechnology, Tokyo University of Agriculture and Technology)

P-141 Development of metal ion-responsive self-assembling peptides with a urea bond

<u>Jumpei Shiota</u>, Takayuki Miki, Hisakazu Mihara, Hiroshi Tsutsumi (School of Life Science and Technology, Tokyo Institute of Technology)

P-142 Development of liposome-like nanostructures composed of short amphiphilic elastin-like peptides

<u>Naoki Sakamoto</u>¹, Daiki Tatsubo¹, Keiji Sato¹, Keisuke Tomohara², Keitaro Suyama², Iori Maeda³, Takeru Nose^{1,2} (¹Department of Chemistry, Faculty and Graduate School of Science, Kyushu University, ²Faculty of Arts and Science, Kyushu University, ³Department of Physics and Information Technology, Kyushu Institute of Technology)

P-143 Oligopeptide desing and synthesis for enamel remineralization

Enrique Ezra Zuñiga Heredia¹, Fernando Arteaga Arteaga^{2,3}, Masahiro Iijima¹, Masaya Sawamura² (¹Division of Orthodontics and Dentofacial Orthopedics, Department Oral Growth and Development, School of Dentistry, Health Sciences University of Hokkaido, ²School of Science, Hokkaido University, ³Institute for the Advancement of Higher Education, Hokkaido University)

P-144 Structure activity relationship study of an α -dystroglycan binding peptide from the laminin $\alpha 2$ chain LG4-5 modules

<u>Keisuke Hamada</u>, Guangrui Zhang, Yuji Yamada, Yamato Kikkawa, Motoyoshi Nomizu (Department of Clinical Biochemistry, School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)

P-145 Identification of α -dystroglycan binding sequences in the laminin α 2 chain LG4-5 modules

<u>Guangrui Zhang</u>, Keisuke Hamada, Yuji Yamada, Yamato Kikkawa, Motoyoshi Nomizu (Department of Clinical Biochemistry, School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)

P-146 Development of cell culture substrate generated by trypsin digestion of Aβ fibrils

Shin-ichiro Yokota¹, Yasumasa Mashimo², Yoshio Hamada¹, Youji Harada³, Masayasu Mie², Eiry Kobatake², Kenji Usui¹ (¹Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, ²Department of Life Science and Technology, School of Life Science and Technology, Tokyo Institute of Technology, ³Clean Chemical Co., Ltd)

P-147 Propulsion of oil-in-water droplets driven by light-induced peptide nanofiber growth

Kenji Hatta, Hiroshi Inaba, Kazunori Matsuura (Graduate School of Engineering, Tottori University)

P-148 A design strategy for beta-peptoids with constraint on multiple backbone dihedral angles

<u>Jungveon Kim</u>¹, Jumpei Morimoto¹, Shinsuke Sando^{1,2} (¹Department of Chemistry and Biotechnology, School of Engineering, The University of Tokyo, ²Department of Bioengineering, School of Engineering, The University of Tokyo)

P-149 Control of assembled structures of viral coat proteins at emulsion interfaces

<u>Michihiro Tanaka</u>¹, Toshiki Sawada^{1,2}, Takeshi Serizawa¹ (¹School of Materials and Chemical Technology, Tokyo Institute of Technology, ²Precursory Research for Embryonic Science and Technology (PRESTO), Japan Science and Technology Agency (JST))

P-150 Evaluation of physiological activity of elastin peptide derived from tuna arterial sphere against normal human fibroblasts (NHDF)

Otome Kitano^{1,2}, Kohji Nakazawa², Yasushi Nakamura¹, Shinsuke Shiratuchi² (¹Shinryo Corporation, ²Department of Life and Environment Engineering, The University of Kitakyushu)

P-151 Development of fluorine-containing cell-penetrating peptide

<u>Toshiki Mikami</u>¹, Kosuke Aikawa¹, Jumpei Morimoto¹, Shinsuke Sando^{1,2}, Kyoko Nozaki¹, Takashi Okazoe³ (¹Department of Chemistry & Biology, School of Engineering, The University of Tokyo, ²Department of Bioengineering, School of Engineering, The University of Tokyo, ³Materials Integration Laboratories, AGC Inc.)

P-152 Identification of new associating proteins of PPM1 phosphatase ILKAP

<u>Nanase Tsukahara</u>, Natsumi Nakagawa, Shogo Ito, Rui Kamada, Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

P-153 Antibacterial activity of lactoferricin B like peptide: Reactive oxygen species-induced apoptosis-like death in *Escherichia coli*

<u>Suhyun Kim</u>, Dong Gun Lee (School of Life Sciences, BK 21 Plus KNU Creative BioResearch Group, College of Natural Sciences, Kyungpook National University)

P-154 Evaluation of cell-penetrating ability of bicyclic peptoids

<u>Hee Myeong Wang</u>, Chang Deok Seo, Hyun-Suk Lim (Department of Chemistry and Division of Advanced Material Science, Pohang University of Science and Technology (POSTECH))

P-201-253: October 25 (Friday) 12:50-14:20

P-201 Combining tandem mass spectrometry and high-throughput peptide synthesis for high-confidence neuropeptidomics

<u>Chihiro Kawano</u>, Eisuke Hayakawa, Hiroshi Watanabe (Evolutionary Neurobiology Unit, Okinawa Institute of Science and Technology)

P-202 Synthesis of hydrophobic peptides/proteins using solubilizing trityl tag

Shugo Tsuda, Shun Masuda, Taku Yoshiya (Peptide Institute, Inc.)

P-203 Chemical synthesis of ubiquitinated histone H3 and its effect on dna methyltrasferase 1

<u>Toru Kawakami</u>¹, Yuichi Mishima¹, Masaya Takazawa¹, Hironobu Hojo¹, Isao Suetake^{1,2} (¹Institute for Protein Research, Osaka University, ²College of Nutrition, Koshien University)

P-204 Efficient methods for rapid development of therapeutic peptides with higher structural complexity

Cyf Ramos-Colon¹, <u>Takanori Ikegami</u>², Daniel Martinez¹, Andrew Kennedy¹, James Cain¹ (¹Gyros Protein Technologies, ²ASTECH CORPRATION)

P-205 Peptide secondary structural change in response to reductive milieu

<u>Yuriko Otani</u>¹, Hikaru Nonaka¹, Mitsunobu Doi², Makoto Oba¹, Masakazu Tanaka¹ (¹Graduate School of Biomedical Sciences, Nagasaki University, ²Osaka University of Pharmaceutical Sciences)

P-206 OFF-to-ON Control of trypsin activity and target protein degradation using ISAAC

<u>Koushi Hidaka</u>^{1,2}, Keiko Hojo^{1,2}, Yuko Tsuda^{1,2} (¹Faculty of Pharmaceutical Sciences, Kobe Gakuin University, ²Cooperative Research Center for Life Science, Kobe Gakuin University)

P-207 Design of the plasmin inhibitor having the imidazole scaffold

<u>Yuko Tsuda</u>^{1,2}, Koushi Hidaka^{1,2}, Keiko Hojo^{1,2}, Keigo Gohda³, Naoki Teno⁴, Keiko Wanaka⁵ (¹Faculty of Pharmaceutical Sciences, Kobe Gakuin University, ²Cooperative Research Center for Life Science, Kobe Gakuin University, ³Computer-Aided Molecular Modeling Research Center Kansai, ⁴Faculty of Clinical Nutrition, Hiroshima International University, ⁵Research Projects on Thrombosis and Haemostasis)

P-208 Crystal structure of gramicidin S hydrochloride

Mitunobu Doi, Akiko Asano (Osaka University of Pharmaceutical Sciences)

P-209 Replica-exchange Monte Carlo SAAP simulation for molecular assembly of silk fibroin model peptides

<u>Michio Iwaoka</u>¹, Koji Yoshida¹, Hisayuki Morii², Akira Takahashi², Atsushi Kameyama² (¹Department of Chemistry, Tokai University, ²Department of Chemistry, Kanagawa University)

P-210 Infrared analyses on amyloid-forming oligopeptides of alanine

<u>Hisayuki Morii</u>, Masayuki Nara (Department of Chemistry, College of Liberal Arts and Sciences, Tokyo Medical and Dental University)

P-211 Design and synthesis of relaxin family peptide-2 stapled analogue

Testuya Fukumoto¹, <u>Keiko Hojo</u>^{1,2}, Koushi Hidaka^{1,2}, Katsutoshi Yayama^{1,2}, Yuko Tsuda^{1,2} (¹Faculty of Pharmaceutical Sciences, Kobe Gakuin University, ²Cooperative Research Center for Life Science, Kobe Gakuin University)

P-212 Investigation of antibacterial activity of short linear or cyclic derivatives of myticalin A6

<u>Keiko Okimura</u>¹, Keiko Matsubara¹, Rie Suzuki¹, Hanako Ito¹, Ayumi Sato¹, Kaori Sugimoto² (¹Faculty of Pharmaceutical Sciences, Hokuriku University, ²SCRUM Inc.)

P-213 Structure-based design of hetero-bivalent peptides to inhibit human vascular endothelial growth factor-

Masataka Michigami, Ikuo Fujii (Department of Biological Science, Osaka Prefecture University)

P-214 Conserved tyrosine residues involve in the orientation of the transmembrane region in FGFR3

Hiroko Tamagaki-Asahina, Takeshi Sato (Kyoto Pharmaceutical University)

P-215 A series of qunine prodrugs for an anti-malarial treatment

<u>Yoshio Hamada</u>, Kenji Usui (Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University)

P-216 Discovery of antibody light chains possessing tau protein-hydrolyzing activity

<u>Hiroaki Taguchi</u>¹, Yuki Kato¹, Taminao Ito¹, Emi Hifumi², Taizo Uda^{3,4} (¹Faculty of Pharmaceuticals Sciences, Suzuka University of Medical Science, ²Research Promotion Institute, Oita University, ³Faculty of Engineering, Oita University, ⁴Institute of Systems, Information Technologies and Nanotechnologies)

P-217 Facile synthesis of Fmoc-aminoacyl-N-alkylcysteine dipeptide by Ugi multi-component reaction

Yuya Asahina, Hironobu Hojo (Institute for Protein Research, Osaka University)

P-218 A study toward endowing PPI inhibition activity to membrane-permeabilizing peptides

Yuki Nagano, Misao Akishiba, Shiroh Futaki (Institute for Chemical Research, Kyoto University)

P-219 Mitochondria-targeting drug delivery by peptide carriers

Rio Kawamura¹, Yuta Uematsu¹, Masayuki Yamasaki², Kin-ya Tomizaki¹ (¹Department of Materials Chemistry, Ryukoku University, ²Department of Food Science and Human Nutrition, Ryukoku University)

P-220 Development of novel peptides useful for promoting growth and undifferentiation of induced pluripotent stem cells

Masashi Sato¹, Yoshitsugu Ohnuki¹, Shinji Masui^{1,2}, Takashi Kawakami^{1,3}, Hiroshi Kurosawa¹ (¹Department of Biotechnology, Faculty of Life and Environmental Sciences, University of Yamanashi, ²Advanced Biotechnology Center, University of Yamanashi, ³JST, PRESTO)

P-221 Development of cell-permeable anti-HIV peptides based on capsid proteins

Rongyi Wang¹, Takuya Kobayakawa¹, Moemi Kaneko¹, Kofi Owusu¹, Tsutomu Murakami², Hirokazu Tamamura¹ (¹Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, ²AIDS Research Center, National Institute of Infectious Diseases)

P-222 Directed evolution of a novel PCSK9-binding peptide for hypercholesterolemia treatment

<u>Takehiro Ando</u>¹, Takumi Yokoyama¹, Mizuki Yamamoto¹, Takashi Kawakami^{1,2} (¹Department of Biotechnology, Faculty of Life and Environmental Sciences, University of Yamanashi, ²JST, PRESTO)

P-223 Assessment of the intracellular cargo delivery efficiency by conjugation with L17E analogues

<u>Kenta Shinga</u>, Misao Akishiba, Kentarou Sakamoto, Shiroh Futaki (Institute of Chemical Research, Kyoto University)

P-224 Improving the activity of L17E by endowing pH-sensitive membrane destabilizing activity

<u>Kentarou Sakamoto</u>, Misao Akishiba, Takahiro Iwata, Kenichi Kawano, Shiroh Futaki (Institute for Chemical Research, Kyoto University)

P-225 Mitocryptides: investigation of signaling mechanisms induced by novel neutrophil-activating peptides derived from mitochondrial transit signal sequences

Takayuki Marutani, Koji Ohura, Shinichiro Tamura, Kenta Nakashima, Hiroki Morikawa, Tatsuya Hattori, Yoshiaki Kiso, <u>Hidehito Mukai</u> (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

P-226 Evaluation of applicability of peptide self-cleavage reaction at canaline

Shugo Tsuda, Shun Masuda, <u>Taku Yoshiya</u> (Peptide Institute, Inc.)

P-227 Development of a nanoBRET-based sensitive screening method to search for chemokine receptor CXCR4 ligands

Maxwell M. Sakyiamah, Wataru Nomura, Takuya Kobayakawa, <u>Hirokazu Tamamura</u> (Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University)

P-228 Relationship between membrane remodeling ability and endocytosis

Toshihiro Masuda, Shiroh Futaki (Institute for Chemical Research, Kyoto University)

P-229 Auto-ubiquitination of artificial ring fingers in human breast cancer cells

<u>Kazuhide Miyamoto</u>, Arisa Nakatani, Yukari Taguchi, Kazuki Saito (Pharmaceutical Sciences, Himeji Dokkyo University)

P-230 Synthesis and evaluation of α-gal antibody conjugate for new cancer immune therapy by recruiting natural antibodies

Yoshiyuki Manabe^{1,2}, Julinton Sianturi¹, Kento Tokunaga¹, Kazuya Kabayama^{1,2}, Koichi Fukase^{1,2} (¹Graduate School of Science, Osaka University, ²Project Research Center for Fundamental Sciences, Osaka University)

P-231 Cell-penetrating activity analysis of amphiphilic α-helix peptides from designed peptide library

<u>Mimi Tian</u>, Takayuki Miki, Hiroshi Tsutsumi, Hisakazu Mihara (School of Life Science and Technology, Tokyo Institute of Technology)

P-232 Development of a small anti-HER2 antibody mimetic by double-CDR grafting

<u>Kyra See</u>, Tetsuya Kadonosono, Wanaporn Yimchuen, Shinae Kizaka-Kondoh (School of Life Science and Technology, Tokyo Institute of Technology)

P-233 Cell permeability evaluation of helical cell penetrating peptides using cyclic disubstituted amino acids having basic functional groups

<u>Takuma Kato</u>¹, Jun Yasukiyo¹, Yuki Kita¹, Kazuki Iwanari¹, Akiko Asano¹, Makoto Oba², Masakazu Tanaka², Mitsunobu Doi¹ (¹Osaka University of Pharmaceutical Sciences, ²Graduate School of Biomedical Sciences, Nagasaki University)

P-234 Transcytosis of histidine-rich peptide derived from Helicobacter pylori in gastric epithelial cells

Yurika Inui, Tsuyoshi Kawano, <u>Takashi Iwasaki</u> (Faculty of Agriculture, Tottori University)

P-235 Evaluation of intracellular delivery efficiency of L17E dimers

<u>Yohei Nomura</u>, Misao Akishiba, Kentarou Sakamoto, Shiroh Futaki (Institute for Chemical Research, Kyoto University)

P-236 Detection of ligand-protein interactions using a combination of ligation and reporter enzyme reconstitution

<u>Tsuyoshi Takahashi</u>, Hiroaki Hagiwara (Graduate School of Science and Technology, Gunma University)

P-237 Dimerization of plexin B1 binding macrocyclic peptides and its evauation

<u>Masanobu Nagano</u>¹, Nasir Kato Bashiruddin¹, Yukiko Matsunaga², Junichi Takagi², Hiroaki Suga¹ (¹Department of Chemistry, Graduate School of Science, The University of Tokyo, ²Laboratory of Protein Synthesis and Expression, Institute for Protein Research, Osaka University)

P-238 Fluorogenic ZIP tag-probe system for fluorescent imaging of endogenous protein expression

<u>Wataru Nomura</u>^{1,2}, Takumi Kamimura², Takuya Kobayakawa², Hirokazu Tamamura² (¹Graduate School of Biomedical and Health Sciences, Hiroshima University, ²Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University)

P-239 Pathogenic fibril growth at a target area by novel force-induced nanolithography of amyloid β

<u>Ryu Tashiro</u>¹, Hiroaki Taguchi¹, Kumi Hidaka², Masayuki Endo², Hiroshi Sugiyama^{2,3} (¹Faculty of Pharmaceutical Sciences, Suzuka University of Medical Sciences, ²Department of Chemistry, Graduate School of Science, Kyoto University, ³Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University)

P-240 Design of barnacle-mimetic peptides enhanced RGDS cell attachment site for tissue engineering scaffold

<u>Yoshiaki Hirano</u>^{1,2}, Daisuke Fujii¹, Ami Takagi¹, Sachiro Kakinoki^{1,2}, Kei Kamino³ (¹Faculty of Chemistry, Materials and Bioengineering, Kansai University, ²Organization for Research and Development of Innovative Science and Technology, Kansai University, ³National Institute of Technology and Evaluation)

P-241 Three-dimensional cell culture using laminin peptide-conjugated agarose hydrogels

<u>Yuji Yamada</u>, Chihiro Yoshida, Keisuke Hamada, Yamato Kikkawa, Motoyoshi Nomizu (School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)

P-242 Stability of Phe-containing elastin-like peptides against proteases in digestive organs

<u>Iori Maeda</u>¹, Miki Kawakami¹, Suguru Taniguchi¹, Keitaro Suyama², Takeru Nose² (¹Department of Physics and Information Technology, Kyushu Institute of Technology, ²Faculty of Arts and Science, Kyushu University)

P-243 Development of peptide immobilized nano-spheres and detection of antibodies to Japanese encephalitis virus in the wild boars in Gunma prefecture, Japan

Hotaka Shibao¹, Daichi Nakayama¹, Minoru Yamaji¹, Yuko Oku², <u>Hiroyuki Oku</u>¹ (¹Division of Molecular Science, Graduate School of Science & Engineering, Gunma University, ²Center of Regional Medical Research and Education, Gunma University Hospital)

P-244 Development of chitosan/dicarboxylic acid hydrogel with cell adhesive peptides as cell culture matrix

<u>Kentaro Hozumi</u>^{1,2}, Chie Takahashi¹, Hayato Yamada², Ayano Kobayashi¹, Rui Hiraga¹, Chihiro Uchiyama², Yoshio Hayashi², Motoyoshi Nomizu² (¹Department of Applied Clinical Dietetics, Kitasato Junior College of Health and Hygienic Science, ²School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)

P-245 Laser dissolution of fibrous peptide at terahertz region

<u>Takayasu Kawasaki</u>¹, Koichi Tsukiyama¹, Akinori Irizawa² (¹IR FEL Research Center, Tokyo University of Science, ²The Institute of Scientific and Industrial Research, Osaka University)

P-246 Practice of automated method development and automated robustness test of synthetic peptides by AI

Masaaki Suzuki¹, Daisuke Kubo², Kosuke Suzuki², Yuko Aoki¹, Shigenori Sonoki¹ (¹Chromsword Japan Co., Ltd., ²Jitsubo CO.,LTD.)

P-247 Research for evaluation of the interaction between synthetic co-factor-derived peptide and vitamin D receptor

<u>Nami Ohashi</u>, Shiori Nagata, Mami Yoshizawa, Toshimasa Itoh, Keiko Yamamoto (Laboratory of Drug Design and Medicinal Chemistry, Showa Pharmaceutical University)

P-248 Evaluation of cysteic acid in bleached hair using soft X-ray spectroscopy

Kazuyuki Suzuta, Kosuke Watanabe, Takaaki Maeda, Sho Kobayashi, <u>Len Ito</u> (Development Headquarters, Milbon Co. Ltd.)

P-249 An approach toward visual detection of single nucleotide polymorphism using pseudocomplementary peptide nucleic acid

Shun-suke Moriya¹, Yuko Sasa¹, Keiko Kuwata², Yasutada Imamura³, Yosuke Demizu⁴, Masaai Kurihara⁵, Atsushi Kittaka¹, Toru Sugiyama¹ (¹Faculty of Pharma-Sciences, Teikyo University, ²Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University, ³School of Advanced Engineering, Kogakuin University, ⁴Division of Organic Chemistry, National Institute of Health Sciences, ⁵Department of Pharmaceutical Sciences, International University of Health and Welfare)

P-250 A chromophore-immobilized peptide binding assay for assessing skin sensitization in vitro

<u>Kenji Usui</u>¹, Hiroshi Miyazaki², Hikaru Takaishi¹, Hidefumi Ikeda³, Yoshio Hamada¹, Kunihiko Yamashita² (¹Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, ²Daicel Corporation, ³Mandom Corporation)

P-251 Solvation-directed formation pathways for peptide nanotubes

<u>Avanashiappan Nandakumar</u>¹, Motoki Ueda^{1,2}, Yoshihiro Ito^{1,2} (¹Emergent Bioengineering Materials Research Team, RIKEN Center for Emergent Matter Science, ²Nano Medical Engineering Laboratory, RIKEN)

P-252 Proposal of Efficient Peptide Synthesis workflow

<u>Fumio Kumakura</u>¹, Cedric Rentier² (¹Peptides Application Engineer, Japan, Biotage Japan Ltd., ²Peptides and Biomolecules Application Specialist, Asia Pacific, Biotage Japan Ltd.)

P-253 In vitro selection of anti-gliadin VHH and its application for immuno-PCR using cDNA display

<u>Chathuni Jayathlake</u>¹, Shigefumi Kumachi², Hidenao Arai², Maiko Motohashi², Akikazu Murakami³, Naoto Nemoto^{1,2} (¹Graduate School of Science and Engineering, Saitama University, ²Epsilon Molecular Engineering, Inc., ³Graduate School of Medicine, University of the Ryukyus)