Poster Presentations

P-001−026: November 9 (Monday) 14:00−15:00

P-001 Tandem conjugate addition-elimination of enol tosylates with chiral Ni(II) complex

Yuhei Shigeno[1], Jianlin Han[2], Vadim A. Soloshonok[3], Hiroki Moriwaki[4], Wataru Fujiwara[1], Hiroyuki Konno[1] ([1]Graduate School of Science and Engineering, Yamagata University, [2]College of Chemical Engineering, Nanjing Forestry University, [3] Department of Organic Chemistry I, Faculty of Chemistry, University of the Basque Country UPV/EHU, [4]Hamari Chemicals Ltd.)

P-002 Synthesis of peptide-based drug carrier conjugated with a pH-sensitive peptide

Shogo Hirota[1], Takahito Imai[1], Masayuki Yamasaki[2], Kin-ya Tomizaki[1] ([1]Department of Materials Chemistry, Ryukoku University, [2]Department of Food Sciences and Human Nutrition, Ryukoku University)

P-003 Synthesis of mitochondria localization signal peptides derived from aldehyde dehydrogenase

Kei Takayama[1], Masayuki Yamasaki[2], Kin-ya Tomizaki[1] ([1]Department of Materials Chemistry, Ryukoku University, [2]Depertment of Food Science and Human Nutrition, Ryukoku University)

P-004 A convergent synthesis of chloroalkene dipeptide isosteres as peptidomimetics

Chika Azuma, Takuya Kobayakawa, Kohei Tsuji, Hirokazu Tamamura (Institute of Biomaterials and Bioengineering (IBB), Tokyo Medical and Dental University (TMDU))

P-005 A new detection method of amyloid β-protein aggregation using forester resonance energy

Eri Sugiyama, Minoru Inagaki, Yuichi Masuda (Graduate School of Bioresources, Mie University)

P-006 Synthesis of collagen model peptides with a phosphate group and a cell recognition site

Garyu Hori, Kin-ya Tomizaki (Department of Materials Chemistry, Ryukoku University)

P-007 Total chemical synthesis of linker histone H1.2 and heterochromatin protein 1 alpha through one-pot multiple peptide ligation using Ru catalyst

Naoki Kamo[1], Gosuke Hayashi[2], Tomoya Kujirai[3], Hitoshi Kurumizaka[3,4], Hiroshi Murakami[2], Akimitsu Okamoto[1,5] ([1]Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, [2]Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, [3]Laboratory of Chromatin Structure and Function, Institute for Quantitative Biosciences, The University of Tokyo, [4]Department of Biological Sciences, Graduate School of Science, The University of Tokyo, [5]Research Center for Advanced Science and Technology, The University of Tokyo)

P-008 Amino acid derivative design using computational chemistry and application to PET tracer

Hiroshi Yamaguchi[1], Keiichi Yamashiro[2], Maki Okada[3], Yukiko Karuo[4], Masaaki Omote[4], Katsuhiko Kato[1] ([1]Department of Integrated Health Sciences, Functional Medical Imaging, Graduate School of Medicine, Nagoya University, [2]Nagoya University Hospital, [3]National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology, [4]Faculty of Pharmaceutical Sciences, Setsunan University)

P-009 Synthesis of boronated azapeptides and their derivatives

Ryota Fujisawa[1], Kota Miyata[1], Airi Narita[1], Makoto Roppongi[2], Shingo Tamesue[1], Satoshi Ito[1], Toru Oba[1] ([1]Graduate School of Regional Development and Creativity, Utsunomiya University, [2]Advanced Instrumental Analysis Department, Center for Industry-University Innovation Support, Utsunomiya University)

P-010 Novel synthetic method of boronophenylalanine using fluoride ion

Yoshihide Hattori[1], Yasukazu Kanai[2,3], Youichiro Ohta[4], Toshimitsu Watanabe[5], Hiroshi Takenaka[3], Kouki Uehara[3], Sadahiro Naka[2], Toshihiro Sakai[6], Jun Hatazawa[7], Mitsunori Kirihata[1] ([1]Research Center of BNCT, Osaka Prefecture University, [2]Department of Biofunctional Analysis, Osaka University of Pharmaceutical Science, [3]Kansai BNCT Medical Center, Osaka Medical College, [4]Stella Pharma Co., [5]Sumitomo Heavy Industry Co., LTD., [6]Hanwa Intelligent Medical Center, [7]Research Center for Nuclear Physics, Osaka University)

P-011 Synthesis of boron-containing azirine and its derivatives

Toru Oba[1], Hiroto Takahashi[1], Yuka Yoshizawa[1], Makoto Roppongi[2], Shingo Tamesue[1], Satoshi Ito[1] ([1]Department of Material and Environmental Chemistry, Graduate School of Engineering, Utsunomiya University, [2]Advanced Instrumental Analysis Department, Center for Industry-University Innovation Support, Utsunomiya University)

P-012 Mitocryptides: presence and molecular forms in mitochondrial damage associated molecular patterns

Yoshinori Sugimoto, Tatsuya Ojima, Hiroki Morikawa, Takayuki Marutani, Yoshiaki Kiso, Hidehito Mukai (Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

P-013 Synthetic study for cyclodepsipeptide decatransin

Kosuke Ohsawa, Sakiko Fukaya, Takayuki Doi (Graduate School of Pharmaceutical Sciences, Tohoku University)

P-014 Chemical synthesis of insulin-like androgenic gland factor from the crayfish *Procambarus clarkii*

Hidekazu Katayama[1], Kenji Toyota[2,3,4], Haruna Tanaka[2], Tsuyoshi Ohira[2] ([1]Department of Applied Biochemistry, School of Engineering, Tokai University, [2]Department of Biological Sciences, Faculty of Science, Kanagawa University, [3]Sado Marine Biological Station, Faculty of Science, Niigata University, [4]Department of Biological Science and Technology, Faculty of Industrial Science and Technology, Tokyo University of Science)

P-015 Design, synthesis and antibacterial studies of novel cyclic undecapeptides and their linear counterparts against virulent bacterial strains

Hisham N. Farrag, Toshinari Maeda, Tamaki Kato (Department of Biological Functions Engineering, Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology)

P-016 Inhibition and molecular docking studies on angiotensin I-converting enzyme by peptides from an elastase-treated hydrolysate of porcine aortic elastin

Toshiya Hatakenaka[1], Masaki Yoshimizu[2], Tamaki Kato[1], Kouji Okamoto[3] ([1]Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology, [2]Fukuoka Foods Co.,Ltd., [3]Vital Resources Applied Laboratory, Inc.)

P-017 Construction of the higher efficient systems, novel PSP-5200 for larger scale syntheses and rapid characterization for small peptide libraries

Kiyoshi Nokihara, Yuki Tominaga, Takeshi Kasama, Haruyuki Fujino, Atsushi Kitagawa, Toru Sasaki, Shun Nokihara (HiPep Laboratories)

P-018 Study for development of orthogonal activation system for the thioester method

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

P-019 Chemical synthesis of membrane protein caveolin and its membrane insertion

Hironobu Hojo[1], Toshiki Takei[1], Yuya Asahina[1], Nobuaki Okumura[1], Toshifumi Takao[1], Masatomo So[1], Isao Suetake[2], Takeshi Sato[3], Akihiro Kawamoto[1], Yoshio Hirabayashi[4] ([1]Institute for Protein Research, Osaka University, [2]Nakamura Gakuen Graduate School University, [3]Kyoto Pharmaceutical University, [4]Cellular Informatics Laboratory RIKEN Cluster for Pioneering Research)

P-020 Aqueous microwave-assisted solid phase peptide synthesis without hydroxy side chain protection. II: water-based synthesis of difficult sequence peptide

Keiko Hojo[1,2], Yuki Manabe[1], Koushi Hidaka[1,2], Katsutoshi Yayama[1,2], Yuko Tsuda[1,2] ([1]Faculty of Pharmaceutical Sciences, [2]Cooperative Research Center for Life Science, Kobe Gakuin University)

P-021 Deprotection of *S*-acetamidomethyl cysteine mediated by copper salts

Daishiro Kobayashi[1], Naoto Naruse[1], Masaya Denda[1], Akira Shiganaga[2], Akira Otaka[1] ([1]Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University, [2]Faculty of Pharmacy and Pharmaceutical Sciences, Fukuyama University)

P-022 Development of a protection-free protocol for the synthesis of lactone peptides

Daiki Sato[1], Honoka Tsunematsu[1], Tomoko Ueda[1], Chiaki Komiya[1], Masaya Denda[1], Akira Shigenaga[2], and Akira Otaka[1] ([1]Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University, [2]Faculty of Pharmacy and Pharmaceutical Sciences, Fukuyama University)

P-023 Preparation of secretoglobin 3A2 type A fragments using Albericio's fragment coupling strategy

Ayaka Okawara, Mariko Kikuchi, Yui Sato, Reiko Kurotani, Hiroyuki Konno (Graduate School of Science and Engineering, Yamagata University)

P-024 Investigation on stereochemistry of cysteinyl prolyl ester (CPE) peptide for the formation of thioester

Eri Sasakura, Hironobu Hojo, Toru Kawakami (Institute for Protein Research, Osaka University)

P-025 Synthesis of C-terminal cysteine peptide acid by Fmoc-SPPS without epimerization

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

P-026 Construction of enveloped virus replica equipped with membrane proteins

Hiroto Furukawa[1], Hiroshi Inaba[1], Yoshihiro Sasaki[2], Kazunari Akiyoshi[2], Kazunori Matsuura[1] ([1]Graduate School of Engineering, Tottori University, [2]Graduate School of Engineering, Kyoto University)

P-027−052: November 9 (Monday) 15:00−16:00

P-027 Role of Phe residues in elastin-like peptide $(FPGVG)_5$ on self-assembly properties

Keitaro Suyama[1], Marin Shimizu[2], Iori Maeda[3], Takeru Nose[1,2] ([1]Faculty of Arts and Science, Kyushu University, [2]Department of Chemistry, Faculty and Graduate School of Science, Kyushu University, [3]Department of Physics and Information Technology, Kyushu Institute of Technology)

P-028 Synthetic peptides designed from hepatitis E virus capsid protein and their reactivity against sera from wild boars in Gunma Prefecture, Japan

Hiroyuki Oku[1], Yusuke Hori[1], Minoru Yamaji[1], Yuko Oku[2] ([1]Division of Molecular Science, Graduate School of Science and Engineering, Gunma University, [2]Aoi-Tori Family Clinic)

P-029 Evaluation of anti-ice nucleation peptide applied for cell culture media

Yoshiaki Hirano[1,2], Kaya Ichikawa[1] ([1]Department of Chemistry and Materials Engineering, Faculty of Chemistry, Materials and Bioengineering, Kansai University, [2]Organization for Research and Development of Innovative Science and Technology (ORDIST), Kansai University)

P-030 Laminin peptide coatings for rat neural stem/progenitor cell culture

Keisuke Hamada[1], Hideki Hayashi[2], Ichiro Horinokita[2], Yuji Yamada[1], Yamato Kikkawa[1], Norio Takagi[2], Motoyoshi Nomizu[1] ([1]Department of Clinical Biochemistry, School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, [2]Department of Applied Biochemistry, School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)

P-031 Fractionation of water-soluble elastin from pig aorta by coacervation method

Iori Maeda[1], Suguru Taniguchi[1], Yumi Moriuchi[1], Naruhiko Sawa[1,2], Asako Inoue[1], Tomoyuki Usa[1], Noriko Watanabe[1], Keitaro Suyama[3], Takeru Nose[3] ([1]Department of Physics and Information Technology, Kyushu Institute of Technology, [2]TechnoPro, Inc. TechnoPro R&D, Company, [3]Faculty of Arts and Science, Kyushu University)

P-032 Fluorescence correlation spectroscopic analysis of formation of artificial viral capsids under molecular crowding conditions

Risako Kobayashi, Hiroshi Inaba, Kazunori Matsuura (Graduate School of Engineering, Tottori University)

P-033 Development of self-aggregating elastin-like peptide analogs with a metal-binding sequence

Shogo Sumiyoshi[1], Keitaro Suyama[2], Takeru Nose[1,2] ([1]Laboratory of Biomolecular Chemistry, Department of Chemistry, Graduate School of Science, Kyushu University, [2]Faculty of Arts and Science, Kyushu University)

P-034 Fluorescence imaging of gangliosides with dansyl-labeled tri-arginine peptides bearing membrane anchor

Mizuki Okazaki, Koichi Hisamoto, Hiroshi Inaba, Kazunori Matsuura (Graduate School of Engineering, Tottori University)

P-035 Construction of artificial viral capsid decorated with green fluorescent protein on the surface

Kazuki Shimomura[1], Hiroshi Inaba[1], Takashi Iwasaki[2], Kazunori Matsuura[1] ([1]Graduate School of Engineering, Tottori University, [2]Graduate School of Agricultural Sciences, Tottori University)

P-036 Construction of artificial viral capsids bearing fusogenic peptide

Yuna Kimura[1], Takashi Iwasaki[2], Hiroshi Inaba[1], Kazunori Matsuura[1] ([1]Graduate School of Engineering, Tottori University, [2]Graduate School of Agricultural Sciences, Tottori University)

P-037 Construction of peptide nanotubes functionalized with helical peptide

Taichi Kurita[1], Tomoaki terabayashi[1], Keiji Numata[1,2], Shunsaku Kimura[1], Hirotaka Uji[1] ([1]Graduate School of Engineering, Kyoto University, [2]RIKEN Center for Sustainable Resource Science)

P-038 Fluorescence-based detection of water-soluble polymers using polymer-binding peptides

Takuya Nonaka, Seigo Suzuki, Toshiki Sawada, Takeshi Serizawa (School of Materials and Chemical Technology, Tokyo Institute of Technology)

P-039 Loading of proteins to polymeric micelles for biomedical applications using a polymer-binding peptide

Kenta Moro, Toshiki Sawada, Takeshi Serizawa (School of Materials and Chemical Technology, Tokyo Institute of Technology)

P-040 Propulsion of nucleo-sphere driven by light-induced peptide nanofiber growth

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

P-041 Effective position of tryptophan residues in stabilization of Aib-based ion channel peptide assemblies and their action to membrane

Keita Shigedomi[1], Kiyohiko Seki[2], Toshihisa Ueda[2], Satoshi Osada[1], Masoud Jelokhani-Niaraki[3], Hiroaki Kodama[1] ([1]Department of Chemistry and Applied Chemistry, Faculty of Science and Engineering, Saga University, [2]Department of Applied Biochemistry and Food Science Life Chemistry, Saga University, [3]Department of Chemistry, Faculty of Science, Wilfrid Laurier University)

P-042 Constructing β-barrel nanopore with glycine-kink

Ikuro Mizoguchi, Masataka Usami, Keisuke Shimizu, Ryuji Kawano (Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)

P-043 Conformational analysis of peptides consisting of a chiral pyrrolidine-based α,α-disubstituted α-amino acid

Yuto Yamaberi[1], Ryo Eto[1], Tomohiro Umeno[1], Makoto Oba[2], Masakazu Tanaka[1] ([1]Graduate School of Biomedical Sciences, Nagasaki University, [2]Graduate School of Medical Science, Kyoto Prefectural University of Medicine)

P-044 Recognition mechanisms of mitocryptide-2 by formylpeptide receptor 2

Keisuke Kamada, Takayuki Marutani, Kodai Nishino, Koji Ohura, Yoshiaki Kiso, Hidehito Mukai (Graduate School of Bio-Science, Nagahama Institure of Bio-Science and Technology)

P-045 Improvement of membrane curvature-inducing ability of the EpN18 peptide by membrane anchoring

Kakeru Kuroki, Takayuki Sakai, Kenichi Kawano, Shiroh Futaki (Institute for Chemical Research, Kyoto University)

P-046 Effects of oligomerization through coiled-coil on biological activities

Yuna Nunokawa, Shuya Sakaguchi, Tatsuya Sakaguchi, Rui Kamada, Kazuyasu Sakaguchi (Department of Chemistry, Faculty of Science, Hokkaido University)

P-047 Evaluation of effect of methyl to trifluoromethyl substitution on membrane permeability of peptides

Takahiro Ono[1], Jumpei Morimoto[1], Kohsuke Aikawa[1], Takashi Okazoe[1,2], Shinsuke Sando[1,3] ([1]Department of Chemistry & Biotechnology, Graduate School of Engineering, The University of Tokyo, [2]Materials Integration Laboratories, AGC Inc., [3]Department of Bioengineering, Graduate school of Engineering, The University of Tokyo)

P-048 Investigation of structure-activity relationship of tryptophan substituted derivatives of myticalin A6 (3-23)-OH

Keiko Okimura, Keiko Matsubara, Hanako Ito, Rie Suzuki, Chinami Katsui, Tamako Shiratori, Atsuya Sawada, Tohru Daikoku (Faculty of Pharmaceutical Sciences, Hokuriku University)

P-049 Exploration on amyloid-forming region in α-synuclein as a causative protein of Parkinson's disease

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

P-050 New role of biological metal ions for the cooperative reduction of protein by glutathione and its derivatives

Shigeru Negi[1], Rina Hashimoto[1], Yuka Kawahara-Nakagawa[2], Yukio Sugiura[1] ([1]Faculty of Pharmaceutical Sciences, Doshisha Women's College, [2]Graduate School of Faculty of Science, Hyogo University)

P-051 Molecular mechanism underlying oxidation reactions of zinc finger protein with H_2O_2

Kanae Kishi[1], Yuka Kawahara[2], Shigeru Negi[1], Mami Hamori[1] ([1]Faculty of Pharmaceutical Sciences, Doshisha Women's College, [2]Graduate School of Faculty of Science, Hyogo University)

P-052 FTIR study of the Ca^{2+}-coordination structure of Akazara scallop troponin C: effect on Glu at the 12th position by an amino-acid replacement

Masayuki Nara[1], Hisayuki Morii[1], Akira Sakamoto[2], Takuya Miyakawa[3], Masaru Tanokura[3] ([1]College of Liberal Arts and Sciences, Tokyo Medical and Dental University, [2]College of Science and Engineering, Aoyama Gakuin University, [3]Graduate School of Agriculture and Life Sciences, The University of Tokyo)

P-053−078: November 10 (Tuesday) 14:00−15:00

P-053 Development of antimicrobial dipeptides targeting dipeptidyl peptidase 7 of *Stenotrophomonas maltophilia*

Koushi Hidaka[1,2], Taisei Hashimoto, Takumi Seki, Yuki Sakurai, Yasumitsu Sakamoto[3], Saori Roppongi[3], Mizuki Sekiya[3], Akihiro Nakamura[4], Wataru Ogasawara[4], Yoshiyuki Suzuki[5], Nobutada Tanaka[6], Anna Miyazaki[7], Keiko Hojo[1,2], Yuko Tsuda[1,2] ([1]Faculty of Pharmaceutical Sciences, Kobe Gakuin University, [2]Cooperative Research Center for Life Sciences, Kobe Gakuin University, [3]School of Pharmacy, Iwate Medical University, [4]Department of Bioengineering, Nagaoka University of Technology, [5]National Institute of Technology, Nagaoka College, [6]School of Pharmacy, Kitasato University, [7]School of Pharmacy and Pharmaceutical Sciences, Mukogawa Women's University)

P-054 Effects of dimerization of antimicrobial peptides on antimicrobial activity and LPS neutralization

Mayu Odaki, Yoshiaki Yano, Katsumi Matsuzaki (Graduate School of Pharmaceutical Sciences, Kyoto University)

P-055 Development of peptide-based degraders against estrogen and androgen receptors

Hidetomo Yokoo[1,2], Nobumichi Ohoka[1], Mikihiko Naito[1], Takao Inoue[1], Yosuke Demizu[1,2] ([1]National Institute of Health Sciences, [2]Graduate School of Medical Science, Yokohama City University)

P-056 Mitocryptide-2: investigation of pathophysiological mechanisms in lipopolysaccharide-induced inflammation

Tomoyuki Miyaji, Yosito Takamuro, Takenori Yamada, Hiroki Morikawa, Kodai Nishino, Tatuya Hattori, Yosiaki Kiso, Hidehito Mukai (Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

P-057 An interacting mechanism between mitocryptide-3 and its receptor molecule

Koji Ohura, Takayuki Marutani, Shinichiro Tamura, Kenta Nakashima, Hiroki Morikawa, Yoshiaki Kiso, Hidehito Mukai (Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

P-058 Development of stapled peptides against inhibiting VDR-coactivator interaction

Yuumi Sato[1,2], Mami Takyo[1,2], Takashi Misawa[2], Hiroaki Ishida[3], Keiko Yamamoto[3], Yosuke Demizu[1,2] ([1]Graduate School of Medical Life Sciences, Yokohama City University, [2]National Institute of Health Science, [3]Laboratory of Drug Design and Medicinal Chemistry, Showa Pharmaceutical University)

P-059 Development of screening method of cyclic peptides with high membrane permeability

Yusuke Inoue, Minoru Inagaki, Yuichi Masuda (Graduate School of Bioresources, Mie University)

P-060 Inhibition of amyloid β assembly induced on GM1-containing lipid membrane using cyclic peptides

Erika Miyamoto, Mako Nakai, Masaya Nishihara, Teruhiko Matsubara, Sato Toshinori (Faculty of Science and Technology, Keio University)

P-061 Control of nucleolar formation via nucleolar protein nucleophosmin by PPM1D phosphatase

Itsumi Tani[1], Yui Oikawa[2], Shogo Ito[1], Rui Kamada[1,2], Kazuyasu Sakaguchi[1,2] ([1]Graduate School of Chemical Sciences and Engineering, Hokkaido University, [2]Department of Chemistry, Faculty of Science, Hokkaido University)

P-062 Cellular functions of mitocryptide-3-binding proteins in neutrophilic cells

Ryota Tanemura, Takayuki Marutani, Kohei Sakuma, Koji Ohura, Shinichiro Tamura, Kenta Nakashima, Yoshiaki Kiso, Hidehito Mukai (Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

P-063 Analysis of mechanism for novel anti-antibiotic peptide r-Pep2 against *Escherichia coli*

Junya Imaizumi, Yuma Omata, Natsumi Nakagawa, Rui Kamada, and Kazuyasu Sakaguchi (Department of Chemistry, Faculty of Science, Hokkaido University)

P-064 Design and synthesis of partial agonists of human neuromedin U receptor type 1 with enhanced serum stability

Kentaro Takayama[1,2], Kenji Mori[3], Yuko Sohma[2], Erina Nomura[2], Yu Sasaki[2], Akihiro Taguchi[2], Atsuhiko Taniguchi[2], Mikiya Miyazato[3], Naoto Minamino[3], Kenji Kangawa[3], Yoshio Hayashi[2] ([1]Department of Environmental Biochemistry, Kyoto Pharmaceutical University, [2]Department of Medicinal Chemistry, Tokyo University of Pharmacy and Life Sciences, [3]National Cerebral and Cardiovascular Center Research Institute)

P-065 Detection of ubiquitination activities using ARF on micro bioactive analyzer

Kazuhide Miyamoto (Pharmaceutical Sciences, Sanyo-Onoda City University)

P-066 Development of post-functionalizable antimicrobial peptide foldamers

Takashi Misawa[1], Motoharu Hirano[1,2], Hidetomo Yokoo[1], Yosuke Demizu[1,2] ([1]National Institute of Health Sciences, [2]Graduate of School of Medical Life Science, Yokohama City University)

P-067 A novel anti-IL-17a cyclic peptide consisting of multi-functional moieties selected by cDNA display

Taro Noguchi[1], Kanako Nakao[1], Takuya Terai[2], Hiroki Anzai[2], Daiki Yamaguchi[2], Ken Hatano[2], Masayuki Tsuchiya[1], Naoto Nemoto[1,2] ([1]Epsilon Molecular Engineering, Inc., [2]Graduate School of Science and Engineering, Saitama University)

P-068 Pure system-based mRNA display evolution of unnatural cyclic *N*-alkyl peptides via genetic code expansion for autoimmune disease treatment

Keita Tsukamoto[1], Takehiro Ando[1], Takumi Yokoyama[1], Mizuki Yamamoto[2], Takashi Kawakami[3,4] ([1]Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [2]Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [3]Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, University of Yamanashi, [4]JST, PRESTO)

P-069 Pure system-based mRNA display evolution of unnatural cyclic *N*-alkyl peptides via genetic code expansion for cancer treatment

Rina Iwamoto[1], Takehiro Ando[1], Daisuke Horiuchi[1], Mizuki Yamamoto[2], Takashi Kawakami[3,4] ([1]Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [2]Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [3]Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, University of Yamanashi, [4] JST, PRESTO)

P-070 Pure system-based mRNA display evolution of unnatural cyclic peptides via genetic code expansion for hypercholesterolemia treatment

Takumi Yokoyama[1], Hiromi Tanaka[2], Takehiro Ando[1], Mizuki Yamamoto[3], Takashi Kawakami[4,5] ([1]Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [2]Department of Biotechnology, Faculty of Life and Environmental Sciences, University of Yamanashi, [3]Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [4]Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, University of Yamanashi, [5]JST,PRESTO)

P-071 Radiolabelling and PET imaging of copper-64 labeled isoDGR derivative

Masayuki Hanyu, Lin Xie, Kuan Hu, Yiding Zhang, Ming-Rong Zhang (National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology)

P-072 Pure system-based mRNA display evolution of unnatural cyclic peptides via genetic code expansion for autoimmune disease treatment

Yukio Takamori[1], Daisuke Fuji[2], Takehiro Ando[1], Mizuki Yamamoto[3], Takashi Kawakami[4,5] ([1]Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [2]Department of Biotechnology, Faculty of Life and Environmental Sciences, University of Yamanashi, [3]Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [4]Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, University of Yamanashi, [5]JST, PRESTO)

P-073 Pure system-based mRNA display evolution of unnatural cyclic peptides via genetic code expansion for cancer treatment

Daisuke Horiuchi[1], Ayano Fukuta[2], Takehiro Ando[1], Mizuki Yamamoto[3], Takashi Kawakami[4,5] ([1]Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [2]Department of Biotechnology, Faculty of Life and Environmental Sciences, University of Yamanashi, [3]Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [4]Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, University of Yamanashi, [5]JST, PRESTO)

P-074 The effect of a novel designed branched amino acid containing substrate peptide for chymotrypsin activity

Yuki Yamawaki, Tomoki Yufu, Tamaki Kato (Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology)

P-075 Solvatochromic peptide binder obtained via extended phage display acts as a fluororeporter for fragment-based drug discovery

Riku Katsuki, Tsubasa Numayama, Yudai Tabuchi, Masumi Taki (Graduate School of Informatics and Engineering, The University of Electro-communication (UEC))

P-076 Peptide-based PICsome to the deliver an enzyme into plants for the addition of antibiotic resistance

Seiya Fujita[1], Kousuke Tsuchiya[1], Keiji Numata[1,2] ([1]Graduate School of Engineering, Kyoto University, [2]RIKEN Center for Sustainable Resource Science)

P-077 Post-antibody drugs: affinity maturation of a molecular-targeted HLH peptide

Yuka Kanata, Ayana Oshima, Chang Iou Ven, Asako Yamaguchi-Nomoto, Masataka Michigami, Ikuo Fujii (Department of Biological Science, Graduate School of Science, Osaka Prefecture University)

P-078 Design and synthesis of a universal coactivator peptide binding to the estrogen receptor and NURR1

Koki Tagawa[1], Keitaro Suyama[2], Hitoshi Kesamaru[2], Takahiro Masuya[1], Takeru Nose[1,2], Ayami Matsushima[1] ([1]Department of Chemistry, Faculty of Science, Kyushu University, [2]Faculty of Arts and Science, Kyushu University)

P-079−103: November 10 (Tuesday) 15:00−16:00

P-079 Withdraw

P-080 Rational design of cytosolic macromolecular delivery peptide with enhanced endosomolytic activity

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

P-081 Development of photo-oxygenation catalyst for α-synuclein

Atsushi Iwai[1], Nozomu Nagashima[1], Reito Nakamura[2], Yukiko Hori[2], Taisuke Tomita[2], Youhei Sohma[1], Motomu Kanai[1] ([1]Synthetic Organic Chemistry Lab., Graduate School of Pharmaceutical Sciences, The University of Tokyo, [2]Neuropathology and Neuroscience Lab., Graduate School of Pharmaceutical Sciences, The University of Tokyo)

P-082 Pure system-based cDNA display evolution of small molecule-binding peptide tags for protein modification

Takehiro Ando[1], Yukio Takamori[1], Mizuki Yamamoto[2], Takashi Kawakami [3,4] ([1]Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [2]Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [3]Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, University of Yamanashi, [4]JST, PRESTO)

P-083 A mitochondria targeting peptide for intracellular drug delivery

Rio Kawamura[1], Masayuki Yamasaki[2], Kin-ya Tomizaki [1] ([1]Department of Materials Chemistry, Ryokoku University, [2] Department of Food Science and Human Nutrition, Ryokoku University)

P-084 Pure system-based cDNA display evolution of small molecule-binding peptide tags for imaging and controlling intracellular proteins

Mizuki Yamamoto[1], Takehiro Ando[2], Takashi Kawakami[3,4] ([1]Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [2]Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, University of Yamanashi, [3]Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, University of Yamanashi, [4]JST, PRESTO)

P-085 Development of amphipathic cell penetrating peptide based on Pep-1 sequence

Takuma Kato, Mihoko Nakamachi, Akiko Asano, Mitsunobu Doi (Osaka University of Pharmaceutical Sciences)

P-086 Characterization of the effects of curcumin related compounds on two prion strains

Sara Iwabuchi[1], Kenta Teruya[1], Miki Matsui[1], Hiroyuki Konno[2], Katsumi Doh-ura[1] ([1]Tohoku University, Graduate School of Medicine, [2]Department of Biochemical Engineering, Yamagata University)

P-087 Anthracene derivative that selectively reduces gold ions

Shungo Teramura[1], Masahiro Asano[2], Kin-ya Tomizaki[1] ([1]Depertment of Materials Chemistry, Ryukoku University, [2]Course of Environmental Ecological Engineering, Ryukoku University)

P-088 Application of Mn^{2+}-specific biosensor based on G-quadruplex DNA aptamer

Masataka Mizunuma[1], Atsushi Kaneko[1], Miyuu Watari[1], Hikaru Saito[1], Akinori Banno[1], Yuka Yamagata[1], Kazuhiro Furukawa[2], Yoshiro Chuman[1] ([1]Laboratory of Biological Chemistry, [2]Cell Regulation Laboratory in Biochemistry, Graduate School of Science and Technology, Niigata University)

P-089 Preparation of the recombinant CRES using an *E. coli* expression system

Sayuri Murata, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

P-090 Point mutations suppress the non-specific degradation of cocoonase during the refolding reaction

Mai Takegawa[1], Ayumi Ogata[1], Mitsuhiro Miyazawa[2], Shigeru Shimamoto[1], Yuji Hidaka[1] ([1]Graduate School of Science and Engineering Research, Kindai University, [2]Institute of Agrobiological Sciences, National Agriculture and Food Research Organization)

P-091 Enzymatic activities of recombinant cocoonase's in which the active site is mutated

Ayumi Ogata[1], Mai Takegawa[1], Mitsuhiro Miyazawa[2], Shigeru Shimamoto[1], Yuji Hidaka[1] ([1]Graduate School of Science and Engineering Research, Kindai University, [2]Institute of Agrobiological Sciences, National Agriculture and Food Research Organization)

P-092 Analyses of the folding of a cassette mutant of human and eel prouroguanylin in a study of the role of an intra-molecular chaperon function on molecular evolution

Toi Osumi, Mayu Fukutsuji, Koki Mizoe, Ryota Shinto, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

P-093 Structural analyses of the N-terminal extracellular domain of the amyloid precursor protein

Yusaku Hanagaki[1], Shingo Kanemura[2], Masaki Okumura[3], Hiroshi Yamaguchi[2], Shigeru Shimamoto[1], Yuji Hidaka[1] ([1]Graduate School of Science and Engineering Research, Kindai University, [2]School of Science and Technology, Kwansei Gakuin University, [3]Frontier Research Institute for Interdisciplinary Sciences, Tohoku University)

P-094 Association between disulfide-coupled folding and the molecular evolution of prouroguanylin

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

P-095 Disulfide-coupled folding of a *de novo* designed hybrid protein derived from eel prouroguanylin

Ryota Shinto, Mayu Fukutsuji, Toi Osumi, Koki Mizoe, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

P-096 Change in dynamics of bound water and protein caused by bleaching treatment of human hair

Sho Kobayashi, Kosuke Watanabe, Len Ito, Kazuyuki Suzuta (Development Headquarters, Milbon Co. Ltd.)

P-097 Mechanism of disulfide-coupled folding of a *de novo* designed prouroguanylin protein

Mayu Fukutsuji, Toi Osumi, Ryota Shinto, Koki Mizoe, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

P-098 Effects of Ser/Thr phosphatase PPM1D on adipocyte differentiation and lipid droplet formation

Sae Uno, Toshiki Tsukamoto, Nozomi Kimura, Rui Kamada, Kazuyasu Sakaguchi (Department of Chemistry, Faculty of Science, Hokkaido University)

P-099 Regulatory mechanism of larval diapause by *C. elegans* neuropeptide FLP-6

Masahiro Ono[1], Chikako Arai[2], Yuka Kunimatsu[2], Yuka Hori[3], Yohei Matsunaga[4], Tomohiro Bito[1,2,3], Takashi Iwasaki[1,2,3], Tsuyoshi Kawano[1,2,3] ([1]Department of Bioresources Science, The United Graduate School of Agriculture, Tottori University, [2]Department of Bioresource Sciences, Faculty of Agriculture, Tottori University, [3]Department of Agricultural Science, Graduate School of Sustainability Science, Tottori University, [4]SRL)

P-100 Prophylactic anti-prion effects of cellulose ether compounds depend on host mouse strains

Kenta Teruya, Keiko Nishizawa, Ayumi Oguma, Katsumi Doh-ura (Graduate School of Medicine, Tohoku University)

P-101 Age related changes of heterogeneity linked with the secondary structure of the hair proteins

Kosuke Watanabe, Sho Kobayashi, Kazuyuki Suzuta, Len Ito (Development Headquarters, Milbon Co. Ltd.)

P-102 Comparative analysis of the effective peptide for hair repairs using Hansen solubility parameter

Motoki Takeda[1], Len Ito[1], Takumi Fujii[2], Shuhei Watanabe[2], Nobuyuki Fujiwara[1], Hideki Yamamoto[2] ([1]Development Headquarters, Milbon Co. Ltd., [2]Department of Chemical, Energy and Environmental Engineering, Faculty of Environmental and Urban Engineering, Kansai University)

P-103 Observation of the aggregation process of oligoarginine and calf thymus DNA; thermodynamic and morphological characteristics

Mami Hamori, Amon Kamiya, Momona Yamane, Megumi Yabuta, Nobuhito Shibata, Shigeru Negi (Faculty of Pharmaceutical Sciences, Doshisha Women's College)