



プログラム集
第20回日本蛋白質科学会年会
年会長 養王田 正文（東京農工大学）

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第 20 回日本蛋白質科学会年会 謝辞

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第 20 回日本蛋白質科学会年会

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日本ジェネティクス株式会社

2020 年 6 月 30 日現在

若手奨励賞シンポジウム/Young Scientists Awards

Chairs : Yoshikazu Tanaka (Tohoku Univ.), Min Yao (Hokkaido Univ.)

YSA-1 **Structure Of The Mitochondrial Protein Import Gate Reveals Distinct Preprotein Paths**
(P1-04)

Yuhei Araiso (Division of Health Sciences, Graduate School of Medical Science, Kanazawa University)

YSA-2 **Cryo-EM structures capture the transport cycle of the P4-ATPase flippase**

(P1-05)

○Masahiro Hiraizumi (The University of Tokyo / Mitsubishi Tanabe Pharma Corporation)

YSA-3 **O₂-activation and unidirectional proton-pump mechanisms of cytochrome c oxidase elucidated by X-ray structures of its catalytic intermediates**
(P1-06)

○Atsuhiko Shimada (Department of Applied Life Science, Faculty of Applied Biological Sciences, Gifu University)

YSA-4 **Cryo-EM structures of calcium homeostasis modulator channels in diverse oligomeric assemblies**
(P1-07)

○Kanae Demura (The University of Tokyo)

YSA-5 **Developments and applications of generalized-ensemble methods for free-energy analysis of protein-ligand binding**
(P2-02)

○Hiraku Oshima (RIKEN Center for Biosystems Dynamics Research)

YSA-6 ***Escherichia coli* small heat shock protein IbpA is an aggregation-sensor to self-regulate its own expression at translational levels**
(P3-04)

○Tsukumi Miwa (School of Life Science and Technology, Tokyo Institute of Technology)

YSA-7 **Mechanism of Antibody Aggregation by pH-Shift Stress**

(P4-08)

○Hiroshi Imamura (Ritsumeikan University)

Poster Presentation

(○ = Presenter)

Protein Structure

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○Tomoki Himiyama (National Institute of Advanced Industrial Science and Technology (AIST)),
Tsutomu Nakamura (National Institute of Advanced Industrial Science and Technology (AIST))

P1-02 **C9orf72-derived PR poly-dipeptides compromise phase separation of low-complexity protein sequences and nucleocytoplasmic transport**

○Eiichiro Mori (Nara Medical University)

P1-03 **Unguided Binding MD of Protein-Protein Complexes by PPI-Coldock**

○Kazuhiro Takemura (TokyoTech), Akio Kitao (TokyoTech)

P1-04 **Structure Of The Mitochondrial Protein Import Gate Reveals Distinct Preprotein Paths**

○Yuhei Arais (Division of Health Sciences, Graduate School of Medical Science, Kanazawa University),
Akihisa Tsutsumi (Graduate School of Medicine, The University of Tokyo), Jian Qiu (University of Freiburg), Kenichiro Imai (National Institute of Advanced Industrial Science and Technology (AIST)),
Takuya Shiota (Organization for Promotion of Tenure Track, University of Miyazaki), Haruka Sakaue (Faculty of Life Sciences, Kyoto Sangyo University / Institute for Protein Dynamics, Kyoto Sangyo University),
Junko Suzuki (Faculty of Life Sciences, Kyoto Sangyo University), Nikolaus Pfanner (University of Freiburg), Masahide Kikkawa (Graduate School of Medicine, The University of Tokyo), Toshiya Endo (Faculty of Life Sciences, Kyoto Sangyo University / Institute for Protein Dynamics, Kyoto Sangyo University)

P1-05 **Cryo-EM structures capture the transport cycle of the P4-ATPase flippase**

○Masahiro Hiraizumi (The University of Tokyo / Mitsubishi Tanabe Pharma Corporation), Keitaro Yamashita (The University of Tokyo), Tomohiro Nishizawa (The University of Tokyo), Osamu Nureki (The University of Tokyo)

P1-06 **O₂-activation and unidirectional proton-pump mechanisms of cytochrome c oxidase elucidated by X-ray structures of its catalytic intermediates**

○Atsuhiko Shimada (Department of Applied Life Science, Faculty of Applied Biological Sciences, Gifu University), Yuki Etoh (Department of Life Science, Graduate School of Life Science, University of Hyogo),
Kyoko Shinzawa-Itoh (Department of Life Science, Graduate School of Life Science, University of

Hyogo), **Eiki Yamashita** (Institute for Protein Research, Osaka University), **Kazumasa Muramoto** (Department of Life Science, Graduate School of Life Science, University of Hyogo), **Tomitake Tsukihara** (Department of Life Science, Graduate School of Life Science, University of Hyogo / Institute for Protein Research, Osaka University), **Shinya Yoshikawa** (Department of Life Science, Graduate School of Life Science, University of Hyogo)

P1-07 Cryo-EM structures of calcium homeostasis modulator channels in diverse oligomeric assemblies

○ **Kanae Demura** (The University of Tokyo), **Tsukasa Kusakizako** (The University of Tokyo), **Wataru Shihoya** (The University of Tokyo), **Masahiro Hiraizumi** (The University of Tokyo), **Kengo Nomura** (Kyoto Prefectural University of Medicine), **Hiroto Shimada** (The University of Tokyo), **Keitaro Yamashita** (The University of Tokyo), **Tomohiro Nishizawa** (The University of Tokyo), **Akiyuki Taruno** (Kyoto Prefectural University of Medicine), **Osamu Nureki** (The University of Tokyo)

P1-08 The auto-inhibitory mechanism of isolated membrane V_o domain from prokaryotic V/A-ATP synthase for preventing H⁺ leakage

○ **Jun-ichi Kishikawa** (Kyoto Sangyo University), **Atsuko Nakanishi** (Kyoto Sangyo University / Osaka University), **Aya Furuta** (Kyoto Sangyo University), **Takayuki Kato** (Osaka University), **Keiichi Namba** (Osaka University), **Masatada Tamakoshi** (Tokyo University of Pharmacy and Life Sciences), **Kaoru Mitsuoka** (Osaka University), **Ken Yokoyama** (Kyoto Sangyo University)

P1-09 Crystal Structures of Phosphatidylserine Decarboxylase Reveal the Basis of Phosphatidylethanolamine Biosynthesis

○ **Yasunori Watanabe** (Graduate School of Agriculture, Ehime University), **Seiya Watanabe** (Graduate School of Agriculture, Ehime University / Center for Marine Environmental Studies (CMES), Ehime University)

P1-10 Structural Study For The Interactions Between Mouse Sortilin And Interferon α

○ **Honoka Watanabe** (Graduate School of Science and Engineering, Ibaraki University / Frontier Research Center for Applied Atomic Science, Ibaraki University), **Miki Tanaka** (Graduate School of Science and Engineering, Ibaraki University / Frontier Research Center for Applied Atomic Science, Ibaraki University), **Toshiki Wada** (Department of Immunology, Kanazawa Medical University), **Masaki Unno** (Graduate School of Science and Engineering, Ibaraki University / Frontier Research Center for Applied Atomic Science, Ibaraki University)

P1-11 Structural Study of cohesin loader

○ **Sotaro Kikuchi** (Nara Medical University)

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○Nozomi Nakamura (Institute for Protein Research, Osaka University), Yukiko Matsunaga (Institute for Protein Research, Osaka University), Nasir Kato Bashiruddin (Department of Chemistry, School of Science, The University of Tokyo), Kyoko Matoba (Institute for Protein Research, Osaka University), Keitaro Yamashita (RIKEN SPring-8 Center), Kunio Hirata (RIKEN SPring-8 Center), Masaki Yamamoto (RIKEN SPring-8 Center), Hiroaki Suga (Department of Chemistry, School of Science, The University of Tokyo), Junichi Takagi (Institute for Protein Research, Osaka University)

P1-13 A unique reaction mechanism of glycoside hydrolases revealed by a fungal *endo-β-1,2-glucanase*

Nobukiyo Tanaka (Tokyo University of Science), ○Masahiro Nakajima (Tokyo University of Science), Shiro Komba (National Agriculture and Food Research Organization), Shinji Kamisuki (Azabu University), Hiroyuki Nakai (Niigata University), Akimasa Miyana (Tokyo Institute of Technology), Hayao Taguchi (Tokyo University of Science)

P1-14 Crystal Structure of HypX Reveals Molecular Mechanism of Carbon Monoxide Production in [NiFe]-Hydrogenase Maturation

○Norifumi Muraki (Exploratory Research Center on Life and Living Systems / Institute for Molecular Sciences / SOKENDAI), Shigetoshi Aono (Exploratory Research Center on Life and Living Systems / Institute for Molecular Sciences / SOKENDAI)

P1-15 Structural Analysis of IgG1-FcγRIIIa Interaction

○Yuki Yamaguchi (Graduate School of Engineering, Osaka University), Rina Yogo (Graduate School of Pharmaceutical Science, Nagoya City University / Exploratory Research Center on Life and Living Systems, ExCELLS), Hiroki Watanabe (Exploratory Research Center on Life and Living Systems, ExCELLS), Hirokazu Yagi (Graduate School of Pharmaceutical Science, Nagoya City University), Tadashi Satoh (Graduate School of Pharmaceutical Science, Nagoya City University), Mahito Nakanishi (Biotechnology Research Institute for Drug Discovery, National Institute of Advanced Industrial Science and Technology, AIST), Masayoshi Onitsuka (Graduate School of Technology, Industrial and Social Sciences, Tokushima University), Takeshi Omasa (Graduate School of Engineering, Osaka University / Graduate School of Pharmaceutical Science, Nagoya City University), Natsumi Wakaizumi (Graduate School of Engineering, Osaka University), Mari Shimada (Graduate School of Engineering, Osaka University), Takahiro Maruno (Graduate School of Engineering, Osaka University), Tetsuo Torisu (Graduate School of Engineering, Osaka University), Shio Watanabe (Thermo Fisher Scientific), Daisuke Higo (Thermo Fisher Scientific), Takayuki Uchihashi (Exploratory Research Center on Life and Living Systems, ExCELLS / Graduate School of Science, Nagoya University), Saeko Yanaka (Graduate School of Pharmaceutical Science, Nagoya City University / Exploratory Research Center on Life and Living Systems, ExCELLS), Koichi Kato (Graduate School of Pharmaceutical Science, Nagoya City University / Exploratory Research Center on Life and Living Systems, ExCELLS), Susumu Uchiyama (Graduate School of Engineering, Osaka University / Exploratory Research Center on Life and Living Systems, ExCELLS)

P1-16 Simulation study of tree dimensional reconstruction of ribosome from X-ray free electron laser diffraction patterns

○Miki Nakano (RIKEN, R-CCS), Osamu Miyashita (RIKEN, R-CCS), Florence Tama (RIKEN, R-CCS / Grad. Sch. Sci., Nagoya Univ. / ITbM, Nagoya Univ.)

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○Kohei Sasamoto (Natl. Inst. Adv. Ind. Sci. Technol. / Grad. School Sci. Eng. Setsunan Univ.), Yuya Shimozawa (Natl. Inst. Adv. Ind. Sci. Technol. / Grad. School Sci. Eng. Setsunan Univ.), Tomoki Himiyama (Natl. Inst. Adv. Ind. Sci. Technol.), Kunihiro Moriyoshi (Osaka Res. Inst. Ind. Sci. Technol.), Takashi Ohmoto (Osaka Res. Inst. Ind. Sci. Technol.), Koichi Uegaki (Natl. Inst. Adv. Ind. Sci. Technol. / Kindai Univ.), Yoshiaki Nishiya (Grad. School Sci. Eng. Setsunan Univ.), Tsutomu Nakamura (Natl. Inst. Adv. Ind. Sci. Technol.)

P1-18 Crystal Structure of Natural Agonist-bound Lipid G protein-coupled Receptor

○Shintaro Maeda (Department of Anatomy and Developmental Biology, Graduate School of Medicine, Kyoto University / Department of Drug Discovery Medicine, Graduate School of Medicine, Kyoto University), Yuki Shiimura (Department of Cell Biology, Graduate School of Medicine, Kyoto University / Institute of Life Science, Kurume University), Hidetsugu Asada (Department of Cell Biology, Graduate School of Medicine, Kyoto University), Kunio Hirata (RIKEN SPring-8 Center), Fangjia Luo (RIKEN SPring-8 Center), Eriko Nango (Department of Cell Biology, Graduate School of Medicine, Kyoto University / RIKEN SPring-8 Center), Masayasu Toyomoto (Department of Anatomy and Developmental Biology, Graduate School of Medicine, Kyoto University), So Iwata (Department of Cell Biology, Graduate School of Medicine, Kyoto University / RIKEN SPring-8 Center), Masatoshi Hagiwara (Department of Anatomy and Developmental Biology, Graduate School of Medicine, Kyoto University)

P1-19 The Structural And Mutational Analysis Of The Inhibitor-binding Pit In The Multidrug Efflux Transporter MexB

○Naoki Koga (Graduate School of Pharmaceutical Sciences, Osaka University / Institute of Scientific and Industrial Research, Osaka University), Seiji Yamasaki (Graduate School of Pharmaceutical Sciences, Osaka University / Institute of Scientific and Industrial Research, Osaka University), Keisuke Sakurai (Institute of Scientific and Industrial Research, Osaka University), Ryosuke Nakashima (Institute of Scientific and Industrial Research, Osaka University), Akihito Yamaguchi (Institute of Scientific and Industrial Research, Osaka University), Kunihiro Nishino (Graduate School of Pharmaceutical Sciences, Osaka University / Institute of Scientific and Industrial Research, Osaka University)

P1-20 Biochemical and structural analyses of serine proteinase involved in biosynthesis of active-site subunit of quinohemoprotein amine dehydrogenase

○Toshinori Oozeki (Institute of Scientific and Industrial Research, Osaka University), Tadashi Nakai (Department of Food Sciences and Biotechnology, Faculty of Life Sciences, Hiroshima Institute of Technology), Katsuyuki Tanizawa (Institute of Scientific and Industrial Research, Osaka University), Toshihide Okajima (Institute of Scientific and Industrial Research, Osaka University)

P1-21 Study on the Encapsulation Mechanism of Guest Proteins into Bacterial Nanocompartment

○Keiichi Noguchi (Tokyo University of Agriculture and Technology), Natsumi Sakurai (Tokyo University of Agriculture and Technology), Motoko Fujii (Tokyo University of Agriculture and Technology), Kosuke Kanamaru (Tokyo University of Agriculture and Technology), Akio Tamura (Tokyo University of Agriculture and Technology), Yosuke Fukutani (Tokyo University of Agriculture and Technology), Hirotooshi Matsumura (Akita University), Masafumi Odaka (Akita University), Masafumi Yohda (Tokyo University of Agriculture and Technology)

P1-22 The Molecular Mechanism of tRNA Thiolation Involved in Iron-Sulfur Enzymes and Ubiquitin-like Sulfur Donor Proteins

○Masato Ishizaka (Graduate School of Life Science, Hokkaido University), Minghao Chen (Faculty of Advanced Life Science, Hokkaido University), Shun Narai (Graduate School of Life Science, Hokkaido University), Masaki Horitani (Faculty of Agriculture, Department of Applied Biochemistry and Food Science, Saga University), Yoshikazu Tanaka (Faculty of Advanced Life Science, Hokkaido University / Graduate School of Life Sciences, Tohoku University), Jian Yu (Graduate School of Life Science, Hokkaido University / Faculty of Advanced Life Science, Hokkaido University), Min Yao (Graduate School of Life Science, Hokkaido University / Faculty of Advanced Life Science, Hokkaido University)

P1-23 Reconstitution And Structural Characterization Of Di-nucleosome With Fully Methylated DNA

○Hiroshi Ushijima (Yokohama City University), Takashi Oda (Yokohama City University), Takashi Umehara (RIKEN Center for Biosystems Dynamic Research), Tsuyoshi Konuma (Yokohama City University), Satoko Akashi (Yokohama City University)

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○Fumiaki Kono (National Institutes for Quantum and Radiological Science and Technology / Kyushu University), Chiho Taguchi (Kyushu University), Michael Blaber (Florida State University, United States), Ryota Kuroki (Japan Atomic Energy Agency), Satoshi Morimoto (Kyushu University), Taro Tamada (National Institutes for Quantum and Radiological Science and Technology)

P1-25 Structural Basis For Cofactor Recognition Mechanism By SMAD2/3 In TGF- β Signaling

○Kenichi Miyazono (The University of Tokyo), Tomoko Ito (The University of Tokyo), Saho Moriwaki (The University of Tokyo), Yosuke Ohno (The University of Tokyo), Hikaru Wada (The University of Tokyo), Yui Fukatsu (Nara Institute of Science and Technology), Akira Kurisaki (Nara Institute of Science and Technology / National Institute of Advanced Industrial Science and Technology), Makoto Asashima (National Institute of Advanced Industrial Science and Technology), Masaru Tanokura (The University of Tokyo)

P1-26 The Interaction Analysis of Iron Chaperone PCBP1 and Human Ferritin H and L Chain

○Taro Masuda (Kyoto University), Sarju Patel (NIDDK, NIH), Olga Protchenko (NIDDK, NIH), Caroline Philpott (NIDDK, NIH)

P1-27 Structural Elucidation Of The Reaction Mechanism Of IgG-Cleaving Protease IdeS

○Kimika Yonekawa (Institute of Protein Research, Osaka University), Tomoaki Koyama (Institute of Protein Research, Osaka University), Takao Arimori (Institute of Protein Research, Osaka University), Junichi Takagi (Institute of Protein Research, Osaka University)

P1-28 Molecular basis for specific interaction between the PH domain of the human ceramide transfer protein CERT and the Chlamydia trachomatis inclusion membrane protein IncD

○Toshihiko Sugiki (Osaka University), Keigo Kumagai (National Institute for Infectious Diseases), Shoko Shinya (Osaka University), Naohiro Kobayashi (Osaka University), Toshimichi Fujiwara (Osaka University), Kentaro Hanada (National Institute for Infectious Diseases), Chojiro Kojima (Osaka University / Yokohama National University)

P1-29 Comparison of Galectin-1 Wild Type Dimer and Artificially Connected Tandem-Repeat Mutant

○Yasuhiro Nonaka (Kagawa University), Takashi Ogawa (Kagawa University), Hiroki Shoji (Kanazawa Medical University), Nozomu Nishi (Kagawa University), Shigehiro Kamitori (Kagawa University), Takanori Nakamura (Kagawa University)

P1-30 Crystallographic studies of the cell-division protein FtsZ from *Klebsiella pneumoniae* and *Escherichia coli*

Takuya Yoshizawa (Ritsumeikan University), Junso Fujita (Osaka University), Haruna Terakado (Ritsumeikan University), ○Mayuki Ozawa (Ritsumeikan University), Natsuko Kuroda (Ritsumeikan University), Shun-ichi Tanaka (Ritsumeikan University), Ryo Uehara (Ritsumeikan University), Hiroyoshi Matsumura (Ritsumeikan University)

P1-31 Crystal structure of a thermostable mutant of neuroserpin useful for drug design

○Sachiko Shinada (Osaka Prefecture University), Akihiro Harada (Osaka Prefecture University), Rinano Suyama (Osaka Prefecture University), Takumi Yamamoto (Osaka Prefecture University), Ryo Watatani (Osaka Prefecture University), Maki Onda (Osaka Prefecture University)

P1-32 Solution NMR structure of LalT2, an antimicrobial peptide of Yaeyama scorpion (*Liocheles australasiae*)

○Maiki Tamura (Japan advanced institute of science and technology), Masahiro Miyashita (Kyoto University), Hisashi Miyagawa (Kyoto University), Hayato Morita (Josai University), Shinya Ohki (Japan advanced institute of science and technology)

P1-33 Structural Mechanism of Translational Repression by PABP-interacting Protein 2

○Takeru Sagae (Keio University), Mariko Yokogawa (Keio University), Ryoichi Sawazaki (Keio University), Nao Hosoda (Nagoya City University), Shin-ichi Hoshino (Nagoya City University), Masanori Osawa (Keio University)

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○Shumpei Koroku (Meiji University), Yutaka Maruyama (RIKEN), Koh Takeuchi (AIST), Ayori Mitsutake (Meiji University)

P1-36 Structure of the Hook-filament Junction with the FliD Cap

○Atsushi Ikeda (Grad. Sch. of Sci., Osaka Univ.), Tomoko Miyata (Grad. Sch. of Frontier Biosci., Osaka Univ.), Fumiaki Makino (Grad. Sch. of Frontier Biosci., Osaka Univ.), Keiichi Namba (Grad. Sch. of Frontier Biosci., Osaka Univ. / BDR, RIKEN), Katsumi Imada (Grad. Sch. of Sci., Osaka Univ.)

P1-37 Structural Analysis of FtsZ in Complex with a Fluorescent Probe BOFP Designed from Binding Structure of Drug

Junso Fujita (Osaka University), Takuya Yoshizawa (Ritsumeikan University), Ryo Uehara (Ritsumeikan University), Mayuki Ozawa (Ritsumeikan University), ○Natsuko Kuroda (Ritsumeikan University), Haruna Terakado (Osaka University), Daniel S. Pilch (Rutgers Robert Wood Johnson Medical School), Hiroyoshi Matsumura (Ritsumeikan University)

P1-38 Molecular mechanism for multi-monoubiquitination of histone H3 by UHRF1

○Shun Matsuzawa (Grad. Sch. of Med Life Sci., Yokohama City Univ.), Makoto Wakatsuki (Grad. Sch. of Med Life Sci., Yokohama City Univ.), Satomi Kori (Grad. Sch. of Med Life Sci., Yokohama City Univ.), Ayako Furukawa (Grad. Sch. of Med Life Sci., Yokohama City Univ.), Yoshifumi Nishimura (Grad. Sch. of Med Life Sci., Yokohama City Univ.), Atsuya Nishiyama (Inst. of Med Sci., Univ of Tokyo), Makoto Nakanishi (Inst. of Med Sci., Univ of Tokyo), Kyohei Arita (Grad. Sch. of Med Life Sci., Yokohama City Univ.)

P1-39 Changes in the structure and function of the vertebrate p53 family proteins in evolution process

○Shuya Sakaguchi (Laboratory of Biological Chemistry, Graduate School of Chemical Sciences and Engineering, Hokkaido University), Natsumi Nakagawa (Laboratory of Biological Chemistry, Graduate School of Chemical Sciences and Engineering, Hokkaido University), Haytham Wahba (Department of Biochemistry and Molecular Medicine, University of Montreal, Canada), Rui Kamada (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), James G. Omichinski (Department of Biochemistry and Molecular Medicine, University of Montreal, Canada), Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

P1-40 Evaluation Of Oligomer States Of Recombinant HIV-2 Envelope Glycoprotein For Structure Studies

○Yuki Anraku (Faculty of Pharm sci., Hokkaido University / Grad. Sch. Life sci., Hokkaido University), Shunsuke kita (Faculty of Pharm sci., Hokkaido University / Grad. Sch. Life sci., Hokkaido University), Hideo Fukuhara (Faculty of Pharm sci., Hokkaido University / Grad. Sch. Life sci., Hokkaido University), Takaki Akiyama (Faculty of Pharm sci., Hokkaido University), Simon Davis (University of Oxford, UK), Atsushi Furukawa (Faculty of Pharm sci., Hokkaido University / Grad. Sch. Life sci., Hokkaido University), Thushan de Silva (University of Oxford, UK), James E. Robinson (University of Tulane, US), Yuguang Zhao (University of Oxford, UK), Yvonne Jones (University of Oxford, UK), David Stuart (University of Oxford, UK), Juha T. Huiskonen (University of Oxford, UK), Sarah Rowland-Jones (University of Oxford, UK), Katsumi Maenaka (Faculty of Pharm sci., Hokkaido University / Grad. Sch. Life sci., Hokkaido University)

P1-41 Structural Basis for the Hepatocyte-specific Entry of Hepatitis B Virus

○Tomoaki Ishiba (Keio University Faculty of Pharmacy), Mariko Yokogawa (Keio University Faculty of Pharmacy), Terumi Yokota (Keio University Faculty of Pharmacy), Taiki Muroi (Keio University Faculty of Pharmacy), Masanori Osawa (Keio University Faculty of Pharmacy)

P1-42 Domain Structural Analysis For The Insecticidal And Antibacterial Two-Domain Toxin, Lalt2, From Japanese Scorpion, *Liocheles australasiae*

○Chiharu Tatsushiro (Josai University), Hayato Morita (Josai University)

P1-43 Observation of Structural Change Of α -Synuclein, a Intrinsically Disordered Protein by Fluorescence Lifetime Measurement

○Ko Sasada (Graduate School of Science, Kobe University), Koichi Fujii (Graduate School of Science, Kobe University), Ryosuke Matsubara (Graduate School of Science, Kobe University), Tetsunari Kimura (Graduate School of Science, Kobe University)

P1-44 Structural basis for the switching of binding partners by Ser298 phosphorylation in UHRF1

○Satomi Kori (Yokohama City University), Tomohiro Jimenji (Yokohama City University), Toru Ekimoto (Yokohama City University), Miwa Sato (Mitsui Knowledge Industry), Fumie Kusano (Yokohama City University), Takashi Oda (Yokohama City University), Motoko Unoki (Kyushu University), Mitsunori Ikeguchi (Yokohama City University), Kyohei Arita (Yokohama City University)

P1-45 A mutation to give an antibody a peptidase activity

○Jun Kobayashi (SBRC, IMSS, KEK), Emi Hifumi (Research Promo. Inst., Oita Univ.), Taizo Uda (Nanotech Lab. ISIT), Ryuichi Kato (SBRC, IMSS, KEK)

P1-46 Cryo-EM Analysis of Nucleosomal Transcription

○Haruhiko Ehara (RIKEN), Tomoya Kujirai (RIKEN / The University of Tokyo), Yuka Fujino (The University of Tokyo / Waseda University), Mikako Shirouzu (RIKEN), Hitoshi Kurumizaka (RIKEN / The University of Tokyo / Waseda University), Shun-ichi Sekine (RIKEN)

P1-47 Neutron diffraction studies of [NiFe]-hydrogenase from *Desulfovibrio vulgaris* Miyazaki F

○Taro Tamada (National Institutes for Quantum and Radiological Science and Technology), Takeshi Hiromoto (National Institutes for Quantum and Radiological Science and Technology / University of Hyogo), Koji Nishikawa (University of Hyogo), Yu Hirano (National Institutes for Quantum and Radiological Science and Technology), Katsuhiro Kusaka (Ibaraki University), Leighton Coates (Oak Ridge National Laboratory), Yoshiki Higuchi (University of Hyogo)

P1-48 Recent Progress Of BioSAXS Equipment For Complex Molecular Systems At The Photon Factory

○Kento Yonezawa (High Energy Accelerator Research Organization), Masatsuyo Takahashi (High Energy Accelerator Research Organization), Keiko Yatabe (High Energy Accelerator Research Organization), Yasuko Nagatani (High Energy Accelerator Research Organization), Yugo Hayashi (Nara Institute of Science and Technology), Shinji Amano (Nara Institute of Science and Technology),

Hironari Kamikubo (High Energy Accelerator Research Organization / Nara Institute of Science and Technology), Nobutaka Shimizu (High Energy Accelerator Research Organization)

P1-49 The Structural Change Mechanism In The Catalytic Cycle Of Malate Dehydrogenase

○Yuya Shimozawa (Setsunan University / National Institute of Advanced Industrial Science and Technology), Yoshiaki Nishiya (Setsunan University), Kohei Sasamoto (Setsunan University / National Institute of Advanced Industrial Science and Technology), Tomoki Himiyama (National Institute of Advanced Industrial Science and Technology), Tsutomu Nakamura (National Institute of Advanced Industrial Science and Technology)

P1-50 Conformational changes of influenza virus hemagglutinin under acidic condition

○Takaki Akiyama (Laboratory of Biomolecular Science, Faculty of Pharmaceutical Science, Hokkaido University), Hideo Fukuhara (Center for Research and Education on Drug Discovery, Faculty of Pharmaceutical Science, Hokkaido University), Mihiro Kawamura (Laboratory of Biomolecular Science, Faculty of Pharmaceutical Science, Hokkaido University), Katsumi Maenaka (Laboratory of Biomolecular Science, Faculty of Pharmaceutical Science, Hokkaido University / Center for Research and Education on Drug Discovery, Faculty of Pharmaceutical Science, Hokkaido University)

P1-51 Thioflavin T Fluorescence Lifetime Assay Of Homogeneous Insulin Amyloid Fibrils

○Akinori Oda (Hamamatsu Photonics K.K.), Tomoo Inubushi (Hamamatsu Photonics K.K.), Keisuke Yuzu (Grad. Sch. Sci., Kobe Univ.), Eri Chatani (Grad. Sch. Sci., Kobe Univ.), Etsuji Yoshikawa (Hamamatsu Photonics K.K.), Hiroshi Satozono (Hamamatsu Photonics K.K.)

P1-52 Mapping Analysis to Probe The Local/Global Conformational Changes in Proteins by FTIR Spectroscopy with Aspartic Acid Scanning

○Masanori Hashimoto (Nagoya Institute of Technology), Kota Katayama (Nagoya Institute of Technology), Manish Singh (Nagoya Institute of Technology), Yuji Furutani (Nagoya Institute of Technology), Hideki Kandori (Nagoya Institute of Technology)

P1-53 Crystal structure analysis of BIR3 domain of ubiquitin ligase in complex with its specific ligand

○Makoto Okabe (Graduate School of Life Sciences, Tohoku University), Takeshi Yokoyama (Graduate School of Life Sciences, Tohoku University), Shusuke Tomoshige (Graduate School of Life Sciences, Tohoku University), Tomohisa Ogawa (Graduate School of Life Sciences, Tohoku University), Minoru Ishikawa (Graduate School of Life Sciences, Tohoku University), Yoshikazu Tanaka (Graduate School of Life Sciences, Tohoku University)

P1-54 Structure Change of MotS from *Bacillus subtilis* by Sodium Ion

○Ayaka Yamaguchi (Grad. Sch. of Sci., Osaka Univ.), Norihiro Takekawa (Grad. Sch. of Sci., Osaka Univ.), Miki Kinoshita (Grad. Sch. of Frontier Biosci., Osaka Univ.), Tohru Minamino (Grad. Sch. of Frontier Biosci., Osaka Univ.), Katsumi Imada (Grad. Sch. of Sci., Osaka Univ.)

P1-55 Single particle analysis of silkworm storage proteins

○Shunsuke Kita (Faculty of Pharmaceutical Sciences, Hokkaido University), Katsumi Maenaka (Faculty of Pharmaceutical Sciences, Hokkaido University)

P1-56 Structure and comparison of two anti-cancer lectins from marine mussels

○Kenichi Kamata (Yokohama City University), Kenji Mizutani (Yokohama City University), Katsuya Takahashi (Yokohama City University), Tsuyoshi Konuma (Yokohama City University), Takahisa Ikegami (Yokohama City University), Yuki Fujii (Nagasaki International University), Yasuhiro Ozeki (Yokohama City University), Jeremy R.H. Tame (Yokohama City University)

P1-57 Impacts Of The Introduction Of Hydrophobic Residues On The Protein Crystallization

○Megumi Kosaka (Okayama University), Hidenori Yamada (Okayama University), Junichiro Futami (Okayama University), Hiroko Tada (Okayama University), Koreyoshi Imamura (Okayama University), Taro Tamada (QST)

P1-58 Crystal structure of dog allergen Can f 1

○Keisuke Suda (Graduate School of Life and Environmental Sciences, Osaka Prefecture University), Haruka Muroya (Graduate School of Life and Environmental Sciences, Osaka Prefecture University), Yuma Fukutomi (Clinical Research Center for Allergy and Rheumatology, National Hospital Organization Sagami National Hospital), Shigenori Nishimura (Graduate School of Life and Environmental Sciences, Osaka Prefecture University), Osamu Ishibashi (Graduate School of Life and Environmental Sciences, Osaka Prefecture University), Takashi Inui (Graduate School of Life and Environmental Sciences, Osaka Prefecture University)

P1-59 The tail tube structure of the jumbo *Staphylococcus* phage S6 by cryo-EM

○Wataru Koibuchi (University of Tsukuba), Jumpei Uchiyama (Azabu University), Shigenobu Matsuzaki (Kochi University), Kazuyoshi Murata (National Institute for Physiological Sciences), Kenji Iwasaki (University of Tsukuba), Naoyuki Miyazaki (University of Tsukuba)

P1-60 Capsid stabilization mechanisms of *Helicobacter pylori* bacteriophage KHP30

○Ryosuke Kamiya (University of Tsukuba), Jumpei Uchiyama (Azabu University), Shigenobu Matsuzaki (Kochi University), Kazuyoshi Murata (National Institute for Physiological Sciences), Kenji Iwasaki (University of Tsukuba), Naoyuki Miyazaki (University of Tsukuba)

P1-61 The Catalytic Mechanism of a PPlase Chaperone Investigated by the Structural Analysis at the Transition State Using NMR and MD Simulation

○Soichiro Kawagoe (Graduate School of Chemical Sciences and Engineering, Hokkaido University), Tomohide Saio (Graduate School of Chemical Sciences and Engineering, Hokkaido University / Department of Chemistry, Faculty of Science, Hokkaido University), Hiroshi Nakagawa (Materials Sciences Research Center Atomic Energy Agency), Hiroyuki Kumeta (Faculty of Advanced Life Science, Hokkaido University), Koichiro Ishimori (Graduate School of Chemical Sciences and Engineering, Hokkaido University / Department of Chemistry, Faculty of Science, Hokkaido University)

P1-62 Bactericidal Mechanisms Of An α -Defensin, Cryptdin-4: Effect Of Peptide Redox And Culture Condition Of E. coli

○Yi Wang (Graduate School of Life Science, Hokkaido University), Rina Hiramane (Graduate School of Life Science, Hokkaido University), Chisato Toyokawa (Graduate School of Life Science, Hokkaido University), Tomoyasu Aizawa (Graduate School of Life Science, Hokkaido University / Global Institution for Collaborative Research and Education, Hokkaido University)

P1-63 Development of Expression of Recombinant Small Peptides Through Calmodulin-fusion Protein System

○Hao Gu (Graduate School of Life Science, Hokkaido University), Koki Onuma (Graduate School of Life Science, Hokkaido University), Hiroaki Ishida (Department of Biological Sciences, University of Calgary), Yasuhiro Kumaki (Graduate School of Life Science, Hokkaido University), Takashi Tsukamoto (Graduate School of Life Science, Hokkaido University / Global Institution for Collaborative Research and Education, Hokkaido University), Takashi Kikukawa (Graduate School of Life Science, Hokkaido University / Global Institution for Collaborative Research and Education, Hokkaido University), Makoto Demura (Graduate School of Life Science, Hokkaido University / Global Institution for Collaborative Research and Education, Hokkaido University), Hans J. Vogel (Department of Biological Sciences, University of Calgary), Tomoyasu Aizawa (Graduate School of Life Science, Hokkaido University / Global Institution for Collaborative Research and Education, Hokkaido University)

P1-64 Determining the domain arrangement of bacterial site-2 protease by the site-specific insertion of PA tag and labeling with NZ-1 Fab

○Rie Aruga (Graduate school of Medical Life Science, Yokohama City University), Risako Tamura (Graduate school of Medical Life Science, Yokohama City University), Mika Hirose (Institute for Protein Research, Osaka University), Rika Oi (Graduate school of Medical Life Science, Yokohama City University), Mika K. Kaneko (Tohoku University Graduate School of Medicine), Yukinari Kato (Tohoku University Graduate School of Medicine), Kenji Iwasaki (Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance, University of Tsukuba), Terukazu Nogi (Graduate school of Medical Life Science, Yokohama City University)

P1-65 Gene Identification Of An Allergen Peptide From Cypress Pollen Using Next Generation Sequencer And Its Over Expression For Analysis

○ Tomona Iizuka (Graduate School of Life Science, Hokkaido University), Hélène Sénéchal (Biochemistry Department, Armand Trousseau Children Hospital / Immunology Department, Institute Pasteur), Pascal Poncet (Biochemistry Department, Armand Trousseau Children Hospital / Immunology Department, Institute Pasteur), Tomoyasu Aizawa (Graduate School of Life Science, Hokkaido University / Global Institution for Collaborative Research and Education, Hokkaido University)

P1-66 Analysis Of Substrate Recognition For Ser/Thr Phosphatase PPM1A

○ Itsumi Tani (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Yukiko Shirahata (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Kei Kawamura (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Shogo Ito (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Rui Kamada (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

P1-67 Enzymatic Activity of RNase H2 Toward Oxidized and Abasic Ribonucleoside Monophosphates Embedded in DNA

○ Yuki Ishizuka (Ritsumeikan University), Ryo Uehara (Ritsumeikan University), Takuya Yoshizawa (Ritsumeikan University), Hiroyuki Matsumura (Ritsumeikan University)

P1-68 Interaction Mechanism between α_1 -Acid Glycoprotein and Membrane Characterized by Vacuum-Ultraviolet Circular-Dichroism Spectroscopy

○ Koichi Matsuo (Hiroshima Synchrotron Radiation Center, Hiroshima University), Munehiro Kumashiro (Department of Physical Science, Graduate School of Science, Hiroshima University), Kunihiko Gekko (Hiroshima Synchrotron Radiation Center, Hiroshima University)

P1-69 High-resolution structure analysis of NADH-cytochrome b_5 reductase

○ Yu Hirano (Institute for Quantum Life Science, National Institutes for Quantum and Radiological Science and Technology / PRESTO, Japan Science and Technology Agency), Kazuo Kurihara (Institute for Quantum Life Science, National Institutes for Quantum and Radiological Science and Technology), Katsuhiro Kusaka (Frontier Research Center for Applied Atomic Science, Ibaraki University), Andreas Ostermann (Technische Universität München, Forschungs-Neutronenquelle Heinz Maier-Leibnitz), Shigenobu Kimura (Graduate School of Science and Engineering, Ibaraki University), Kunio Miki (Graduate School of Science, Kyoto University), Taro Tamada (Institute for Quantum Life Science, National Institutes for Quantum and Radiological Science and Technology)

P1-70 Molecular Basis for the Intramolecular Regulation of DGK α : Structural and Biophysical Characterization of its N-terminal Domains

○Daisuke Takahashi (Kyushu University), Fumio Sakane (Chiba University)

P1-71 Enhancement Of The Expression Level Of Recombinant α -defensin Derived From Mouse By Inclusion Body Formation In The E. coli Cytoplasm

○Yuchi Song (Graduate School of Life Science, Hokkaido University), Tomoyasu Aizawa (Graduate School of Life Science, Hokkaido University / Global Institution for Collaborative Research and Education, Hokkaido University)

P1-72 A new role of cellular zinc for protein quality control in the early secretory pathway

○Satoshi Watanabe (Tohoku University), Yuta Amagai (Tohoku University), Sara Sannino (Ospedale San Raffaele), Amiko Miyake (Tohoku University), Roberto Sitia (Ospedale San Raffaele), Kenji Inaba (Tohoku University)

P1-73 Molecular Recognition Of An Innate Immune Sensor NANO Toward HIV-2 Capsid

○Nanao Fujitani (Hokkaido University), Kimiko Kuroki (Hokkaido University), Cécile Conrad (Institut Curie), Xavier Lahaye (Institut Curie), Felix Rey (Institut Pasteur), Nicolas Manel (Institut Curie), Katsumi Maenaka (Hokkaido University)

P1-74 Improved Structure Refinement in MAINMAST for *de novo* Modeling from Cryo-EM Maps

○Takaharu Mori (RIKEN), Genki Terashi (Purdue University), Daisuke Matsuoka (RIKEN), Daisuke Kihara (Purdue University), Yuji Sugita (RIKEN)

P1-75 Mechanistic insight into dysregulation of FUS liquid-liquid phase separation by toxic repeat peptide

○Honoka Kawamukai (Graduate School of Chemical Sciences and Engineering, Hokkaido University), Tomohide Saio (Graduate School of Chemical Sciences and Engineering, Hokkaido University / Faculty of Science, Hokkaido University), Koichiro Ishimori (Graduate School of Chemical Sciences and Engineering, Hokkaido University / Faculty of Science, Hokkaido University)

P1-76 Molecular basis of JAK-STAT signal pathway inhibition by rabies virus P-protein

○Aoi Sugiyama (Hokkaido University), Miku Minami (Hokkaido University), Xinxin Jiang (Hokkaido University), Yuma Nagano (Hokkaido University), Tomo Nomai (Hokkaido University), Takuya Wakahara (Hokkaido University), Katsumi Maenaka (Hokkaido University), Min Yao (Hokkaido University), Toyoyuki Ose (Hokkaido University)

P1-77 Analysis Of Ligand Recognition And Activation Mechanisms In Muscarinic Acetylcholine Receptor 2 (mAChR2) By ATR-FTIR Spectroscopy

○Kohei Suzuki (Nagoya Institute of Technology), Kota Katayama (Nagoya Institute of Technology), Ryoji Suno (Kansai Medical University. Medical), Hideki Kandori (Nagoya Institute of Technology)

P1-78 Secondary-Structure Analysis of Aggregated Keratin Protein Using Vacuum-Ultraviolet Circular Dichroism Spectroscopy

○Motoki Takeda (Milbon Co., Ltd.), Atsushi Baba (Milbon Co., Ltd.), Yudai Izumi (Hiroshima Synchrotron Radiation Center, Hiroshima University), Koichi Matsuo (Hiroshima Synchrotron Radiation Center, Hiroshima University), Len Ito (Milbon Co., Ltd.)

P1-79 Structural Modeling Of Lat2 As A Peptide Toxin In The Venom Of Japanese Scorpion *Liocheles australasiae*, With Cross Validation Experiments Using Polyclonal Antibodies For Lat2 And C-Lat2

Takuya Izawa (Josai University), Chiharu Tatsushiro (Josai University), Maiki Tamura (Japan Advanced Institute of Science and Technology), Masahiro Miyashita (Kyoto University), Hayato Eugene Morita (Kyoto University), Shinya Ohki (Kyoto University), ○Hayato Eugene Morita (Josai University)

P1-80 Effect Of Metal Ions On Phosphatase Activity Of Ser/Thr Phosphatase PPM Family Members

○Takaaki Ozawa (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Shogo Ito (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Ryo Iwamuro (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Rui Kamada (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University), Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

P1-81 Host Specificity and Structure of Bacteriophage Receptor Binding Protein

○Shuji Kanamaru (Tokyo Institute of Technology)

P1-82 Elucidation of interaction between neurotrophin receptor TrkAd5 and its binding peptide

○Maho Takahashi (Yokohama City University), Toru Ekimoto (Yokohama City University), Tsutomu Yamane (Yokohama City University), Rika Suzuki (Yokohama City University), Hideo Takahashi (Yokohama City University), Mitsunori Ikeguchi (Yokohama City University / RIKEN)

P1-83 Structural Characterization Of A Novel Exo- α -D-fructofuranosidase From *Bifidobacterium dentium* That Degrades Caramelized Sugars

○Toma Kashima (The University of Tokyo), Kouki Okumura (Kagoshima University), Takatoshi Arakawa (The University of Tokyo), Akihiro Ishiwata (RIKEN), Yukishige Ito (RIKEN), Kiyotaka Fujita (Kagoshima University), Shinya Fushinobu (The University of Tokyo)

P1-84 Targeting the cryptic sites: NMR-based strategy to improve the druggability of proteins via dynamics modulation

○Koh Takeuchi (National Institute for Advanced Industrial Science and Technology), Yumiko Mizukoshi (JBIC), Yuji Tokunaga (National Institute for Advanced Industrial Science and Technology), Ichio Shimada (The Univ. of Tokyo, Grad Sch Pharm Sci)

P1-85 Cryo-EM, Crystallographic And Kinetic Study Of Quinol-dependent Nitric Oxide Reductases From *Neisseria Meningitidis*

○Muhamad Arif Bin Mohamad Jamali (Graduate School of Life Science, University of Hyogo), Chai C. Gopalasingam (Molecular Biophysics Group, Institute of Integrative Biology, Faculty of Health and Life Sciences, University of Liverpool, England), Rachel M. Johnson (School of Biomedical Sciences, Faculty of Biological Sciences, University of Leeds, England / Astbury Centre for Structural and Molecular Biology, University of Leeds, England), Stephen P Muench (School of Biomedical Sciences, Faculty of Biological Sciences, University of Leeds, England / Astbury Centre for Structural and Molecular Biology, University of Leeds, England), Svetlana V. Antonyuk (Molecular Biophysics Group, Institute of Integrative Biology, Faculty of Health and Life Sciences, University of Liverpool, England), Samar S. Hasnain (Molecular Biophysics Group, Institute of Integrative Biology, Faculty of Health and Life Sciences, University of Liverpool, Liverpool, England), Takehiko Tosha (RIKEN SPring-8 Center), Kazumasa Muramoto (Graduate School of Life Science, University of Hyogo), Yoshitsugu Shiro (Graduate School of Life Science, University of Hyogo)

P1-86 Reconstitution of full-complex of bacterial heme transporter into the platforms suitable for structural analysis

○Ayaho Abe (University of Hyogo), Hideki Shigematsu (RIKEN SPring-8 Center), Masaki Yamamoto (RIKEN SPring-8 Center), Hiroshi Sugimoto (University of Hyogo / RIKEN SPring-8 Center)

P1-87 Crystal Structure of Enantiospecific Decarboxylase Involved in Phenyl Coumaran Catabolism

○Takumi Sawaya (National Institute of Technology, Asahikawa College), Miki Senda (Institute of Materials Structure Science, High Energy Accelerator Research Organization (KEK)), Takaaki Yoshida (National Institute of Technology, Asahikawa College), Kotone Asahina (National Institute of Technology, Asahikawa College), Hiroshi Matsuura (National Institute of Technology, Asahikawa College), Naofumi Kamimura (Nagaoka University of Technology), Eiji Masai (Nagaoka University of Technology), Toshiya Senda (Institute of Materials Structure Science, High Energy Accelerator Research Organization (KEK)), Keisuke Sugimoto (National Institute of Technology, Asahikawa College)

P1-88 A Novel Analysis Method for Free-energy Landscape of Protein Domain Motion Deduced from Cryo-EM Images

○Mao Oide (Theoretical Molecular Science Laboratory, RIKEN / Department of Physics, Keio University), Tomotaka Oroguchi (Department of Physics, Keio University), Taiki Wakabayashi (Department of Physics, Keio University), Takayuki Kato (Protein Institute, Osaka University), Masayoshi Nakasako (Department of Physics, Keio University)

P1-89 Stable metalloprotein composed of a bulky synthetic porphyrin and the heme acquisition protein secreted by *Pseudomonas aeruginosa*

○Garyo Ueda (Nagoya University), Yuma Shisaka (Nagoya University), Erika Sakakibara (Nagoya University), Hiroshi Sugimoto (RIKEN SPring-8 Center / Core Research for Evolutional Science and Technology), Shoji Osami (Nagoya University / Core Research for Evolutional Science and Technology)

P1-90 Crystal structure analysis of an autoimmune disease susceptible allele CD72^c

○Nobutaka Numoto (Department of Structural Biology, Medical Research Institute, Tokyo Medical and Dental University), Takeshi Tsubata (Department of Immunology, Medical Research Institute, Tokyo Medical and Dental University), Nobutoshi Ito (Department of Structural Biology, Medical Research Institute, Tokyo Medical and Dental University)

P1-91 Structural Stability and Dynamics of NCPs Reconstituted with Diverse DNA Sequences

○Tsuyoshi Konuma (Yokohama City University), Kohei Hashimoto (Yokohama City University), Kanako Sato (Yokohama City University), Satoko Akashi (Yokohama City University)

P1-92 The residues determining CYP81A6 activity

○Miki H. Maeda (National Agriculture and Food Research Organization), Shunsuke Yamamoto (Kumiai Chemical Industries, Co., LTD.), Yoshitaka Tanetani (Kumiai Chemical Industries, Co., LTD.), Kiyoshi Kawai (Kumiai Chemical Industries, Co., LTD.), Rintaro Suzuki (National Agriculture and Food Research Organization)

P1-93 SAXS Analysis of the Magnetoreceptor Candidate Protein ISCA1

○Shigeki Arai (National Institutes for Quantum and Radiological Science and Technology), Rumi Shimizu (National Institutes for Quantum and Radiological Science and Technology), Motoyasu Adachi (National Institutes for Quantum and Radiological Science and Technology), Satoshi Ajito (Gunma Univ.), Mitsuhiro Hirai (Gunma Univ.)

P1-94 Elucidation of the structural change in heat activation of the alcohol dehydrogenase from *Sulfolobus tokodaii*

○Shuichiro Goda (Soka University / Nagasaki University), Sho Takashima (Nagasaki University), Kosei Kajiyama (Nagasaki University), Yuka Nagano (Nagasaki University), Takuro Uchida (Nagasaki University), Hideaki Unno (Nagasaki University), Tomomitsu Hatakeyama (Nagasaki University)

P1-95 Structural Basis for Quenchbody (Q-body): Crystal Structures of the Fab Fragment of Anti-osteocalcin Antibody KTM219

○Shuma Yazaki (Shinshu University), Misaki Komatsu (Shinshu University), Jinhua Dong (Tokyo Institute of Technology), Hiroshi Ueda (Tokyo Institute of Technology), Ryoichi Arai (Shinshu University)

P1-96 Basic Properties of Newly Developed MALS Detector and its Application to MAb

○ Hiroshi Tomizawa (Tosoh corporation), Jukka Kervinen (Tosoh Bioscience LLC), Ali Soleymnnazhad (Tosoh Bioscience LLC.)

P2-01 Simulating the association/dissociation process of flexible protein complexes

○Tran P. Duy (Tokyo Institute of Technology), Akio Kitao (Tokyo Institute of Technology)

P2-02 Developments and applications of generalized-ensemble methods for free-energy analysis of protein-ligand binding

○Hiraku Oshima (RIKEN Center for Biosystems Dynamics Research)

P2-03 Elucidation of local structure contributing to protein stability: Structural features of loop residues of 4-strand β -sheet motif

○Megumi Nakajima (Nagoya University), George Chikenji (Nagoya University)

P2-04 Structure prediction of the transmembrane domain of alpha- and beta-secretases and the structural differences

○Kaori Yanagino (Kindai University), Naoyuki Miyashita (Kindai University)

P2-05 Conformational Changes of Heme ABC Transporter BhuUV-T Revealed by Molecular Simulations

○Koichi Tamura (RIKEN R-CCS), Yuji Sugita (RIKEN R-CCS / RIKEN CPR / RIKEN BDR)

P2-06 Molecular Dynamics Simulation of Monoamine Oxidase B (MAO-B) and the drug binding

○Masaki Ottawa (BOST Kindai University), Lisa Matsukura (BOST Kindai University), Kaori Yanagino (BOST Kindai University), Naoyuki Miyashita (BOST Kindai University), Ryuichi Harada (School of Medicine, Tohoku University), Yuichi Kimura (BOST Kindai University), Syozo Furumoto (CYRIC Tohoku University)

P2-07 Mechanism of DNA Transcription Bubble in Transcription Initiation Complex Studied by Molecular Simulation

○Genki Shino (Department of Biophysics, Division of Biological Sciences, Graduate School of Science, Kyoto University), Masahiro Shimizu (Department of Biophysics, Division of Biological Sciences, Graduate School of Science, Kyoto University), Shintaroh Kubo (Department of Biophysics, Division of Biological Sciences, Graduate School of Science, Kyoto University), Toru Niina (Department of Biophysics, Division of Biological Sciences, Graduate School of Science, Kyoto University), Shoji Takada (Department of Biophysics, Division of Biological Sciences, Graduate School of Science, Kyoto University)

P2-08 Molecular Modeling and Interaction Analysis of C3a Anaphylatoxin Chemotactic Receptor (C3aR1)

○Kensuke Misawa (Kao Corporation), Yoshiya Sugai (Kao Corporation), Takatsugu Hirokawa (National Institute of Advanced Industrial Science and Technology / University of Tsukuba)

P2-09 Molecular Dynamics Study on Functional Regulation of Transcription Factors by Phosphorylation on the Intrinsically Disordered Region

○Kota Kasahara (College of Life Sciences, Ritsumeikan University), Toru Sengoku (Graduate School of Medicine, Yokohama City University), Junichi Higo (Graduate School of Simulation Studies, University of Hyogo), Takuya Takahashi (College of Life Sciences, Ritsumeikan University), Kazuhiro Ogata (Graduate School of Medicine, Yokohama City University), Haruki Nakamura (Institute for Protein Research, Osaka University)

P2-10 Influences of cholesterol on dimerization of transmembrane peptides with a GxxxG motif studied by molecular dynamics simulations

○Hayato Itaya (Graduate School of Life Sciences, Ritsumeikan University), Kota Kasahara (College of Life Sciences, Ritsumeikan University), Yosiaki Yano (Graduate School and Faculty of Pharmaceutical Sciences, Kyoto University), Katsumi Matsuzaki (Graduate School and Faculty of Pharmaceutical Sciences, Kyoto University), Takuya Takahashi (College of Life Sciences, Ritsumeikan University)

P2-11 Molecular Dynamics Simulation of HSP90 Dimer and Docking Simulation of the Peptide Drug

○Lisa Matsukura (KINDAI University), Naoyuki Miyashita (KINDAI University / University of Electro-Communications), Masumi Taki (University of Electro-Communications), Shinichi Watanabe (University of Electro-Communications)

P2-12 Energy analysis of folding simulations of NuG2

Yutaka Maruyama (RIKEN), ○Ayori Mitsutake (Meiji University)

P2-13 Development of *de novo* Method for Searching Protein-Ligands Binding Pathway: Ligand-Docking Parallel Cascade Selection Molecular Dynamics (Id-PaCS-MD)

○Hayato Aida (Biology, Life and Earth Sciences, Grad. School of Sci. and Tech., University of Tsukuba), Yasuteru Shigeta (Center for Computational Sciences, University of Tsukuba), Ryuhei Harada (Center for Computational Sciences, University of Tsukuba)

P2-14 Comprehensive classification of Protein-peptide interactions in the Protein Data Bank by using the Gaussian mixture model

○Keiichiro Sato (Graduate School of Life Sciences, Ritsumeikan University), Kota Kasahara (College of Life Sciences, Ritsumeikan University), Takuya Takahashi (College of Life Sciences, Ritsumeikan University)

P2-15 Retrieving potential three-dimensional biological shape matches from a small number of two-dimensional single particle XFEL diffraction patterns

○Sandhya P. Tiwari (RIKEN Center for Computational Science), Florence Tama (RIKEN Center for Computational Science / Institute of Transformative Bio-Molecules, University of Nagoya / Department of Physics, University of Nagoya), Osamu Miyashita (RIKEN Center for Computational Science)

P2-16 Evaluation of Newly Developed Protein Particle Picking Software for Cryo-EM

○Masataka Ohashi (BioNet Lab. Inc.), Fumio Hosokawa (BioNet Lab. Inc.), Takao Shinkawa (BioNet Lab. Inc.), Kenji Iwasaki (University of Tsukuba)

P2-17 Multi-canonical Molecular Dynamics Study the Fuzzy Complex Formation by the Transcription Factor MED26

○Satoshi Goto (Graduate School of Life Sciences, Ritsumeikan University), Kota Kasahara (College of Life Sciences, Ritsumeikan University), Takuya Takahashi (College of Life Sciences, Ritsumeikan University)

P2-18 Dynamics Of Orexin Receptors Using Molecular Dynamics Simulations

○Shun Yokoi (Meiji University), Ayori Mitsutake (Meiji University)

P2-19 Analysis of Urea-Concentration Dependence for Binding Free Energy of Lysozyme—(GlcNac)₃

○Simon Hikiri (Grad. Sch. Eng. Sci., Osaka Univ.), Nobuyuki Matubayasi (Grad. Sch. Eng. Sci., Osaka Univ.)

P2-20 Search for Partial Structural Space of Specific Loop Residues by Hydrogen Bond and Steric Repulsion

○Hiroto Murata (Nagoya University), George Chikenji (Nagoya University)

P2-21 Evaluation of the protein thermal stability by molecular dynamics simulation

○Kaito Kobayashi (National Institute of Advanced Industrial Science and Technology (AIST)), Tomoshi Kameda (National Institute of Advanced Industrial Science and Technology (AIST)), Shin Irumagawa

(Shinshu University), Ryoichi Arai (Shinshu University), Yutaka Saito (National Institute of Advanced Industrial Science and Technology (AIST)), Takeshi Miyata (Kagoshima University), Mitsuo Umetsu (Tohoku University)

P2-22 Regulation Mechanism of Agonist/Antagonist Activities of Vitamin D Receptor Elucidated by Generalized Ensemble Method

○Toru Ekimoto (Yokohama City University), Takafumi Kudo (Yokohama City University), Tsutomu Yamane (Yokohama City University), Mitsunori Ikeguchi (Yokohama City University / RIKEN)

P2-23 PSD-95 multimerization mechanisms studied by coarse-grained molecular simulations

○Yutaka Murata (Grad. Sch. Sci., Kyoto Univ.), Toru Niina (Grad. Sch. Sci., Kyoto Univ.), Shoji Takada (Grad. Sch. Sci., Kyoto Univ.)

P2-24 Coarse-grained molecular dynamics simulations to dissect effects of charge distributions in protein sequences on liquid-liquid phase separation

○Hiroki Terazawa (Graduate School of Life Science, Ritsumeikan University), Kota Kasahara (College of Life Science, Ritsumeikan University), Takuya Takahashi (College of Life Science, Ritsumeikan University)

P2-25 Evaluating Self-Assembly Propensity of Tetra-Peptide Using MD and Machine Learning

○Yoichi Kurumida (AIRC, AIST), Keisuke Ikeda (Faculty of Pharmaceutical Sciences, University of Toyama.), Yusuke Nakamichi (ISC, AIST), Kaito Kobayashi (AIRC, AIST), Yutaka Saito (AIRC, AIST), Tomoshi Kameda (AIRC, AIST)

P2-26 A brand-new particle-picking program: GRIPS

○Junpei Yamaguchi (University of Tsukuba), Masataka Ohashi (BioNet Lab. Inc), Fumio Hosokawa (BioNet Lab. Inc), Takao Shinkawa (BioNet Lab. Inc), Kenji Iwasaki (University of Tsukuba)

P2-27 Analysis of Reaction Pathway on E1/E2 Transition in SR-Ca²⁺-ATPase by Molecular Dynamics Simulations

○Chigusa Kobayashi (RIKEN Center for Computational Science), Yasuhiro Matsunaga (Saitama University), Jaewoon Jung (RIKEN Center for Computational Science / RIKEN Cluster for Pioneering Research, Theoretical Molecular Science Lab), Yuji Sugita (RIKEN Center for Computational Science / RIKEN Cluster for Pioneering Research, Theoretical Molecular Science Lab / RIKEN Center for Biosystems Dynamics Research)

P2-28 Comparison of Molecular Dynamics of Cyclosporin A and Cyclosporin E

○ Akari Ito (Yokohama City University), Tsutomu Yamane (Yokohama City University), Toru Ekimoto (Yokohama City University), Mitsunori Ikeguchi (Yokohama City University / RIKEN)

P2-29 Coarse-grained local potential for disordered proteins optimized via Bayesian inference

○ Azuki Mizutani (Dept Biophysics, Div Biology, Grad School Science, Kyoto University), Giovanni Brandani (Dept Biophysics, Div Biology, Grad School Science, Kyoto University), Shoji Takada (Dept Biophysics, Div Biology, Grad School Science, Kyoto University)

P2-30 Protein-protein complex dissociation simulated by Parallel Cascade Selection Molecular Dynamics

○ Yoshiaki Miyazawa (Tokyo Institute of Technology), Duy Phuoc Tran (Tokyo Institute of Technology), Kazuhiro Takemura (Tokyo Institute of Technology), Akio Kitao (Tokyo Institute of Technology)

P2-31 Local Structural Similarity of Mononucleotide Binding Sites in Different Levels of SCOPe Classification

○ Shota Kawakami (Graduate School of Life Sciences, Tohoku University), Hafumi Nishi (Graduate School of Information Sciences, Tohoku University / Faculty of Core Research, Ochanomizu University), Kengo Kinoshita (Graduate School of Life Sciences, Tohoku University / Graduate School of Information Sciences, Tohoku University)

P2-32 Computational studies on mechanisms for intramolecular cyclization of N-terminal glutamic acid residues

○ Tomoki Nakayoshi (Graduate School of Pharmacy, Meijo University / Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University), Koichi Kato (Graduate School of Pharmacy, Meijo University / Department of Pharmacy, Kinjo Gakuin University), Eiji Kurimoto (Graduate School of Pharmacy, Meijo University), Akifumi Oda (Graduate School of Pharmacy, Meijo University / Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University / Institute for Protein Research, Osaka University)

P2-33 Comprehensive and Up-to-date Annotation of Nonsynonymous Single Nucleotide Variants of Human Genome with Protein Structure Information

○ Matsuyuki Shirota (Tohoku University)

P2-34 Development of Molecular Dynamics Software, GENESIS version 1.4

○ Yuji Sugita (RIKEN CPR / RIKEN BDR / RIKEN R-CCS), Takaharu Mori (RIKEN CPR), Kiyoshi Yagi (RIKEN CPR), Hiraku Oshima (RIKEN BDR), Jaewoon Jung (RIKEN R-CCS), Chigusa Kobayashi (RIKEN R-CCS), Yasuhiro Matsunaga (Saitama University)

P2-35 Automatic Identification of Subvisible Particles Using Flow Imaging Microscopy Images

○Yuriko Shibano (Department of Biotechnology, Graduate School of Engineering, Osaka University), Arni Gambe-Gilbuena (Department of Biology, School of Science and Engineering, Ateneo de Manila University), Elena Krayukhina (Research Department, U-Medico Inc.), Tetsuo Torisu (Department of Biotechnology, Graduate School of Engineering, Osaka University), Susumu Uchiyama (Department of Biotechnology, Graduate School of Engineering, Osaka University / Department of Creative Research, Exploratory Research Center on Life and Living Systems, National Institutes of Natural Sciences)

P2-36 Characterisation of Druggable Cryptic Binding Sites via Atomistic Molecular Dynamics Simulation

○ Shinji Iida (Technology Research Association for Next-Generation Natural Products Chemistry), Hironori K. Nakamura (Biomodeling Research Co., Ltd.), Tadaaki Mashimo (IMS BIO Co., Ltd.), Yoshifumi Fukunishi (Molecular Profiling Research Center for Drug Discovery, AIST Tokyo Waterfront)

P2-37 Prediction Of Cancer Associated Hotspot Mutations That Affect GPCR Oligomerization

○Sakie Shimamura (Department of Science and Technology, Tokyo Denki University), Vachirane Limvipuvadh (Bioinformatics Institute, Agency for Science, Technology and Research, Singapore), Yoshihiro Yamanishi (Faculty of Computer Science and Systems Engineering, Department of Bioscience and Bioinformatics, Kyushu Institute of Technology), Hiroyuki Toh (School of Science and Technology, Kwansei Gakuin University), Wataru Nemoto (Department of Science and Technology, Tokyo Denki University)

P2-38 Molecular Dynamics Simulation Of The Effect That Ca^{2+} Has On The Tertiary Structure Of An RNA Aptamer

○Kazuki Kaneta (Department of Chemical Biology and Applied Chemistry, College of Engineering, Nihon University), Seiichiro Ishii (Department of Chemical Biology and Applied Chemistry, College of Engineering, Nihon University), Hisae Yoshida (Department of Chemical Biology and Applied Chemistry, College of Engineering, Nihon University / JSPS Research Fellow), Keisuke Masukawa (Department of Chemical Biology and Applied Chemistry, College of Engineering, Nihon University), Taiichi Sakamoto (Department of Life Science, Faculty of Advanced Engineering, Chiba Institute of Technology), Takeshi Ishikawa (Department of Advanced Engineering, Faculty of Engineering, Kagoshima University), Kenji Yamagishi (Department of Chemical Biology and Applied Chemistry, College of Engineering, Nihon University)

P2-39 The ratio of the mutated proteins among the primary neighboring proteins of a non-mutated protein follows the Weibull distribution

○Eri Hayashi (Tokyo Denki University), Yuto Kimura (Tokyo Denki University), Shuichi Hirose (NAGASE & CO., LTD.), Wataru Nemoto (Tokyo Denki University)

P2-40 3D-RISM-AI: Prediction of protein-ligand binding free energy based on machine learning using 3D-RISM

○Kazu Ohsaki (Yokohama City University), Ekimoto Toru (Yokohama City University), Yamane Tsutomu (Yokohama City University), Ikeguchi Mitsunori (Yokohama City University / RIKEN Medical Science Innovation Hub Program)

P2-41 The Relationship between Designability of Protein and Preference of Local Structures

○Kazuma Toko (Nagoya University), George Chikenji (Nagoya University)

P2-42 Comprehensive Analysis of the Hydration of Small Molecule Binding Sites in Ligand-Free Protein Structures: 3D-RISM Approach

○Takashi Yoshidome (Department of Applied Physics, Tohoku University), Mitsunori Ikeguchi (Drug Development Data Intelligence Platform Group, Medical Science Innovation Hub Program, Cluster of Science, Technology and Innovation Hub, RIKEN / Graduate School of Medical Life Science, Yokohama City University), Masateru Ohta (Drug Development Data Intelligence Platform Group, Medical Science Innovation Hub Program, Cluster of Science, Technology and Innovation Hub, RIKEN)

P2-43 Understanding human genetic variations in protein-protein interactions through protein and residue sociability

○Hafumi Nishi (Graduate School of Information Sciences, Tohoku University / Faculty of Core Research, Ochanomizu University), Yuki Kagaya (Graduate School of Information Sciences, Tohoku University), Matsuyuki Shirota (Graduate School of Medicine, Tohoku University), Kengo Kinoshita (Graduate School of Information Sciences, Tohoku University)

P2-44 Improvement of the prediction of drug sensitivity changes upon mutation using a molecular dynamics-based alchemical free energy calculation method

○Fumie Ono (Kyoto university), Shuntaro Chiba (RIKEN), Yuta Isaka (Foundation for Biomedical Research and Innovation at Kobe), Shigeyuki Matsumoto (RIKEN), Biao Ma (Foundation for Biomedical Research and Innovation at Kobe), Ryohei Katayama (Japanese Foundation for Cancer Research), Mitsugu Araki (Kyoto university), Yasushi Okuno (Kyoto university / RIKEN / Foundation for Biomedical Research and Innovation at Kobe)

P2-45 A Large-scale Structural and Evolutionary Analysis of Protein Loops

○Lin Zhang (Graduate School of Information Sciences, Tohoku University), Hafumi Nishi (Graduate School of Information Sciences, Tohoku University / Faculty of Core Research, Ochanomizu University)

P2-46 Role of the Cytoplasmic Domains of SLC26A9 in Chloride Ion Transport Revealed by the Molecular Dynamics Simulations

○Satoshi Omori (Graduate School of Information Sciences, Tohoku University), Yuya Hanazono (Institute for Quantum Life Science, National Institutes for Quantum and Radiological Science and Technology), Hafumi Nishi (Graduate School of Information Sciences, Tohoku University / Faculty of Core Research, Ochanomizu University), Kengo Kinoshita (Graduate School of Information Sciences, Tohoku University / Tohoku Medical Megabank Organization, Tohoku University / Institute of Development, Aging, and Cancer, Tohoku University)

P2-47 Prediction of Protein Functional Annotations Using Deep Neural Network with Transfer Learning from Pretrained Model with Pfam

○Tsukasa Nakamura (Postdoctoral Fellow, JSPS / Tohoku University), Kengo Kinoshita (Tohoku University)

P2-48 Database Analysis of Protein-protein Interfaces

○Wataru Sagawa (Nagoya University), George Chikenji (Nagoya University)

P2-49 Infinite-swap limit in generalized replica exchange with solute-tempering

○Hiroaki Nakayama (Saitama University), Yasuhiro Matsunaga (Saitama University)

P2-50 Bayesian analysis of high-speed atomic force microscopy images towards integrative modeling of biomolecular dynamics

○Tomonori Ogane (Saitama University / JST CREST), Yasuhiro Matsunaga (Saitama University / JST CREST)

P2-51 Fast Calculation of Gaussian Mixture Models by Down Sampled Voxels and Atoms for Fitting Atomic Models on EM Maps

○Takeshi Kawabata (Institute for Protein Research, Osaka University), Haruki Nakamura (Institute for Protein Research, Osaka University), Genji Kurisu (Institute for Protein Research, Osaka University)

P3-01 Multiple binding mechanism: Why can DNA-damaged-binding protein 1 bind the substrates with various amino acids?

○Katsumi Omagari (Nagoya City University), Yasuhito Tanaka (Nagoya City University)

P3-02 Human Molecular Chaperone Hsp60 apical domain Suppresses Aggregation and Cytotoxicity of α -synuclein in Eukaryotic cells

○Mayuka Adachi (Dep. of Biomed. Sci., Grad Sch. of Med., Tottori University), Hanae Yamamoto (Dep. of Chem. and Biotech., Grad. Sch. of Eng., Tottori University), Kunihiro Hongo (Dep. of Biomed. Sci., Grad Sch. of Med., Tottori University / Dep. of Chem. and Biotech., Grad. Sch. of Eng., Tottori University / GSC Center, Eng., Tottori University), Tomohiro Mizobata (Dep. of Biomed. Sci., Grad Sch. of Med., Tottori University / Dep. of Chem. and Biotech., Grad. Sch. of Eng., Tottori University / GSC Center, Eng., Tottori University), Yasushi Kawata (Dep. of Biomed. Sci., Grad Sch. of Med., Tottori University / Dep. of Chem. and Biotech., Grad. Sch. of Eng., Tottori University / GSC Center, Eng., Tottori University)

P3-03 The Analyses of Dynamic Properties of Dnmt1 and Cofactors Based on All-atom Molecular Dynamics Simulations

○Takunori Yasuda (College of Biological Sciences, University of Tsukuba), Yasuteru Shigeta (Center for Computational Sciences, University of Tsukuba), Ryuhei Harada (Center for Computational Sciences, University of Tsukuba)

P3-04 *Escherichia coli* small heat shock protein IbpA is an aggregation-sensor to self-regulate its own expression at translational levels

○Tsukumi Miwa (School of Life Science and Technology, Tokyo Institute of Technology), Yuhei Chadani (Cell Biology Center, Tokyo Institute of Technology), Hideki Taguchi (School of Life Science and Technology, Tokyo Institute of Technology / Cell Biology Center, Tokyo Institute of Technology)

P3-05 How similar are the LDLR family members? - Examination of pH-dependent regulation of ligand capture and release through SPR and HS-AFM analyses

○Aki Shiozawa (Graduate School of Life Science, Yokohama City University), Noriyuki Kodera (WPI Nano Life Science Institute, Kanazawa University), Terukazu Nogi (Graduate School of Life Science, Yokohama City University)

P3-06 Observation of Hsp104-driven severing of Huntingtin/PolyQ fiber

○Yumi Goto (Department of Biotechnology & Life Science, Tokyo University of Agriculture and Technology), Kyoka Shibata (Department of Biotechnology & Life Science, Tokyo University of Agriculture and Technology), Yasuhiro Onoue (Department of Molecular Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto University), Teru Ogura (Department of Molecular Cell Biology, Institute of

Molecular Embryology and Genetics, Kumamoto University), Masafumi Yohda (Department of Biotechnology & Life Science, Tokyo University of Agriculture and Technology), Kyosuke Shinohara (Department of Biotechnology & Life Science, Tokyo University of Agriculture and Technology)

P3-07 Development of Acid-tolerant Reversibly Photoswitchable Green Fluorescent Protein for Super-resolution Imaging in Acidic Environment

○Tomoki Matsuda (ISIR, Osaka Univ. / Grad. Sch. Eng., Osaka Univ.), Hajime Shinoda (Grad. Sch. Eng., Osaka Univ. / CPR, RIKEN), Kai Lu (ISIR, Osaka Univ.), Ryosuke Nakashima (ISIR, Osaka Univ.), Tetsuichi Wazawa (ISIR, Osaka Univ.), Kosuke Noguchi (Grad. Sch. Eng., Osaka Univ.), Takeharu Nagai (ISIR, Osaka Univ. / Grad. Sch. Eng., Osaka Univ.)

P3-08 Multistep enzymatic reaction for high-capacity biofuel cells using lactic acid

○Ako Kagawa (RIKEN Center for Biosystems Dynamics Research), Takanori Kigawa (RIKEN Center for Biosystems Dynamics Research), Tsutomu Mikawa (RIKEN Center for Biosystems Dynamics Research)

P3-09 Functional and Structural Characterization of RTP1S, a Chaperone of Olfactory Receptors

○Ryosuke Inoue (Dept. of Biotechnol., Tokyo Univ of Agri. and Technol.), Yosuke Fukutani (Dept. of Biotechnol., Tokyo Univ of Agri. and Technol.), Ryohei Tamaki (Dept. of Biotechnol., Tokyo Univ of Agri. and Technol.), Hiroaki Matsunami (Dept. of Molecular Genetics and Microbiology, Duke Univ. Medical Center), Masahumi Yohda (Dept. of Biotechnol., Tokyo Univ of Agri. and Technol.)

P3-10 The Structural and Functional Diversity of Cholesterol-dependent Cytolysin Produced from *Streptococci*

○Atsushi Tabata (Department of Bioscience and Bioindustry, Graduate School of Technology, Industrial and Social Sciences, Tokushima University / Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University), Kazuto Ohkura (Graduate School of Pharmaceutical Sciences, Suzuka University of Medical Science), Hisashi Ohkuni (Health Science Research Institute East Japan), Miho Kobayashi (Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University), Airi Matsumoto (Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University), Toshifumi Tomoyasu (Department of Bioscience and Bioindustry, Graduate School of Technology, Industrial and Social Sciences, Tokushima University / Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University), Hideaki Nagamune (Department of Bioscience and Bioindustry, Graduate School of Technology, Industrial and Social Sciences, Tokushima University / Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University)

P3-11 Functional analysis of mammalian odorant receptor produced with the wheat germ cell-free expression system

○Masashi Abe (Tokyo University of Agriculture and Technology), Yosuke Fukutani (Tokyo University of Agriculture and Technology), Masashi Asakawa (Tokyo University of Agriculture and Technology), Hiroyuki Takeda (Ehime University), Hiroaki Matsunami (Duke University), Masafumi Yohda (Tokyo University of Agriculture and Technology)

P3-12 Novel Insight into PDI Family-regulated IRE1 Activation/Inactivation

○Motonori Matsusaki (Tohoku University), Shingo Kanemura (Kwansei Gakuin University), Kenji Inaba (Tohoku University), Masaki Okumura (Tohoku University)

P3-13 Dynamic features of Canine Distemper Virus H protein revealed by High-Speed Atomic Force Microscope

○Kohei Yumoto (Laboratory of Biomolecular Science, Faculty of Pharmaceutical Science, Hokkaido University), Hideo Fukuhara (Center for Research and Education on Drug Discovery, Faculty of Pharmaceutical Science, Hokkaido University), Mihiro Kawamura (Laboratory of Biomolecular Science, Faculty of Pharmaceutical Science, Hokkaido University), Philippe Plattet (Division of Experimental and Clinical Research, Vetsuisse Faculty, University of Bern), Katsumi Maenaka (Laboratory of Biomolecular Science, Faculty of Pharmaceutical Science, Hokkaido University / Center for Research and Education on Drug Discovery, Faculty of Pharmaceutical Science, Hokkaido University)

P3-14 Isolation and characterization of a linear peptide that binds to human MuSK extracellular domain

○Fumiya Mizutani (Institute for Protein Research, Osaka University), Hayden Peacock (Department of Chemistry, School of Science, The University of Tokyo), Kyoko Matoba (Institute for Protein Research, Osaka University), Osamu Higuchi (Department of Clinical Research, Nagasaki Kawatana Medical Center), Hiroaki Suga (Department of Chemistry, School of Science, The University of Tokyo), Junichi Takagi (Institute for Protein Research, Osaka University)

P3-15 Msp1 clears mistargeted proteins by facilitating their transfer from mitochondria to the ER

○Shunsuke Matsumoto (Kyoto Sangyo University), Kunio Nakatsukasa (Nagoya City University), Chika Kakuta (Kyoto Sangyo University), Yasushi Tamura (Yamagata University), Masatoshi Esaki (Kumamoto University), Toshiya Endo (Kyoto Sangyo University)

P3-16 Development Of a Single Use In Situ Glutamine Sensor For Bioprocess Monitoring Using Glutamine Binding Protein

○Shouhei Takamatsu (Tokyo University of Agriculture and Technology), Jinhee Lee (Joint Department of Biomedical Engineering, The North Carolina University at Chapel Hill and North Carolina State University), Ryutaro Asano (Tokyo University of Agriculture and Technology), Wakako Tsugawa (Tokyo University of Agriculture and Technology), Koji Sode (Joint Department of Biomedical Engineering,

The North Carolina University at Chapel Hill and North Carolina State University), Kazunori Ikebukuro (Tokyo University of Agriculture and Technology)

P3-17 Functional analysis of OR7C1 expressed in Colon Cancer-Initiating Cells

○Tomoyo Koshizawa (Tokyo University of Agriculture and Technology), Yosuke Fukutani (Tokyo University of Agriculture and Technology / Duke University Medical Center), Aiko Murai (Sapporo Medical University), Hiroaki Matsunami (Duke University Medical Center), Yoshihiko Hirohashi (Sapporo Medical University), Toshihiko Torigoe (Sapporo Medical University), Masafumi Yohda (Tokyo University of Agriculture and Technology)

P3-18 Cholesterol-dependent cytolysin-like adhesion protein of Mitis group streptococci

○Airi Matsumoto (Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University), Atsushi Tabata (Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University / Department of Bioscience and Bioindustry, Graduate School of Technology, Industrial and Social Sciences, Tokushima University), Ayuko Takao (Department of Oral Microbiology, School of Dental Medicine, Tsurumi University), Ken Kikuchi (Department of Infectious Diseases, Tokyo Women's Medical University), Toshifumi Tomoyasu (Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University / Department of Bioscience and Bioindustry, Graduate School of Technology, Industrial and Social Sciences, Tokushima University), Hideaki Nagamune (Department of Biological Science and Technology, Life System, Institute of Technology and Science, Tokushima University / Department of Bioscience and Bioindustry, Graduate School of Technology, Industrial and Social Sciences, Tokushima University)

P3-19 Visualization of Repeat Associated Non-AUG (RAN) Translation Involved in Neurodegenerative Diseases at Single mRNA in Living Cells

○Hayato Ito (School of Life Science and Technology, Tokyo Institute of Technology), Morio Ueyama (Department of Neurotherapeutics, Osaka University Graduate School of Medicine), Kohji Mori (Department of Psychiatry, Osaka University Graduate School of Medicine), Yoshitaka Nagai (Department of Neurotherapeutics, Osaka University Graduate School of Medicine), Timothy J. Stasevich (Department of Biochemistry and Molecular Biology, Institute of Genome Architecture and Function, Colorado State University / World Research Hub Initiative, Institute of Innovative Research, Tokyo Institute of Technology), Hideki Taguchi (School of Life Science and Technology, Tokyo Institute of Technology / Cell Biology Center, Tokyo Institute of Technology)

P3-20 The Molecular Basis of How SNP in LI-cadherin Affected Cancer Metastasis

○Anna Yui (Dept. of Bioeng., Sch. of Eng., Univ. of Tokyo), Chika Kikuchi (Dept. of Chem. Biotech., Sch. of Eng., Univ. of Tokyo), Shuichiro Goda (Grad. Sch. of Eng., Nagasaki Univ.), Shota Kudo (Dept. of Chem. Biotech., Sch. of Eng., Univ. of Tokyo), Hiroki Akiba (Dept. of Bioeng., Sch. of Eng., Univ. of Tokyo), Makoto Nakakido (Dept. of Bioeng., Sch. of Eng., Univ. of Tokyo), Daisuke Kuroda (Dept. of Bioeng., Sch. of Eng., Univ. of Tokyo / Med. Dev. Dev. Reg. Res. Center, Sch. of Eng., Univ. of Tokyo), Satoru

Nagatoishi (Dept. of Bioeng., Sch. of Eng., Univ. of Tokyo / Dept. of Chem. Biotech., Sch. of Eng., Univ. of Tokyo / Inst. of Med. Sci., Univ. of Tokyo), Osamu Arai (RCAST, Univ. of Tokyo), Hiroko Iwanari (RCAST, Univ. of Tokyo), Takao Hamakubo (RCAST, Univ. of Tokyo), Kouhei Tsumoto (Dept. of Bioeng., Sch. of Eng., Univ. of Tokyo / Dept. of Chem. Biotech., Sch. of Eng., Univ. of Tokyo / Inst. of Med. Sci., Univ. of Tokyo)

P3-21 FAD-binding to apo-form of *Synechocystis* sp. PCC6803 *slr0600* gene product in solution

○Naho Umeda (Department of Quantum Beam Science, Graduate School of Science and Engineering, Ibaraki University), Takaaki Suzuki (Department of Quantum Beam Science, Graduate School of Science and Engineering, Ibaraki University), Yu Minato (Department of Quantum Beam Science, Graduate School of Science and Engineering, Ibaraki University), Shigenobu Kimura (Department of Quantum Beam Science, Graduate School of Science and Engineering, Ibaraki University)

P3-22 Bifunctional activity of a fusion enzyme DahX

○Yukiko Takahashi (Graduate School of Life Sciences, Tohoku University), Chihiro Chubachi (Graduate School of Life Sciences, Tohoku University), Shouta Nonoyama (Graduate School of Life Sciences, Tohoku University), Yukari Sato (Graduate School of Life Sciences, Tohoku University), Yuji Nagata (Graduate School of Life Sciences, Tohoku University)

P3-23 Oligomeric states of MCE transporter components LinM and LinN from *Sphingobium japonicum* UT26

○Yukari Sato (Graduate School of Life Sciences, Tohoku University), Takuya Ogata (Graduate School of Life Sciences, Tohoku University), Yuji Nagata (Graduate School of Life Sciences, Tohoku University)

P3-24 PR Poly-dipeptide Blocks the Chaperone Activity of Karyopherinβ2 for Fused in Sarcoma

○Takeru Uehara (Ritsumeikan University), Ayano Fujiwara (Ritsumeikan University), Takuya Yoshizawa (Ritsumeikan University), Ryo Uehara (Ritsumeikan University), Hiroyoshi Matsumura (Ritsumeikan University)

P3-25 Identification and characterization of a cuticular protein from the Antarctic krill *Euphausia superba*

○Tomonobu Seki (Kanagawa University), Miyuki Mekuchi (National Research Institute of Fisheries Science), Tsuyoshi Matsuda (Port of Nagoya Public Aquarium), Kiyonori Nakajima (Port of Nagoya Public Aquarium), Nobuo Suzuki (Kanazawa University), Michio Suzuki (The University of Tokyo), Tsuyoshi Ohira (Kanagawa University)

P3-26 Molecular Mechanism of the Recognition of Bacterially Cleaved Immunoglobulin by the Immune Regulatory Receptor LILRA2

○Atsushi Furukawa (Hokkaido University), Rika Yamazaki (Hokkaido University), Jiaqi Wang

(Hokkaido University), Kouyuki Hirayasu (Osaka University / Kanazawa University), Kohei Yumoto (Hokkaido University), Hideo Fukuhara (Hokkaido University), Hisashi Arase (Osaka University), Katsumi Maenaka (Hokkaido University)

P3-27 Direct observation of Hsp104-driven disassembly of α -synuclein fibril

○Kyoka Shibata (Department of Biotechnology & Life Science, Tokyo University of Agriculture & Technology), Yumi Goto (Department of Biotechnology & Life Science, Tokyo University of Agriculture & Technology), Yasuhiro Onoue (Department of Molecular Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto University), Kaori Tsukakoshi (Department of Biotechnology & Life Science, Tokyo University of Agriculture & Technology), Kazunori Ikebukuro (Department of Biotechnology & Life Science, Tokyo University of Agriculture & Technology), Masato Hasegawa (Department of Dementia and Higher Brain Function, Tokyo Metropolitan Institute of Medical Science), Teru Ogura (Department of Molecular Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto University), Masafumi Yohda (Department of Biotechnology & Life Science, Tokyo University of Agriculture & Technology), Kyosuke Shinohara (Department of Biotechnology & Life Science, Tokyo University of Agriculture & Technology)

P3-28 Structural and functional characterization of sHsps from the fission yeast, *Schizosaccharomyces pombe*

○Rui Nishiima (Tokyo University of Agriculture and Technology), Ken Morishima (Kyoto University), Rintaro Inoue (Kyoto University), Masaaki Sugiyama (Kyoto University), Masafumi Yohda (Tokyo University of Agriculture and Technology)

P3-29 Immunosuppressive effects of HLA-G2 protein in SLE model mice

○Hiroshi Watanabe (Hokkaido University), Kimiko Kuroki (Hokkaido University), Chisato Yamada (Hokkaido University), Yukari Saburi (Hokkaido University), Naoyoshi Maeda (Hokkaido University), Katsumi Maenaka (Hokkaido University)

P3-30 The Inorganic Phosphate Emerged Upon The Polymerization Of Actin Filament Affects Its Monomer's Configuration

○Miku Nezasa (Nagaoka University of Technology), Ryusei Ebata (Nagaoka University of Technology), Takahiro Mitani (Nagaoka University of Technology), Ryota Mashiko (Nagaoka University of Technology), Hajime Honda (Nagaoka University of Technology), Kenji Kamimura (National Institute of Thechnology, Nagaoka College)

P3-31 Analysis of Autophagy-dependent Degradation Mechanism of Cytoplasmic Chaperonin CCT

○Natsuki Ohsako (Tokyo University of Agriculture and Technology), Tomoko Kawamata (Tokyo Institute of Technology), Yui Jin (Tokyo Institute of Technology), Yoshinori Ohsumi (Tokyo Institute of Technology), Masafumi Yohda (Tokyo University of Agriculture and Technology)

P3-32 Transient Binding And Non-rotational Coupled Motion Of p53 Revealed By Sub-millisecond Resolved Single-molecule Fluorescence Tracking

○Dwiky R. G Subekti (Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University / Graduate School of Science, Tohoku University), **Agato Murata** (Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University / Graduate School of Science, Tohoku University), **Satoshi Takahashi** (Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University / Graduate School of Science, Tohoku University), **Kiyoto Kamagata** (Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University / Graduate School of Science, Tohoku University)

P3-33 Nascent polypeptide-induced ribosome hopping in Escherichia coli

○Aoi Tanabe (School of Life Science and Technology, Tokyo Institute of Technology), Yuhei Chadani (Cell Biology Center, Tokyo Institute of Technology), **Hideki Taguchi** (School of Life Science and Technology, Tokyo Institute of Technology / Cell Biology Center, Tokyo Institute of Technology)

P3-34 Requirement of the TOM complex for mitochondrial outer membrane protein biogenesis in vivo

○Haruka Sakaue (Kyoto Sangyo University), Jiyao Song (University of Freiburg), Toshiya Endo (Kyoto Sangyo University)

P3-35 Comprehensive analysis of Human Death Domain-fold Superfamily Interactome Using Recombinant Protein Array and AlphaScreen

○Wei Zhou (Grad Sch Med, Ehime Univ.), Ai Yanase (PROS, Ehime Univ.), Tomoya Nakagita (PROS, Ehime Univ.), Naoe Kaneko (Grad Sch Med, Ehime Univ.), **Hiroyuki Takeda** (PROS, Ehime Univ.), Junya Masumoto (Grad Sch Med, Ehime Univ. / PROS, Ehime Univ.)

P3-36 Development of epigenetic enzyme screening using *in vitro* reconstituted *Drosophila* chromatin

○Keiichi Okimune (Hokkaido University), Kazuki Matsumoto (Hokkaido University), Nobuaki Takemori (Ehime University), Szilvia K. Nagy (Sемmelweis University), Yaeta Endo (Ehime University), Taichi Takasuka (Hokkaido University)

P3-37 Expression and functional characterization of reductive dehalogenase from *Dehalococcoides mccartyi* CG4

○Reona Higuchi (Tokyo University of Agriculture and Technology), Yoshihiro Tanaka (Tokyo University of Agriculture and Technology), Jianzhong He (National University of Singapore), Masafumi Yohda (Tokyo University of Agriculture and Technology)

P3-38 Functional Analysis Of Membrane Proteins Involved In Iron Absorption Using Human Intestinal Model Cell System

Michiyo Takahara (Graduate School of Life Science, University of Hyogo), Hitomi Fujishiro (Faculty of Pharmaceutical Sciences, Tokushima Bunri University), Taiho Kambe (Graduate School of Biostudies, Kyoto University), Hiroshi Sugimoto (Graduate School of Life Science, University of Hyogo / RIKEN SPring-8 Center), Yoshitsugu Shiro (Graduate School of Life Science, University of Hyogo), ○Hitomi Sawai (Graduate School of Life Science, University of Hyogo / RIKEN SPring-8 Center)

P3-39 Osmotic Pressure-induced Multilamellar Structure Formation Based On Protein-Encapsulated Yolk-shell Structure

○Tomoki Maruyama (Kyushu University), Yiwei Liu (Kyushu University), Takeshi Mori (Kyushu University), Yoshiki Katayama (Kyushu University), Akihiro Kishimura (Kyushu University)

P3-40 Dual Function of the Heme Ligation in a Heme-responsive Sensor Protein, PefR

○Yudai Nishitani (Department of Life Science, University of Hyogo), Megumi Nishinaga (Department of Life Science, University of Hyogo), Seina Nagai (Department of Life Science, University of Hyogo), Hiroshi Sugimoto (Department of Life Science, University of Hyogo / RIKEN SPring-8 Center), Takehiko Toshi (Department of Life Science, University of Hyogo / RIKEN SPring-8 Center), Yoshitsugu Shiro (Department of Life Science, University of Hyogo), Hitomi Sawai (Department of Life Science, University of Hyogo / RIKEN SPring-8 Center)

P3-41 The landscape of ribosome elongation states revealed by footprint extension in bacteria

○Tomoya Fujita (RNA Systems Biochemistry Laboratory, RIKEN Cluster for Pioneering Research / School of Life Science and Technology, Tokyo Institute of Technology), Takeshi Yokoyama (Laboratory for Protein Functional and Structural Biology, RIKEN Center for Biosystems Dynamics Research), Hideki Taguchi (School of Life Science and Technology, Tokyo Institute of Technology / Cell Biology Center, Institute of Innovative Research, Tokyo Institute of Technology), Takuhiro Ito (Laboratory for Translation Structural Biology, RIKEN Center for Biosystems Dynamics Research), Shintaro Iwasaki (RNA Systems Biochemistry Laboratory, RIKEN Cluster for Pioneering Research / Department of Computational Biology and Medical Sciences, Graduate School of Frontier Sciences, The University of Tokyo)

P4-01 Hydration dynamics of bio-molecules revealed by molecular dynamics simulations

○Takuya T. Takahashi (Dept. Bioinformatics, Ritsumeikan Univ.)

P4-02 Biophysical screening in nanodiscs reveals novel inhibitors of the bacterial ABC transporter MsbA

○Kaoru Fujimoto (Kyushu University), Satoru Nagatoishi (The University of Tokyo), Kouhei Tsumoto (The University of Tokyo), Tadashi Ueda (Kyushu University), Jose Caaveiro (Kyushu University)

P4-03 Conformational Dynamics upon Ligand Binding in Muscarinic Acetylcholine Receptor Revealed by FTIR Spectroscopy

○Kota Katayama (Nagoya Institute of Technology / OpotoBioTechnology Reserach Center, Nagoya Institute of Technology), Kohei Suzuki (Nagoya Institute of Technology), Ryoji Suno (Kansai Medical University), Hideki Kandori (Nagoya Institute of Technology / OpotoBioTechnology Reserach Center, Nagoya Institute of Technology)

P4-04 *In vivo* X-ray single-molecule observation of ice-binding proteins for *Caenorhabditis elegans* freezing tolerance

○Masahiro Kuramochi (The University of Tokyo / AIST-UTokyo OPERANDO-OIL, AIST), Geikaku Tou (The University of Tokyo), Motomichi Doi (AIST), Kazuhiro Mio (AIST-UTokyo OPERANDO-OIL, AIST), Sakae Tsuda (AIST-UTokyo OPERANDO-OIL / AIST), Yuji C. Sasaki (The University of Tokyo / AIST-UTokyo OPERANDO-OIL / JASRI/SPRing-8), Hiroshi Sekiguchi (JASRI/SPRing-8)

P4-05 Evolution of Protein Solubility in Macromolecular Crowding

○Yasuhiro Isogai (Toyama Prefectural University), Hiroshi Imamura (Ritsumeikan University), Tomonari Sumi (Okayama University), Ken-ichi Takahashi (Nagahama Institute of Bio-Science and Technology), Tsuyoshi Shirai (Nagahama Institute of Bio-Science and Technology)

P4-06 Wavelength-dependent reversible interaction dynamics between light sensor protein PYP and its downstream protein

○Suhyang Kim (Kyoto University), Yusuke Nakasone (Kyoto University), Akira Takakado (Gakushuin University), Yoichi Yamazaki (Nara Institute of Science and Technology), Hironari Kamikubo (Nara Institute of Science and Technology), Masahide Terazima (Kyoto University)

P4-07 Cooperative Regulation Of ClpB Disaggregase By The Middle Domain And DnaK

○Tomonori Murakami (Department of Biology, Graduate School of Natural Science, Konan University), Takahiro Ishizaki (Department of Biology, Graduate School of Natural Science, Konan University), Takashi Yamasaki (Institute for Integrative Neurobiology, Konan University), Sayaka Hayashi (Department of Biology, Graduate School of Natural Science, Konan University), Yo-hei Watanabe (Department of Biology, Graduate School of Natural Science, Konan University / Institute for Integrative Neurobiology, Konan University)

P4-08 Mechanism of Antibody Aggregation by pH-Shift Stress

○Hiroshi Imamura (Ritsumeikan University)

P4-09 Reduced aggregation and altered *N*-glycosylation status of recombinant IgG1 in perfusion mammalian cell culture

○Masayoshi Onitsuka (Tokushima University / Manufacturing Technology Association of Biologics (MAB)), Atsuko Shimadu (Manufacturing Technology Association of Biologics (MAB)), Shutaro Ishikawa (Manufacturing Technology Association of Biologics (MAB) / ABLE-Biott Corporation)

P4-10 Fibrillation of Periplasmic Molecular Chaperone HdeB and its Structural Characterization

○Rina Uehara (Department of Chemistry and Biotechnology, Graduate School of Sustainability Science, Tottori University), Yui Nakata (Department of Chemistry and Biotechnology, Engineering, Tottori University), Kunihiro Hongo (Department of Chemistry and Biotechnology, Graduate School of Sustainability Science, Tottori University / Department of Chemistry and Biotechnology, Engineering, Tottori University), Yasushi Kawata (Department of Chemistry and Biotechnology, Graduate School of Sustainability Science, Tottori University / Department of Chemistry and Biotechnology, Engineering, Tottori University), Tomohiro Mizobata (Department of Chemistry and Biotechnology, Graduate School of Sustainability Science, Tottori University / Department of Chemistry and Biotechnology, Engineering, Tottori University)

P4-11 Relation of Colloidal and Conformational Stabilities to Aggregate Formation in a Monoclonal Antibody

○Hiroaki Oyama (Osaka University), Hiroki Koga (Osaka University), Takashi Tadokoro (Hokkaido University), Katsumi Maenaka (Hokkaido University), Akira Shiota (Institute of Immunology Co., Ltd.), Masami Yokoyama (U-Medico Inc.), Masanori Noda (U-Medico Inc.), Tetsuo Torisu (Osaka University), Susumu Uchiyama (Osaka University / ExCELLS)

P4-12 Understanding the mechanism governing protein folding assisted by inter- or intra- molecular chaperon

○Koki Masuda (Sch. of Sci. and Tech., Kwansei Gakuin Univ.), Shingo Kanemura (Sch. of Sci. and Tech., Kwansei Gakuin Univ.), Hiroshi Yamaguchi (Sch. of Sci. and Tech., Kwansei Gakuin Univ.), Yuji Hidaka (Fac. of Sci. and Eng., Kindai Univ.), Kenji Inaba (IMRAM, Tohoku Univ.), Masaki Okumura (FRIS, Tohoku Univ.)

P4-13 Structural difference and its seed-dependent propagation manner of human/bovine insulin amyloid fibrils as detected by iodine staining

○Keisuke Yuzu (Graduate School of Science, Kobe University), Naoki Yamamoto (Faculty of Medicine, Jichi Medical University), Masahiro Noji (Institute for Protein Research, Osaka University), Masatomo So (Institute for Protein Research, Osaka University), Yuji Goto (Institute for Protein Research, Osaka University), Tetsushi Iwasaki (Biosignal Research Center, Kobe University), Motonari Tsubaki (Graduate School of Science, Kobe University), Eri Chatani (Graduate School of Science, Kobe University)

P4-14 Construction Of Synthetic Nanopores With De Novo Design Of α -helical Peptide

○Masataka Usami (Tokyo University of Agriculture and Technology), Keisuke Shimizu (Tokyo University of Agriculture and Technology), Yusuke Sekiya (Tokyo University of Agriculture and Technology), Ryuji Kawano (Tokyo University of Agriculture and Technology)

P4-15 Identification of Cyclin-dependent kinase-like 5 substrate protein using docking simulation technique

○Aya Takahara (Ritsumeikan University College of Life Sciences), Shoichi Katayama (Ritsumeikan University College of Pharmaceutical Sciences), Takako Kawano (Ritsumeikan University College of Pharmaceutical Sciences), Tetsuya Inazu (Ritsumeikan University College of Pharmaceutical Sciences), Takeshi Kikuchi (Ritsumeikan University College of Life Sciences)

P4-16 Mechanism of polyphosphate-induced amyloid fibrillization of α -synuclein

○Keiichi Yamaguchi (Institute for Protein Research, Osaka University), Masatomo So (Institute for Protein Research, Osaka University), Kenji Sasahara (Institute for Protein Research, Osaka University), Yasushi Kawata (Department of Chemistry and Biotechnology, Graduate School of Engineering, Tottori University), Yuji Goto (Institute for Protein Research, Osaka University)

P4-17 Inhibition of P-cadherin-mediated Cell Contact Formation Through The Kinetic Effect Of Chemical Fragment

○Akinobu Senoo (Dept. of Chem. Biotech., Grad. Sch. of Eng., Univ. of Tokyo), Yutaro Saito (Dept. of Chem. Biotech., Grad. Sch. of Eng., Univ. of Tokyo), Sho Itoh (RIKEN, SPring-8), Satoru Nagatoishi (Inst. of Med. Sci., Univ. of Tokyo), Go Ueno (RIKEN, SPring-8), Kouhei Yoshida (Dept. of Bioeng., Grad. Sch. of Eng., Univ. of Tokyo), Takumi Tashima (Dept. of Chem. Biotech., Grad. Sch. of Eng., Univ. of Tokyo),

Shota Kudo (Dept. of Chem. Biotech., Grad. Sch. of Eng., Univ. of Tokyo), Shisuke Sando (Dept. of Chem. Biotech., Grad. Sch. of Eng., Univ. of Tokyo), Kouhei Tsumoto (Dept. of Chem. Biotech., Grad. Sch. of Eng., Univ. of Tokyo / Inst. of Med. Sci., Univ. of Tokyo / Dept. of Bioeng., Grad. Sch. of Eng., Univ. of Tokyo)

P4-18 The Effect of Post-Translational Modifications of Histone H3 Tail on Liquid-Liquid Phase Separation of DNA

○Masahiro Mimura (Pure and Appl. Sci., Univ. Tsukuba / Biomed. Res. Inst., AIST), Shunsuke Tomita (Biomed. Res. Inst., AIST), Hiroka Sugai (Biomed. Res. Inst., AIST), Yoichi Shinkai (Biomed. Res. Inst., AIST), Ryoji Kurita (Pure and Appl. Sci., Univ. Tsukuba / Biomed. Res. Inst., AIST)

P4-19 Assembly Mechanism of *Haemophilus Influenzae* Adhesin Transmembrane Domain into BamA-embedded Nanodiscs

○Eriko Aoki (Department of Bioinformatics, Soka University), Kazuo Fujiwara (Department of Bioinformatics, Soka University), Masamichi Ikeguchi (Department of Bioinformatics, Soka University)

P4-20 Structural analysis of a therapeutic protein at air-liquid interface

○Kanta Enomoto (Department of Biotechnology, Graduate School of Engineering, Osaka University), Tetsuo Torisu (Department of Biotechnology, Graduate School of Engineering, Osaka University), Susumu Uchiyama (Department of Biotechnology, Graduate School of Engineering, Osaka University / Exploratory Research Center on Life and Living Systems, National Institutes of Natural Sciences)

P4-21 Conformational analysis for ubiquitin polymers upon phosphorylation

○Yuka Yamashita (Dept. of Biomed. Eng., Shinshu Univ.), Reina Takahashi (Dept. of Biomed. Eng., Shinshu Univ.), Koji Umezawa (Dept. of Biomed. Eng., Shinshu Univ. / IBS, Shinshu Univ.)

P4-22 The aggregation pathways and mechanisms of serpin polymers

○Mone Yonekura (Osaka Prefecture University), Yuki Nishikawa (Osaka Prefecture University), Saki Hirohata (Osaka Prefecture University), Maki Onda (Osaka Prefecture University)

P4-23 Water-amide proton exchange coupled with protein conformational transition studied by high-pressure NMR

○Soichiro Kitazawa (College of Pharmaceutical Sciences, Ritsumeikan University), Ryo Kitahara (College of Pharmaceutical Sciences, Ritsumeikan University)

P4-24 Unfolding Mechanism of a Lytic Polysaccharide Monooxygenase from *Serratia marcescens*, CBP21

Yuichi Nakajima (Niigata University), Ayaka Motoyama (Niigata University), Takeshi Watanabe (Niigata University), Kazushi Suzuki (Niigata University), ○Hayuki Sugimoto (Niigata University)

P4-25 Construction And Functional Characterization Of Heterodimeric KaiA, An Activator Of Circadian Clock Protein KaiC

○Yasuhiro Onoue (College of Life Sciences, Ritsumeikan University), Kotona Fujie (College of Life Sciences, Ritsumeikan University), Kazuki Terauchi (College of Life Sciences, Ritsumeikan University / Graduate School of Life Sciences, Ritsumeikan University)

P4-26 Biochemical characterizations of ER-resident peroxidases, GPx7 and GPx8, reveal their distinct oxidative activities

○Shingo Kanemura (Sch. of Sci. and Tech., Kwansei Gakuin Univ. / IMRAM, Tohoku Univ. / FRIS, Tohoku Univ.), Elaza Firdiani Sofia (IMRAM, Tohoku Univ.), Naoya Hirai (IMRAM, Tohoku Univ.), Masaki Okumura (IMRAM, Tohoku Univ. / FRIS, Tohoku Univ.), Hiroshi Kadokura (IMRAM, Tohoku Univ.), Kenji Inaba (IMRAM, Tohoku Univ.)

P4-27 Single Molecule Observation of Amyloid β Peptide on Lipid Membrane under Non-equilibrium Fluidic Condition

○Akane Iida (Graduate school of Science and Engineering, Yamagata University), Kei Unoura (Faculty of Science, Yamagata University), Hideki Nabika (Faculty of Science, Yamagata University)

P4-28 The Effect of Antibiotic Minocycline on Human Insulin Amyloid

○Wakako Mori (Ehime University), Keisuke Yuzu (Ehime University), Keiichi Iwaya (SASAKI Institute, Kyoundo Hospital), Terumasa Nagase (Tokyo Medical University Ibaraki Medical Center), Nadine Lobsiger (Ehime University), Michael Lindgren (Norwegian University of Science and Technology), Sofie Nyström (Linköping University), Peter Nilsson (Linköping University), Per Hammarström (Linköping University), Tamotsu Zako (Ehime University)

P4-29 Interaction between Mint3 and FIH-1 analyzed by high-resolution NMR

○Ryo Maeda (Kyoto University), Satoru Nagatoishi (The University of Tokyo), Kouhei Tsumoto (The University of Tokyo), Katsumi Matsuzaki (Kyoto University), Masaru Hoshino (Kyoto University)

P4-30 Amyloid Formation And Breakdown Of Supersaturation

○Masahiro Noji (Kyoto University), Keiichi Yamaguchi (Osaka University), Eri Chatani (Kobe University), Yuji Goto (Osaka University)

P4-31 Engineering of TOP7 aiming for improving diffraction-quality crystal formation

○Yuki Ito (Yamagata University), Shota Shiga (Yamagata University), Koki Makabe (Yamagata University)

P4-32 Unfolding-dependent Disulfide-linked Dimer Formation Leads To The Transthyretin Amyloid Assembly Pathway Toward The Production Of Cytotoxic Aggregate

○Yuki Inada (Department of Analytical and Biophysical Chemistry, Graduate School of Pharmaceutical Sciences, Kumamoto University), Takashi Sato (Department of Analytical and Biophysical Chemistry, Graduate School of Pharmaceutical Sciences, Kumamoto University), Kentaro Noi (Institute for NanoScience Design, Osaka University), Ryoko Sasaki (Department of Molecular Medicine, Graduate School of Pharmaceutical Sciences, Kumamoto University), Yuichiro Ono (Department of Analytical and Biophysical Chemistry, School of Pharmacy, Kumamoto University), Yoshihiro Kobashigawa (Department of Analytical and Biophysical Chemistry, Graduate School of Pharmaceutical Sciences, Kumamoto University), Tsuyoshi Shuto (Department of Molecular Medicine, Graduate School of Pharmaceutical Sciences, Kumamoto University), Hirofumi Kai (Department of Molecular Medicine, Graduate School of Pharmaceutical Sciences, Kumamoto University), Hiroshi Morioka (Department of Analytical and Biophysical Chemistry, Graduate School of Pharmaceutical Sciences, Kumamoto University)

P4-33 Simplified method for production of cyclic single-chain Fv antibodies by using a sophisticated Escherichia coli expression system

○Chenjiang Liu (Graduate School of Pharmaceutical Sciences, Kumamoto University), Soichiro Yamauchi (Graduate School of Pharmaceutical Sciences, Kumamoto University), Natsuki Fukuda (Graduate School of Pharmaceutical Sciences, Kumamoto University), Takashi Sato (Graduate School of Pharmaceutical Sciences, Kumamoto University), Takeshi Masuda (Graduate School of Pharmaceutical Sciences, Kumamoto University), Yoshihiro Kobashigawa (Graduate School of Pharmaceutical Sciences, Kumamoto University), Sumio Ohtsuki (Graduate School of Pharmaceutical Sciences, Kumamoto University), Hiroshi Morioka (Graduate School of Pharmaceutical Sciences, Kumamoto University)

P4-34 Structures and dynamics of bacterial actin homolog, MreB proteins involved in swimming motility of *Spiroplasma eriocheiris*

○Daichi Takahashi (Graduate School of Science, Osaka City University), Ikuko Fujiwara (Graduate School of Science, Osaka City University), Katsumi Imada (Graduate School of Science, Osaka University), Makoto Miyata (Graduate School of Science, Osaka City University / OCARINA, Osaka City University)

P4-35 Conformational Characteristic Analysis Of β 2-microglobulin Amyloid Fibril Precursor Using Pressure NMR

○Ryousuke Tomiyama (Kindai University), Kazumasa Sakurai (Kindai University)

P4-36 Analyses of pH-dependent residual structure and aggregate's morphology of α -synuclein

○Hiroki Ito (Kindai University), Tomotaka Sasaki (Kindai University), Satoshi Abe (Kindai University), Young-Ho Lee (Korea Basic Sci. Inst.), Kazumasa Sakurai (Int. Adv. Tech, Kindai University)

P4-37 Mechanisms of Cryoprotection and Amyloid Formation Inhibition of Human-Derived Intrinsically Disordered Proteins: A Challenge for Molecular Shield Mechanism

Koki Ikeda (Nagoya University), Shota Suzuki (Nagoya University), Naoki Matsuo (Nagoya University), Yoshiki Shigemitsu (Tokyo Institute of Technology), Natsuko Goda (Nagoya University), Takeshi Tenno (Nagoya University / BeCellBar, LLC.), Atsunori Oshima (Nagoya University), ○ Hidekazu Hiroaki (Nagoya University / BeCellBar, LLC.)

P4-38 Utilization of Multi-domain Enzymatic Scaffold of Cytochrome P450BM3 for Molecular Oxygen Activation with Non-biological Porphyrin Complex

○Keita Omura (Nagoya University), Yuichiro Aiba (Nagoya University), Joshua Kyle Stanfield (Nagoya University), Shinya Ariyasu (Nagoya University), Hiroshi Sugimoto (JST-CREST / RIKEN SPring-8), Reza Ghiladi (North Carolina State University), Yoshihito Watanabe (Nagoya University), Osami Shoji (Nagoya University / JST-CREST)

P4-39 Prediction of Folding Pathways of Multi-domain Proteins by an Extended Statistical Mechanical Model

○Koji Ooka (Department of Physics, The University of Tokyo), Munehito Arai (Department of Physics, The University of Tokyo / Department of Life Sciences, The University of Tokyo)

P4-40 Effect Of Peroxynitric Acid On Aggregation Of Amyloid β Protein

○Kawabe Haruka (Ehime University), Ikawa Satoshi (Osaka Research Institute of Industrial Science and Technology), Kitano Katsuhisa (Osaka University), Zako Tamotsu (Ehime University)

P4-41 Biosensors for morphinan alkaloids based on their biosynthetic enzymes

○Mei Nonoshita (Chiba University), Yuki Kimura (Chiba University), Yusuke Otani (Chiba University), Ikki Kobayashi (Chiba University), Akira Nakagawa (Ishikawa Prefectural University), Hiromichi Minai (Ishikawa Prefectural University), Shigeko Kawai(Noma) (Chiba University), Daisuke Umeno (Chiba University)

P4-42 Identification of GroE function at low temperature

○Yusuke Ichinokawa (Tokyo Institute of Technology), Tatsuya Niwa (Tokyo Institute of Technology), Kurumi Watanabe (Tokyo Institute of Technology), Naomi Ledey (Tokyo Institute of Technology), Hedeki Taguchi (Tokyo Institute of Technology)

P4-43 Characterization of the Complex of Aggregated Antibody and Silicone Oil Droplets; From Perspectives of Morphology, 3-D View, and FyRs activation

○Masato Kiyoshi (National Institute of Health Sciences), Minoru Tada (National Institute of Health Sciences), Hiroko Shibata (National Institute of Health Sciences), Akiko Ishii-Watabe (National Institute of Health Sciences), Michihiko Aoyama (National Institute of Health Sciences)

P4-44 N-terminal region of *Drosophila* Argonaute2 can form amyloid fibrils

○Haruka Narita (The University of Tokyo), Makoto F. Kuwabara (The University of Tokyo), Tomotaka Komori (The University of Tokyo), Ryo Murakami (The University of Tokyo), Tomohiro Shima (The University of Tokyo), Mikiko C. Siomi (The University of Tokyo), Sotaro Uemura (The University of Tokyo)

P4-45 Residue-specific NMR analysis of a polypeptide chain revealed a new-type linear free energy relationship

○Seiichiro Hayashi (Kyushu University), Daisuke Fujinami (Kyushu University), Daisuke Kohda (Kyushu University)

P4-46 The H/D-Exchange Kinetics of Unfolded Ubiquitin in 6 M Guanidinium Chloride Studied by the DMSO-Quenched 2D NMR Techniques

○Kunihiro Kuwajima (The University of Tokyo / Korea Institute for Advanced Study), Maho Yagi-Utsumi (Institute for Molecular Science), Saeko Yanaka (Institute for Molecular Science), Koichi Kato (Institute for Molecular Science)

P4-47 Study on Membrane-Bound Conformation of α -Synuclein using Vacuum-Ultraviolet Circular-Dichroism Spectroscopy and Molecular Dynamics Simulation

○Ryota Imaura (Department of Physical Science, Graduate School of Science, Hiroshima University), Munehiro Kumashiro (Department of Physical Science, Graduate School of Science, Hiroshima University), Yasushi Kawata (Department of Chemistry and Biotechnology, Graduate School of Engineering, Tottori University), Koichi Matsuo (Hiroshima Synchrotron Radiation Center, Hiroshima University)

P4-48 Effect of Membrane Thickness on Magainin 2-Induced Pore Formation Characterized by Vacuum-Ultraviolet Circular-Dichroism and Linear-Dichroism Spectroscopy

Shoma Suenaga (Hiroshima University), ○Munehiro Kumashiro (Hiroshima University), Koichi Matsuo (Hiroshima University)

P4-49 Misfolded Wild-type SOD1 in Cerebrospinal Fluid is a Common Pathological Species in Amyotrophic Lateral Sclerosis

Eiichi Tokuda (Department of Chemistry, Keio University), Shinji Ohara (Department of Neurology, Iida Hospital), Noriko Fujiwara (Hyogo College of Medicine), Isao Hozumi (Gifu Pharmaceutical University), ○Yoshiaki Furukawa (Department of Chemistry, Keio University)

P4-50 CoDN3, an Effector of Colletotrichum Orbiculare, Is an IDP (Intrinsically Disordered Protein) That Binds to Calmodulin in a Ca²⁺ Dependent Manner

○Shinya Ohki (Japan Advanced Institute of Science and Technology), Noriyoshi Isozumi (Japan Advanced Institute of Science and Technology), Yoshihiro Inoue (Kyoto University), Tomohiro Imamura (Ishikawa Prefectural University), Masahi Mori (Ishikawa Prefectural University), Yoshitaka Takano (Kyoto University)

P4-51 Relationship between helix stability and closed loop length

○Yuuki Yanagida (Soka University), Kiyomi Yoshida (Soka University), Kazuo Fujiwara (Soka University), Masamichi Ikeguchi (Soka University)

P5-01 Generation of Highly Functionalized Antibodies by Site-specific Chemical Conjugation Using an Affinity Peptide Called CCAP

○Yuji Ito (Kagoshima University)

P5-02 Expanding the Substrate Specificity of Cytochrome P450 Peroxygenases by Substrate Misrecognition

○Hiroki Onoda (Graduate School of Medical LifeScience, Yokohama City University), Osami Shoji (Graduate School of Science, Nagoya University / CREST, Japan Science and Technology Agency), Hiroshi Sugimoto (CREST, Japan Science and Technology Agency / RIKEN SPring-8 Center), Yoshitsugu Shiro (Graduate School of Life Science, University of Hyogo), Yoshihito Watanabe (Graduate School of Science, Nagoya University)

P5-03 Construction of Structure-Switchable Protein Supramolecules using Fusion Proteins Designed Based on 3D Domain Swapping

○Masaru Yamanaka (Nara Institute Science and Technology), Takayuki Uchihashi (Nagoya University), Shun Hirota (Nara Institute Science and Technology)

P5-04 The design of artificial domain-swapped dimers by polyproline rod insertion

○Shota Shiga (Graduate School of Science and Engineering, Yamagata University), Masaru Yamanaka (Division of Materials Science, Nara Institute of Science and Technology), Wataru Fujiwara (Graduate School of Science and Engineering, Yamagata University), Shun Hirota (Division of Materials Science, Nara Institute of Science and Technology), Shuichiro Goda (Graduate School of Engineering, Nagasaki University), Koki Makabe (Graduate School of Science and Engineering, Yamagata University)

P5-05 Dual-Surface Functionalization of an Artificial Protein Nanocapsule Based on Molecular Sieving Effect of its Porous Surface

○Erika Nasu (Keio University), Norifumi Kawakami (Keio University), Kenji Miyamoto (Keio University)

P5-06 Improvements in sensitivity of immunoassay for Legionella through an antibody engineering of VHH antibodies

○Norihiko Kiyose (Kagoshima University), Yuji Ito (Kagoshima University)

P5-07 New Strategy For Designing Direct Electron Transfer Type Enzyme by Structure-based Protein Engineering

○Kohei Ito (Tokyo University of Agriculture and Technology), Junko Okuda-Shimazaki (University of North Carolina at Chapel Hill, USA), Wakako Tsugawa (Tokyo University of Agriculture and Technology), Ryutaro Asano (Tokyo University of Agriculture and Technology), Tsubasa Hashimoto (Tohoku University), Takeshi Yokoyama (Tohoku University), Yoshikazu Tanaka (Tohoku University), Bruno Humbel (Okinawa Institute of Science and Technology Graduate University), Ryo Kanno (Okinawa Institute of Science and Technology Graduate University), Kazunori Ikebukuro (Tokyo University of Agriculture and Technology), Koji Sode (University of North Carolina at Chapel Hill, USA)

P5-08 Incorporation of Hydrophobic Small Molecules in the Artificial Protein Nanoparticle TIP60

○Norifumi Kawakami (Keio University), Maika Yamashita (Keio University), Kenji Miyamoto (Keio University)

P5-09 Relationship between protein adsorption and protein aggregation in biopharmaceuticals

○Saki Yoneda (Osaka University), Ayana Hioki (Osaka University), Takahiro Maruno (Osaka University), Haruka Nishiumi (Osaka University), Asuka Mori (Osaka University), Taichi Sawaguchi (ZEON Corporation), Yosuke Harauchi (ZEON Corporation), Susumu Uchiyama (Osaka University)

P5-10 Double-CDR Grafting for the Development of Small HER2-Targeting Proteins

○Kyra T. See (Tokyo Institute of Technology), Tetsuya Kadonosono (Tokyo Institute of Technology), Wanaporn Yimchuen (Tokyo Institute of Technology), Shinae Kizaka-Kondoh (Tokyo Institute of Technology)

P5-11 Development of a Bioluminescent Imaging Probe for Detecting KISS1R-Expressing Cancers *In Vivo*

○Koya Honma (Tokyo Institute of Technology), Tetsuya Kadonosono (Tokyo Institute of Technology), Wanaporn Yimchuen (Tokyo Institute of Technology), Shinae Kizaka-Kondoh (Tokyo Institute of Technology)

P5-12 Effect Of 5' UTR Of The Template DNA On Protein Synthesis With The Reconstituted Cell-free Protein Synthesis System (PUREfrex)

○ Takashi Kanamori (GeneFrontier Corporation), Tomoe Fuse-Murakami (GeneFrontier Corporation), Rena Matsumoto (GeneFrontier Corporation)

P5-13 Modification Of The AAV2 Capsid With PA-Tag Insertion

○Sarina Ando (Osaka University), Junichi Takagi (Osaka University), Emiko Mihara (Osaka University), Satoshi Watanabe (Osaka University)

P5-14 Improved conformational stability and resistance against aggregation of backbone-circularized protein by gains in enthalpy of folded structure and compactness of unfolded structure

○Risa Shibuya (BMRI, AIST), Takamitsu Miyafusa (BMRI, AIST), Shinya Honda (BMRI, AIST / Grad. Sch. of Fro., Univ. of Tokyo)

P5-15 Optimization Of The Expression Construct For Viral CD47 Homologues

○Yurie Noguchi (Osaka University), Junichi Takagi (Osaka University)

P5-16 Function of the segments in coiled-coils of yeast cargo receptors Emp46p/47p in their assembly and possibility of application to pH-dependent biosensor

○Koichi Kato (Facul. of Pharm., Meijo Univ. / Col. of Pharm., Kinjo Gakuin Univ.), Tomoki Nakayoshi (Facul. of Pharm., Meijo Univ.), Eiji Kurimoto (Facul. of Pharm., Meijo Univ.), Akifumi Oda (Facul. of Pharm., Meijo Univ. / Inst. for Prot. Res., Osaka Univ.)

P5-17 Affinity maturation of a cleft-binding VHH by a computer-guided library

○Hiroki Akiba (National Institutes of Biomedical Innovation, Health and Nutrition / Kyoto University), Hiroko Tamura (The University of Tokyo), Jose M.M. Caaveiro (Kyushu University), Kouhei Tsumoto (National Institutes of Biomedical Innovation, Health and Nutrition / The University of Tokyo)

P5-18 Development of tumor specific drug delivery system by multimerization of lipocalin-type prostaglandin D synthase

○Haruna Yoshida (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Naohiro Shimoji (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Kosuke Furuta (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Rina Okubo (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Sayumi Tashiro (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Masatoshi Nakatsuji (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Shigenori Nishimura (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Takashi Inui (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.)

P5-19 Drug Delivery System for Anti-Cancer Drug Paclitaxel Using Human Lipocalin-type Prostaglandin D Synthase

○Kosuke Furuta (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Masatoshi Nakatsuji (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Haruna Yoshida (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Rina Okubo (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Sayumi Tashiro (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.), Takashi Inui (Grad. Sch. of Life & Envi. Sci., Osaka Pref. Univ.)

P5-20 Analysis of immune response induced by protein aggregates derived from three types of syringes

○Haruka Nishiumi (Osaka University), Saki Yoneda (Osaka University), Takahiro Maruno (Osaka University), Masami Yokoyama (U-Medico Inc), Taichi Sawaguchi (Zeon Corporation), Yosuke Harauchi (Zeon Corporation), Susumu Uchiyama (Osaka University)

P5-21 Structural basis for antigen recognition by methylated lysine specific antibodies

Misaki Ishii (University of Tokyo), ○Makoto Nakakido (University of Tokyo), Jose M.M. Caaveiro (Kyushu University), Daisuke Kuroda (University of Tokyo), CJ Okumura (Abwizbio Inc.), Toshiaki Maruyama (Abwizbio Inc.), Kevin Entzminger (Abwizbio Inc.), Kouhei Tsumoto (University of Tokyo)

P5-22 Proteome Analysis to Clarify the Function of the Translation Initiation Factors in Escherichia coli

○Masamu Wakabayashi (School of Life Science and Technology, Tokyo Institute of Technology), Yuhei Chadani (Cell Biology Center, Tokyo Institute of Technology), Tatsuya Niwa (Cell Biology Center, Tokyo Institute of Technology / School of Life Science and Technology, Tokyo Institute of Technology), Hideki Taguchi (Cell Biology Center, Tokyo Institute of Technology / School of Life Science and Technology, Tokyo Institute of Technology)

P5-23 Stabilization of engineered lactate oxidase by introducing inter-subunit disulfide bond

○Kentarō Hiraka (Tokyo University of Agriculture and Technology), Wakako Tsugawa (Tokyo University of Agriculture and Technology), Ryutaro Asano (Tokyo University of Agriculture and Technology), Kazunori Ikebukuro (Tokyo University of Agriculture and Technology), Koji Sode (Joint Department of Biomedical Engineering, The University of North Carolina at Chapel Hill, North Carolina State University)

P5-24 Enzymatic crosslinking of small antibody and cationic peptide for siRNA delivery

○Hikaru Nakazawa (Tohoku University), Yu Ando (Tohoku University), Disuke Miura (Tohoku University), Mitsuo Umetsu (Tohoku University)

P5-25 Development Of Novel Preparation Method For Bispecific Antibody Using Dimerizing Motif And Refolding Procedure

○Linko Hirono (Tokyo University of Agriculture and Technology), Kazunori Ikebukuro (Tokyo University of Agriculture and Technology), Izumi Kumagai (Tokyo University of Agriculture and Technology), Ryutaro Asano (Tokyo University of Agriculture and Technology)

P5-26 Structural analysis of a peptide fragment grafted onto the Adhiron scaffold

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P5-27 Engineering Of Genome Editing Protein Cas9 That Slides Along DNA Faster And Might Enable Efficient Target Search

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P5-28 Proteomic Identification And Validation Of New Interactions Of Novel Tumor Suppressor PRELP With Membrane Proteins

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P5-29 Metal Inducive Assembly of a Newly Designed Protein Cage TIP60

○Naoya Ohara (Keio University), Norifumi Kawakami (Keio University), Kenji Miyamoto (Keio University)

P5-30 Construction and Characterization of the Engineered Trimeric single-chain Fv Antibody Fragment

○Takashi Tadokoro (Faculty of Pharmaceutical Sciences, Hokkaido University), Kota Nakamura (Faculty of Pharmaceutical Sciences, Hokkaido University), Asami Tomita (Faculty of Pharmaceutical Sciences, Hokkaido University), Harumi Tsuboi (Faculty of Pharmaceutical Sciences, Hokkaido University), Reo Ohmura (Faculty of Pharmaceutical Sciences, Hokkaido University), Katsumi Maenaka (Faculty of Pharmaceutical Sciences, Hokkaido University)

P5-31 Development Of Highly Sensitive Anti-Human Hemoglobin Sensing Elements Using A Universal Fabrication Technology For Antibody-Enzyme Complex

○Daimei Miura (Tokyo University of Agriculture and Technology), Hayato Kimura (Tokyo University of Agriculture and Technology), Wakako Tsugawa (Tokyo University of Agriculture and Technology), Kazunori Ikebukuro (Tokyo University of Agriculture and Technology), Koji Sode (Joint Department of Biomedical Engineering, The University of North Carolina at Chapel Hill and North Carolina State University), Ryutaro Asano (Tokyo University of Agriculture and Technology)

P5-32 Cyclic ScFv : A Low Molecular Weight Antibody With Reduced Aggregation Propensity For Biomedical Use

○Soichiro Yamauchi (Graduate School of Pharmaceutical Science, Kumamoto University), Chenjiang Liu (Graduate School of Pharmaceutical Science, Kumamoto University), Natsuki Fukuda (Graduate School of Pharmaceutical Science, Kumamoto University), Takashi Sato (Graduate School of Pharmaceutical Science, Kumamoto University), Yoshihiro Kobashigawa (Graduate School of Pharmaceutical Science, Kumamoto University), Hiroshi Morioka (Graduate School of Pharmaceutical Science, Kumamoto University)

P5-33 Machine-learning-guided mutagenesis for the directed evolution of functional proteins

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P5-34 Next-generation sequencing analysis in the directed evolution of antibody mimics

○Tomoyuki Ito (Grad. Sch. Eng., Tohoku Univ.), Hafumi Nishi (Grad. Sch. Information Sci., Tohoku Univ. / Fac. Core Res., Ochanomizu Univ.), Thuy Duong Nguyen (AIRC, AIST), Yutaka Saito (AIRC, AIST / Adv. Intell. Pro., RIKEN), Tomoshi Kameda (AIRC, AIST / Adv. Intell. Pro., RIKEN), Hikaru Nakazawa (Grad. Sch. Eng., Tohoku Univ.), Koji Tsuda (Adv. Intell. Pro., RIKEN / Grad. Sch. Frontier Sci., The Univ. of Tokyo), Mitsuo Umetsu (Grad. Sch. Eng., Tohoku Univ. / Adv. Intell. Pro., RIKEN)

P5-35 Next-Generation Sequencing Analysis in the Directed Evolution of Antibodies

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P5-36 Universal fabrication technology of antibody-enzyme complexes as sensing elements using Catcher/Tag systems

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P5-37 Development Of Novel Quantitative Method To Evaluate Cross-linking Ability Of Bispecific Antibodies Using Atomic Force Microscopy

○Atsushi Maejima (Tokyo University of Agriculture and Technology), Kenta Ishibashi (Tokyo University of Agriculture and Technology / AIST), Hyonchol Kim (Tokyo University of Agriculture and Technology / AIST), Kazunori Ikebukuro (Tokyo University of Agriculture and Technology), Izumi Kumagai (Tokyo University of Agriculture and Technology), Ryutaro Asano (Tokyo University of Agriculture and Technology)

P5-38 Proteomics Approach to Examine Irreversible Proteome Reorganization in E.coli

○Haruka Onodera (School of Life Science and Technology, Tokyo Institute of Technology), Yuhei Chadani (Cell Biology Center, Tokyo Institute of Technology), Tatsuya Niwa (Cell Biology Center, Tokyo Institute of Technology / School of Life Science and Technology, Tokyo Institute of Technology), Hideki Taguchi (Cell Biology Center, Tokyo Institute of Technology / School of Life Science and Technology, Tokyo Institute of Technology)

P5-39 CF-PPiD: A Cell-Free Human Protein Array Technology and Proximity Biotinylation-Based Protein-Protein Interaction Identification

○Shusei Sugiyama (CellFree Sciences Co., Ltd), Ryo Morishita (CellFree Sciences Co., Ltd), Miwako Denda (CellFree Sciences Co., Ltd), Satoshi Ozawa (CellFree Sciences Co., Ltd), Satoshi Yamanaka (Proteo-Science Center, Ehime University), Koki Kido (Proteo-Science Center, Ehime University), Shogo Nakano (Graduate Division of Nutritional and Environmental Sciences, University of Shizuoka), Sohei Ito (Graduate Division of Nutritional and Environmental Sciences, University of Shizuoka), Tatsuya Sawasaki (Proteo-Science Center, Ehime University)

P5-40 Location of Temperature Sensor in the Small Heat Shock Proteins of Methanogenic Archaea

○Rio Midorikawa (Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology), Arisa Kannno (Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology), Masafumi Yohda (Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)

P5-41 Comprehensive analysis of affinity maturation of camelid derived single domain VHH antibody through immunization

Tomonari Matsuda (Research Center for Environmental Quality Management, Kyoto University), Yoko Akazawa-Ogawa (National Institute of Advanced Industrial Science and Technology (AIST)), Lilian-Kaede Komaba (National Institute of Advanced Industrial Science and Technology (AIST)), Norihiko Kiyose (ARK Resource. Co., Ltd.), Nobuo Miyazaki (ARK Resource. Co., Ltd.), Yusaku Mizuguchi (JSR Corporation), Tetsuo Fukuta (JSR Corporation), Yuji Ito (Graduate School of Science and Engineering, Kagoshima University), ○Yoshihisa Hagihara (National Institute of Advanced Industrial Science and Technology (AIST))

P5-42 CodonAdjust: A software for in silico design of a mutagenesis library with specific amino acid profiles

○Thuy Duong Nguyen (Artificial Intelligence Research Center, National Institute of Advanced Industrial Science and Technology (AIST)), Yutaka Saito (Artificial Intelligence Research Center, National Institute of Advanced Industrial Science and Technology (AIST) / AIST-Waseda University Computational Bio Big-Data Open Innovation Laboratory (CBBD-OIL) / Graduate School of Frontier Sciences, University of Tokyo) Tomoshi Kameda (Artificial Intelligence Research Center, National Institute of Advanced Industrial Science and Technology (AIST))

P5-43 Rotary Properties of Hybrid F₁-ATPases Consisting of Subunits from Different Species

○Ryo Watanabe (The University of Tokyo), Mariel Zarco-Zavala (The University of Tokyo), Chun-Biu Li (Stockholm University, Sweden), Toshiharu Suzuki (Tokyo Institute of Technology), Ryohei Kobayashi (The University of Tokyo), Hiroshi Ueno (The University of Tokyo), Hiroyuki Noji (The University of Tokyo)

P5-44 Rational Design of Small Proteins that Inhibit a Transcriptional Activator-Coactivator Interaction

○Shunji Suetaka (Department of Life Sciences, The University of Tokyo), Yoshiki Oka (Department of Life Sciences, The University of Tokyo), Tomoko Kunihara (Department of Life Sciences, The University of Tokyo), Yuuki Hayashi (Department of Life Sciences, The University of Tokyo), Munehito Arai (Department of Life Sciences, The University of Tokyo / Department of Physics, The University of Tokyo)

P5-45 Rational Design of an Inhibitor for the Interaction of the KIX Domain of CBP with Transcriptional Activators

○Nao Sato (Department of Life Sciences, The University of Tokyo), Shunji Suetaka (Department of Life Sciences, The University of Tokyo), Yuuki Hayashi (Department of Life Sciences, The University of Tokyo), Munehito Arai (Department of Life Sciences, The University of Tokyo / Department of Physics, The University of Tokyo)

P5-46 Directed Evolution of Dimethylallyl Alcohol Kinases

○ Yumi Onozato (Chiba University), Naomasa Araki (Chiba University), Shigeko Kawai (Noma) (Chiba University), Daisuke Umeno (Chiba University)

P5-47 Blurring the Genetic Code for the Expansion of Cellular Protein Functions

○ Masakazu Araki (Chiba University), Soji Watanabe (Chiba University), Shigeko Kawai (Noma) (Chiba University), Daisuke Umeno (Chiba University)

P5-48 Characterization of a TNFR2-selective Agonistic TNF- α Mutant Protein as Regulatory T-cell Expander

○ Masaki Inoue (Kobe Gakuin University / National Institutes of Biomedical Innovation, Health and Nutrition), Haruhiko Kamada (National Institutes of Biomedical Innovation, Health and Nutrition), Shin-ichi Tsunoda (Kobe Gakuin University / National Institutes of Biomedical Innovation, Health and Nutrition)

P5-49 Creation and evaluation of immunosensors that enable ratiometric assay by rapid dual-color labeling of antibody fragments

○ Takanobu Yasuda (Life Sci., Tokyo Tech.), Akihito Inoue (Life Sci., Tokyo Tech.), Tetsuya Kitaguchi (Res. Inst., Tokyo Tech.), Hiroshi Ueda (Res. Inst., Tokyo Tech.)

P5-50 Rational Design Of An Artificial Liquid-liquid Phase Separation System Via Side-chain Modification Of Synthetic Polypeptide As IDP Mimic For Effective Protein Sequestration

○ Biplab K. C. (Graduate School of Systems Life Sciences, Kyushu University), Takeshi Mori (Department of Applied Chemistry, Faculty of Engineering, Kyushu University / Center for Future Chemistry, Kyushu University), Yoshiki Katayama (Department of Applied Chemistry, Faculty of Engineering, Kyushu University / Center for Future Chemistry, Kyushu University / Center for Molecular Systems, Kyushu University / Center for Advanced Medical Innovation, Kyushu University), Akihiro Kishimura (Department of Applied Chemistry, Faculty of Engineering, Kyushu University / Center for Molecular Systems, Kyushu University)

P5-51 Rational Stabilization of Dimeric Four-Helix Bundle *De Novo* Proteins Using Molecular Dynamics Simulation

○ Shin Irumagawa (Shinshu University), Kaito Kobayashi (National Institute of Advanced Industrial Science and Technology (AIST)), Yutaka Saito (National Institute of Advanced Industrial Science and Technology (AIST)), Takeshi Miyata (Kagoshima University), Mitsuo Umetsu (Tohoku University), Tomoshi Kameda (National Institute of Advanced Industrial Science and Technology (AIST)), Ryoichi Arai (Shinshu University)