39th Annual Meeting of the Society for Actinomycetes Japan

Dates： September 3 (Wed) - 5 (Fri), 2025

Venue：GRANSHIP (2-3-1, Higashishizuoka, Suruga-ku, Shizuoka-shi, 422-8019)

September 3 (Wed)

9:00 **Venue Opened**

9:30 **Opening Remarks**

9:35 **Oral Presentation**（O-1～O-4）

O-1 **Development of a high-throughput cultivation platform for the isolation of novel rare actinomycetes using droplet technology**

○Hayaki Goto[1], Kazuki Nosho[1,2], Yuta Awano[3], Yuki Inahashi[3,4], Yasuo Ohnishi[1,2]
([1]Grad. Sch. of Agri. and Life Sci., Univ. of Tokyo, [2]CRIIM, Univ. of Tokyo, [3]Grad. Sch. Infection Control Sci., Kitasato Univ., [4]Omura Satoshi Memorial Inst., Kitasato Univ.)

O-2 **Characterization of the *Streptomyces* microorganism isolated from "Yukido" lava tunnel in Daikonshima**

○Kuninobu Inada[1], Sho Ogaki[2], Satoru Ogino[3], Hitoshi Ikeda[4], Keiko Matsubara[5], Kenji Arakawa[2]
([1]N-BARD, Hiroshima Univ., [2]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [3]Daikon Is. Attr. Prom. Proj., [4]Matsue city Yatsuka community center, [5]Izumo-no-kuni Geoguide)

O-3 **Vitamin B_{12} produced by *Streptomyces* promotes the growth of a methionine/vitamin B_{12} auxotrophic bacterium *Lysobacter auxotrophicus***

Runon Kondo[1], Miki Nakamura[1], Wang Xinru[1], Hideaki Takano[2], ○Akihiro Saito[1]
([1] Shizuoka Inst. Sci. Technol., [2] Nihon Univ.)

O-4 **Untargeted metabolomic profiling and evaluation of antibacterial activity of *Streptomyces* sp. KSF7 against acne-causing bacteria**

Rachel Ern Ru Ting[1], Krystle Angelique Santiago[1], Aalina Sakiinah Mohd Fuad[1], Mohd Syamil Razak[1], ○Adzzie Shazleen Azman[1, 2]
([1]School of Science, Monash University, [2]Laboratory of Molecular RNA Virology and Antiviral Strategies, Department of Microbiology and Immunology, Yong Loo Lin School of Medicine, National University of Singapore)

10:30 **Break**（10 min）

10:40 **Invited Lecture 1**

Actinobacteria from Extreme Environments: A Potential Solution for Abiotic Stress in Plants

Wasu Pathom-aree
(Department of Biology, Faculty of Science, Chiang Mai University)

11:15 **Invited Lecture 2**

From Soil to Discovery: A Challenging Journey Toward Novel Microbial Secondary Metabolites

Jae-Hyuk Jang[1, 2]

([1]Chemical Biology Research Center, Korea Research Institute of Bioscience and Biotechnology, Korea, [2]KRIBB School of Bioscience, University of Science and Technology [UST], Korea)

11:50 **Lunch** (100 min)

13:30 **The SAJ Plenary Meeting**

14:00 **Award Ceremony**

14:20 **Award Lecture (Ōmura Award)**

Biosynthetic mechanism of cationic homopoly(amino acid)s in actinomycetes and its application to direct intracellular delivery

Yoshimitsu Hamano (Department of Bioscience and Biotechnology, Fukui Prefectural University)

15:00 **Award Lecture (Distinguished Contribution Award)**

A pioneer in marine actinomycete research: discovery and application of novel actinomycete species and bioactive compounds

Chiaki Imada (Atmosphere and Ocean Research Institute, The University of Tokyo)

15:40 **Award Lecture (Hamada Award)**

Chemical biology research to expand the diversity and functionality of secondary metabolites produced by actinomycetes

Shun Saito (Department of Biosciences & Informatics, Faculty of Science and Technology, Keio University)

Structure–function analysis of altemicidin and lincosamide biosynthetic enzymes from actinomycetes

Takahiro Mori (Graduate School of Pharmaceutical Sciences, The University of Tokyo)

16:20 **Break** (10 min)

16:30 **Poster Presentation** (Odd number)

18:00 **Break・Move to the banquet venue**

19:00 **Banquet** (HOTEL GRAND HILLS SHIZUOKA)

September 4 (Thu)

9:00 **Venue Opened**

9:20 **Oral Presentation** (O-5～O-9)

O-5 **Optimization of heterologous production and structural elucidation of the lanthipeptide durhapeptin**
○Marino Tsugimoto[1], Ryo Kobayashi[1], Keita Saito[1], Chanaphat Thetsana[1], Tomohiro Furukawa[2], Hiroyuki Nakagawa[3], Shinya Kodani[1]
([1]Grad. Sch. Agr. Sci. Shizuoka Univ., [2] Inst. Food Res., NARO, [3]Res. Cent. Adv. Anal., NARO)

O-6 **Development of a framework for seed compound creation using the biosynthetic system of cyclic peptides derived from actinomycetes**
○Shinta Ijichi[1], Shotaro Hoshino[1], Alexander A. Vinogradov[2], Yuki Goto[3, 4], Hiroaki Suga[4], Hiroyasu Onaka[1]
([1]Grad. Sch. Sci., Gakushuin Univ., [2]NUS, [3]Grad. Sch. Sci., Kyoto Univ., [4]Grad. Sch. Sci., UTokyo)

O-7 **Biosynthetic study of acivicin, a natural product containing isooxazoline**
○Takumi Yamagishi[1], Takeshi Tsunoda[2], Max Sosa[3], Richiro Ushimaru[4], Ikuro Abe[3], Tohru Dairi[2], Yasushi Ogasawara[2]
([1] Grad. Sch. Chem. Sci. Eng., Hokkaido Univ., [2]Grad. Sch. Eng., Hokkaido Univ., [3]Grad. Sch. Pharm. Sci., Univ. Tokyo, [4]Inst. Adv. Study, Kyushu Univ.)

O-8 **Biosynthesis of the nucleoside natural product sinefungin**
○Koki Ueno[1], Richiro Ushimaru[2, 3], Kazuki Shimada[1], Yi Yang[1], Ikuro Abe[1, 4]
([1]Grad. Sch. Pharm. Sci., Univ. Tokyo, [2]Inst. Adv. Study, Kyushu Univ., [3]FOREST, [4]CRIIM, Univ. Tokyo)

O-9 **Functional analysis of novel thioesterases in highly reducing type II polyketide synthases**
○Kota Moriga[1], Seiji Kawai[1], Yohei Katsuyama[1, 2], Yasuo Ohnishi[1, 2]
([1] Grad. Sch. of Agric. and Life Sci., The Univ. of Tokyo, [2] CRIIM, The Univ. of Tokyo)

10:25 **Break** (10 min)

10:35 **Poster Presentation** (Even number)

12:05 **Lunch** (85 min)

13:30 **Oral Presentation** (O-10～O-14)

O-10 **Biosynthetic study of ST analogue possessing *O*-acylpeptide side chain**
Kanki Matsuda[1], Kotone Yasuhara[1], Yoshitaka Moriwaki[2], Yasushi Ogasawara[3], Kazuo Shin-ya[4], Fumihito Hasebe[1], Tohru Dairi[3], Yoshimitsu Hamano[1], ○Chitose Maruyama[1]
([1] Grad. Sch. Biosci. Biotec., Fukui Pref. Univ., [2]Science Tokyo, [3] Grad. Sch. Eng., Hokkaido Univ., [4]AIST)

O-11 **Functional study on tryptophan prenyltransferase from actinomycetes**
Ryo Yamada, Reiichi Tago, Sumika Inoue, ○Masahiro Okada
(Fac. of Chem. and Biol., Kanagawa Univ.)

O-12 **New genomics capabilities to accelerate secondary metabolite research in actinomycetes**
○Hiroshi Otani[1]
([1]DOE Joint Genome Institute, Lawrence Berkeley National Laboratory)

O-13 **Disease-oriented screening of actinomycetes isolated from deep-sea waters across Japan**
Chiaki Imada[1], Satoru Shigeno[2], Taichi Ohshiro[2], Yasuhiro Igarashi[3]
([1]Atmosphere and Ocean Research Institute, The University of Tokyo; [2]School of Pharmacy, Kitasato University; [3]Faculty of Engineering, Toyama Prefectural University)

O-14 **Exploring the structural diversity and functions of biogenic organocatalysts**
○Tatsuya Nishiyama, Kenji Ueda
(Nihon Graduate School of Biomedical Sciences)

14:35 **Break** (15 min)

14:50 **Oral Presentation** (O-15～O-18)

O-15 **Identification of an effector that is loaded inside an intracellular phage tail-like nanomachine of *Streptomyces lividans***
○Toshiki Nagakubo[1, 2], Tatsuya Nishiyama[3], Shumpei Asamizu[4], Hiroyasu Onaka[5], Nobuhiko Nomura[1, 2, 6], Dennis Claessen[7], Masanori Toyofuku[1, 2, 6]
([1]Life Environm. Sci., Univ. Tsukuba, [2]TIAR, Univ. Tsukuba, Biores. Sci., [3]Nihon Univ., EGBRC, [4]Kobe Univ., [5]Facul. Sci. Gakushuin Univ., [6]MiCS, Univ. Tsukuba, [7]Instit. Biol., Leiden Univ.)

O-16 **Reclassification of *Streptomyces solisilvae* and *Streptomyces samsunensis***
○Hisayuki Komaki[1], Akira Hosoyama[1], Natsuko Ichikawa[1], Yasuhiro Igarashi[2]
([1]NBRC, [2] Fac. Eng., Toyama Pref. Univ.)

O-17 **Analysis of the thermotolerance-promoting mechanism in actinomycetes by the oxazole-containing natural product noaoxazole**
○Sosuke Kataoka, Shun Saito, Midori A. Arai
(Grad. Sch. Sci. Tech, Keio Univ.)

O-18 **Genetic characteristics of novobiocin resistance in actinomycetes**
○Tomoka Kondo[1, 2], Nanase Takaba[1], Miran Hasegawa[1, 2], Shinya Kodani[3], Takeshi Hosaka[1, 2]
([1]Fac. Agric., Shinshu Univ. [2] Grad. Sch. Sci. Technol., Shinshu Univ. [3]Grad. Sch. Agric. Sci., Shizuoka Univ.)

15:45 **Break** (10 min)

15:55 **Poster Award Ceremony**

16:10 **SAJ40th Annual Meeting Announcement**

16:15 **Closing Remarks**

September 5 (Fri)

9:00-16:00 **Soil sampling session** (GRANSHIP, Miho Pine Grove, Nihondaira Yume Terrace, Kunozan Toshogu Shrine)

Poster Presentation

P-1 **Functional analysis of transporter and regulatory genes in the bisenarsan biosynthetic cluster**

○Shotaro Hoshino, Shinta Ijichi, Hiroyasu Onaka
(Dept. of Life Sci., Gakushuin Univ.)

P-2 **Genome mining of actinomycetes secondary metabolites through overexpression of the SARP-type transcriptional activators**

○Kotaro Kashihara, Yang Liu, Yuya Misaki, Kenji Arakawa
(Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)

P-3 **Searching for actinomycete secondary metabolites specific to solid-phase cultivation**

○Satoru Shigeno[1], Kota Watanabe[1], Takeshi Terahara[2], Chiaki Imada[3], Hiroshi Tomoda[1], Taichi Ohshiro[1]
([1]Grad. Sch.Pharm., Kitasato Univ., [2]TUMSAT, [3]AORI, Univ. of Tokyo)

P-4 **Analysis of metabolites produced by mutants of azoxyalkene maniwamycin producer**

○Sari Sumida[1], Haruka Nagano[1], Kaito Fukumori[1], Ayaka Tatsukawa[2], Atushi Fukumoto[3], Yojiro Anzai[3], Aiko Teshima[1, 2], Kenji Arakawa[1, 2]
([1] Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [2] Grad. Sch. AdSM, Hiroshima Univ., [3]Toho Univ.)

P-5 **Biosynthetic investigation of azoxyalkene compound, KA57A, using comparative genomic analysis**

○Kaito Fukumori[1], Haruka Nagano[1], Yu Tanaka[1], Takuya Kishimoto[2], Hirofumi Kunitake[2], Aiko Teshima[1,2], Kenji Arakawa[1, 2]
([1]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [2] Grad. Sch. Adv. Sci. Matt., Hiroshima Univ.)

P-6 **Effect of H457W + R460X double mutation in *rpoB* gene that increase sinefungin production**

○Mayu Sasakawa[1] , Tadayoshi Kanao[1] , Michiko Nemoto[1], Takashi Tamura[1]
([1]Grad. Sch. Env. Life Nat. Sci. Technol., Okayama Univ.)

P-7 **Characterization of a novel cyclic amino acid synthase**

○Kana Uchida[1], Taichi Chisuga[1], Shogo Nakano[1]
([1]University of Shizuoka)

P-8 **Search for antimalarial substances found in Indonesian actinomycetes**

○Sho Ogaki[1], Rukman Muslimin[1], Awet Alem Teklemichael[2], Aliumuddin Ali[3], Kuninobu Inada[4], Mayumi Taniguchi[2], Aiko Teshima[1], Shusaku Mizukami[2], Kenji Arakawa[1]
([1]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [2]Inst. Trop. Med., Nagasaki Univ., [3]Makassar State Univ., [4]N-BARD, Hiroshima Univ.)

P-9 **Chemical analysis of peptides produced by actinomycetes from suruga bay marine soil**

○Haruka Akiyama, Ryo Kobayashi, Shinya Kodani
(Grad. Sch. Agr. Sci. Shizuoka Univ.)

P-10 **New lasso peptide in rare actinomycete *Nonomuraea jiangxiensis***
○Atsushi Kawakami[1], Takeshi Tsunoda[2], Tohru Dairi[2], Yasushi Ogasawara[2]
([1] Grad. Sch. Chem. Sci. Eng., Hokkaido Univ., [2] Grad. Sch. Eng., Hokkaido Univ.)

P-11 **Biosynthetic study of a cyclopropane-containing polyketide natural product**
○Mizuki Ikeda[1], Takeshi Tsunoda[2], Tohru Dairi[2], Yasushi Ogasawara[2]
([1]Grad. Sch. Chem. Sci. Eng., Hokkaido Univ., [2]Grad. Sch. Eng., Hokkaido Univ)

P-12 **Exploration of the cryptic bioactivity in peptide natural products by PIECE method**
○Kohei Kaneda, Kaito Suzuki, Tomoya Ogura, Fumihito Hasebe, Chitose Maruyama, Yoshimitsu Hamano
(Grad. Sch. Biosci. Biotec., Fukui Pref. Univ.)

P-13 **Structure-function analysis of bacterial ACC synthase SvOrf30**
○Lyu Zhou[1], Takahiro Mori[1,2], Seko Hiroyuki[1], Tohru Terada[3], Takayoshi Awakawa[4] , Fumitaka Kudo[5], Ikuro Abe[1]
([1]Grad. Sch. Pharm. Sci., UTokyo, [2]CRIIM, [3] Grad. Sch. Agric. Life Sci., UTokyo, [4]RIKEN CSRS, [5] Faculty of Chem. Biochem., Kanagawa Univ.)

P-14 **Characterization of noncanonical nonribosomal peptide cyclases toward chemo-enzymatic synthesis of backbone *N*-alkylated cyclic peptides**
○Mitsuo Aono, Kenichi Matsuda, Toshiyuki Wakimoto
(Sch. Pharm, Hokkaido Univ.)

P-15 **Ancestral enzyme design and substrate specificity analysis of ATP-dependent diazotases from actinomycetes**
○Jiayu Ning[1], Taichi Chisuga[2], Shogo Nakano[2], Yohei Katsuyama[1, 3], Yasuo Ohnishi[1, 3]
([1] Grad. Sch. of Agric. and Life Sci., The Univ. of Tokyo, [2] Univ. of Shizuoka, [3] CRIIM, The Univ. of Tokyo)

P-16 **Mass spectrometry-based functional analysis of an unusual NRPS-like machinery that assembles amino acid building blocks into two dimensions**
○Kosei Fukue[1], Yuya Hashimoto[2], Noriaki Arakawa[2], Tadao Oikawa[1], Kazuya Yamanaka[1]
([1]Grad. Sch. Sci. Eng. Kansai Univ.,[2] National Institute of Health Sciences)

P-17 **Identification of anti-*Bacillus* active substances produced by fermented fish gravy-derived actinomycetes and salt-induced secondary metabolites production**
○Mizuki Kofuji [1], Sakura Nogimura [1], Natsuki Tada [2], Nana Kanayama [2], Takahiro Osada[3], Ryosuke Unno[1], Morio Ishikawa[1], Kenji Arakawa[4], Toshihiro Suzuki[1]
([1] Grad. Sch. Dept. Ferment. Sci., Tokyo Univ. Agric., [2] Dept. Ferment. Sci., Tokyo Univ. Agric., [3]Osada Shouten., [4]Integ. Sci. life., Hiroshima Univ.)

P-18 **NaCl-dependent activation of antibiotic production in *Streptomyces* sp. strain TUA-HK1GM isolated from a salt-containing fermented brine**
○Sachiko Masaki[1], Nana Kanayama[2], Sho Ogaki[2], Takahiro Osada[3], Ryosuke Unno[1], Morio Ishikawa[1], Kenji Arakawa[2], Toshihiro Suzuki[1]
([1]Grad. Sch. Dept. Ferment. Sci., Tokyo Univ. Agric., [2]Dept. Ferment. Sci., Tokyo Univ. Agric., [3]Integ. Sci. life., Hiroshima Univ., [4] Osada Shouten

P-19 **Lysine source for ε-poly-L-lysine biosynthesis during its production in *Streptomyces albulus***

○Daisuke Shimada, Chitose Maruyama, Yoshimitsu Hamano, Fumihito Hasebe
(Grad. Sch. Biosci. Biotec., Fukui Pref. Univ.)

P-20 **Screening of secondary metabolite production in marine actinomycetes**

○Yuna Kadota[1], Ulanova Dana[2], Shinya Kodani[1]
([1]Grad. Sch. Agr. Sci. Shizuoka Univ., [2]Facul. Agr. Mar. Sci., Kochi Univ.)

P-21 **Study on the biosynthetic mechanism of β-homolysine found in resormycin**

○Kazuma Sasaki[1], Yasushi Ogasawara[2], Kazuya Yamanaka[3], Masayuki Igarashi[4], Fumihito Hasebe[1], Tohru Dairi[2], Yoshimitsu Hamano[1], Chitose Maruyama[1]
([1] Grad. Sch. Biosci. Biotec., Fukui Pref. Univ., [2] Grad. Sch. Eng., Hokkaido Univ., [3] Fac. Chem. Mater. Bioeng., Kansai Univ., [4] Institute of Microbial Chemistry, BIKAKEN)

P-22 **Study on the biosynthsis of streptolidine lactam (SLL) found in streptothricin related compounds**

○Kotone Yasuhara [1], Yasushi Ogasawara [2], Fumihito Hasebe[1], Tohru Dairi[2], Yoshimitsu Hamano[1], Chitose Maruyama[1]
([1] Grad. Sch. Biosci. Biotec., Fukui Pref. Univ., [2] Grad. Sch. Eng., Hokkaido Univ.)

P-23 **Identification of a L-threonine-utilizing hydrazine synthetase for thrazarine biosynthesis in *Streptomyces coerulescens* MH802-fF5**

○Yusuke Shikai[1], Hideyuki Muramatsu[2], Masayuki Igarashi[2], Yohei Katsuyama[1, 3], Yasuo Ohnishi[1, 3]
([1] Grad. Sch. of Agric. and Life Sci., The Univ. of Tokyo, [2]BIKAKEN, [3]CRIIM, The Univ. of Tokyo)

P-24 **Exploration of the bioactive purple pigmented extracts from *Streptomyces* sp. MM for potential medical applications**

○Watsana Penkhrue[1], Chompunoot Wangboon[1], Sirilak Chumkiew[2], Mantana Jamklang[1], Sainamthip Rangdist[1], Pathanin Chantree[3], Pongsakorn Martviset[3]
([1]Sch. Preclinic. Sci., Inst. Sci., Suranaree Univ. Tech., [2]Sch. Bio., Inst. Sci., Suranaree Univ. Tech., [3]Dept. of Preclinical Science, Fac. of Medicine, Thammasat Univ.)

P-25 **Biosynthetic analysis of ascamycin**

○Ryouhei Kurita, Yu Zheng, Hiroshi Takagi, Naoko Morita, Shunji Takahashi
(RIKEN CSRS)

P-26 **Production of terpenoid compounds using *Actinacidiphila reveromycinica* SN-593**

○Kotoha Hiroyama[1, 2], Hiroshi Takagi[2], Keisuke Fujiyama[2], Naoko Morita[2], Yu Zheng[2], Tetsuya Yamamoto[1], Shunji Takahashi[1, 2]
([1]Grad. Sch. Eng, Tokyo Denki Univ., [2]RIKEN CSRS)

P-27 **Heterologous expression screening of class III lanthipeptides derived from actinomycetes**

○Yuki Torada, Ryo Kobayashi, Shinya Kodani
(Grad. Sch. Agr. Sci. Shizuoka Univ.)

P-28 **Exploring homologs of α-ketoglutarate dependent L-methionine metabolizing oxygenase from *Streptomyces***
○Taku Mizutani[1, 2], Takayoshi Awakawa[3], Ikuro Abe[1, 2]
([1] Grad. Sch. Pharm. Sci., UTokyo, [2]CRIIM, UTokyo, [3]RIKEN, CSRS)

P-29 **Analysis of flavonoid sensory regulators in *Streptomyces***
○Yuto Tsukagoshi, Hideaki Takano
(Grad. Sch. Bioresour. Sci, Nihon Univ.)

P-30 **Development of transcription booster for multiplex gene expression control in *Streptomyces***
○Sota Takada, Hideaki Takano
(Grad. Sch. Bioresour. Sci, Nihon Univ.)

P-31 **Expression analysis of selenium-containing formate dehydrogenase from *Streptomyces incarnatus***
○Zhao Xiaohui, Mao Kubo, Tadayoshi Kanao, Michiko Nemoto, Takashi Tamura
(Grad. Sch. Env. Life Nau. Sci., Okayama Univ.)

P-32 **Analysis of the thermotolerance-promoting mechanism in actinomycetes by discoid-type polyketide resistomycins**
○Yuya Kato, Yurika Okumura, Shun Saito, Midori A. Arai
(Grad. Sch. Sci. Tech, Keio Univ.)

P-33 **Functional analysis of genes under the control of the global effector *ccr1* involved in combined-culture**
○Ayari Kunoki[1], Shumpei Asamizu[2], Shotaro Hoshino[1], Hiroyasu Onaka[1]
([1]Dept. of Life Sci. Gakushuin Univ., [2]Kobe Univ. EGBRC)

P-34 **Screening for actinomycete natural products that activate MITOL, mitochondrial outer membrane-localized ubiquitin ligase**
○Nozomi Takaku, Isshin Shiiba, Shigeru Yanagi, Shotaro Hoshino, Hiroyasu Onaka
(Dept. of Life Sci., Gakushuin Univ.)

P-35 **Suppression of antibacterial compound production in co-cultures of marine bacteria**
○Hirano Aya, Ulanova Dana
(Graduated school of Integrared Arts and Science, Kochi University)

P-36 **Discovery of anti-aging and antimicrobial natural products from actinomycetes**
○Hanaha Kawaguchi, Shotaro Hoshino, Hiroyasu Onaka
(Dept. of Life Sci., Gakushuin Univ.)

P-37 **Functional analysis of the nucleosome protein gene *ccr1* activated in combined-culture**
○Makoto Kato[1], Yukun LEI[2], Shunpei Asamizu[3], Shotaro Hoshino[1], Hiroyasu Onaka[1]
([1] Dept. Life Sci., Gakushuin Univ., [2]Grad. Sch. Agric., Univ. of Tokyo, [3]EGBRC, Kobe Univ.)

P-38 **Analysis of the activation mechanism of secondary metabolite production by nisin**

○Yuta Awano[1], Hayama Tsutsumi[1, 2], Arisa Suto[3], Yuta Kikuchi[2, 4], Kaho Anegawa[1], Miho Nagayoshi[2], Takeaki Tezuka[5, 6], Yasuo Ohnishi[5, 6], Takashi Matsui[3, 7], Yoshio Kodera[3, 7], Yuki Inahashi[1, 2]

([1]Grad. Sch. Infection Cont. Sci., Kitasato Univ., [2]Ōmura Inst., Kitasato Univ., [3]Grad. Sch. Sci., Kitasato Univ., [4]Sch. of Computing, Inst. of Science Tokyo, [5]Grad. Sch. of gri. And Life Sci., Univ. of Tokyo, [6]CRIIM, Univ. of Tokyo, [7]Center for Disease Proteomics, Sch. Sci., Kitasato Univ.)

P-39 **Analysis of genes related to pyrogallol-induced hyphal branching in *Streptomyces***

○Saho Fukuhara[1], Shumpei Asamizu[2], Shotaro Hoshino[1], Hiroyasu Onaka[1]

([1]Dept. of Life Sci., Gakushuin Univ., [2]Kobe Univ. EGBRC)

P-40 **The effect of DEAD/H-box RNA helicase gene disruption on ofloxacin resistance in *S. coelicolor***

○Takumi Saito[1, 2], Kanata Hoshino[2], Tomoko Shibayama[2], Takeshi Hosaka[1, 2]

([1]Fac. Agric., Shinshu Univ., [2] Grad. Sch. of Sci. and Technol., Shinshu Univ.)

P-41 **Genetic and physiological characteristics of *Mycobacterium smegmatis* 23S rRNA mutants**

○Shiori Kurumi[1, 2], Kousuke Tanioka[1], Yuta Nakashima[1], Takeshi Hosaka[1, 2]

([1]Fac. Agric., Shinshu Univ, [2]Grad. Sch. Sci. Technol., Shinshu Univ.)

P-42 **The effect of pretreatment with surfactants and enzymes on selective isolation of actinomycetes**

○Tomoyo Takagi, Narumi Enomoto, Makiko Nakamaru, Tomohiko Tamura, Moriyuki Hamada

(NITE・NBRC)

P-43 **Proposal of a novel genus and species in the family *Microbacteriaceae* isolated from *Sake Manjū-Moto* used in Sake Manju production**

○Moriyuki Hamada[1], Ryutaro Sano[1], Mika Miyashita[1], Shin-ichi Kondo[2], Akihiro Yoshimura[2], Yoshinori Sawai[2], Hideki Kitano[3], Tomohiko Tamura[1]

(NITE, NBRC[1], Gifu Pref. Res. Inst. For Food Sciences[2], Kinchouen Souhonke[3])

P-44 **Development of a filter paper and cup-based enrichment culture method for the isolation of rare motile actinomycetes from fallen leave**

○Haruna Kobayashi[1], Akira Take[1], Youji Nakagawa[1], Shinya Kokubo[1], Masayuki Hayakawa[2], Hideki Yamamura[1]

([1]Fac. Life Environ. Sch., Univ. Yamanashi, [2] Yamanashi Pref. Univ.)

P-45 **Selection of antibiotics capable of specifically isolating filamentous actinomycetes**

○Akira Také[1], Yoshihiko Sakaguchi[2], Yuki Inahashi[3, 4], Kazuyoshi Gotoh[5], Shunji Hayashi[6], Hideki Yamamura[1]

([1]Fac. Life Environ. Sci., Univ. Yamanashi, [2]Pharm. Sci., Tokushima Bunri Univ., [3]Grad. Sch. Infection Control Sci., Kitasato Univ., [4]Ōmura Satoshi Mem. Inst., Kitasato Univ., [5]Grad. Sch. Health Sci., Okayama Univ., [6]Sch. Med., Kitasato Univ.)

P-46 **Phylogeny and ecological significance of the genus *Micromonospora* isolated from long-term fermented fish products**

○Misaki Onishi[1], Azumi Minoshima[2], Takahiro Osada[3], Miu Ueki[1], Ryosuke Unno[1], Morio Ishikawa[1], Toshihiro Suzuki[1]
([1]Grad. Sch. Dept. Ferment. Sci., Tokyo Univ. Agric., [2]Dept. Ferment. Sci., Tokyo Univ. Agric., [3]Osada Shouten.)

P-47 **Isolation of actinomycetes from marine organisms for the discovery of new natural products**

○Kaho Anegawa[1], Yuta Awano[1], Yuta Kikuchi[2, 3], Hayama Tsutsumi[1, 2], Yuki Inahashi[1, 2]
([1]Grad. Sch. Infection Cont. Sci., Kitasato Univ., [2]Ōmura Inst., Kitasato Univ., [3]Sch. of Computing, Inst. of Science Tokyo)

P-48 **Taxonomic study of rare actinomycetes isolated from povidone-iodine treated soils**

○Yuta Saitou[1], Rei Udono[1], Yuki Inahashi[1, 2]
([1] Grad. Sch. Infection Control Sci., Kitasato Univ., [2]Ōmura Inst., Kitasato Univ.)

P-49 **Assessment of biological activities and taxonomic study of strain *Kineococcus* sp. NUM-3379 from Mongolia**

○Jiahao Zeng[1], Chiharu Najima[1], Momoko Ando[1], Ryo Yamaguchi[1], Yuxi Tian[1], Yohei Iizaka[1], Moriyuki Hamada[2], Chimeddeleg Sod-Erdene[3], Bekh-Ochir Davaapurev[3], Tomohiko Tamura[2], Javzan Batkhuu[3], Yojiro Anzai[1]
([1] Fac. Pharm. Sci., Toho Univ., [2] NITE, NBRC, [3] Natl. Univ. Mongolia.)

P-50 **Isolation and taxonomy of rare actinomycetes from soils treated with disinfectant**

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P-51 **Isolation of rhizosphere microbes from rye field and identification of antifungal compounds**

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P-52 **A novel actinomycete derived from ants that produces new antibiotics**

○Hideyuki Muramatsu[1], Atsuko Matsumoto[1], Yoshimasa Ishizaki[1], Yasunari Otsuka[2], Yasuhiro Takehana[1], Chigusa Hayashi[1], Maya Umekita[1], Tomoyuki Kimura[3], Ryuichi Sawa[3], Masayuki Igarashi[1]
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P-53 **Chemoenzymatic synthesis of cyclic peptide-peptide nucleic acid hybrid molecules**

○Naho Onozawa, Kenichi Matsuda, Toshiyuki Wakimoto
(Facult. Pharm. Sci., Hokkaido Univ.)

P-54 **Evaluation of activity of goadsporin analogs to create antimicrobial peptides**

○Chihiro Hoshino, Shotaro Hoshino, Hiroyasu Onaka
(Dept. of Life Sci., Gakushuin Univ.)

P-55 **Improvement of chromosomal mobilization efficiency between actinomycetes *Streptomyces* bacteria**

○Yusaku Kobayashi, Akane Mizowaki, Masahiro Mizuno, Masakazu Kataoka
(Dept. Biomed. Eng. Grad. Sch. Shinshu Univ)

P-56 **Investigation of overlapping methionine biosynthetic pathways in *Streptomyces fradiae* NBRC 12773**

○Souma Yoshida, Chitose Maruyama, Yoshimitsu Hamano, Fumihito Hasebe
(Grad. Sch. Biosci. Biotec., Fukui Pref. Univ.)

P-57 **Investigation of interaction regions between homocysteine synthase and sulfur carrier protein in *Streptomyces albulus***

○Maria Igarashi, Chitose Maruyama, Yoshimitsu Hamano, Fumihito Hasebe
(Grad. Sch. Biosci. Biotec., Fukui Pref. Univ.)

P-58 **Discovery of non-quinone organocatalyst from actinomycetes**

○Runa Akiba[1], Tatsuya Kanbayashi[1], Kazuo Furihata[2] Kenji Ueda[1], Tatsuya Nishiyama[1]
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P-59 **In vivo substrate of the *Streptomyces*-derived organocatalyst granaticin**

○Hokuto Kudo, Kenji Ueda, Tatsuya Nishiyama
(College of Bioresource Sci., Nihon Univ.)

P-60 **Relationship between surugamide biosynthetic genes and salt sensitivity in *Streptomyces* spp. isolated from salt-containing environments**

Miyuki Saito[1], Yui Narama[2], Takuma Ikegami[1], Kenichi Matsuda[3], Toshiyuki Wakimoto[3], Ryosuke Unno[1], Morio Ishikawa[1], Kenji Arakawa[4], Toshihiro Suzuki[1]
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P-61 **Cultivation of actinomycetes on humus media and their antimicrobial production**

○Kota Kobayashi[1], Mizuki Abe[1], Shinya Kodani[2], Takeshi Hosaka[1]
([1]Grad. Sch. Sci. Technol., Shinshu Univ., [2]Grad. Sch. Agric. Sci., Shizuoka Univ.)

P-62 **Development of a nuclease intracellular delivery system allowing for transformation-independent genetic manipulation in microorganisms**

○Ai Shimizu[1], Rikuto Sasaki[1], Tadao Oikawa[1], Chitose Maruyama[2], Yoshimitsu Hamano[2], Kazuya Yamanaka[1]
([1]Grad. Sch. Sci. Eng., Kansai Univ., [2]Grad. Sch. Biosci. Biotec., Fukui Pref. Univ.)

P-63 **Development of an inducible regulatory system for the restriction endonuclease PacI-mediated Actinobacterial genome editing**

○Kenta Shimizu[1], Nobuki Sakurai[2], Keiichiro Kanao[2], Tadao Oikawa[1], Kazuya Yamanaka[1]
([1]Kansai Univ., [2] JNC Corp. Yokohama RC)

P-64 **Salt stress mitigation in yomato by deep-Sea *Dermacoccus abyssi* MT1.1ᵀ via ectoine production**

Inthira Wongchompoo [1], Jaturong Kumla[1, 2], Pharada Rangseekaew[1], Wasu Pathom-aree[1]
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HP-1 **Agar concentration and its effect on the growth of actinomycetes**

○Nao Ashiya[1], Miyu Fujimoto[1], Akihiko Etoh[1], Rei Miyano[1, 2, 3]
([1]Mita International School of Sci., [2]Science communicator, [3]Ōmura Satoshi Mem. Inst., Kitasato Univ.)

HP-2 **Preliminary study on the use of yogurt waste as a microbial biopesticide**

○Arisa Ishida[1], Shinya Kodani[2]
([1]Tokoha Univ. Tokoha High Sch. [2]Shizuoka Univ. Agr.)

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