

SAJ NEWS

Vol. 25, No. 2, 2011

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Outline of SAJ: Activities and Membership

The Society for Actinomycete Japan (SAJ) was established in 1955 and authorized as a scientific organization by Science Council of Japan in 1985. The Society for Applied Genetics of Actinomycetes, which was established in 1972, merged in SAJ in 1990. SAJ aims at promoting actinomycete researches as well as social and scientific exchanges between members domestically and internationally. The **Activities of SAJ** have included annual and regular scientific meetings, workshops and publications of *The Journal of Antibiotics* (the official journal, joint publication with Japan Antibiotics Research Association), *Actinomycetologica* (Newsletter) and laboratory manuals. Contributions to International Streptomyces Project (ISP) and International Symposium on Biology of Actinomycetes (ISBA) have also been SAJ's activities. In addition, SAJ have occasional special projects such as the publication of books related to actinomycetes: "Atlas of Actinomycetes, 1997", "Identification Manual of Actinomycetes, 2001" and "Digital Atlas of Actinomycetes, 2002" (<http://www.nih.go.jp/saj/DigitalAtlas/>). These activities have been planned and organized by the board of directors with association of executive committees consisting of active members who belong to academic and nonacademic organizations.

The **SAJ Memberships** comprise **active members, student members, supporting members and honorary members**. Currently (as of Mar. 31, 2011), SAJ has about 358 active members including student members, 43 oversea members, 11 honorary members, 5 oversea honorary members, 1 special member and 15 supporting members. The SAJ members are allowed to join the scientific and social meetings or projects (regular and specific) of SAJ on a membership basis and to browse *The Journal of Antibiotics* from a link on the SAJ website and will receive each issue of *Actinomycetologica*, currently published in June and December. Actinomycete re-

searchers in foreign countries are welcome to join SAJ. For application of SAJ membership, please contact the SAJ secretariat (see below). Annual membership fees are currently 5,000 yen for active members, 3,000 yen for student members and 20,000 yen or more for supporting members (mainly companies), provided that the fees may be changed without advance announcement.

The current members (April 2010 - March 2012) of the Board of Directors are: TAKAHASHI, Yoko (Chairperson; Kitasato Univ.), KATO, Fumio (Vice Chairperson; Toho Univ.), KUZUYAMA, Tomohisa (Secretary General; Univ. Tokyo), GONOI, Tohru (Chiba Univ.), IGARASHI, Masayuki (Inst. Microb. Chem.), KIZUKA, Masaaki (Daiichi Sankyo Co., Ltd.), MURAMATSU, Hideyuki (Astellas Res. Technol. Co., Ltd.), NATSUME, Masahiro (Tokyo Univ. Agric. Technol.), OHNISHI, Yasuo (Univ. Tokyo), OKAMOTO, Susumu (NFRI), SAKAI, Takashi (Eisai Co., Ltd.), SUZUKI, Ken-ichiro (NITE), TAMURA, Tomohiko (NITE), TAMURA, Tomohiro (AIST), UEKI, Masashi (RIKEN).

The members of the Advisory Board are: HAYAKAWA, Masayuki (Univ. Yamanashi), IWAI, Yuzuru (Kitasato Inst.), NAKAJIMA, Mutsuyasu (formerly, Nihon Univ.), OCHIAI, Keiko (JST), YOKOTA, Akira (formerly, Univ. Tokyo).

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The SAJ Secretariat

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The 2011 Annual Meeting of the Society for Actinomycetes Japan (SAJ2011)

Chairperson: Kozo Asano (Hokkaido University)

General Information

Dates: September 8 (Thu) – 9 (Fri), 2011

Venue: Sapporo Convention Center

1-1-1 Higashi-Sapporo 6-jo, Shiroishi-ku, Sapporo 003-0006, Japan

TEL:+81-11-817-1010 <http://www.sora-scc.jp/eng/index.html>

Program

September 8, Thursday (Room I [207])

9:30 Opening Remarks

9:40 Oral presentation (Session 1), O-1 to O-7

O-1 (P-AM08-11)

The autoregulator-receptor homologue AvaR3 is a global regulator controlling antibiotic production and cell morphology of *Streptomyces avermitilis*

○Kiyoko Miyamoto¹, Shigeru Kitani¹, Mamoru Komatsu², Haruo Ikeda², and Takuya Nihira¹

(¹International Center for Biotechnology, Osaka Univ., Japan; ²Kitasato Inst. Life Sci., Kitasato Univ., Japan)

O-2 (P-AM08-12)

Strict regulation of morphological and physiological differentiation by a positive feedback loop between two global regulators AdpA and *bldA* in *Streptomyces griseus*

○Akiyoshi Higo, Sueharu Horinouchi, and Yasuo Ohnishi

(Dept. Biotechnol., Grad. Sch. Agri. Life Sci., Univ. Tokyo, Japan)

O-3 (P-AM08-13)

Knockout of *cvn1*, one of the conserved GPCR-like regulatory operons, causes fragmentation of vegetative mycelium in *Streptomyces griseus*

○Hideaki Takano, Kazuki Hashimoto, Hayato Watanabe, Hatsumi Shiratori-Takano, and Kenji Ueda.

(Life Sci. Res. Cent., College of Bioresource Sci., Nihon Univ., Japan)

O-4 (P-AM08-14)

Isolation and structural elucidation of the novel γ -butenolide signaling molecules SRBs that switch on antibiotic production in *Streptomyces rochei* 7434AN4

○Kenji Arakawa, Akihiro Taniguchi, Naoto Tsuda, and Haruyasu Kinashi

(Dept. Molecular Biotechnol., Grad. Sch. Adv. Sci. Mat., Hiroshima Univ., Japan)

O-5 (P-AM08-15)

Characterization of *ksbC*, a γ -butyrolactone-autoregulator receptor gene homolog in *Kitasatospora setae* NBRC 14216

○Aiyada Aroonsri¹, Shigeru Kitani¹, Haruo Ikeda², and Takuya Nihira¹

(¹International Center for Biotechnology, Osaka Univ., Japan; ²Kitasato Inst. Life Sci., Kitasato Univ., Japan)

O-6 (P-AM08-1)

Functional characterization of *Streptomyces* ABBA prenyltransferases involved in the biosyntheses of novobiocin and prenylated indoles

○Taro Ozaki, Makoto Nishiyama, and Tomohisa Kuzuyama
(Biotechnol. Res. Cent., Univ. Tokyo, Japan)

O-7 (P-AM08-2)

Characterization of the biosynthesis gene cluster for alkyl-O-dihydrogeranyl- methoxyhydroquinones in *Actinoplanes missouriensis*

○Takayoshi Awakawa¹, Nobuyuki Fujita², Masayuki Hayakawa³, Yasuo Ohnishi¹, and Sueharu Hori-nouchi¹

(¹Dept. Biotechnol., Grad. Sch. Agri. Life Sci., Univ. Tokyo, Japan; ²NITE Bioresource Information Center, Dept. Biotechnol., Natl. Inst. Technol. Eval., Japan; ³Division of Applied Biological Sci., Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan)

11:25 Short Break

11:35 Poster Session core time (odd numbers, Poster room A [Main Hall C])

12:20 Lunch Break

13:20 Poster Session core time (even numbers, Poster room A [Main Hall C])

14:05 Short Break

14:15 The SAJ Plenary Meeting (in Japanese)

15:00 Award Ceremony

15:20 Hamada's award lectures

SAJ-AL-1

Selective isolation method for motile actinomycetes and ecological study of actinomycetes in Southeast Asia

Misa Otoguro (NITE Biological Resource Center, Japan)

SAJ-AL-2

Signalling systems with γ -butyrolactone autoregulator for antibiotic production in actinomycetes
Shigeru Kitani (International Center for Biotechnology, Osaka University, Japan)

SAJ-AL-3

Construction of natural product library with secondary metabolites produced by actinomycetes

Motoki Takagi (Technology Research Association for Next-Generation Natural Product Chemistry, Japan)

16:20 Short Break

16:30 Oral presentation (Session 2), O-8 to O-14

O-8 (P-AM08-3)

Heterologous expression of biosynthetic gene cluster for secondary metabolite derived from shikimate pathway in engineered *Streptomyces avermitilis*

○Mamoru Komatsu¹, Hiroyasu Onaka², Mervyn J. Bibb³, and Haruo Ikeda¹
(¹Kitasato Inst. Life Sci., Kitasato Univ., Japan; ²Toyama Prefectural Univ., Japan; ³John Innes Centre, U.K.)

O-9 (P-AM08-19)

Identification of key enzymes involved in spiroacetal formation in reveromycin A biosynthesis

○Shunji Takahashi, Takuto Kumano, Hiroshi Takagi, Toshihiko Nogawa, Eri Oowada, Suresh Panthee, Masakazu Uramoto, and Hiroyuki Osada

(Chem. Biol. Dept., RIKEN Adv. Sci. Inst., Japan)

O-10 (P-AM08-20)

***In vitro* reconstruction of post-PKS modification in RM-A biosynthesis**

○Takuto Kumano, Shunji Takahashi, and Hiroyuki Osada
(Chem. Biol. Dept., Adv. Sci. Inst., RIKEN, Japan)

O-11 (P-AM08-21)

Novel acetoacetyl-coenzyme A synthesizing enzyme of the thiolase superfamily involved in the mevalonate pathway

○Tomohisa Kuzuyama
(Biotechnol. Res. Cent., Univ. Tokyo, Japan)

O-12 (P-AM08-22)

Detection of fermented food microorganisms-producing bioactive cyclic dipeptides by enzymatic conversion-based method

○Hiroshi Kanzaki, Ayaka Takatsu, Yuu Fukuda, Man Chao, and Teruhiko Nitoda
(Grad. Sch. Natural Sci. Tech., Okayama Univ., Japan)

O-13 (P-AM08-23)

Biosynthetic pathway of new polyketides produced by *Streptomyces* sp. RK95-74

○Masashi Ueki¹, Naofumi Koshiro^{1,2}, Shunji Takahashi¹, Eri Oowada¹, Jun Ishikawa³, Atsushi Toyoda⁴,
and Hiroyuki Osada¹

(¹Chem. Biol. Dept., RIKEN ASI, Japan; ²Mat. Sci. Eng., Tokyo Denki Univ., Japan; ³Dept. Bioactive Molecules, Natl. Inst. Infect. Dis., Japan; ⁴Natl. Inst. Genet., Japan)

O-14 (P-AM08-50)

Bioactive *Streptomyces* species isolated from desert soil in Riyadh, Kingdom of Saudi Arabia: Evaluation of their activity against human pathogenic bacteria and yeast

○Ismet Ara, Muneera Al-Othman, and Mohammad Abdul Bakir
(Dept. Botany and Microbiology, College of Science, Kingdom of Saudi Arabia)

18:15 Poster removal

19:00 SAJ2011 Reception at Asahi-beer garden Shiroishi HAMANASU-KAN

September 9, Friday (Room E [Mid-sized Hall B])

8:00 SAJ2011 Front counter open

9:00 Oral presentation (Session 3), O-15 to O-21

O-15 (P-AM08-55)

Novel phenylacetylated peptides isolated from *Streptomyces* sp. and *Kibdelosporangium* sp.

○Miho Izumikawa¹, Jun-ya Ueda¹, Ikuko Kozono¹, Hideki Yamamura², Masayuki Hayakawa², Motoki Takagi¹, and Kazuo Shinya³

(¹Japan Biological Informatics Consortium (JBIC); ²Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan; ³Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

O-16 (P-AM08-66)

New aspects of chemical biology using tautomycetin produced by *Streptomyces griseochromogenes*

○Makoto Ubukata, Ying Li, and Shinya Mitsuhashi
(Grad. Sch. Agri., Hokkaido Univ., Japan)

O-17 (P-AM08-56)

Novel secondary metabolites produced by *Lechevalieria* sp. K10-0216 isolated from a mangrove sediment

Junya Ochiai¹, ○Takuji Nakashima², Atsuko Matsumoto³, Masato Iwatsuki³, Kazuro Shiomi^{1,3}, Satoshi Ōmura³, and Yōko Takahashi^{1,3}

(¹Grad. Sch. Infection Control Sci., Japan; ²Research Organization for Infection Control Sci., Japan; ³Kitasato Inst. Life Sci., Kitasato Univ., Japan)

O-18 (P-AM08-70)

3,6,7-tri-*epi*-invictolide, a diastereomer of queen recognition pheromone, and its analog from a marine derived actinomycete

○Fumie Iwata, Seizo Sato, Shoichi Yamada, and Hiroyuki Kawahara
(Central Research Laboratory, Nippon Suisan Kaisha, Ltd., Japan)

O-19 (P-AM08-71)

Enhancing biocatalytic production of 25-hydroxyvitamin D3 by the site-directed mutagenesis on the molecular surface of vitamin D3 hydroxylase (P450 Vdh)

○Taiki Nishioka¹, Noriko Imoto¹, Yoshiaki Yasutake², and Tomohiro Tamura^{1,2}

(¹Grad. Sch. Agri., Hokkaido Univ., Japan; ²Bioproduction Res. Inst., Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

O-20 (P-AM08-72)

Rpf-like protein from *Tomitella biformata* promotes the growth and resuscitates from non-dividing state

○Indun Dewi Puspita¹, Moe Uehara¹, Taiki Katayama², Michiko Tanaka¹, Yoichi Kamagata^{1,2}, and Kozo Asano¹

(¹Grad. Sch. Agri., Hokkaido Univ., Japan; ²Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

O-21 (P-AM08-73)

Studies on substances which promote colony formation of bacteria produced by actinomycetes

○Ryo Kawai, Tetsuya Yamada, Noritomo Fujino, Hiromichi Nagasawa, and Shohei Sakuda
(Dept. Applied Biological Chemistry, Univ. Tokyo, Japan)

10:45 Short Break

11:00 SAJ2011 Symposia

SAJ-SY-1

Kissing the sleepy actinobacterial beauty: an molecular approach

Erko Stackebrandt, DSMZ-German Collection of Microorganisms and Cell Cultures GmbH, Germany

SAJ-SY-2

Ecological importance of the presence of *Micromonospora* in legume root nodules

Martha E. Trujillo, Dpto. de Microbiología y Genética, Universidad de Salamanca, Spain

SAJ-SY-3

Genetic and biochemical analysis of precursor supply in secondary metabolite biosynthesis in Actinomycetes

Wolfgang Wohlleben, Institute of Microbiology, University of Tuebingen, Germany

13:00 Award Ceremony for Poster Award

13:15 Closing Remarks

Poster Sessions (IUMS2011 P-AM08 Actinomycetes)

P-AM08-1 (O-6)

Functional characterization of *Streptomyces* ABBA prenyltransferases involved in the biosyntheses of novobiocin and prenylated indoles

○Taro Ozaki, Makoto Nishiyama, and Tomohisa Kuzuyama
(Biotechnol. Res. Cent., Univ. Tokyo, Japan)

P-AM08-2 (O-7)

Characterization of the biosynthesis gene cluster for alkyl-O-dihydrogeranyl- methoxyhydroquinones in *Actinoplanes missouriensis*

○Takayoshi Awakawa¹, Nobuyuki Fujita², Masayuki Hayakawa³, Yasuo Ohnishi¹, and Sueharu Hori-nouchi¹

(¹Dept. Biotechnol., Grad. Sch. Agri. Life Sci., Univ. Tokyo, Japan; ²NITE Bioresource Information Center, Dept. Biotechnol., Natl. Inst. Technol. Eval., Japan; ³Division of Applied Biological Sci., Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan)

P-AM08-3 (O-8)

Heterologous expression of biosynthetic gene cluster for secondary metabolite derived from shikimate pathway in engineered *Streptomyces avermitilis*

○Mamoru Komatsu¹, Hiroyasu Onaka², Mervyn J. Bibb³, and Haruo Ikeda¹
(¹Kitasato Inst. Life Sci., Kitasato Univ., Japan; ²Toyama Prefectural Univ., Japan; ³John Innes Centre, U.K.)

P-AM08-4

Functional Analysis of the *actVA* genes involved in actinorhodin biosynthesis of *Streptomyces coelicolor*

○Takaaki Taguchi¹, Susumu Okamoto^{1,2}, Kimiko Hasegawa³, and Koji Ichinose¹
(¹Res. Inst. Pharmaceutical Sci., Musashino Univ.; ²Natl. Food Res. Inst., Japan; ³Rigaku Corp., Japan)

P-AM08-5

Diverse 2-alkylmalonyl-CoA biosynthesis in reveromycin production

○Takeshi Miyazawa^{1,2}, Shunji Takahashi¹, Takuto Kumano¹, Kouji Matsumoto², and Hiroyuki Osada^{1,2}
(¹Chem. Biol. Dept., Adv. Sci. Inst., RIKEN, Japan; ²Dept. Biochemistry and Molecular Biology, Grad. Sch. Sci. Eng., Saitama Univ., Japan)

P-AM08-6

Function of cytochrome P450 genes, *rosC* and *rosD*, in biosynthesis of rosamicin macrolide antibiotics

Yojiro Anzai, ○Yohei Iizaka, Noriko Higashi, and Fumio Kato.
(Faculty of Pharmaceutical Sci., Toho Univ., Japan)

P-AM08-7

Intragenomic diversity of type-I polyketide synthase genes in the genus *Nocardia*

○Hisayuki Komaki¹, Natsuko Ichikawa¹, Akira Hosoyama¹, Mitsuo Sekine¹, Tomohiko Tamura¹, Syuji Yamazaki¹, Azusa Takahashi², Tetsuhiro Matsuzawa², Tohru Gonoi², Ken-ichiro Suzuki¹ and Nobuyuki Fujita¹

(¹NITE Biological Resource Center (NBRC), Natl. Inst. Technol. Eval. (NITE), Japan; ²Medical Mycology Res. Center (MMRC), Chiba Univ., Japan)

P-AM08-8

Heterologous production of kasugamycin, an aminoglycoside antibiotic from *Streptomyces kasugaensis*, in *Streptomyces lividans* and *Rhodococcus erythropolis* L-88 by constitutive expression of the biosynthetic gene cluster

○Kano Kasuga¹, Chikako Fujii¹, Naoya Kuwahara¹, Yuiko Minato¹, Masayuki Kobayashi¹, Hitoshi Agematsu², Tomohiro Tamura³, Haruo Ikeda⁴, and Ikuo Kojima¹
(¹Dept. Biotechnol., Akita Prefectural Univ., Japan; ²Akita Natl. College of Technology, Japan; ³Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan; ⁴Kitasato Inst. Life Sci., Kitasato Univ., Japan)

P-AM08-9

Characterization of dehydroalanine formation involving in goadsporin biosynthesis in *Streptomyces* sp. TP-0584

○Yukari Kurokawa, Naoya Oku, Yasuhiro Igarashi, and Hiroyasu Onaka
(Biotechnol., Toyama Prefectural Univ., Japan)

P-AM08-10

Organization of bafilomycin biosynthetic gene cluster of *Kitasatospora cheerisanensis* KCTC2395

○Doo Hyun Nam, Jae Yoon Hwang, So Hee Kim, and Bo Geum Kim
(College of Pharmacy, Yeungnam Univ., South Korea)

P-AM08-11 (O-1)

The autoregulator-receptor homologue AvaR3 is a global regulator controlling antibiotic production and cell morphology of *Streptomyces avermitilis*

○Kiyoko Miyamoto¹, Shigeru Kitani¹, Mamoru Komatsu², Haruo Ikeda², and Takuya Nihira¹
(¹International Center for Biotechnology, Osaka Univ., Japan; ²Kitasato Inst. Life Sci., Kitasato Univ., Japan)

P-AM08-12 (O-2)

Strict regulation of morphological and physiological differentiation by a positive feedback loop between two global regulators AdpA and *bldA* in *Streptomyces griseus*

○Akiyoshi Higo, Sueharu Horinouchi, and Yasuo Ohnishi
(Dept. Biotechnol., Grad. Sch. Agri. Life Sci., Univ. Tokyo, Japan)

P-AM08-13 (O-3)

Knockout of *cvn1*, one of the conserved GPCR-like regulatory operons, causes fragmentation of vegetative mycelium in *Streptomyces griseus*

○Hideaki Takano, Kazuki Hashimoto, Hayato Watanabe, Hatsumi Shiratori-Takano, and Kenji Ueda.
(Life Sci. Res. Cent., College of Bioresource Sci., Nihon Univ., Japan)

P-AM08-14 (O-4)

Isolation and structural elucidation of the novel γ -butenolide signaling molecules SRBs that switch on antibiotic production in *Streptomyces rochei* 7434AN4

○Kenji Arakawa, Akihiro Taniguchi, Naoto Tsuda, and Haruyasu Kinashi
(Dept. Molecular Biotechnol., Grad. Sch. Adv. Sci. Mat., Hiroshima Univ., Japan)

P-AM08-15 (O-5)

Characterization of *ksbC*, a γ -butyrolactone-autoregulator receptor gene homolog in *Kitasatospora setae* NBRC 14216

○Aiyada Aroonsri¹, Shigeru Kitani¹, Haruo Ikeda², and Takuya Nihira¹
(¹International Center for Biotechnology, Osaka Univ., Japan; ²Kitasato Inst. Life Sci., Kitasato Univ., Japan)

P-AM08-16

Analysis of DeoR-family transcriptional regulators in *Streptomyces avermitilis*

○Dana Ulanova, Shigeru Kitani, and Takuya Nihira
(International Center for Biotechnology, Osaka Univ., Japan)

P-AM08-17

Transcriptional analysis of diaminopimelic acid epimerase genes (*dapF*) in *Kitasatospora setae* KM-6054^T

Hiromi Miura¹, ○Yasufumi Yagisawa², Yasuki Kato², Satoshi Omura¹, and Yoko Takahashi^{1,2}
(¹Laboratory of Microbial Functions, Kitasato Inst. Life Sci., Kitasato Univ., Japan; ²Grad. Sch. Infection Control Sci., Kitasato Univ.)

P-AM08-18

The role of two repressor genes, *srrB* and *srrC*, for the production of secondary metabolites in *Streptomyces rochei*

○Naoto Tsuda, Yuzuru Takahashi, Toshihiro Suzuki, Kenji Arakawa, and Haruyasu Kinashi
(Dept. Molecular Biotechnol., Grad. Sch. Adv. Sci. Mat., Hiroshima Univ., Japan)

P-AM08-19 (O-9)

Identification of key enzymes involved in spiroacetal formation in reveromycin A biosynthesis

○Shunji Takahashi, Takuto Kumano, Hiroshi Takagi, Toshihiko Nogawa, Eri Oowada, Suresh Panthee, Masakazu Uramoto, and Hiroyuki Osada
(Chem. Biol. Dept., RIKEN Adv. Sci. Inst., Japan)

P-AM08-20 (O-10)

***In vitro* reconstruction of post-PKS modification in RM-A biosynthesis**

○Takuto Kumano, Shunji Takahashi, and Hiroyuki Osada
(Chem. Biol. Dept., Adv. Sci. Inst., RIKEN, Japan)

P-AM08-21 (O-11)

Novel acetoacetyl-coenzyme A synthesizing enzyme of the thiolase superfamily involved in the mevalonate pathway

○Tomohisa Kuzuyama
(Biotechnol. Res. Cent., Univ. Tokyo, Japan)

P-AM08-22 (O-12)

Detection of fermented food microorganisms-producing bioactive cyclic dipeptides by enzymatic conversion-based method

○Hiroshi Kanzaki, Ayaka Takatsu, Yuu Fukuda, Man Chao, and Teruhiko Nitoda
(Grad. Sch. Natural Sci. Tech., Okayama Univ., Japan)

P-AM08-23 (O-13)

Biosynthetic pathway of new polyketides produced by *Streptomyces* sp. RK95-74

○Masashi Ueki¹, Naofumi Koshiro^{1,2}, Shunji Takahashi¹, Eri Oowada¹, Jun Ishikawa³, Atsushi Toyoda⁴, and Hiroyuki Osada¹
(¹Chem. Biol. Dept., RIKEN ASI, Japan; ²Mat. Sci. Eng., Tokyo Denki Univ., Japan; ³Dept. Bioactive Molecules, Natl. Inst. Infect. Dis., Japan; ⁴Natl. Inst. Genet, Japan)

P-AM08-24

Search for a new metabolic pathway by genome mining in *Streptomyces coelicolor*

○Kentarō Yanashima, Tomomi Matsui, Shunsuke Ikeda, and Tohru Dairi
(Grad. Sch. Eng., Hokkaido Univ., Japan)

P-AM08-25

Comprehensive analysis of terpene compounds from prokaryote

○Yu-ki Yamada, Takuma Uchiyama, Mamoru Komatsu, and Haruo Ikeda
(Kitasato Inst. Life Sci., Kitasato Univ., Japan)

P-AM08-26

Inhibitory selectivity of β -N-acetylglucosaminidase inhibitor TMG-chitotriomycin produced by *Streptomyces anulatus*

○Hiroto Shiota¹, Hirokazu Usuki^{2,3}, Hiroshi Kanzaki¹, and Teruhiko Nitoda¹
(¹The Grad. Sch. Natural Sci. Tech., Okayama Univ., Japan; ²Res. Inst. Biological Sci. (RIBS), Okayama Prefectural Technology Center for Agriculture, Forestry and Fisheries, Japan; ³ Research Fellow of the Japan Society for the Promotion of Science, Japan)

P-AM08-27

Characterization of glycosyltransferases in the biosynthesis of kanamycin and gentamicin

○Fumitaka Kudo¹, Hilda Sucipto², Kyohei Ota², and Tadashi Eguchi²
(¹Chemistry, Tokyo Inst. Tech., Japan; ²Chem. Mater. Sci., Tokyo Inst. Tech.)

P-AM08-28

Functional analysis of an epsilon-Poly-L-lysine synthetase homolog in *Saccharopolyspora erythraea*

○Naoko Kito, Takashi Utagawa, and Yoshimitsu Hamano
(Fukui Prefectural Univ., Japan)

P-AM08-29

New isonitrile hydratase from *Arthrobacter*: Characterization and identification of the active site

○Hiroyoshi Sato, Yoshiteru Hashimoto, and Michihiko Kobayashi
(Inst. Applied Biochemistry, and Grad. Sch. Life Environ. Sci., Univ. Tsukuba, Japan)

P-AM08-30

Purification and characterization of a hyaluronidase inhibitor produced by a marine actinomycete isolated from a marine organism

○Enjuro Harunari¹, Takeshi Terahara¹, Takeshi Kobayashi¹, Chiaki Imada¹, and Yasuhiro Igarashi²
(¹Tokyo Univ. Marine Sci. Tech., Japan; ²Toyama Prefectural Univ., Japan)

P-AM08-31

Functional characterization of diterpene cyclases found in *Streptomyces* genomes

○Ayuko Meguro¹, Satoshi Omura², Haruo Ikeda³, Makoto Nishiyama¹, Tomohisa Kuzuyama¹
(¹Biotechnol. Res. Cent., Univ. Tokyo¹, Japan; ²Kitasato Univ., Japan; ³Kitasato Inst. Life Sci., Kitasato Univ.)

P-AM08-32

Investigation of the epsilon-poly-L-lysine synthetase mechanism that determines the peptide chain length of enzymatic products

○Tomohiro Yoshimura¹, Kazuya Yamanaka¹, Akihiro Kita², Naoko Kito², Chitose Maruyama², and Yoshimitsu Hamano²
(¹JNC Corporation (Chisso Corporation); ²Fukui Prefectural Univ., Japan)

P-AM08-33

Xylanase from a novel strain of *Microbispora siamensis* DMKUA 245T: enzyme production and characterization

○Antika Boondaeng¹, Shinji Tokuyama², and Vichien Kitpreechavanich¹
(¹Microbiology, Kasetsart Univ., Thailand; ²Agri., Shizuoka Univ.)

P-AM08-34

A hydroxylation reaction necessary in the biosynthesis of an antitubercular antibiotic D-cycloserine

Takanori Kumagai, ○Kisho Takagi, Masafumi Noda, Kosuke Oda, Yasuyuki Matoba, and Masanori Sugiyama
(Dept. Molecular Microbiology and Biotechnology, Grad. Sch. Biomed. Sci., Hiroshima Univ., Japan)

P-AM08-35

Analysis of conjugative transfer of *Streptomyces avermitilis* linear plasmid SAPI

○Atsushi Suzuki¹, Takuya Matsuda¹, Haruo Ikeda¹, and Masakazu Kataoka¹
(¹Grad. Sch. Eng. Shinshu Univ., Japan; ²Kitasato Inst. Life Sci. Kitasato Univ., Japan)

P-AM08-36

The ATPase activity of TraB protein on *Streptomyces* plasmid pSN22 is essential for the conjugative transfer

○Yukihiro Fuseya, Tetsu Miyatake, and Masakazu Kataoka
(Grad. Sch. Eng., Shinshu Univ., Japan)

P-AM08-37

A novel insight of *Streptomyces* plasmid transfer: *clt* (*cis*-acting locus of plasmid transfer) of pSN22 functions in horizontal transfer of the chromosome and the plasmid

○Tetsu Miyatake and Masakazu Kataoka
(Grad. Sch. Eng., Shinshu Univ., Japan)

P-AM08-38

Self-inhibitor of spore germination in *Streptomyces* spp.

Yuu Aoki, Saori Kashiwagi, ○Mori Yokoyama, Hiroshi Kawaide and Masahiro Natsume
(Inst. Agri., Tokyo Univ. Agri. Tech., Japan)

P-AM08-39

Dramatic changes in phenotypic and biochemical properties of *Streptomyces* sp. 631689 through a spontaneous gentamicin resistance mutation

○Takeshi Hosaka¹, Tatsuya Fujiwara², Kikuo Sen² and Kozo Ochi³
(¹International Young Researchers Empowerment Center, Shinshu Univ., Japan; ²Faculty of Agriculture, Shinshu Univ., Japan; ³Faculty of Applied Information Sci., Hiroshima Inst. Technol, Japan)

P-AM08-40

Taxonomy and bioactive secondary metabolites of actinomycetes isolated from plants in Thailand

○Yuki Inahashi¹, Atsuko Matsumoto², Ousana Ongcharoenwut³, Panitch Boonsongcheep⁴, Sompop Prathanturarug⁴, Watanalai Panbangred³, Satoshi Ōmura² and Yōko Takahashi^{1,2}
(¹Grad. Sch. Infection Control Sci., Kitasato Univ., Japan; ²Kitasato Inst. Life Sci., Kitasato Univ.; ³MU-OU:CRC, Faculty of Science, Mahidol Univ., Thailand; ⁴Dept. Pharmaceutical Botany, Faculty of Pharmacy, Mahidol Univ.)

P-AM08-41

Taxonomic classification of new antibiotic producer, MK575-ff5

Naoko Kinoshita, ◯Masayuki Igarashi, Masaki Hatano, and Akio Nomoto
(Inst. Microbial Chemistry, Japan)

P-AM08-42

Taxonomic and ecological evaluation of actinomycetes isolated in Vietnam

◯Yayoi Sakiyama¹, Binh Thi Thanh Chu², Hang Thuy Dinh², Seishi Ikeda³, Shinji Miyadoh¹, Luong Thi Dao², Hop Van Duong², and Katsuhiko Ando¹

(¹Dept. Biotechnol., Natl. Inst. Technol. Eval., Japan; ²Inst. Microbiology and Biotechnology, Vietnam Natl. Univ., Vietnam; ³Memuro Research Station, Natl. Agri. Res. Cent. Hokkaido Region, Japan)

P-AM08-43

Phylogenetic analysis of acidophilic actinomycetes from Japan

◯Hideyuki Muramatsu¹, Ryuji Murakami², Kana Murakami², and Koji Nagai¹

(¹Fermentation Res. Div., Astellas Research Technologies Co., Ltd.; ²Pharmacology Research Labs, Astellas Pharma Inc.)

P-AM08-44

Potency of flagellin genes as a novel taxonomical marker for motile actinomycetes

◯Hideki Yamamura¹, Keitaro Hanawa¹, Aya Shimizu¹, Youji Nakagawa¹, Masami Kusunoki¹, Kazuo Nakamura¹, Moriyuki Hamada², Misa Ootoguro², Tomohiko Tamura², Nobuyuki Fujita², and Masayuki Hayakawa¹

(¹Division of Applied Biological Sci., Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan; ²NITE Biological Resource Center, Natl. Inst. Technol. Eval., Japan)

P-AM08-45

Diversity of actinomycete assemblages isolated from lichens in Japan

◯Haruna Ashizawa¹, Yuuya Sakuraki¹, Hideki Yamamura¹, Youji Nakagawa¹, Yuumi Ishida², Moriyuki Hamada², Misa Ootoguro², Tomohiko Tamura², and Masayuki Hayakawa¹

(¹Division of Applied Biological Sci., Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan; ²NITE Biological Resource Center, Natl. Inst. Technol. Eval., Japan)

P-AM08-46

Taxonomic study of four novel Actinoplanes isolates from soils in Japan

◯Aya Shimizu¹, Hideki Yamamura¹, Youji Nakagawa¹, Yuumi Ishida², Moriyuki Hamada², Misa Ootoguro², Tomohiko Tamura², and Masayuki Hayakawa¹

(¹Division of Applied Biological Sci., Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan; ²NITE Biological Resource Center, Natl. Inst. Technol. Eval., Japan)

P-AM08-47

Taxonomic study of *Actinoallomurus* strains isolated from plant roots

◯Ryo Koyama¹, Yuki Inahashi¹, Atsuko Matsumoto², Watanalai Panbangred³, Satoshi Ōmura² and Yōko Takahashi^{1,2}

(¹Grad. Sch. Infection Control Sci., Kitasato Univ., Japan; ²Kitasato Inst. Life Sci., Kitasato Univ., ³MU-OU:CRC, Faculty of Science, Mahidol Univ., Thailand)

P-AM08-48

Evaluation of newly discovered transglutaminase and taxonomy of the producing *Streptomyces* isolates

○Masashi Nishizawa¹, Masayo Date², Keiichi Yokoyama², Hideki Yamamura¹, and Masayuki Hayakawa¹

(¹Division of Applied Biological Sci., Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan; ²Ajinomoto Inst. Life Sci.)

P-AM08-49

Reconstruction of classification system of the family *Dermatophilaceae* with proposal of three new genera

○Moriyuki Hamada, Tomohiko Tamura, Takao Iino, and Ken-ichiro Suzuki
(NITE Biological Resource Center, Natl. Inst. Technol. Eval.)

P-AM08-50 (O-14)

Bioactive *Streptomyces* species isolated from desert soil in Riyadh, Kingdom of Saudi Arabia: Evaluation of their activity against human pathogenic bacteria and yeast

○Ismet Ara, Muneera Al-Othman, and Mohammad Abdul Bakir
(Dept. Botany and Microbiology, College of Science, Kingdom of Saudi Arabia)

P-AM08-51

Cultivable actinomycete diversity in coastal marine sediments of Thailand

○Wasu Pathom-aree¹, Kannika Duangmal², Yuki Inahashi³, Atsuko Matsumoto⁴, Yoko Takahashi⁴, Saisamorn Lumyong¹, and Michael Goodfellow⁵
(¹Dept. Biology, Chiang Mai Univ., Thailand; ²Dept. Microbiology, Kasetsart Univ., Thailand; ³Grad. Sch. Infection Control Sci., Kitasato Univ., Japan; ⁴Kitasato Inst. Life Sci., Kitasato Univ.; ⁵School of Biology, Univ. Newcastle, United Kingdom)

P-AM08-52

Actinomycetes diversity from Thai coastal marine sediment by culture independent approach

○Pornpun Ruttanasutja¹, Sakunnee Bovonsombut¹, Kui Hong², and Wasu Pathom-aree¹
(¹Dept. Biology, Faculty of Science, Chiang Mai Univ., Thailand; ²Inst. Tropical Biosciences and Biotechnology Chinese Academy of Tropical Agri. Sci., China)

P-AM08-53

Biodiversity and biotechnological potential of *Streptomyces* species from mountain soils of Kyrgyzstan

○Tinatin Doolotkeldieva, and S. T. Bobusheva
(Kyrgyz-Turkish International Univ., Kyrgyz Republic)

P-AM08-54

Diversity of actinomycetes associated with *Nostoc commune* Voucher ex Bornet & Flahault from North-eastern of Thailand

○Thanitsara Inthasotti, Yuwadee Peerapornpisal, Jeeraporn Pekkoh, and Wasu Pathom-aree (Biology, Faculty of Science, Chiang Mai Univ., Thailand)

P-AM08-55 (O-15)

Novel phenylacetylated peptides isolated from *Streptomyces* sp. and *Kibdelosporangium* sp

○Miho Izumikawa¹, Jun-ya Ueda¹, Ikuko Kozono¹, Hideki Yamamura², Masayuki Hayakawa², Motoki Takagi¹, and Kazuo Shinya³
(¹Japan Biological Informatics Consortium (JBIC); ²Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan; ³Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

P-AM08-56 (O-17)

Novel secondary metabolites produced by *Lechevalieria* sp. K10-0216 isolated from a mangrove sediment

Junya Ochiai¹, ○Takuji Nakashima², Atsuko Matsumoto³, Masato Iwatsuki³, Kazuro Shiomi^{1,3}, Satoshi Ōmura³, and Yōko Takahashi^{1,3}

(¹Grad. Sch. Infection Control Sci., Japan; ²Research Organization for Infection Control Sci., Japan; ³Kitasato Inst. Life Sci., Kitasato Univ., Japan)

P-AM08-57

Isolation of endophytic actinomycetes and the potential for production of useful secondary metabolites

Atsuko Matsumoto¹, ○Kazuki Tanaka², Yuki Inahashi², Risa Shimada², Satoshi Ōmura¹ and Yōko Takahashi^{1,2}

(¹Kitasato Inst. Life Sci.; ²Grad. Sch. Infection Control Sci., Kitasato Univ., Japan)

P-AM08-58

Panowamycins A and B, new antitrypanosomal isochroman compounds produced by *Streptomyces* sp. K07-0010

○Junko Hashida¹, Megumi Niitsuma¹, Masato Iwatsuki², Mihoko Mori¹, Aki Ishiyama², Miyuki Namatame², Aki Nishihara-Tsukashima², Atsuko Matsumoto¹, Yoko Takahashi¹, Haruki Yamada¹, Kazuhiko Otoguro², Satoshi Ōmura¹ and Kazuro Shiomi¹

(¹Laboratory of Biological Functions, Kitasato Inst. Life Sci., Kitasato Univ., Japan; ²Res. Cent. Tropical Diseases, Kitasato Inst. Life Sci., Kitasato Univ., Japan)

P-AM08-59

Selective isolation of *Rhodococcus* species using an alkaline-SDS pretreatment technique

○Shingo Takano¹, Hideki Yamamura¹, Youji Nakagawa¹, Moriyuki Hamada², Misa Otoguro², Tomohiko Tamura², and Masayuki Hayakawa¹

(¹Division of Applied Biological Sci., Interdisciplinary Grad. Sch. Med. Eng., Univ. Yamanashi, Japan; NITE Biological Resource Center, Natl. Inst. Technol. Eval., Japan)

P-AM08-60

Isolation of secondary metabolites from *Streptomyces* sp. RK95-74.

○Naofumi Koshiro^{1,2}, Masashi Ueki¹, Masakazu Uramoto¹, Hisashi Kawasaki², and Hiroyuki Osada¹.
(¹Chem. Biol. Dept., RIKEN ASI; ²Mat. Sci. Eng., Tokyo Denki Univ., Japan)

P-AM08-61

New bioactive compounds generated by biosynthetic engineering of the classic antibiotic, streptothricine

○Chitose Maruyama¹, Jun-ya Toyoda¹, Aika Yano¹, Hajime katano¹, Yasuo Kato², Motoki Takagi³, Kazuo Shin-ya⁴, Takashi Utagawa¹, and Yoshimitsu Hamano¹

(¹Fukui Prefectural Univ., Japan; ²Toyama Prefectural Univ., Japan; ³Biomedical Information Research Center, Japan Biological Informatics Consortium; ⁴Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

P-AM08-62

A novel anthraquinone derivative from *Streptomyces reveromyceticus* identified by using Fraction Library Database

○Hiroshi Takagi, Toshihiko Nogawa, Shunji Takahashi, Akiko Okano, Masakazu Uramoto and Hiroyuki Osada.

(Chem. Biol. Dept., Adv. Sci. Inst., RIKEN, Japan)

P-AM08-63

Actinomycetes isolated from mangrove soils and their secondary metabolites

○Aya Nagai¹, Shams Tabrez Khan¹, Motoki Takagi¹, and Kazuo Shin-ya²

(¹Japan Biological Informatics Consortium; ²Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

P-AM08-64

Natural product library with secondary metabolites isolated from the cultures of actinomycetes

○Motoki Takagi¹, Kazuo Shin-ya²

(¹Japan Biological Informatics Consortium; ²Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

P-AM08-65

Selective isolation of *Micromonospora* from marine sediments

○Takeshi Terahara, Takeshi Kobayashi, and Chiaki Imada

(Grad. Sch. Marine Sci. Tech., Tokyo Univ. Marine Sci. Tech., Japan)

P-AM08-66 (O-16)

New aspects of chemical biology using tautomycetin produced by *Streptomyces griseochromogenes*

○Makoto Ubukata, Ying Li, and Shinya Mitsushashi

(Grad. Sch. Agri., Hokkaido Univ., Japan)

P-AM08-67

Antimicrobial antibiotic production in actinomycetes influenced by cultural medium

○Rattanaorn - Srivibool

(Marine Biotechnol. Unit, Inst. Marine Sci., Burapha Univ., Thailand)

P-AM08-68

Identification of a Philippine *Streptomyces* isolate and its bioactive compound against methicillin-resistant *Staphylococcus aureus*

○Teofila O. Zulaibar¹, Irene A. Papa¹, Maria Teresa M. Perez¹, Eufrocino C. Marfori¹, Edwin A. Alcantara¹, Pauline Angeli T. Roxas², Takuya Nihira³, and Shigeru Kitani³

(¹BIOTECH Univ. the Philippines Los Banos; ²Inst. Chemistry Univ. Philippines; ³IC BIOTECH, Osaka Univ.)

P-AM08-69

Novel furaquinocins isolated from *Streptomyces reveromyceticus*

○Suresh Panthee, Shunji Takahashi, Hiroshi Takagi, Toshihiko Nogawa, Eri Oowada, Masakazu Uramoto, and Hiroyuki Osada

(Chem. Biol. Dept., RIKEN Adv. Sci. Inst., Japan)

P-AM08-70 (O-18)

3,6,7-tri-*epi*-invictolide, a diastereomer of queen recognition pheromone, and its analog from a marine derived actinomycete

○Fumie Iwata, Seizo Sato, Shoichi Yamada, and Hiroyuki Kawahara

(Central Research Laboratory, Nippon Suisan Kaisha, Ltd., Japan)

P-AM08-71 (O-19)

Enhancing biocatalytic production of 25-hydroxyvitamin D3 by the site-directed mutagenesis on the molecular surface of vitamin D3 hydroxylase (P450 Vdh)

○Taiki Nishioka¹, Noriko Imoto¹, Yoshiaki Yasutake², and Tomohiro Tamura^{1,2}

(¹Grad. Sch. Agri., Hokkaido Univ., Japan; ²Bioproduction Res. Inst., Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

P-AM08-72 (O-20)

Rpf-like protein from *Tomitella biformata* promotes the growth and resuscitates from non-dividing state

○Indun Dewi Puspita¹, Moe Uehara¹, Taiki Katayama², Michiko Tanaka¹, Yoichi Kamagata^{1,2}, and Kozo Asano¹

(¹Grad. Sch. Agri., Hokkaido Univ., Japan; ²Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

P-AM08-73 (O-21)

Studies on substances which promote colony formation of bacteria produced by actinomycetes

○Ryo Kawai, Tetsuya Yamada, Noritomo Fujino, Hiromichi Nagasawa, and Shohei Sakuda (Dept. Applied Biological Chemistry, Univ. Tokyo, Japan)

P-AM08-74

Analysis of the terminal sequence, deletion, and circularization of the linear chromosome of *Streptomyces rochei*

○Zhisheng Cao,¹ Yosi Nindita,¹ Yusuke Kataoka,¹ Yingjie Yang,¹ Kenji Arakawa,¹ Michihira Tagami,² Alexander Lezhava,² Yuh Shiwa,³ Hirofumi Yoshikawa³ and Haruyasu Kinashi¹

(¹Dept. Molecular Biotechnol., Hiroshima Univ., Japan; ²RIKEN Omics Science Center; ³Dept. Bio-science, Tokyo Univ. Agri., Japan)

P-AM08-75

Identification of quorum quenching strain MM336-mF1

○Masaki Hatano, Naoko Kinoshita, Masayuki Igarashi, and Akio Nomoto (Inst. Microbial Chemistry, Tokyo, Japan)

P-AM08-76

Genome wide localization analysis of BphT1 binding region on *Rhodococcus jostii* RHA1

○Yuki Atago¹, Hirofumi Hara¹, Jun Shimodaira², Naoto Araki², Masao Fukuda², and Takashi Hatta¹ (¹Dept. Biomed. Eng., Okayama Univ. Sci. Japan; ²Dept. Bioengineering, Nagaoka Univ. Tech., Japan)

P-AM08-77

A spontaneous erythromycin resistance mutation in *Streptomyces lividans* elicits an ability to produce antibacterial compounds

○Yu Imai¹, Tatsuya Fujiwara¹, Kikuo Sen², Kozo Ochi³, and Takeshi Hosaka⁴ (¹Grad. Sch. Agri., Shinshu Univ., Japan; ²Faculty of Agriculture, Shinshu Univ.; ³Faculty of Applied Information Science, Hiroshima Inst. Technol., Japan; ⁴International Young Researchers Empowerment Center, Shinshu Univ.)

P-AM08-78

The essential sequence for transcriptional regulation of biphenyl/polychlorinated biphenyls-degradation gene promoters in *Rhodococcus jostii* RHA1

○Jun Shimodaira¹, Yuta Miyazawa¹, Yuki Furusawa¹, Hisashi Takeda², Daisuke Kasai¹, Keisuke Miyachi³, Eiji Masai¹, and Masao Fukuda¹

(¹Dept. Bioengineering, Nagaoka Univ. Tech., Japan; ²Dept. Applied Microbiology, Hoshi Univ., Japan; ³Dept. Civil Environ. Eng., Tohoku Gakuin Univ., Japan)

P-AM08-79

Analysis of mechanosensitive channels of *Corynebacterium glutamicum* expressed in *Bacillus*

subtilis

○Ken-ichi Hashimoto, Isamu Yabe, Tsuyoshi Nakamatsu, and Hisashi Kawasaki
(Dept. Green and Sustainable Chemistry, Tokyo Denki Univ., Japan)

P-AM08-80

Biological control of strawberry anthracnose by Actinomycetes

Choko Hara, and ○Shinji Tokuyama
(Faculty of Agriculture, Shizuoka Univ., Japan)

P-AM08-81

Profiling of actinomycetes' secondary metabolites by UPLC-TOF-MS

○Ikuko Kozone¹, Motoki Takagi¹, and Kazuo Shin-ya²
(¹Japan Biological Informatics Consortium (JBIC); ²Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan)

P-AM08-82

Improvement of PLA-degrading enzyme production by *Actinomadura keratinilytica* strain T16-1 in airlift fermenter using response surface methodology

○Sukhumaporn Sukkhum¹, Vichien Kitpreechavanich²
(¹Biology, Faculty of Sci., Srinakharinwirot Univ., Thailand; ²Microbiology, Faculty of Science, Kasetsart Univ., Thailand)

P-AM08-83

A novel antibiotic protein and the genes identified from *Rhodococcus erythropolis* JCM2895

○Wataru Kitagawa^{1,2}, Miyako Hata¹, and Tomohiro Tamura^{1,2}
(¹Bioproduction Res. Inst., Natl. Inst. Adv. Ind. Sci. Technol. (AIST), Japan; ²Grad. Sch. Agri., Hokkaido Univ., Japan)

P-AM08-84

Genetic analysis of a gram negative wide host-range plasmid pJRD215 and its application to oral *Actinomyces* spp.

○Chiho Mashimo, Takayuki Nambu, Kazuyoshi Yamane, Takeshi Yamanaka, and Hisanori Fukushima
(Dept. Bacteriology, Osaka dental Univ., Japan)

P-AM08-85

Functional analysis of the RNase E/G family endoribonuclease in an industrially important bacterium, *Corynebacterium glutamicum*

○Tomoya Maeda, and Masaaki Wachi
(Dept. Bioengineering, Tokyo Inst. Tech., Japan)

P-AM08-86

Analysis of biofilm and aggregation in *Rhodococcus* sp. SD-74

○Takuma Kikuko, Tomohiro Inaba, Toshiaki Nakajima, Hiroo Uchiyama, and Nobuhiko Nomura
(Grad. Sch. Life Environ. Sci., Univ. Tsukuba, Japan)

P-AM08-87

Analysis of regulatory mechanism of trehalose lipids production in *Rhodococcus* sp.

○Tomohiro Inaba, Takuma Kikuko, Toshiaki Nakajima-Kambe, Hiroo Uchiyama, and Nobuhiko Nomura
(Grad. Sch. Life Environ. Sci., Univ. Tsukuba, Japan)

P-AM08-88

Growth promoting compound for *Catellibacterium nectariphilum* produced by *Sphingomonas* sp.

○Andrew Boey¹, Kengo Shigetomi¹, Shinya Mitsuhashi¹, Yasuhiro Tanaka², Hideyuki Tamaki¹, Yoichi Kamagata¹, and Makoto Ubukata¹

(¹Grad. Sch. Agri., Hokkaido Univ., Japan; ²Yamanashi Univ., Japan)

P-AM08-89

Production of 14-membered macrolide antibiotic by deletion of polyketide synthase gene in *Streptomyces* strain

○Doo Hyun Nam, Nguyen Phan Kieu Hanh, Hyo Sun Kim, and Ji Seon Lee
(College of Pharmacy, Yeungnam Univ., South Korea)

P-AM08-90

The biochemical characterization of two acyl-CoA carboxylase complexes in *Streptomyces toxytricini*

○Doo Hyun Nam, Bo Ram Park, and Anamika Khanal
(College of Pharmacy, Yeungnam Univ., South Korea)

P-AM08-91

Screening of actinomycetes from plant rhizospheric soils with inhibitory activity against *Colletotrichum* spp.

○Watanalai Panbangred, Bungonsiri Intra^{1,2}, Isada Mungsuntisuk^{1,2}, Takuya Nihira³, and Yasuhiro Igarashi⁴

(¹Dept. Biotechnol., Faculty of Science, Mahidol Univ.; ²Mahidol Univ.-Osaka Univ. Collaborative Research Center for Bioscience and Biotechnology (MU-OU:CRB), Faculty of Science, Mahidol Univ., Thailand; ³Osaka Univ., International Center for Biotechnology, Japan; ⁴Toyama Prefectural Univ., Japan)

P-AM08-92

Molecular detection of inulin fructotransferase (DFA III-producing) gene in *Nonomuraea* strains

○Sri Pudjiraharti^{1,2}, Nanami Takano¹, Ayumi Abe¹, Michiko Tanaka¹, Teruo Sone¹, and Kozo Asano¹
(¹Grad. Sch. Agri., Hokkaido Univ., Japan; ²Research Centre for Chemistry, Indonesian Inst. Sci., Indonesia)

IUMS2011 Symposium on Bioactive Microbial Products

Date: Sep. 7 (Wed.), 2011

Place: Sapporo Convention Center

Organizer: The Society for Actinomycetes Japan (SAJ) and Japan Antibiotics Research Association (JARA)

Program:

Session 1, Biosynthesis

1. Structural and mechanistic understanding of Type I iterative polyketide synthases and their potential for unnatural product synthesis.

Craig A. Townsend (John Hopkins Univ., USA)

2. Recent progress on enzymatic construction of natural polyethers.

Hideaki Oikawa (Hokkaido Univ., Japan)

3. Biosynthesis of macrolactam antibiotic vicenistatin.

Fumitaka Kudo (Tokyo Inst. Tech., JAPAN)

4. Structural basis for the regio- and stereo-specific diterpene cyclization cascade.

Tomohisa Kuzuyama (Univ. Tokyo, Japan)

Session 2, Screening & Ecology

1. Anticancer drug discovery from marine cyanobacteria.

William H. Gerwick (Univ. California San Diego, USA)

2. Antiatherosclerotic activity of fungal pyripypopene A and its derivatives in mouse models.

Hiroshi Tomoda (Kitasato Univ., Japan)

3. Discovery of fungal metabolites modulating cellular responses.

Jong Seog Ahn (KRIBB, Korea)

4. Mycolic-acid-containing bacteria induce natural-product biosynthesis in *Streptomyces*.

Hiroyasu Onaka (Toyama Pref. Univ., Japan)

5. Thinking of primary roles of secondary metabolites: unknown properties of known substances from *Streptomyces*.

Kenji Ueda (Nihon Univ., Japan)

Session 3, Biological Activity

1. Target identification with natural products based substances – a pharmaceutical perspective.

Frank Petersen (Novartis, Germany)

2. Metabolomic identification of the target of the filopodia protrusion inhibitor glucopiericidin -A.

Masaya Imoto (Keio Univ., Japan)

3. Anti-infective assays / screening libraries: which combination is best?

Ronald J. Quinn (Griffith Univ., Australia)

4. Deciphering of reveromycin A biosynthesis and the production of novel derivatives.

Shunji Takahashi (RIKEN, Japan)

5. Small molecule modulators of host-tumor interactions: new candidates for antitumor drugs

Manabu Kawada (Inst. Microbial Chem., Japan)

The 2012 Annual Meeting of the Society for Actinomycetes Japan

Chair parson: Masahiro Natsume (Tokyo University of Agriculture and Technology)

The 2012 annual meeting of SAJ will be held in September 2012 in Tokyo, Japan. We look forward to welcoming you to participate in the meeting and to submit papers

Updated information will be provided on the SAJ Home Page: <http://www.nih.go.jp/saj/index-e.html>

General Outline

Dates: September 6 (Thu) – 7 (Fri), 2012

Venue: Fuchu-no-mori Art Theater

1-12 Sengen-Cho, Fuchu 183-0001, Japan

TEL: +81-42-335-6211 <http://www.fuchu-cpf.or.jp/theater/>

Registration fee including abstracts:

SAJ member	8,000 yen (6,000 yen until June 16, 2012)
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Non-member	10,000 yen (8,000 yen until June 16, 2012)
Abstracts only	2,000 yen

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Reception: September 6 (Thu), 2012 at Fuchu-no-mori Art Theater

Fee: SAJ member	10,000 yen (8,000 yen until June 16, 2012)
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Deadline for submission of abstracts: June 30, 2012

For further information contact:

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