

## Poster Presentation

1st day, September 13th (Wed)

**P1-1 New Stage of Extraction of Essential Oils in Plants Using Betaine-Based Deep Eutectic Solvent**

(<sup>1</sup> Faculty of Science and Technology, Sophia University, <sup>2</sup> Ebisu Kagaku Co., Ltd.)  
Natsuki Mori<sup>1</sup>, Rina Yasutomi<sup>1</sup>, Masamitsu Urakawa<sup>2</sup>, Toyonobu Usuki<sup>1</sup>

**P1-2 Exploring the Path to Discover New Natural Products through Rare Actinomycetes in the Genus *Phytohabitans***

(<sup>1</sup> Biotechnology Research Center and Department of Biotechnology, Toyama Prefectural University, <sup>2</sup> Faculty of Science and Technology, Keio University, <sup>3</sup> Graduate School of Health Sciences, Gunma University, <sup>4</sup> Showa Pharmaceutical University, <sup>5</sup> NBRC)  
Desy Wulan Triningsih<sup>1</sup>, Enjuro Harunari<sup>1</sup>, Shun Saito<sup>2</sup>, Xiaohanyao Ye<sup>1</sup>, Shunsuke Mae<sup>1</sup>, Tao Zhou<sup>1</sup>, Keisuke Fukaya<sup>1</sup>, Junko Nakajima-Shimada<sup>3</sup>, Etsu Tashiro<sup>4</sup>, Moriyuki Hamada<sup>5</sup>, Narumi Enomoto<sup>5</sup>, Tomohiko Tamura<sup>5</sup>, Hisayuki Komaki<sup>5</sup>, Naoya Oku<sup>1</sup>, Daisuke Urabe<sup>1</sup>, Yasuhiro Igarashi<sup>1</sup>

**P1-3 Synthesis and Identification of Decarbamoyloxysaxitoxins in Toxic Microalgae, and Prediction of Biosynthetic Pathway**

(<sup>1</sup> Graduate School of Agricultural Science, Tohoku University, <sup>2</sup> Graduate School of Engineering, Tokyo University of Agriculture and Technology, <sup>3</sup> Frontier Research Institute for Interdisciplinary Sciences, Tohoku University, <sup>4</sup> Graduate School of Life Sciences, Tohoku University)  
Mayu Hakamada<sup>1</sup>, Chihiro Tokairin<sup>1</sup>, Hayate Ishizuka<sup>2</sup>, Kanna Adachi<sup>2</sup>, Toma Osawa<sup>2</sup>, Ryosuke Hirozumi<sup>1</sup>, Shigeki Tsuchiya<sup>1</sup>, Yuko Cho<sup>1</sup>, Yuta Kudo<sup>1,3</sup>, Keiichi Konoki<sup>1</sup>, Yasukatsu Oshima<sup>4</sup>, Kazuo Nagasawa<sup>2</sup>, Mari Yotsu-Yamashita<sup>1</sup>

**P1-4 Structure and Content of Catechinopyranocyanidin A, B and Their Analogues in Seed-Coat of Various Adzuki Bean**

(<sup>1</sup> Faculty of Engineering Aichi Institute of Technology, <sup>2</sup> Graduate School of Informatics, Nagoya University, <sup>3</sup> Research Center for Materials Science, Nagoya University, <sup>4</sup> Faculty of Pharmacy, Meijo University, <sup>5</sup> National Institute of Health Sciences)  
Kumi Yoshida<sup>1,2</sup>, Mizuki Yoshimine<sup>2</sup>, Seiji Hagihara<sup>2</sup>, Tomoyo Asano<sup>2</sup>, Yoko Takayama<sup>2</sup>, Kohei Kazuma<sup>2</sup>, Tadao Kondo<sup>2</sup>, Kin-ichi Oyama<sup>3</sup>, Yoshiaki Takaya<sup>4</sup>, Yuzo Nishizaki<sup>5</sup>

**P1-5 The Efficient Isolation Method of Dimeric Nuphar Alkaloids and Their Structure-Activity Relationship for TRPV1**

(<sup>1</sup> School of pharmacy, Kitasato University, <sup>2</sup> Research Center for Medicinal Plant Resources, National Institutes of Biomedical Innovation, Health and Nutrition, <sup>3</sup> National Institute of Health Sciences, <sup>4</sup> Yokohama University of Pharmacy, <sup>5</sup> Faculty of Pharmacy, Meijo University)  
Tomohisa Kanai<sup>1</sup>, Shunsuke Nakamori<sup>1</sup>, Tatsuya Shirahata<sup>1</sup>, Megumi Hiraoka<sup>1</sup>, Shogo Taniguchi<sup>1</sup>, Noriaki Kawano<sup>2</sup>, Kayo Yoshimatsu<sup>2</sup>, Toshiko Kagawa-Tanaka<sup>3</sup>, Takuro Maruyama<sup>4</sup>, Yoshinori Kobayahi<sup>1</sup>

- P1-6 Screening for Secondary Metabolites from Fusion Cells of Actinobacteria**  
 (<sup>1</sup> Faculty of Chemistry and Biochemistry, Kanagawa University, <sup>2</sup> National Institute of Advanced Industrial Science and Technology)  
 Kazuki Nishimoto <sup>1</sup>, Koshi Kurokawa <sup>1</sup>, Mizuki Tsuji <sup>1</sup>, Shimpei Sumimoto <sup>1</sup>,  
 Wataru Kitagawa <sup>2</sup>, Masahiro Okada <sup>1</sup>
- P1-7 Co-Culture of Pathogenic Fungi *Aspergillus* Species and Immune Cells for Activating Silent Genes**  
 (<sup>1</sup> Faculty of Science and Technology, Keio University, <sup>2</sup> Graduate School of Pharmaceutical Sciences, Chiba University, <sup>3</sup> Faculty of Agriculture, Kagawa University, <sup>4</sup> Biotechnology Research Center and Department of Biotechnology, Toyama Prefectural University, <sup>5</sup> Department of Pharmaceutical Sciences, University of Shizuoka, <sup>6</sup> Faculty of Pharmaceutical Sciences, Teikyo Heisei University, <sup>7</sup> College of Bioresource Sciences, Nihon University, <sup>8</sup> Medical Mycology Research Center, Chiba University, <sup>9</sup> NITENBRC, <sup>10</sup> IUHW)  
Yukiko Ujie <sup>1</sup>, Shun Saito <sup>1</sup>, Ruri Kuwabara <sup>2</sup>, Yasumasa Hara <sup>2,3</sup>, Keisuke Fukaya <sup>4</sup>,  
 Daisuke Urabe <sup>4</sup>, Shinji Kishimoto <sup>5</sup>, Kenji Watanabe <sup>5</sup>, Yoshikuni Goto <sup>6</sup>,  
 Kenji Ogawa <sup>7</sup>, Yoko Kusuya <sup>8,9</sup>, Hiroki Takahashi <sup>8</sup>, Takashi Yaguchi <sup>8</sup>,  
 Masami Ishibashi <sup>2,10</sup>, Midori A. Arai <sup>1</sup>
- P1-8 Scalable Syntheses of Fostriecin and Leucascandrolide a Macrolactone Using Chiral Phosphoric Acid/Cux Combined Catalytic System**  
 (Graduate School of Science, Tohoku University)  
Shigenobu Umemiya, Naoya Shinagawa, Masahiro Terada
- P1-9 Stereodivergent Approach toward Pancreatistatin Derivatives**  
 (Faculty of Pharmaceutical Sciences, Tokushima University)  
Chunzhao Sun, Tsubasa Inokuma, Ken-ichi Yamada
- P1-10 Strategy for the Construction of a Structurally Diverse Chemical Library from Macrocyclic Natural Product Brefeldin A**  
 (<sup>1</sup> Faculty of Pharmacy, Keio University, <sup>2</sup> Graduate School of Pharmaceutical Sciences, Tohoku University)  
Takehiro Nishimura <sup>1</sup>, Kosuke Shiga <sup>2</sup>, Yuki Sato <sup>2</sup>, Ken Ataka <sup>1</sup>, Akihiro Sugawara <sup>2</sup>,  
 Haruhisa Kikuchi <sup>1</sup>
- P1-11 Synthetic Studies towards Natural Cyclic Peptide Ogipeptins and Their Derivatives**  
 (<sup>1</sup> Daiichi Sankyo RD Novare Co., Ltd., <sup>2</sup> Yamaguchi University)  
Shingo Takiguchi <sup>1</sup>, Hidehito Homma <sup>1</sup>, Tetsunori Fujisawa <sup>1</sup>, Yuki Hirota-Takahata <sup>1</sup>,  
 Yasunori Ono <sup>1</sup>, Masaaki Kizuka <sup>1</sup>, Satomichi Yoshimura <sup>1,2</sup>, Hiroshi Maruoka <sup>1</sup>,  
 Shinji Marumoto <sup>1</sup>
- P1-12 Total Synthesis of (+)-*ent*-Vetiverianine A**  
 (Synthetic Medicinal Chemistry, Hoshi University)  
Tomoya Mashiko, Eiji Nagata, Hisaaki Sakate, Shogo Kamo, Kazuyuki Sugita

- P1-13 Synthesis of Drimane-8 $\alpha$ ,11-diol Using Terpene Cyclase from *Bacillus megaterium***  
(<sup>1</sup> Graduate School of Science, Osaka Metropolitan University, <sup>2</sup> Graduate School of Science, Kyushu University, <sup>3</sup> Graduate School of Science and Technology, Niigata University)  
Seiya Endo<sup>1</sup>, Keita Ozawa<sup>1</sup>, Eigo Fukuda<sup>1</sup>, Atsushi Nakayama<sup>1</sup>, Yoko Yasuno<sup>1,2</sup>, Daijiro Ueda<sup>3</sup>, Tsutomu Sato<sup>3</sup>, Tetsuro Shinada<sup>1</sup>
- P1-14 Syntheses of Tricyclic Diterpenes Based on Convergent Reverse Two-Phase Strategy**  
(Faculty of Pharmacy, Keio University)  
Riichi Hashimoto, Kengo Hanaya, Shuhei Higashibayashi, Takeshi Sugai
- P1-15 Synthesis of Isoindolinone Derivatives Isolated from the Fungi Belonging to the *Xylariaceae* Family**  
(Faculty of Pharmaceutical Sciences, Josai University)  
Hitoshi Kamauchi, Yoshiaki Sugita
- P1-16 Synthetic Studies on Nagelamide Q**  
(Graduate School of Pharmaceutical Sciences, Tokushima University)  
Kodai Kawata, Ryuji Okamoto, Koki Kato, Karanjit Sangita, Ryota Sato, Kosuke Namba
- P1-17 Rediscovery of an Anti-Drug Resistant Gram-Positive Bacterial Substance, Tetronomycin, and Analysis of Its Mechanism of Action**  
(<sup>1</sup> Graduate School of Infection Control Sciences, Kitasato University, <sup>2</sup> Ōmura Satoshi Memorial Institute, Kitasato University, <sup>3</sup> Kowa Company, Ltd.)  
Iori Tsuruoka<sup>1</sup>, Aoi Kimishima<sup>1,2</sup>, Hiroki Kanto<sup>1</sup>, Hayama Tsutsumi<sup>1,2</sup>, Naoaki Arima<sup>3</sup>, Kazunari Sakai<sup>3</sup>, Miho Sugamata<sup>1,2</sup>, Hidehito Matsui<sup>1,2</sup>, Yoshihiro Watanabe<sup>1,2</sup>, Masato Iwatsuki<sup>1,2</sup>, Masako Honsho<sup>1,2</sup>, Kamrun Naher<sup>2</sup>, Sota Homma<sup>1,2</sup>, Yuki Inahashi<sup>1,2</sup>, Hideaki Hanaki<sup>1,2,3</sup>, Yukihiko Asami<sup>1,2</sup>
- P1-18 Functional Modification of Flavin-Containing Monooxygenase through Machine Learning Methodology**  
(<sup>1</sup> Department of Pharmaceutical Sciences, University of Shizuoka, <sup>2</sup> National Institute of Advanced Industrial Science and Technology, <sup>3</sup> Graduate School of Frontier Sciences, The University of Tokyo, <sup>4</sup> Kitasato University)  
Takuma Matsushita<sup>1</sup>, Shinji Kishimoto<sup>1</sup>, Yutaka Saito<sup>2,3,4</sup>, Kenji Watanabe<sup>1</sup>
- P1-19 A C-C Bond Formation through the Transfer of a Breslow Intermediate between Two Distinct Thiamine Diphosphate-Dependent Enzymes**  
(<sup>1</sup> Graduate School of Agricultural and Life Sciences, The University of Tokyo, <sup>2</sup> CRIIM, The University of Tokyo)  
Yuxun Zhu<sup>1</sup>, Taro Shiraishi<sup>1</sup>, Atsuro Ito<sup>1</sup>, Yusuke Ogura<sup>1</sup>, Makoto Nishiyama<sup>1,2</sup>, Tomohisa Kuzuyama<sup>1,2</sup>
- P1-20 Heterologous Production of New Lanthipeptides Melittapeptins A-C**  
(<sup>1</sup> Faculty of Agriculture, Shizuoka University, <sup>2</sup> NARO)  
Pratchaya Rukthanapitak<sup>1</sup>, Issara Kaweewan<sup>1</sup>, Hiroyuki Nakagawa<sup>2</sup>, Shinya Kodani<sup>1</sup>

**P1-21 Isolation, Structure Determination, Biological Activity and Synthetic Study on Terukufazolines from an Undescribed Marine Cyanobacterium Collected in Aguni Island**

(<sup>1</sup> Faculty of Science and Technology, Keio University, <sup>2</sup> Faculty of Science and Engineering, Chuo University, <sup>3</sup> Graduate School of Bioagricultural Sciences, Nagoya University, <sup>4</sup> Faculty of Medicine, The University of Tokyo)

Raimu Taguchi<sup>1</sup>, Akira Ebihara<sup>1</sup>, Yuta Tsunematsu<sup>3</sup>, Ghulam Jeelani<sup>4</sup>, Tomoyoshi Nozaki<sup>4</sup>, Kiyotake Suenaga<sup>1</sup>, Arihiro Iwasaki<sup>2</sup>

**P1-22 Structural Optimization of the Toxic Dimer and Trimer Models of Amyloid  $\beta$ 40**

(<sup>1</sup> Graduate School of Agriculture, Kyoto University, <sup>2</sup> Nihon Waters, K. K., <sup>3</sup> Shiga University of Medical Sciences, <sup>4</sup> Faculty of Agriculture, Kagawa University, <sup>5</sup> Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama)

Kazuhiro Irie<sup>1</sup>, Ayumi Uchino<sup>1</sup>, Ayaka Chikugo<sup>1</sup>, Yumi Irie<sup>1</sup>, Chihiro Tsukano<sup>1</sup>, Taiji Kawase<sup>2</sup>, Kenji Hirose<sup>2</sup>, Yusuke Kageyama<sup>3</sup>, Ikuo Tooyama<sup>3</sup>, Ryo C. Yanagita<sup>4</sup>, Takahito Maki<sup>5</sup>, Toshiaki Kume<sup>5</sup>

**P1-23 Chemical Studies on Fairy Chemicals Derivatives**

(<sup>1</sup> Graduate School of Science and Technology, Shizuoka University, <sup>2</sup> Graduate School of Integrated Science and Technology, Shizuoka University, <sup>3</sup> Research Institute of Green Science and Technology, Shizuoka University, <sup>4</sup> Department of Applied Life Sciences, Shizuoka University, <sup>5</sup> Research Institute for Mushroom Science, Shizuoka University)

Sota Ino<sup>1</sup>, Takahiro Abe<sup>3</sup>, Jin Wu<sup>4,5</sup>, Jee-Hoon Choi<sup>1-5</sup>, Hirofumi Hirai<sup>1-5</sup>, Hirokazu Kawagishi<sup>4,5</sup>

## 2nd day, September 14th (Thu)

### **P2-1 Complete Assignment of Main Product Ions from Ciguatoxin CTX3C [M+H]<sup>+</sup> as a Precursor Ion through LC/APCI/Q-TOF/MS**

(<sup>1</sup> Graduate School of Tokyo University of Agriculture, <sup>2</sup> Agilent Technologies, <sup>3</sup> Graduate School of Applied Bioscience, Tokyo University of Agriculture, <sup>4</sup> Japan Food Research Laboratories)

Ryogo Ukai<sup>1</sup>, Hideaki Uchida<sup>2</sup>, Kouichi Sugaya<sup>3</sup>, Jun-ichi Onose<sup>3</sup>, Naoki Abe<sup>3</sup>, Takeshi Yasumoto<sup>4</sup>

### **P2-2 Novel Triterpene Glycosides from *Saponaria officinalis* Seeds and Apoptosis-Inducing Activity**

(<sup>1</sup> School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, <sup>2</sup> School of Life Sciences, Tokyo University of Pharmacy and Life Sciences)

Naoki Takahashi<sup>1</sup>, Tomoki Iguchi<sup>1</sup>, Minpei Kuroda<sup>1</sup>, Remina Shirai<sup>2</sup>, Masaki Mishima<sup>1</sup>, Junji Yamauchi<sup>2</sup>, Yoshihiro Mimaki<sup>1</sup>

### **P2-3 Study on the Structural Analysis of Novel Long Carbonchain Polyols, Amdigenols I, L and M, Produced by the Dinoflagellate *Amphidinium* sp.**

(<sup>1</sup> Graduate School of Natural Science and Technology, Gifu University, <sup>2</sup> Faculty of Engineering, Gifu University, <sup>3</sup> Life Science Research Center, Gifu University)

Hatsuki Tobo<sup>1</sup>, Ryo Sugiki<sup>1</sup>, Yasuhiro Kubota<sup>2</sup>, Kazumasa Funabiki<sup>2</sup>, Toshiyasu Inuzuka<sup>3</sup>

### **P2-4 Development of AI-Based Image Classification Model for the Discovery of Osteoclastogenic Inhibitors and Screening of Natural Products**

(<sup>1</sup> Graduate School of Pharmaceutical Sciences, Kumamoto University, <sup>2</sup> Faculty of Advanced Science and Technology, Kumamoto University)

Mako Hokaguchi<sup>1</sup>, Yuki Hitora<sup>1</sup>, Takumi Higaki<sup>2</sup>, Sachiko Tsukamoto<sup>1</sup>

### **P2-5 Structural Determination of Resveratrol Hexamers in *Vatica bantamensis***

(<sup>1</sup> Gifu University of Medical Science, <sup>2</sup> Gifu Pharmaceutical University, <sup>3</sup> Institute of Microbial Chemistry, <sup>4</sup> Chubu University)

Tetsuro Ito<sup>1,2</sup>, Yasumasa Hara<sup>2</sup>, Ryuichi Sawa<sup>3</sup>, Yumiko Kubota<sup>3</sup>, Kyoko Hayashi<sup>4</sup>, Toshio Kawahara<sup>4</sup>, Munekazu Iinuma<sup>2</sup>

### **P2-6 Zamamiphidins B and C, New Manzamine-Related Alkaloids from an *Amphimedon* sp. Marine Sponge Collected in Okinawa**

(<sup>1</sup> Faculty of Medicine, Dentistry, and Pharmaceutical Sciences, Okayama University,

<sup>2</sup> Showa Pharmaceutical University, <sup>3</sup> School of Pharmacy, Showa University, <sup>4</sup> Faculty of Pharmaceutical Sciences, Hokkaido University)

Shin-ichiro Kurimoto<sup>1,2,3</sup>, Shoichi Suzuki<sup>2</sup>, Mayumi Ueno<sup>2</sup>, Jun'ichi Kobayashi<sup>4</sup>, Takaaki Kubota<sup>1,2</sup>

- P2-7 Biomimetic Oxidation of Chebulinic Acid**  
(<sup>1</sup> Graduate School of Biomedical Sciences, Nagasaki University,  
<sup>2</sup> School of Pharmaceutical Sciences, Nagasaki University)  
Takako Yamashita<sup>1</sup>, Kaito Uefuji<sup>2</sup>, Yosuke Matsuo<sup>1</sup>, Yoshinori Saito<sup>1</sup>, Takashi Tanaka<sup>1</sup>
- P2-8 Asymmetric Total Synthesis of Lucidumone**  
(School of Life Sciences, Tokyo University of Pharmacy and Life Sciences)  
Yuichiro Kawamoto, Naoki Noguchi, Toyoharu Kobayashi, Hisanaka Ito
- P2-9 Syntheses of Certain Natural Products Using the AD-Julia Type Reaction**  
(<sup>1</sup> Graduate School of Life Science, Tokyo University of Agriculture and Technology,  
<sup>2</sup> Graduate School of Agriculture, Tokyo University of Agriculture and Technology,  
<sup>3</sup> Faculty of Applied biology, Tokyo University of Agriculture and Technology,  
<sup>4</sup> Faculty of Life Sciences, Tokyo University of Agriculture and Technology)  
Atsushi Shoji<sup>1</sup>, Hiroki Nakata<sup>1</sup>, Izumi Shirakawa<sup>2</sup>, Nanami Shiotani<sup>3</sup>, Tatsuo Saito<sup>4</sup>,  
Ryo Katsuta<sup>4</sup>, Ken Ishigami<sup>4</sup>, Arata Yajima<sup>4</sup>
- P2-10 Synthesis and Antifouling Activity of Monoterpene-Furan Hybrid Molecules**  
(<sup>1</sup> Graduate School of Natural Science and Technology, Okayama University,  
<sup>2</sup> University of Hyogo, <sup>3</sup> Museum of Nature and Human Activities)  
Hiroyoshi Takamura<sup>1</sup>, Yuya Kinoshita<sup>1</sup>, Takefumi Yorisue<sup>2,3</sup>, Isao Kadota<sup>1</sup>
- P2-11 Structure-Activity Relationship Study of Amphidinol 3 Based on Chemical Synthesis**  
(Graduate School of Science, Kyushu University)  
Yoko Yasuno, Yusuke Mita, Yuki Yamashita, Yuma Wakamiya, Tohru Oishi
- P2-12 Total Synthesis of Halichonine B**  
(Department of Pharmaceutical Sciences, University of Shizuoka)  
Masaya Uchida, Kaori Aratame, Hitoshi Ouchi, Makoto Inai, Fumihiko Yoshimura,  
Ryo Takita, Toshiyuki Kan
- P2-13 Synthetic Studies on Antimycin Antibiotics Aimed towards Structure-Activity Relationship Research**  
(Graduate School of Science, Osaka Metropolitan University)  
Yoshinosuke Usuki, Kazuki Nishiguchi, Tomoki Higashi, Yuka Tanaka, Miyu Morii,  
Tetsuya Sato
- P2-14 Synthetic Studies on Pyrroindomycin A**  
(Graduate School of Biomedical Sciences, Nagasaki University)  
Tomohiro Tsutsumi, Keita Komine, Hayato Fukuda, Jun Ishihara
- P2-15 Development of Novel Compounds Based on the Potential High Reactivity of Natural Products**  
(<sup>1</sup> Graduate School of Agriculture, Kindai University, <sup>2</sup> Nagahama Institute of Bio-Science and Technology, <sup>3</sup> Saitama Medical University)  
Takashi Kitayama<sup>1</sup>, Gengo Kashiwazaki<sup>1</sup>, Yoshimi Utaka<sup>1</sup>, Miyuki Fukushima<sup>1</sup>,  
Issei Takahashi<sup>1</sup>, Yasushi Kawai<sup>2</sup>, Noriko Tsuchida<sup>3</sup>

- P2-16 Synthetic Studies on Macrolactam Moiety of Poecillastrin C**  
(Faculty of Advanced Science and Engineering, Waseda University)  
Hugh Clarke, Yu Sueyama, Naoshi Yoneyama, Yuzuki Takahashi, Takumi Hagiwara,  
Seijiro Hosokawa
- P2-17 Synthetic Studies for Antibiotic Stalobacin I**  
(Graduate School of Pharmaceutical Sciences, Tohoku University)  
Kosuke Ohsawa, Junya Kubota, Shota Ochiai, Tatsuya Inagaki, Takayuki Doi
- P2-18 Synthesis of <sup>11</sup>C-Radiolabeled Eribulin as a Companion Diagnostics PET Tracer for Brain Glioblastoma**  
(<sup>1</sup> RIKEN BDR, <sup>2</sup> Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, <sup>3</sup> Graduate School of Pharmaceutical Sciences, Kyushu University, <sup>4</sup> Tokushima University, <sup>5</sup> Eisai, Inc., <sup>6</sup> NCC)  
Takashi Niwa <sup>1,2,3</sup>, Tsuyoshi Tahara <sup>1,4</sup>, Charles E. Chase <sup>5</sup>, Francis G. Fang <sup>5</sup>,  
Takayoshi Nakaoka <sup>1</sup>, Satsuki Irie <sup>1</sup>, Emi Hayashinaka <sup>1</sup>, Yasuhiro Wada <sup>1</sup>,  
Hidefumi Mukai <sup>1</sup>, Kenkichi Masutomi <sup>6</sup>, Yasuyoshi Watanabe <sup>1</sup>, Yilong Cui <sup>1</sup>,  
Takamitsu Hosoya <sup>1,2</sup>
- P2-19 Establishment of the MR1-Presentation Reporter Screening System for Identification of MAIT Cell Modulators**  
(<sup>1</sup> Kyoto University, <sup>2</sup> RIKEN, <sup>3</sup> Osaka University)  
Takuro Matsuoka <sup>1</sup>, Akira Hattori <sup>1</sup>, Shinya Oishi <sup>1</sup>, Mitsugu Araki <sup>1</sup>, Biao Ma <sup>2</sup>,  
Toshiki Fujii <sup>1</sup>, Norihito Arichi <sup>1</sup>, Yasushi Okuno <sup>1</sup>, Hideaki Takeya <sup>1</sup>, Sho Yamasaki <sup>3</sup>,  
Hiroaki Ohno <sup>1</sup>, Shinsuke Inuki <sup>1</sup>
- P2-20 Structure-Activity Relationship Study of Naphthoquinones with STAT3 Inhibitory Activity**  
(Graduate School of Agriculture, Kindai University)  
Arisa Tsukamoto, Mitsuaki Yamashita, Yuto Nakamori, Akira Iida
- P2-21 5,6,11-Trideoxytetradotoxin Attracts the Puffer Fish *Takifugu rubripes***  
(<sup>1</sup> School of Marine Biosciences, Kitasato University, <sup>2</sup> College of Bioresource Sciences, Nihon University, <sup>3</sup> Center for Biological Resources and Informatics, Tokyo Institute of Technology, <sup>4</sup> Graduate School of Pharmaceutical Sciences, Tohoku University, <sup>5</sup> Graduate School of Bioagricultural Sciences, Nagoya University)  
Kairi Miyazaki <sup>1</sup>, Rei Suo <sup>2</sup>, Shiro Itoi <sup>2</sup>, Junji Hirota <sup>3</sup>, Masaatsu Adachi <sup>4</sup>,  
Tadachika Miyasaka <sup>5</sup>, Toshio Nishikawa <sup>5</sup>, Shigeru Sato <sup>1</sup>, Kentaro Takada <sup>1</sup>
- P2-22 Biosynthesis and Spectroscopic Analysis of Heterocyclic Natural Products with Nitrogen-Nitrogen Bond**  
(<sup>1</sup> Faculty of Pharmaceutical Sciences, Hokkaido University, <sup>2</sup> Faculty of Agriculture, Hokkaido University)  
Kuga Arima <sup>1</sup>, Satoko Akiyama <sup>1</sup>, Eri Fukushi <sup>2</sup>, Kenichi Matsuda <sup>1</sup>, Toshiyuki Wakimoto <sup>1</sup>

**P2-23 Heterologous Expressions and Biological Activities of Enterceptides, Antibacterial RiPPs from Human-Associated Bacteria**

(<sup>1</sup> National University Singapore, <sup>2</sup> Graduate School of Pharmaceutical Sciences, Chiba University, <sup>3</sup> JST PRESTO, <sup>4</sup> Graduate School of Pharmaceutical Sciences, Tohoku University, <sup>5</sup> SMART)

Ryosuke Sugiyama<sup>1,2,3</sup>, Yohei Morishita<sup>1,4</sup>, Nhan Dai Thien Tram<sup>1</sup>, Joel Lim<sup>1</sup>, Chin-Soon Phan<sup>1</sup>, Zhen Heng Lim<sup>1</sup>, Yuxin Hou<sup>1</sup>, Jia Ying Lee<sup>1</sup>, Xu Jian<sup>1</sup>, Sharon Y. H. Ling<sup>5</sup>, Patrina W. L. Chua<sup>5</sup>, Wei Yang Goh<sup>1</sup>, Pui Lai Rachel Ee<sup>1</sup>, Brandon I. Morinaka<sup>1</sup>

**P2-24 Biosynthetic Study on a Protein Transport Inhibitor Brefeldin A**

(<sup>1</sup> Graduate School of Pharmaceutical Sciences, Tohoku University, <sup>2</sup> Graduate School of Agricultural and Life Sciences, The University of Tokyo, <sup>3</sup> CRIIM, The University of Tokyo)

Yohei Morishita<sup>1</sup>, Ryuhei Nagata<sup>2</sup>, Yohei Kobayashi<sup>2</sup>, Akihiro Sugawara<sup>1</sup>, Taro Ozaki<sup>1</sup>, Tomohisa Kuzuyama<sup>2,3</sup>, Teigo Asai<sup>1</sup>

**P2-25 Identification of the Gene Cluster Involved in Doubly Homologated Tyrosine Biosynthesis from *Microcystis aeruginosa***

(<sup>1</sup> Graduate School of Environmental Science, Hokkaido University, <sup>2</sup> Faculty of Environmental Earth Science, Hokkaido University, <sup>3</sup> Faculty of Pharmaceutical Sciences, Hokkaido University, <sup>4</sup> Global Station for Biosurfaces and Drug Discovery, Hokkaido University)

Zhengyi Ling<sup>1</sup>, Chin-Soon Phan<sup>2</sup>, Jakia Jerin Mehjabin<sup>2</sup>, Kenichi Matsuda<sup>3,4</sup>, Prakoso Nurcahyo Iman<sup>1</sup>, Taiki Umezawa<sup>1,2</sup>, Toshiyuki Wakimoto<sup>3,4</sup>, Tatsufumi Okino<sup>1,2</sup>



3rd day, September 15th (Fri)

**P3-1 Inhibitory Activity of FONSECINONE D on Extracellular Vesicle Production and Its Mechanism of Action**

(<sup>1</sup> Graduate School of Pharmaceutical Sciences, Osaka University, <sup>2</sup> Lampung University, <sup>3</sup> Aichi Cancer Center Research Institute)

Jianyu Lin<sup>1</sup>, Atsushi Kimishima<sup>1</sup>, Andi Setiawan<sup>2</sup>, Chitose Oneyama<sup>3</sup>, Masayoshi Arai<sup>1</sup>

**P3-2 Structure and Biological Activity of a Novel Alkaloid from *Theonella swinhoei***

(<sup>1</sup> Graduate School of Advanced Science and Engineering, Waseda University, <sup>2</sup> National Research Center for Protozoan Diseases, Obihiro University of Agriculture and Veterinary Medicine, <sup>3</sup> Waseda Research Institute for Science and Engineering)

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**P3-3 Isolation of Biologically Active Compounds from Kuji Amber Using the Inhibition Activity Against the Degranulation of RBL-2H3 Cells**

(<sup>1</sup> Graduate School of Arts and Sciences, Iwate University, <sup>2</sup> RIKEN CSRS)

Kurumi Tanaka<sup>1</sup>, Hiroyuki Koshino<sup>2</sup>, Ken-ichi Kimura<sup>1</sup>

**P3-4 New Liposidomycin Analogs for Therapeutic Efficacy in the Silkworm Infection Model with *Mycobacterium avium* Complex**

(Faculty of Pharmaceutical Sciences, Tohoku Medical and Pharmaceutical University)

Akiho Yagi, Mayu Fujiwara, Mayu Sato, Yuzu Abe, Ryuji Uchida

**P3-5 Isolation, Structure Determination, and Total Synthesis of Inaoside A, New Antioxidant Compound Isolated from the Edible Mushroom *Laetiporus cremeiporus***

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Atsushi Kawamura<sup>1</sup>, Tomoya Takao<sup>2</sup>, Aira Mizuno<sup>2</sup>, Mayuri Kurakake<sup>2</sup>, Akiyoshi Yamada<sup>2,3</sup>, Hidefumi Makabe<sup>1,2</sup>

**P3-6 Isolation, Synthesis and Functional Elucidation of a Chitinase Inhibitor Isolated from Japanese Hornets**

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**P3-7 Syzygioblanes, Unique Bioactive Natural Products from an Indonesian Medicinal Plant, 'Jampu Salo'**

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Nona Koga <sup>1</sup>, Katsunori Miyake <sup>2</sup>, Yohei Saito <sup>1</sup>, Abdul Rahim <sup>1,3</sup>, Ahmad Najib <sup>1</sup>, Nobuyuki Tanaka <sup>4</sup>, Satoshi Yoshida <sup>5</sup>, Sota Sato <sup>5,6</sup>, Yusuke Yamada <sup>7</sup>, Akihito Ikeda <sup>7</sup>, Toshiya Senda <sup>7</sup>, Kyoko Nakagawa-Goto <sup>1,8</sup>

**P3-8 Synthetic Studies of Callophycoic Acid A**

(Department of Applied Chemistry, Keio University)

Raia Sagasaki, Seiya Endo, Ryugo Nakamura, Akihiro Ogura, Ken-ichi Takao

**P3-9 Synthesis of (±)-Zeapyranolactone and Determination of Its Overall Relative Configuration**

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Chinatsu Ogasawara <sup>1</sup>, Yusuke Ogura <sup>1</sup>, Hironori Okamura <sup>1</sup>, Kiyofumi Takaba <sup>2</sup>, Satoshi Yoshida <sup>3</sup>, Sota Sato <sup>3,4</sup>, Koji Yonekura <sup>2,5</sup>, Hirosato Takikawa <sup>1</sup>

**P3-10 Epimerization-Suppressed Peptide C-Terminal Modification and Its Application to the Synthesis of Middle Molecular Cyclic Peptides**

(Graduate School of Pharmaceutical Sciences, Kyoto University)

Ai Koyama, Takefumi Kuranaga, Ryota Morimoto, Takumi Matsumoto, Hideaki Kakeya

**P3-11 Alkylation-Cyclization-Isomerization-3-Aza-Cope Cascade Reaction for the Synthesis of Fused Cyclic Amines Bearing Tetrasubstituted Carbon**

(Faculty of Pharmacy, Meijo University)

Takeo Sakai, Tomoki Furuhashi, Kota Hosoe, Kaho Umemura, Yuji Mori

**P3-12 Development of C-H Functionalization of Aliphatic Peptide Side Chains via N-Chlorination of Amides**

(Graduate School of Pharmaceutical Sciences, Kyoto University)

Takeshi Nanjo, Ayaka Matsumoto, Takuma Oshita, Yoshiji Takemoto

**P3-13 Synthetic Studies towards Illisimonin A**

(<sup>1</sup> Graduate School of Chemical Sciences and Engineering, Hokkaido University, <sup>2</sup> Faculty of Science, Hokkaido University)

Muhammad Aiman bin Mohd Fariz <sup>1</sup>, Takahiro Suzuki <sup>2</sup>, Riko Nagahama <sup>1</sup>, Yuki Yukutake <sup>1</sup>, Keiji Tanino <sup>2</sup>

- P3-14 Synthetic Study on a Middle-Sized Natural Product Dityromycin toward the Creation of Novel PPI Inhibitor**  
(<sup>1</sup> Graduate School of Infection Control Sciences, Kitasato University, <sup>2</sup> Ōmura Satoshi Memorial Institute)  
Daiki Suzuki<sup>1</sup>, Masahiro Kanaida<sup>1</sup>, Yoshihiko Noguchi<sup>1,2</sup>, Tomoyasu Hirose<sup>1,2</sup>, Toshiaki Sunazuka<sup>1,2</sup>
- P3-15 Synthetic Study of Pactamycin Based on Aza-Benzilic Acid Rearrangement**  
(Graduate School of Engineering, Tokyo University of Agriculture and Technology)  
Taisei Matoba, Minami Odagi, Kazuo Nagasawa
- P3-16 Studies on Nectriatides Which Potentiate the Antifungal Activity of Amphotericin B**  
(<sup>1</sup> Graduate School of Pharmaceutical Sciences, Kitasato University, <sup>2</sup> Graduate School of Integrated Sciences for Life, Hiroshima University, <sup>3</sup> Faculty of Agriculture, Kindai University, <sup>4</sup> Faculty of Pharmaceutical Sciences, Tohoku Medical and Pharmaceutical University)  
Keisuke Kobayashi<sup>1</sup>, Kenichiro Nagai<sup>1</sup>, Ryosuke Miyake<sup>1</sup>, Reiko Seki<sup>1</sup>, Shinichi Nishimura<sup>2</sup>, Takashi Fukuda<sup>3</sup>, Ryuji Uchida<sup>4</sup>, Hiroshi Tomoda<sup>1</sup>, Taichi Ohshiro<sup>1</sup>
- P3-17 Divergent Synthesis and Structure Elucidation of Aspinolides: DFT-Supported Investigations**  
(<sup>1</sup> Tokyo University of Agriculture, <sup>2</sup> Graduate School of Agricultural Science, Tohoku University)  
Ryo Katsuta<sup>1</sup>, Ryo Shimizu<sup>1</sup>, Keita Takeda<sup>1,2</sup>, Shinnosuke Wakamori<sup>1</sup>, Arata Yajima<sup>1</sup>, Shigefumi Kuwahara<sup>2</sup>, Tomoo Nukada<sup>1</sup>, Ken Ishigami<sup>1</sup>
- P3-18 Synthesis and Biological Function of Inositol Phospholipid Compounds (MIPC) from Fungi**  
(Faculty of Science and Technology, Keio University)  
Akifumi Ito, Yohei Arai, Kana Okubo, Etsuko Nabika, Takanori Matsumaru, Yukari Fujimoto
- P3-19 Exploring of a Novel 3CL Protease Inhibitor Based on Vitamin K Derivatives**  
(College of Systems Engineering and Science, Shibaura Institute of Technology)  
Ryohto Koharazawa, Mayu Hayakawa, Yoshihisa Hirota, Yoshitomo Suhara
- P3-20 The Plant Hormone JA-Ile Receptor System Has Two Distinct Modes for Ligand Perception**  
(<sup>1</sup> Graduate School of Science, Tohoku University, <sup>2</sup> Graduate School of Life Science, Tohoku University)  
Kotaro Matsumoto<sup>1</sup>, Misuzu Nakayama<sup>1</sup>, Takuya Kaji<sup>1</sup>, Shunji Hoshino<sup>2</sup>, Yousuke Takaoka<sup>1</sup>, Jianxin Wang<sup>1</sup>, Minoru Ueda<sup>1,2</sup>