

## Oral Presentation

(Speak in Japanese or English; Slides are written in English)

11th July, Wednesday 13:00~15:15

Room B2 01-1~01-9	Session 1: Genomics / Phylogeny & Taxonomy 口頭発表1: ゲノム科学・系統分類
01-1 13:00-	<p><b>Non-invasive lipid productivity analysis by single-cell innate fluorescent signature</b> 1細胞自家蛍光シグネチャー解析による油脂生産性の仮想的ラベリング</p> <p>○Tomohiro Hirayama<sup>1)</sup>、Shiomi Yawata<sup>3)</sup>、Yuhki Kawamura<sup>2)</sup>、Nobuhiko Nomura<sup>3)</sup>、Yutaka Yawata<sup>3)</sup></p> <p>1) Sch. Life Environ. Sci., Univ. Tsukuba 2) Grad. Sch. Life Environ. Sci., Univ. Tsukuba 3) Fac. Life Environ. Sci., Univ. Tsukuba</p>
01-2 13:15-	<p><b>Molecular mechanism of methylotaxis in <i>Methylobacterium aquaticum</i> strain 22A</b></p> <p>○Yuuki Haruna、Akio Tani</p> <p>IPSR, Okayama Univ</p>
01-3 13:30-	<p><b>Comparative metatranscriptomics reveals extracellular electron transfer pathways in electrogenic microbiomes conferring microbial adaptivity to surface redox potential changes</b></p> <p>メタトランスクリプトーム解析によって解き明かす電気微生物の表面電極電位変化への応答</p> <p>○Shun'ichi Ishii<sup>1)</sup>、Shino Suzuki<sup>2)</sup>、Kenneth H. Neelson<sup>3)</sup></p> <p>1) R&amp;D Center for Submarine Resources, JAMSTEC 2) KCC, JAMSTEC 3) USC</p>
01-4 13:45-	<p><b>Algal polysaccharide degrading bacteria isolation and genetic background characterization</b></p> <p>海藻多糖分解菌の単離およびその遺伝的バックグラウンドの関連性・特性</p> <p>○Tetsushi Mori<sup>1)</sup>、Yasuhito Yokoi<sup>2)</sup>、Toshiyuki Shibata<sup>3)</sup>、Reiji Tanaka<sup>3)</sup>、Hideo Miyake<sup>3)</sup>、Mitsuyoshi Ueda<sup>4)</sup></p> <p>1) Grad. Sch. Engr., Tokyo Univ. Agric. Technol. 2) Dept. Life Sci. &amp; Biotech., Tokyo Univ. Agric. Technol. 3) Grad. Sch. Bioresour., Mie Univ. 4) Grad. Sch. Agric., Kyoto Univ.</p>
01-5 14:00-	<p><b>Phylogenomic analysis of catalase genes of lactic acid bacteria in the order <i>Lactobacillales</i></b></p> <p>乳酸菌 (<i>Lactobacillales</i>) ゲノムにおけるcatalaseの遺伝子分布と構造</p> <p>○Daisuke Fukuda<sup>1)</sup>、Kouhei Mizuno<sup>2)</sup></p> <p>1) GlaxoSmithKline 2) National institute of technology, Kitakyushu college</p>
01-6 14:15-	<p><b>Morphological and genomic characterization of a novel phagotrophic bacterium <i>Candidatus "Uab amorphum"</i></b></p> <p>新奇捕食性バクテリア<i>Candidatus "Uab amorphum"</i> の形態及びゲノム特性について</p> <p>○Takashi Shiratori<sup>1)</sup>、<sup>3)</sup>、Shigekatsu Suzuki<sup>2)</sup>、Yukako Kakizawa<sup>1)</sup>、Ken-ichiro Ishida<sup>1)</sup></p> <p>1) Univ. of Tsukuba 2) NIES 3) JAMSTEC</p>
01-7 14:30-	<p><b>Molecular phylogenetic analysis of <i>Acanthamoeba castellanii medusavirus</i></b></p> <p><i>Acanthamoeba castellanii medusavirus</i>の分子系統学的解析</p> <p>○Masaharu Takemura<sup>1)</sup>、Genki Yoshikawa<sup>2)</sup>、Keita Aoki<sup>1)</sup>、Tomohiro Mochizuki<sup>3)</sup>、Romain Blanc-Mathieu<sup>2)</sup>、Chihong Song<sup>4)</sup>、Kazuyoshi Murata<sup>4)</sup>、Hiroyuki Ogata<sup>2)</sup></p> <p>1) Fac. of Sci., Tokyo Univ. of Sci. 2) Inst. for Chem. Res., Kyoto Univ. 3) ELSI, Tokyo Inst. of Technol. 4) Nat. Inst. for Physiol. Sci.</p>
01-8 14:45-	<p><b>[ASME] Skin biofilm-derived <i>Propionibacterium acnes</i> genotypes are unique to each individual</b></p> <p>皮膚バイオフィルムを構成するアクネ菌遺伝子型は個人固有である</p> <p>○Jiayue Yang<sup>1)</sup>、<sup>4)</sup>、Mia Yoshikawa<sup>1)</sup>、Tomoya Tsukimi<sup>1)</sup>、Kenta Suzuki<sup>2)</sup>、Masaru Tomita<sup>1)</sup>、Shinji Fukuda<sup>1)</sup>、<sup>3)</sup>、<sup>4)</sup>、<sup>5)</sup>、<sup>6)</sup></p> <p>1) Inst. Adv. Biosci., Keio Univ. 2) NIES 3) KISTEC-KAST 4) TMRC, Tsukuba Univ. 5) JST PRESTO 6) Metabologenomics, Inc.</p>

- 01-9** **Metaepigenomic analysis reveals an unexplored diversity of DNA methylations in environmental prokaryotic community**  
 15:00- **メタエピゲノム解析が明らかにする環境細菌叢のDNAメチル化多様性**  
 ○Satoshi Hiraoka<sup>1), 2)</sup>, Yusuke Okazaki<sup>3)</sup>, Mizue Anda<sup>4)</sup>, Shin-ichi Nakano<sup>3)</sup>, Wataru Iwasaki<sup>1), 4), 5)</sup>  
 1) Deep-sea Bio OIP, R&D Center for Marine Biosciences, JAMSTEC 2) CBMS, Graduate School of Frontier Sciences, UTokyo 3) CER, Kyoto Univ. 4) Department of Biological Sciences, Graduate School of Science, UTokyo 5) AORI, UTokyo

Room B3  
02-1~02-9

**Session 2: Physiology and Metabolism**  
**口頭発表2: 生理・代謝・増殖**

- 02-1** **Glycogen Metabolism of Anammox Bacteria *Candidatus Brocadia sinica*: Comparison of Growing, Stationary, and Starvation Phase**  
 13:00- ○Amrini Shafdar, Satoshi Okabe  
 Hokkaido University
- 02-2** **Isolation Process and Genomic Analysis of Nitrite Oxidizer *Nitrotoga* sp. Provide Insights on Physiological Characteristics and Clues to Promote the Growth**  
 13:15- **分離培養プロセスとゲノム情報から推定する亜硝酸酸化細菌*Nitrotoga*の生理学的性質および増殖促進条件**  
 ○Kento Ishii<sup>1)</sup>, Hirotsugu Fujitani<sup>2), 3)</sup>, Yuji Sekiguchi<sup>4)</sup>, Satoshi Tsuneda<sup>1), 2)</sup>  
 1) Grad. Sch. Adv. Sci. Eng., Waseda Univ. 2) NLR, Waseda Univ. 3) Environ., DTU 4) AIST
- 02-3** **Unveiling acetate- and CO<sub>2</sub>-utilizing microbiota under methanogenic conditions in *Sasa*-invaded wetland soils**  
 13:30- **笹侵食湿地土壤中でのメタン生成菌と基質競合する未知微生物の網羅的同定**  
 ○Tomo Aoyagi<sup>1)</sup>, Cuong Ho<sup>2)</sup>, Takashi Narihiro<sup>3)</sup>, Daisuke Mayumi<sup>4)</sup>, Atsushi Ogata<sup>1)</sup>, Hiroshi Habe<sup>1)</sup>, Tomoyuki Hori<sup>1)</sup>  
 1) EMRI, AIST 2) IET, VAST 3) BPRI, AIST 4) GREEN, AIST
- 02-4** **Is the retinal-synthesizing gene (*blh*) essential for rhodopsin-containing bacteria? レチナル生産遺伝子(*blh*)はロドプシン保有細菌に必須か?**  
 13:45- ○Yu Nakajima<sup>1), 2)</sup>, Satoko Doi<sup>3)</sup>, Keiichi Kojima<sup>3)</sup>, Yuki Sudo<sup>3)</sup>, Kazuhiro Kogure<sup>1), 2)</sup>, Susumu Yoshizawa<sup>1), 2)</sup>  
 1) AORI, UTokyo 2) Grad. Sch. Front. Sci., UTokyo 3) Grad. Sch. Med. Den. Pharm., Okayama Univ.
- 02-5** **Characterization of *E. coli* drug efflux pump involved in bisphenol A resistance**  
 14:00- **大腸菌の薬剤排出ポンプがビスフェノールA耐性に及ぼす影響**  
 ○Tsunemoto Kaga, Toshiyuki Nikata, Yasuzo Sakai  
 Eng., Utsunomiya Univ.
- 02-6** **[ASME] Exogenous addition of biosurfactants to disrupt *Pseudomonas aeruginosa* PAO1 biofilms**  
 14:15- ○Bac V.G Nguyen, Andrew S. Utada, Nobuhiko Nomura  
 Graduate School of Life and Environmental Sciences, University of Tsukuba
- 02-7** **Microbiome in awamori moromi (mash) affecting the flavours and its application of awamori production**  
 14:30- **泡盛の芳香に影響を与えるもろみ中の微生物群と泡盛製造への応用**  
 ○Kaoru Nakasone<sup>1)</sup>, Takato Saeki<sup>1)</sup>, Akifumi Nishida<sup>2)</sup>, Masayuki Yamamura<sup>2)</sup>  
 1) Sch. Eng., Kindai Univ. 2) Info., Tokyo Tech
- 02-8** **Visualization of temporal dynamics of single-cell innate fluorescence signature**  
 14:45- **一細胞自家蛍光シグネチャーの時間的ダイナミクスの可視化**  
 ○Yuhki Kawamura<sup>1)</sup>, Tomohiro Hirayama<sup>1)</sup>, Hiroki Watanabe<sup>1)</sup>, Tatsunori Kiyokawa<sup>1)</sup>, Nobuhiko Nomura<sup>2)</sup>, Yutaka Yawata<sup>2)</sup>  
 1) Grad.Sch.Life Environ.Sci., Univ.Tsukuba 2) Fac.Life Environ.Sci., Univ.Tsukuba

- 02-9** [ASME] Analysis on the single-cell metabolic pathway of electrogenic bacteria with nanoscale secondary ion mass spectrometry  
15:00- 高分解能二次イオン質量分析を用いた単一細胞の炭素・窒素同化速度比に基づく代謝経路解析  
○Junki Saito<sup>1)</sup>、Kazuhito Hashimoto<sup>2)</sup>、Akihiro Okamoto<sup>3)</sup>  
1) Engineering, The Univ. of Tokyo 2) NIMS 3) NIMS, MANA

Room B4  
03-1~03-9

**Session 3: Symbiosis and Interaction**  
**口頭発表3：共生・寄生・相互作用**

- 03-1** Metatranscriptomics reveals ecology of chemosynthetic ectosymbiosis of the deep-sea squat lobster, *Shinkaia crosnieri*  
13:00- 深海性甲殻類の外部共生菌叢の生態をメタトランスクリプトーム解析で解明する  
○Kaori Motoki<sup>1)</sup>、<sup>2)</sup>、Tomo-o Watsuji<sup>2)</sup>、Yoshihiro Takaki<sup>2)</sup>、Maki Tokuda<sup>3)</sup>、Takafumi Kasaya<sup>4)</sup>、Ken Takai<sup>2)</sup>、Wataru Iwasaki<sup>1)</sup>、<sup>5)</sup>  
1) GSS, UTokyo 2) D-SUGAR, JAMSTEC 3) R&D Center, JAMSTEC 4) CEAT, JAMSTEC 5) AORI, UTokyo
- 03-2** Microbial community structure in gastrointestinal tracts of wood-eating crab  
13:15- 木喰いガニの消化管微生物群集構造解析  
○Yasunori Baba<sup>1)</sup>、Nobuhiro Goto<sup>1)</sup>、Yumi Baba (Mori)<sup>1)</sup>、Takasei Kusube<sup>1)</sup>、Katsuhide Miyake<sup>1)</sup>、<sup>2)</sup>  
1) Res. Inst. Biores. Biotech., Ishikawa Pref. Univ. 2) Dept. Environ. Sci. Technol., Meijo Univ.
- 03-3** [ASME] Land snail *Macrochlamys hippocastaneum* has *Mycoplasma*-dominated gut microbiota surrounded by chitinous peritrophic matrix-like layer  
13:30- Han-Chen Ho<sup>1)</sup>、Yen-Tse Liu<sup>2)</sup>、Hsin-Chien Cheng<sup>2)</sup>、Li-Chuen Lin<sup>2)</sup>、Wen-Chin Huang<sup>2)</sup>、Yu-Rou Deng<sup>2)</sup>、Hon-Yun Chen<sup>2)</sup>、Nien-Yun Wu<sup>2)</sup>、Shu-Mei Chang<sup>2)</sup>、○Chun-Yao Chen<sup>3)</sup>  
1) Department of Anatomy, Tzu Chi University 2) Hua-Lien Girls' High School 3) Department of Life Sciences, Tzu Chi University
- 03-4** Single spore analysis reveals diverse host-parasite relationships between phytoplankton and fungi  
13:45- Single spore PCR法による植物プランクトンと菌類の多様な宿主寄生者関係の解明  
○Maiko Kagami<sup>1)</sup>、<sup>2)</sup>、<sup>3)</sup>、Silke van den Wyngaert<sup>3)</sup>、Kensuke Seto<sup>1)</sup>、<sup>2)</sup>、<sup>3)</sup>、Keilor Rojas<sup>3)</sup>、Christian Wurzbacher<sup>4)</sup>、<sup>5)</sup>、Hans-Peter Grossart<sup>3)</sup>  
1) Yokohama National University, 2) Toho University, 3) IGB-Berlin, 4) Univ. of Gothenburg, 5) Technical University of Munich
- 03-5** Comparative genome analysis of two endosymbiotic *Treponema* species of cellulolytic protists in the termite gut  
14:00- シロアリ腸内に共生する原生生物の*Treponema*属細胞内共生細菌の比較ゲノム解析  
○Masahiro Yuki<sup>1)</sup>、Hirokazu Kuwahara<sup>2)</sup>、Satoko Noda<sup>1)</sup>、<sup>3)</sup>、Yuichi Hongoh<sup>1)</sup>、<sup>2)</sup>、Moriya Ohkuma<sup>1)</sup>  
1) JCM, RIKEN-BRC 2) Life Sci. Technol, Tokyo Tech 3) Life Environ. Sci, Univ. of Yamanashi
- 03-6** Single cell transcriptome analyses of the symbiotic protists in termite gut  
14:15- シングルセルに基づくシロアリ腸内原生生物のトランスクリプトーム解析  
○Yuki Nishimura<sup>1)</sup>、Masato Otagiri<sup>2)</sup>、Masahiro Yuki<sup>1)</sup>、Michiru Shimizu<sup>1)</sup>、Nagisa Sato<sup>1)</sup>、Shigeharu Moriya<sup>3)</sup>、Moriya Ohkuma<sup>1)</sup>  
1) BRC, RIKEN 2) RAP, RIKEN 3) CSRC, RIKEN
- 03-7** Endosymbiotic interaction in anaerobic ciliates with methanogens and bacteria  
14:30- 嫌気性繊毛虫におけるメタン菌、バクテリアとの共生関係  
○Kazutaka Takeshita<sup>1)</sup>、Takanori Yamada<sup>1)</sup>、Yuto Kawahara<sup>1)</sup>、Takashi Narihiro<sup>2)</sup>、Yoichi Kamagata<sup>2)</sup>、Naoya Shinzato<sup>1)</sup>、<sup>2)</sup>  
1) TBRC, Univ. of the Ryukyus 2) Bioprocess Res. Inst., AIST
- 03-8** Analysis of gene functions related to quorum sensing in *Roseomonas* sp. TAS13 isolated from an activated sludge  
14:45- 活性汚泥由来*Roseomonas* sp. TAS13株のQuorum sensing関連遺伝子の機能解析  
○Eri Nasuno<sup>1)</sup>、Yuya Sasaki<sup>1)</sup>、Tomohiro Suzuki<sup>2)</sup>、Norihiro Kato<sup>1)</sup>  
1) Utsunomiya University 2) Utsunomiya University, C-Bio

**03-9 Analyses of Adapting Processes for Growth Repressing Effects by *Pseudomonas* sp. strain C8**

15:00-

***Pseudomonas* sp. C8株の増殖抑制物質に対する適応プロセスの解析**○Masahiro Honjo<sup>1)</sup>、Kenshi Suzuki<sup>2)</sup>、Tomoka Nishimura<sup>3)</sup>、Fatma Azwani<sup>4)</sup>、Kensei Masuda<sup>3)</sup>、Ayaka Minoura<sup>3)</sup>、Yosuke Tashiro<sup>1)、2)</sup>、Hiroyuki Futamata<sup>1)、2)、5)</sup>

1) Grad. Schol. of Eng., Univ. of the Shizuoka 2) Grad. Schol. of Sci. and Technol., Univ. of the Shizuoka 3) Dept. of Appl. Chem. and Biochem., Eng. Univ. of the Shizuoka

4) Lab. of Food crops, Inst. of Trop. Agri. UPM 5) Inst. of Green Sci. and Technol., Univ. of the Shizuoka

**12th July, Thursday 9:00~11:45**Room B2  
04-1~04-11**Session 4: Extreme Environment / Material Cycling / Wastewater Treatment****口頭発表4：極限環境・水処理生態系・物質循環****04-1 Deep-sea geochemist meets microbial ecologist**

9:00-

**深海の化学組成を調べて微生物生態を想像する**○Shinsuke Kawagucci、Hiroyuki Yamamoto  
JAMSTEC**04-2 Vertical profiles of chemical state of inorganic sulfur and sulfur-oxidizing bacteria in launched marine sediment by tsunami**

9:15-

**海洋由来津波堆積物内の無機硫黄形態及び硫黄酸化細菌の鉛直プロファイル**○Hideyuki Ihara<sup>1)</sup>、Tomoyuki Hori<sup>1)</sup>、Tomo Aoyagi<sup>1)</sup>、Mitsuru Takasaki<sup>2)</sup>、Yoko Katayama<sup>3)</sup>

1) EMRI, AIST 2) Faculty of Science and Engineering, Ishinomaki Senshu University

3) Center for Conservation Science, Tokyo National Research Institute for Cultural Properties

**04-3 [ASME] Syntrophic association between sulfur disproportionating bacterium and anoxygenic photosynthetic bacterium, *Chloroflexus aggregans***

9:30-

**硫黄不均化菌と酸素非発生型光合成細菌*Chloroflexus aggregans*の共生関係**○Shigeru Kawai、Katsumi Matsuura、Shin Haruta  
Dept. Biol. Sci., Tokyo Metropolitan Univ.**04-4 Microbial adaptive evolution to the extreme geochemistry occurring at the serpentinization systems**

9:45-

**蛇紋岩水系に見られる極限環境への微生物の適応的進化**○Shino Suzuki<sup>1)</sup>、Shun'ichi Ishii<sup>2)</sup>、J. Gijss Kuenen<sup>3)</sup>、Kenneth H. Nealson<sup>4)</sup>

1) KCC, JAMSTEC 2) JAMSTEC 3) TU Delft 4) USC

**04-5 Crude oil biodegradation and methane production in a high-temperature oil field**

10:00-

**深部地下高温油層環境における原油分解とメタン生成**○Hanako Mochimaru<sup>1)</sup>、Daisuke Mayumi<sup>1)</sup>、Susumu Sakata<sup>1)</sup>、Hideyoshi Yoshioka<sup>1)</sup>、Hideyuki Tamaki<sup>2)</sup>、Yoichi Kamagata<sup>2)</sup>

1) AIST 2) AIST

**04-6 [ASME] Enrichment and Function Study of A High-temperature Methanogenic *n*-alkane Degrading Microbial Community**

10:15-

○Bo Tu<sup>1)、2)</sup>、Laiyan Liu<sup>1)、2)</sup>、Lirong Dai<sup>1)、2)</sup>、Hui Zhang<sup>1)、2)</sup>、Lei Cheng<sup>1)、2)</sup>

1) Key Laboratory of Development and Application of Rural Renewable Energy

2) Biogas Institute of Ministry of Agriculture

**04-7 [ASME] Interspecies electron transfer driving syntrophy in mesophilic and thermophilic propionate-degrading anaerobic chemostats**

10:30-

○Yating Chen<sup>1)</sup>、Masaru Konishi Nobu<sup>2)</sup>、Takashi Narihira<sup>2)</sup>、Dan Zheng<sup>1)</sup>、Huizhong Wang<sup>1)</sup>、Yueqin Tang<sup>1)</sup>

1) College of Architecture and Environment, Sichuan University 2) Bioproduction

Research Institute, National Institute of Advanced Industrial Science and Technology (AIST)

**04-8 [ASME] Hydrogen production using hybrid MEC with TiO<sub>2</sub> photoanode**

10:45-

○Kinam Kim、Hwapyong Kim、Su-il In

DGIST, Daegu Gyeongbuk Institute of Science and Technology

**04-9 Effect of lactate and riboflavin on arsenic-mobilizing microbial communities****11:00- ヒ素可溶性微生物群に及ぼす乳酸とリボフラビンの影響**

○Shigeki Yamamura<sup>1)</sup>、Yuta Kashiwabara<sup>2)</sup>、Tomoyuki Hori<sup>3)</sup>、Tomo Aoyagi<sup>3)</sup>、  
Seigo Amachi<sup>2)</sup>

1) NIES 2) Fac. Horticult., Chiba Univ. 3) AIST

**04-10 Enrichment of bacterial community that precipitates antimony in water phase****11:15- 水相のアンチモンを不溶化させる細菌群集の集積**

○Masashi Kuroda<sup>1)</sup>、Kentaro Mori<sup>1)</sup>、Hisaaki Hosokawa<sup>1)</sup>、Hiroshi Nishikawa<sup>2)</sup>、  
Daisuke Inoue<sup>1)</sup>、Satoshi Soda<sup>3)</sup>、Michihiko Ike<sup>1)</sup>

1) Grad. Sch. Eng., Osaka Univ. 2) JWRI, Osaka Univ. 3) Coll. Sci. Eng., Ritsumeikan Univ.

**04-11 Metabolic strategy of predatory bacteria in a complex microbiome****11:30- 微生物コミュニティにおける捕食性細菌の代謝戦略**

○Yuya Sato、Tomohiro Inaba、Tomoyuki Hori、Hiroshi Habe  
EMRI, AIST

Room B3  
05-1~05-11

**Session 5: Aquatic Ecosystem****口頭発表5：水圏生態系****05-1 To use light or to avoid it? Light-adaptation strategies in marine Flavobacteria****9:00- 光を使うか、それとも避けるか？海洋性フラボバクテリアの光適応戦略**

○Susumu Yoshizawa<sup>1)</sup>、<sup>2)</sup>、Yohei Kumagai<sup>1)</sup>、Kazuhiro Kogure<sup>1)</sup>、Wataru Iwasaki<sup>1)</sup>、<sup>2)</sup>、<sup>3)</sup>

1) AORI, UTokyo 2) Grad. Sch. Front. Sci., UTokyo 3) Grad. Sch. Sci., UTokyo

**05-2 Ecological effects of labyrinthean protists in the marine environment estimated from their biomass**

9:15-

**原生生物ラビリントウ類の現存量から推定された海洋生態系における影響力**

○Yoko Hamamoto<sup>1)</sup>、<sup>2)</sup>、Takanori Shono<sup>3)</sup>、Ryosuke Nakai<sup>4)</sup>、Mayumi Ueda<sup>5)</sup>、Daisuke Honda<sup>2)</sup>、<sup>3)</sup>

1) Graduate School of Natural Science, Konan University 2) Institute for Integrative Neurobiology, Konan University 3) Faculty of Science and Engineering, Konan University  
4) Bioproduction Research Institute, AIST 5) Rresearch inst of environment, agriculture and fisheries, osaka prefecture

**05-3 Viruses of eukaryotic plankton: insight into their diversity, host range and role in carbon export**

9:30-

**真核生物プランクトンのウイルス：その多様性、宿主域、そして炭素輸送における役割**

○Romain Blanc-Mathieu、Hiroto Kaneko、Rodrigo Hernandez-Velazquez、Hisashi Endo、  
Hiroyuki Ogata  
Kyoto University

**05-4 Metagenomic insights into the microbial life in the oligotrophic Pacific Ocean**

9:45-

**メタゲノムから見た太平洋貧栄養海域における微生物群集の生態**

○Koji Hamasaki<sup>1)</sup>、Shotaro Suzuki<sup>1)</sup>、Yuya Tada<sup>2)</sup>、<sup>3)</sup>、Wataru Arai<sup>3)</sup>、Yoshitoshi Ogura<sup>4)</sup>、  
Tetsuya Hayashi<sup>4)</sup>、Hiroshi Mori<sup>5)</sup>、Ken Kurokawa<sup>5)</sup>、Hideto Takami<sup>3)</sup>

1) AORI, The Univ. of Tokyo 2) National Institute for Minamata Disease 3) JAMSTEC  
4) Graduate School of Medical Science, Kyushu Univ. 5) National Institute of Genetics

**05-5 [ASME] Biodiversity of the coral-killing sponge *Terpios hoshinota*-associated Bacteria in the western Pacific Ocean**

10:00-

Hsing-Ju Chen<sup>1)</sup>、Daphne Z. Hoh<sup>1)</sup>、<sup>2)</sup>、<sup>3)</sup>、Wenhua Savanna Chow<sup>1)</sup>、<sup>2)</sup>、<sup>3)</sup>、

Chaolun Allen Chen<sup>1)</sup>、<sup>2)</sup>、James D. Reimer<sup>4)</sup>、Euichi Hirose<sup>4)</sup>、Budhi Hascaryo Iskandar<sup>5)</sup>、  
Hui Huang<sup>6)</sup>、Peter J. Schupp<sup>7)</sup>、Jia-Ho Shiu<sup>1)</sup>、Ming-Hui Liao<sup>1)</sup>、Pei-Wen Chiang<sup>1)</sup>、

○Sen-Lin Tang<sup>1)</sup>、<sup>2)</sup>

1) Biodiversity Research Center, Academia Sinica 2) Biodiversity Program, Taiwan  
International Graduate Program, Academia Sinica and National Taiwan Normal  
University 3) Department of Life Science, National Taiwan Normal University

4) Department of Chemistry, Biology and Marine Science, University of the Ryukyus

5) Department of Fishery Resources Utilization, Borgor Agricultural University

6) Tropical Marine Biological Research Station in Hainan, Chinese Academy of Sciences

7) Institute of Chemistry and Biology of the Marine Environment, University of  
Oldenburg

05-6 10:15-	<b>Transcriptome analysis of immune response in the coral <i>Acropora digitifera</i> against infection of pathogenic bacterium <i>Vibrio coralliilyticus</i></b> 病原細菌 <i>Vibrio coralliilyticus</i> に対するサンゴ <i>Acropora digitifera</i> 免疫応答のトランスクリプトーム解析 ○Toshiyuki Takagi <sup>1)</sup> , Yuki Yoshioka <sup>1)</sup> , Yoshikazu Ohno <sup>2)</sup> , Yuna Zayasu <sup>2)</sup> , Noriyuki Satoh <sup>2)</sup> , Chuya Shinzato <sup>1)</sup> 1) AORI, Univ. of the Tokyo 2) MGU, OIST
05-7 10:30-	<b>[ASME] Preliminary Results of the Stagnant Water Microbiome Project [SWaMP]</b> ○Matan Shelomi National Taiwan University
05-8 10:45-	<b>Distribution and predicted origin(s) of macrolide resistance genes <i>mef(C)</i>-<i>mph(G)</i> in Taiwan waters</b> 台湾北部の河川におけるマクロライド耐性遺伝子 <i>mef(C)</i> - <i>mph(G)</i> の分布と発生源の推定 ○Yuta Sugimoto <sup>1)</sup> , Jer-Horng Wu <sup>2)</sup> , Hsin-Yiu Chou <sup>3)</sup> , Satoru Suzuki <sup>1)</sup> 1) CMES, Ehime University 2) National Cheng Kung University 3) National Taiwan Ocean University
05-9 11:00-	<b>Ecological and hygenical roles of bacteria selection at a blackish water area</b> 汽水域の微生物選択作用が担う生態学のおよび衛生的役割 ○Tsukasa Ito <sup>1)</sup> , Naoki Kuribara <sup>1)</sup> , Shota Inagaki <sup>2)</sup> , Yuta Koyama <sup>2)</sup> , Naoki Noguchi <sup>2)</sup> , Yu Yamanashi <sup>1)</sup> 1) Dept. of Env. Eng. Sci., Gunma Univ. 2) Dept. of Env. Eng. Sci., Gunma Univ.
05-10 11:15-	<b>Characterization and Producing Process of Bio-minerals Produced by Sulfate-Reducing Bacteria</b> 硫酸還元細菌の生成するバイオミネラルの特性と生成プロセスの解析 ○Yuki Kudo <sup>1)</sup> , Shota Ando <sup>1)</sup> , Kazuki Yasuike <sup>2)</sup> , Yuki Wakebe <sup>2)</sup> , Yosuke Tashiro <sup>1)</sup> , Hiroyuki Futamata <sup>1), 3), 4)</sup> 1) Grad. Sch. Int. Sci. Tech., Shizuoka Univ. 2) Fac. Eng., Shizuoka Univ. 3) Grad. Sch. Sci. Tech., Shizuoka Univ. 4) Inst. Green Sci. Tech., Shizuoka Univ.
05-11 11:30-	<b>Dispersal of microbes to the deep seafloor biosphere to the hydrosphere through mud volcanoes</b> 海底下深部生命圏から海水中への泥火山を通じた微生物の拡散 ○Tatsuhiko Hoshino <sup>1)</sup> , Tomohiro Toki <sup>2)</sup> , Akira Ijiri <sup>1)</sup> , Yuki Morono <sup>1)</sup> , Juichiro Ashi <sup>3)</sup> , Fumio Inagaki <sup>1)</sup> 1) KCC, Jamstec 2) Faculty of Science, Univ. of the Ryukyus 3) AORI, The Univ. of Tokyo
<b>Room B4 06-1~06-11</b>	<b>Session 6: Soil and Forest Ecosystem 口頭発表6: 土壌と植物の微生物</b>
06-1 9:00-	<b>[ASME] Identification and isolation of a keystone species in the rhizosphere microbiome of tomato resistant to bacterial wilt</b> ○Jihyun F. Kim Kim <sup>1)</sup> , Min-Jung Kwak <sup>1)</sup> , Soon-Kyeong Kwon <sup>1)</sup> , Ju-Yeon Song <sup>1)</sup> , Seon-Woo Lee <sup>2)</sup> 1) Yonsei Univerisity 2) Dong-A University
06-2 9:15-	<b>Traits of <i>Burkholderia kururiensis</i>, an important diazotrophic endophyte inhabited the root of a rice line, pLIA-1 derived from a cross between <i>Oryza longistaminata</i> and <i>O. sativa</i> ssp. <i>japonica</i></b> アフリカイネ <i>Oryza longistaminata</i> と <i>O. sativa</i> ssp. <i>japonica</i> の交雑後代系統イネ pLIA-1 根に棲息する窒素固定エンドファイト <i>Burkholderia kururiensis</i> の性質と挙動 ○Yasuyuki Hashidoko <sup>1)</sup> , Seiji Tachibana <sup>1)</sup> , Gyeryeong Bak <sup>1)</sup> , Masahiko Maekawa <sup>2)</sup> 1) Res. Fac. of Agric., Hokkaido Univ. 2) IPSR, Okayama Univ.
06-3 9:30-	<b>Illumina-based analysis of Rhizosphere and Endosphere Bacterial Communities related to Halophytes <i>Glaux maritima</i> and <i>Salicornia europaea</i></b> 塩生植物 ウミミドリおよびアッケシソウの根圏・内生細菌相の解析と比較 ○Kosuke Yamamoto <sup>1)</sup> , Yuh Shiwa <sup>1)</sup> , Taichiro Ishige <sup>2)</sup> , Hikaru Sakamoto <sup>3)</sup> , Masataka Uchino <sup>1)</sup> , Naoto Tanaka <sup>1)</sup> , Suguru Oguri <sup>3)</sup> , Hiromasa Saitoh <sup>1)</sup> , Seiya Tsushima <sup>1)</sup> 1) Dept. Mol. Microbiol., Tokyo Univ. of Agr. 2) NODAI Genome Research Center, Tokyo Univ. of Agr. 3) Dept. Northern Biosphere Agr., Tokyo Univ. of Agr.

<b>06-4</b> 9:45-	<b>Phylogeny and physiological characteristics of a novel <i>Bacteroidetes</i> bacterium KFE18 promoting microalgae growth</b> 微細藻類の成長を促進する新規 <i>Bacteroidetes</i> 門細菌KFE18株の系統と生理特性 ○Ayaka Makino <sup>1)</sup> 、Ryosuke Nakai <sup>1)</sup> 、Yasuko Yoneda <sup>1)</sup> 、Yasuhiro Tanaka <sup>3)</sup> 、Tadashi Toyama <sup>4)</sup> 、Kazuhiro Mori <sup>4)</sup> 、Michihiko Ike <sup>5)</sup> 、Masaaki Morikawa <sup>2)</sup> 、Yoichi Kamagata <sup>1)</sup> 、Hideyuki Tamaki <sup>1)</sup> 1) BRI., AIST 2) Grad. Sch. Environ. Sci., Hokkaido Univ. 3) Fac. Life Environ. Sci., Univ. of Yamanashi 4) Fac. Engineer., Univ. of Yamanashi 5) Grad. Sch. Eng., Osaka Univ.
<b>06-5</b> 10:00-	<b>[ASME] Denitrification is lower in <i>Bradyrhizobium japonicum</i> than in <i>B. diazoefficiens</i> due to impaired nitrate reductase activity</b> ○Fernandes Siqueira Arthur、Minamisawa Kiwamu、Sanchez Cristina Microbial Symbiosis Lab, Tohoku Univ.
<b>06-6</b> 10:15-	<b>Genetic and biochemical diversity for <i>N</i>-acylhomoserine lactone biosynthesis in plant pathogen <i>Pectobacterium carotovorum</i></b> 植物病原菌 <i>Pectobacterium carotovorum</i> におけるアシル化ホモセリンラクトン生合成系の多様性 ○Tomohiro Morohoshi <sup>1)</sup> 、Yuto Ogasawara <sup>1)</sup> 、Yudai Ito <sup>1)</sup> 、Xiaonan Xie <sup>2)</sup> 、Nobutaka Someya <sup>3)</sup> 1) Grad. Sch. Eng., Utsunomiya Univ. 2) Bio. Sci. Cent., Utsunomiya Univ. 3) NARO
<b>06-7</b> 10:30-	<b>Solidification of soil using microbial function</b> 微生物機能を利用した土壌固化技術の開発 ○Takamichi Nakamura、Masaharu Endou、Eri Taniguchi KUMAGAIGUMI
<b>06-8</b> 10:45-	<b>Isolation and taxonomic classification of novel ktedonobacterial strains from a soil in Mt. zao and “Tengu-no-mugimeshi”</b> 蔵王山の土壌と「天狗の麦飯」から新しいクテドノバクテリアの分離および系統分類 ○Chiung-Mei Wang <sup>1)</sup> 、Yu Zheng <sup>1)</sup> 、Yasuteru Sakai <sup>1)</sup> 、Hideaki Miyashita <sup>2)</sup> 、Keietsu Abe <sup>1)</sup> 、Akira Yokota <sup>1)</sup> 、Shuhei Yabe <sup>1)</sup> 1) Grad. Sch. Agric Sci., Tohoku Univ. 2) Grad. Sch. of Human Environ. Stud., Kyoto Univ.
<b>06-9</b> 11:00-	<b>An incubation experiment examining the carbon dynamics during the thawing of a frozen soil core collected at a black spruce forest, Interior Alaska</b> アラスカ内陸部、黒トウヒ林で採取した凍結土壌コアの融解過程における炭素代謝の培養実験 Hirohiko Nagano <sup>1)</sup> 、Yongwon Kim <sup>2)</sup> 、Bang-Yong Lee <sup>3)</sup> 、Haruka Shigeta <sup>1)</sup> 、 ○Kazuyuki Inubushi <sup>1)</sup> 1) Graduate School Horticulture, Chiba Univ. 2) International Arctic Research Center, University of Alaska Fairbanks 3) Division of Polar Climate Sciences, Korea Polar Research Institute
<b>06-10</b> 11:15-	<b>[ASME] Molecular diversity of arbuscular mycorrhizal fungi along pH gradients from different habitats in Hungary</b> ○Istvan Paradi <sup>1)</sup> 、 <sup>2)</sup> 、Ramona Kovacs <sup>1)</sup> 、Tunde Takacs <sup>1)</sup> 、Fuzy Anna <sup>1)</sup> 、Agnes Zold-Balogh <sup>2)</sup> 、 <sup>3)</sup> 、Attila Engloner <sup>4)</sup> 、Bernadett Berecz <sup>2)</sup> 、Tibor Szili-Kovacs <sup>1)</sup> 1) Institute for Soil Sciences and Agricultural Chemistry, Centre for Agricultural Research, Hungarian Academy of Sciences, Budapest, Hungary 2) Eotvos Lorand University, Dept. Plant Physiology and Molecular Plant Biology, Budapest, Hungary 3) Paluster Ltd. for Ecology and Conservation, Budapest, Hungary 4) Danube Research Institute of Centre for Ecological Research, Hungarian Academy of Sciences, Budapest, Hungary
<b>06-11</b> 11:30-	<b>[ASME] Fates of Antibiotic Resistance Genes in Cattle Manure after Aerobic Composting and the Resistome Dissemination in Agricultural Soils</b> ○Min Gou <sup>1)</sup> 、Hang-Wei Hu <sup>2)</sup> 、Yue-Qin Tang <sup>1)</sup> 、Ji-Zheng He <sup>2)</sup> 1) College of Architecture and Environment, Sichuan University, Chengdu, Sichuan 610065, China 2) Faculty of Veterinary and Agricultural Sciences, The University of Melbourne, Parkville, Victoria 3010, Australia