

On-demand Presentation

1 Microbial Taxonomy

a. Phylogenetic Analyses, Taxonomy, and Typing

ODP-001

***Veillonella nakazawae* sp. nov., isolated from the oral cavity of Japanese children**

○ Izumi Mashima^{1,2}, Citra F. Theodore³, Futoshi Nakazawa³, Ariadna A. Djais³, Tadao Kunihiro⁴, Yoshiaki Kawamura², Masato Saitoh⁵, Maiko Otomo⁵, Riyoko Tamai¹, Yusuke Kiyoura¹ (¹Dept. Oral Med. Sci., Sch. Dent., Ohu Univ., ²Dept. Microbiol., Sch. Pharm., Aich Gakuin Univ., ³Dept. Oral Biol., Fac. Dent., Univ. Indonesia, ⁴Techno Suruga Labo., Co. Ltd., ⁵Dept. Ped. Dent., Sch. Dent., Heal. Sci Univ. Hokkaido)

ODP-002

Comparative genomic analysis of *Mycobacterium intracellulare* clinical strains

○ Yoshitaka Tateishi, Yuriko Ozeki, Akihito Nishiyama, Sohichi Matsumoto (Dept. Bacteriol., Sch. Med., Niigata Univ.)

ODP-003

***Filobacterium* spp. found in human specimens constitutes an independent bacterial species**

○ Fumio Ike (Exp. Anim. Div., RIKEN BRC)

1 Microbial Taxonomy

b. Methods in Detection and Identification of Microbes

ODP-004

Examination of novel application of endolysin to improve GBS test

○ Masaya Ogata¹, Hidehito Matsui², Tadahiro Nasukawa¹, Iyo Uchiyama¹, Masato Higashide³, Masahiro Sakaguchi¹, Hideaki Hanaki², Jumpei Uchiyama¹ (¹Dept. Microbio, Sch. Vet., Azabu Univ., ²Dept. Infect. Control, Lab. Omura., Kitazato Univ., ³Lab. Kotobiken)

ODP-005

Prevalence and antimicrobial resistance of *Salmonella* in poultry in Yamaguchi

○ Tomoya Yamamoto¹, Hajime Toyofuku², Tomoko Mizote³ (¹Dept. Health and Welfare, Grad. Sch., Yamaguchi Pref. Univ., ²Joint Fac. Vet. Med., Yamaguchi Univ., ³Dept. Nurs. and Nutr., Yamaguchi Pref. Univ.)

ODP-006

Evaluation of quantitative 16S metagenomic analysis using spike-in archaeal genome

○ Ayumu Ohno¹, Mano Takahashi¹, Takuya Habara¹, Kirill Kryukov², So Nakagawa¹, Tadashi Imanishi¹ (¹Dept. Molecular Life Science., Sch. Med., Tokai Univ, ²Dept. Genomics and Evolutionary Biology, National Institute of Genetics)

1 Microbial Taxonomy

c. Others

ODP-007

Diversification of *Porphyromonas gingivalis* standard strains revealed by difference in proliferation

○ Keitarou Saiki, Yumiko Urano-Tashiro, Yukihiro Takahashi (Dept. Microbiol., Sch. Life Dent., Nippon Dental Univ.)

2 Microbial Ecology

a. Ecology, Symbiosis, and Environmental Microbiology

ODP-008/WS4-7

A symbiotic relationship between intestinal lymphoid tissue resident Alcaligenes and dendritic cells

○ Koji Hosomi¹, Naoko Shibata^{1,2,3}, Atsushi Shimoyama⁴, Tomoya Uto⁴, Takahiro Nagatake¹, Haruko Takeyama³, Koichi Fukase⁴, Hiroshi Kiyono², Jun Kunisawa^{1,2,3,4,5} (¹National Institutes of Biomedical Innovation, Health, and Nutrition, ²The Univ. of Tokyo, ³Waseda Univ., ⁴Osaka Univ., ⁵Kobe Univ.)

ODP-009/WS4-1

Detection of airborne bacteria by the handmade air sampler build by 3D printer

○ Torahiko Okubo¹, Satoru Miyazaki¹, Masato Sumi¹, Jeewan Thapa², Hiroyuki Yamaguchi¹ (¹Fac. Health Science, Hokkaido Univ., ²Res. Cent. Zoonosis Control Hokkaido Univ.)

ODP-010/WS4-2

Analysis of *Legionella*-containing vacuoles in *Paramecium* hosts

○ Kenta Watanabe, Takashi Shimizu, Masahisa Watarai (Dept. Vet Med., Yamaguchi Univ.)

ODP-011

Bacterial transport by amoeba that depend on symbiotic bacteria involves the Na^+/H^+ antiporter NhaA

○ Nana Tanaka¹, Torahiko Okubo¹, Toyotaka Sato², Shin-ichi Yokota², Jeewan Thapa³, Hiroyuki Yamaguchi¹ (¹Fac. Health Sci., Hokkaido Univ., ²Fac. Med, Sapporo Med. Univ., ³Res. Cent. Zoonosis Control Hokkaido Univ.)

ODP-012

Interaction between ciliates and *Legionella* separated from sewage treatment plants using syringe

○ Airi Kawashiro¹, Reiji Onuma¹, Torahiko Okubo¹, Jeewan Thapa², Hiroyuki Yamaguchi¹ (¹Fac. Health Science, Hokkaido Univ., ²Res. Cent. Zoonosis Control Hokkaido Univ.)

ODP-013**Suppresses of toxin release from *Clostridioide difficile* by intestinal microbes**

○Haruyuki Imaohji¹, Miad Elahi¹, Masahito Hashimoto², Ayano Tada¹, Tomomi Kuwahara¹ (¹Dept. Microbiol., Sch. Med., Kagawa Univ., ²Dept. Chem. Biotech., & Chemical Eng., Kagoshima Univ.)

ODP-014**Evaluation of intestinal environmental viability of actinomycetes isolated from food**

○Akira Take¹, Yoshihiko Sakaguchi¹, Yuki Inahashi², Kazuyoshi Gotoh³, Shunji Hayashi¹, Naoki Omiya⁴, Haru Kato⁵ (¹Dept. Microbiol., Sch. Med., Kitasato Univ., ²Omura Satoshi Mem. Inst., Kitasato Univ., ³Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ⁴Dept. Gastroenterol., Fujita Health Univ., ⁵Dept. Bacteriol. II, NIID)

ODP-015**Effect of Heat-killed *L. johnsonii* against coccoid formation and drug sensitivity of *H. pylori***

○Fuhito Hojo¹, Takako Osaki², Hideo Yonezawa², Tomoko Hanawa², Shigeru Kamiya³, Jiro Mitobe² (¹Inst. Lab. Anim., Grad. Sch. Med., Kyorin Univ., ²Dept. Infect. Dis., Kyorin Univ. Sch Med., ³Facult. Health Sci., Kyorin Univ.)

ODP-016**Spatio-temporal analysis of mixed biofilms formation by skin bacteria**

○Kaori Tsuryu¹, Nobuhiko Nomura^{2,3}, Andrew Shinichi Utada^{2,3}, Nozomu Obana^{3,4} (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²Fac. Life Environ. Sci., Univ. Tsukuba, ³MiCS, Univ. Tsukuba, ⁴TMRC, Fac. Med., Univ. Tsukuba)

2 Microbial Ecology
b. Microbiota

ODP-017**Little effect of unlinked rRNA genes on the rRNA operon-based metagenomic analysis in equine samples**

○Yuta Kinoshita, Hidekazu Niwa, Eri Uchida, Toshio Nukada (Microbiol. Div., Equine Research Institute, JRA)

ODP-018/WS4-8**Shotgun metagenome sequencing identification of microbial genes associated with an oral disease**

○Koji Yahara⁴, Hiroko Yahara¹, Akimitsu Hiraki², Yutaka Maruoka³, Aki Hirabayashi⁴, Masato Suzuki⁴ (¹Genome Med. Sci. P.J. (Toyama), R.I., NCGM, ²Sec. Oral Oncol., Dep. Oral Maxillofac. Surg, Fukuoka Dental. Coll., ³Dep. Oral Maxillofac. Surg, H.P., NCGM, ⁴AMR Res. Ctr., NIID)

ODP-019**Examination of *Vibrio cholerae* in Stools of Residents of Kolkata, India by Metagenomic Analysis**

○Keinosuke Okamoto¹, Kei Kitahara¹, Eizo Takahashi², Shin-ichi Miyoshi³, Daisuke Motooka⁴, Shota Nakamura⁴, Tetsuya Iida⁴ (¹Colla. Res. Cent. Infect. Dis. Ind., Okayama Uni., ²Heal. Pharm., Yokohama Pharm. Uni., ³Grad. Sch. Med. Den. Pharm. Sci., Okayama Uni., ⁴Res. Inst. Micro. Dis., Osaka Uni.)

ODP-020**[Withdrawn]****ODP-021****Microbiota analysis of oral potentially malignant disorders and cancer site**

○Yawaka Shitozawa^{1,2}, Kazumasa Fukuda¹, Midori Ogawa¹, Mitsumasa Saito¹ (¹Dept. Microbiol., Sch. Med., UOEH, ²Dept. Dentistry and Oral Surgery, Hospital, UOEH)

ODP-022**The role of Environmental Water in Kolkata, India in the survival of *Vibrio cholerae* in this area**

○Kei Kitahara¹, Eizo Takahashi², Shin-ichi Miyoshi³, Keinosuke Okamoto¹ (¹Colla. Res. Cent. Infect. Dis. Ind., Okayama Uni., ²Heal. Pharm., Yokohama Pharm. Uni., ³Grad. Sch. Med. Den. Pharm. Sci., Okayama Uni.)

2 Microbial Ecology**c. Habitats, and Culture Conditions**

ODP-023**Na+/H+ antiporter regulates desiccation tolerance in *Escherichia coli***

○Yoshiaki Enoda¹, Nana Tanaka¹, Torahiko Okubo¹, Toyotaka Sato², Shin-ichi Yokota², Jeewan Thapa³, Hiroyuki Yamaguchi¹ (¹Fac. Health Science, Hokkaido Univ., ²Fac. Med, Sap Med Univ., ³Res. Cent. Zoonosis Control Hokkaido Univ.)

ODP-024**Conditions for acid treatment and culture for obtaining acid-resistant strains of *Campylobacter***

○Kanta Hamaguchi, Nana Taniguchi, Manami Yamaoka, Yoko Eguchi (Dept. Food Sci. Tech., BOST. Kindai Univ.)

ODP-025**Preservative efficacy test for eye drops (in-hospital preparation)**

○Rina Shimada¹, Ryuta Nishi¹, Akiko Okuda², Yoichi Yamada¹, Kana Sato², Mana Kimura¹, Sumiko Shiota¹, Kazunobu Takayanagi² (¹Dept. Molecular Biology., Sch. Pharm., Shujitsu Univ., ²Dept. Pharm., Kurashiki Central Hospital)

2 Microbial Ecology

d. Others

ODP-026

Mechanisms of bile acid tolerance in *Lactobacillus casei* ATCC27139

○Masahiro Ito, Nobuhiko Okada (Dept. Microbiol., Sch. Pha., Kitasato Univ.)

ODP-027

Effects of antibiotic treatment until weaning on nonalcoholic steatohepatitis in model mice

○Nozomi Fujimoto, Miyuu Higasa, Akiko Sakurai, Keiko Kataoka (Dept. Microbiol. Genetic Anal., Sch. Med., Tokushima Univ.)

3 Microbial Structure and Physiology

a. Cell Surface Structure, Membrane Structure, and Cytoskeleton

ODP-028

Association of FtsZ with the intrabacterial nanotransportation system for *Helicobacter pylori* urease

○Hong Wu¹, Shouichi Takayama¹, Shoichi Sakaguchi¹, Noritaka Iwai², Youichi Suzuki¹, Takashi Nakano¹ (¹Dept. Microbiology and Infection Control, Osaka Medical College, ²Grad. Sch. Bioscience and Biotechnology, Tokyo Institute of Technology)

ODP-029

Identification of glycopeptidolipid biosynthesis gene cluster from clinical *M. intracellulare* strain

○Nagatoshi Fujiwara¹, Shin Nakaya², Yuji Miyamoto³, Minoru Ayata⁴, Takashi Naka¹, Shinji Maeda⁵ (¹Tezukayama Univ., ²Otemae College of Nutrition, Dept Nutrition, ³Leprosy Research Center, National Institute of Infectious Diseases, ⁴Osaka City Univ. Grad. Sch. Medicine, Dept. Virology, ⁵Hokkaido Univ. of Science, Fac. Pharmacy)

3 Microbial Structure and Physiology

b. Mobility

ODP-030

Role of C-terminal regions of FlhG in polar flagellar number regulation in *Vibrio alginolyticus*

○Seiji Kojima¹, Yuxi Hao², Michio Homma¹ (¹Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., ²Dept. Biol. Sci., Sch. Sci., Nagoya Univ.)

ODP-031/WS4-6

Rheotaxis in *Mycoplasma pneumoniae*

○Daisuke Nakane¹, Yoshiki Kabata², Takayuki Nishizaka²
(¹Dept. Eng. Sci., Univ. of Electro-Communications, ²Dept. Phys., Gakushuin Univ.)

ODP-032

Evaluation of the effect of surface protein of *Treponema denticola* on motility

○Eitoyo Kokubu, Yuichiro Kikuchi, Kazuko Shibayama, Kazuyuki Ishihara (Dept. Microbiology, Tokyo Dental College)

ODP-033/WS4-5

Role of seven proteins conferring *Spiroplasma* swimming motility to synthetic bacterium JCVI-syn3.0

○Hana Kiyama¹, Shigeyuki Kakizawa², Makoto Miyata^{1,3}
(¹Grad. Sch. Sci., Osaka City Univ., ²Bioproduction Research Institute, AIST, ³OCARINA, Osaka City Univ.)

ODP-034/WS4-4

Structure of the helical cytoskeleton Fibril involved in *Spiroplasma* swimming revealed by cryoEM

○Yuya Sasajima¹, Takayuki Kato², Tomoko Miyata³, Keiichi Namba^{3,4,5}, Makoto Miyata¹ (¹Grad. Sch. Sci., Osaka City Univ., ²IPR., Osaka Univ., ³Grad. Sch. Front. Biosci., Osaka Univ., ⁴BDR & SPRing-8 Center, Riken, ⁵JEOL Yokogushi Res. Alliance. Lab. Osaka Univ.)

ODP-035

Imaging of amphitrichous flagellar rotations in *Magnetospirillum magneticum* AMB-1

○Yukako Eguchi¹, Yuta Takaoka², So Kawamura², Yoshihiro Fukumori³, Azuma Taoka^{2,3} (¹Car. Des. Lab. Gend. Equal., Kanazawa Univ., ²Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., ³NanoLSI, Inst. Front. Sci. Init., Kanazawa Univ.)

3 Microbial Structure and Physiology

c. Others

ODP-036

Existence of extracellular DNA in pathogenic mycobacteria and its role in mycobacterial physiology

○Aleksandr Vladimirovich Ilinov^{1,2}, Amina Kaboso Shaban¹, Mariko Hakamata¹, Akihito Nishiyama¹, Yuriko Ozeki¹, Yukari Fukushima³, Chie Nakajima³, Yoshitaka Tateishi¹, Yasuhiko Suzuki³, Sohkichi Matsumoto¹ (¹Dept. Bacteriol., Sch. Med. Niigata Univ., ²Dept. General Surgery, Krasnoyarsk Med. Univ., ³Division Bioresources, Hokkaido Univ. Research Center for Zoonosis Control)

ODP-037**Comparison of cell morphology between the species in genus *Mycobacteroides* examined with cryo-TEM**

○Hiroyuki Yamada¹, Kinuyo Chikamatsu¹, Akio Aono¹, Kazuyoshi Murata², Naoyuki Miyazaki³, Yoko Kayama^{2,5}, Nagatoshi Fujiwara⁴, Shinji Maeda⁵, Satoshi Mitarai¹ (¹Dept. Mycobac. Ref. Res., RIT, JATA., ²NIPS, ³Univ. Tsukuba, ⁴Tezukayama Univ., ⁵Hokkaido Univ. Science)

ODP-038**Effect of electrical stimulation on synthesis****of bacterial biofilm on a metal**

○Hiroyuki Taira¹, Minoru Yaga², Tetsu Yamashiro³ (¹Dept. Orthop., Sch. Med., Univ. Ryukyus, ²Dept. Mech. Sys. Engr., Fuc. Engr., Univ. Ryukyus, ³Dept. Bacteriol., Sch. Med., Univ. Ryukyus)

ODP-039**Localization of DPPs and dipeptide transporter Pot in *Porphyromonas gingivalis* defined by IEM**

○Yu Shimoyama¹, Yuko Ohara-Nemoto², Takayuki K Nemoto², Taichi Ishikawa¹, Daisuke Sasaki³, Yoshitoyo Kodama¹, Shigenobu Kimura⁴, Minoru Sasaki¹ (¹Dept. Microbiol., Div. Mol. Microbiol., Iwate Med. Univ., ²Dept. Oral Mol. Biol., Course Med. Dent. Sci., Nagasaki Univ. Grad. Sch. Biomed. Sci., ³Dept. Conservative Dent., Div. Periodontol., Iwate Med. Univ., ⁴Dept. Oral Hygiene, Kansai Women's College)

4 Molecular Microbiology**a. Genome, Plasmids, Horizontal Gene Transfer, Mobile Genetic Elements, and Evolution****ODP-040/WS6-1****Prophages in prophages: a mechanism to accumulate T3SS effector and stx genes in *E. coli***

○Keiji Nakamura¹, Yoshitoshi Ogura², Yasuhiro Gotoh¹, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., ²Dept. Infect. Med., Kurume Univ. Sch. Med.)

ODP-041**Novel tra/mob operon for CA-MRSA plasmid's extremely high conjugative transfer/mobilization system**

○Tsai Wen Wan^{1,2}, Lee Jene Teng², Tatsuo Yamamoto¹ (¹Dept. Epidemiol. Genomics Evol., Intl. Med. Edu. Res. Center, ²Dept. Clin. Lab. Sci. Med. Biotechnol., National Taiwan Univ.)

ODP-042**Genomic diversity of EHEC O157 clade 8 and variation in the Stx2 and Stx2 phage subtypes**

○Tatsuya Miyata^{1,2}, Yoshitoshi Ogura^{1,3}, Keiji Nakamura¹, Yasuhiro Gotoh¹, Dai Yoshimura⁴, Sunao Iyoda⁵, Takehiko Itoh⁴, Makoto Ohnishi⁵, Tetsuya Hayashi¹ (¹Dept. Bacteriol. Fac. Med. Sci., Kyushu Univ., ²Dept. Pediatr. Fac. Med. Sci., Kyushu Univ., ³Dept. Infect. Med., Kurume Univ. Sch. Med., ⁴Sch. Life Sci & Tech, Tokyo Tech, ⁵Dept. Bacteriol. I, NIID)

ODP-043**Genomic diversity and dynamics of Stx phages in EHEC O26:H11**

○Bungo Yano¹, Keiji Nakamura¹, Itsuki Taniguchi¹, Yasuhiro Gotoh¹, Yoshitoshi Ogura², Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., ²Dept. Infect. Med., Kurume Univ. Sch. Med.)

ODP-044**Phylogenetic analysis of antimicrobial resistance plasmids by Bird's-eye mapping with Python**

○Yusuke Tsuda¹, Jun-ichi Wachino¹, Kouji Kimura¹, Yoshichika Arakawa^{1,2} (¹Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ., ²Dept. Med. Tech., Shubun Univ.)

ODP-045**Evolution of quorum sensing of *Ralstonia solanacearum***

○Chika Takemura¹, Wakana Senuma¹, Akinori Kiba¹, Kouhei Ohnishi¹, Kenji Kai², Yasufumi Hikichi¹ (¹Fac. Agri. & Marine Sci., Kochi Univ., ²Sch. Life & Environmental Sci., Osaka Pre Univ.)

ODP-046**Genome analysis of “*Candidatus Rickettsia longicornii*” revealed unique mobile genetic elements**

○Kentaro Kasama¹, Yasuhiro Gotoh¹, Hiromi Fujita², Seigo Yamamoto³, Yoshitoshi Ogura⁴, Shuji Ando⁵, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fac. Med., Kyushu Univ., ²Mahara acari Med. Lab., ³(Former) Miyazaki Pref. Inst. for Pub. Health and Environment, ⁴Div. Microbiol., Dept. Infectious Med., Kurume Univ., ⁵NIID)

ODP-047**Genetic analysis on the pathogenicity of *flaA* of *Aeromonas* spp.**

○Kazufumi Miyagi, Itaru Hirai (Lab. Microbiol., Sch. Health Sci., Fac. Med., Univ. of the Ryukyus)

ODP-048/WS6-3***Helicobacter cinaedi* is a human-specific lineage in the *H. cinaedi* complex**

○Yasuhiro Gotoh¹, Takako Taniguchi², Keiji Nakamura¹, Naoaki Misawa², Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fact. Medical Sci., Kyushu Univ., ²Dept. Vet Med Sci., Fact. Agric., Miyazaki Univ.)

ODP-049**Retron structure of *Vibrio mimicus* and possibility of horizontal gene transfer**

Toshi Shimamoto¹, Yojiro Ishida², Hirofumi Nariya³, ○Tadashi Shimamoto¹ (¹Food Microbiol. Hygiene, Grad. Sch. Integrated Sci. Life, Hiroshima Univ., ²St. Jude Children's Res. Hosp., ³Fac. Human Life, Jumonji Univ.)

ODP-050

Comparative genomic analyses of *Helicobacter cinaedi* and its close relatives *Helicobacter* spp.

○Junko Tomida¹, Ryo Kutsuna¹, Tohru Miyoshi-Akiyama², Yoshiaki Kawamura¹ (¹Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ., ²Pathogen Microbe. Lab., Nat. Center Global Health & Med.)

ODP-051

Genome analysis of hard tick-borne relapsing fever borreliae

○Ai Takano¹, Ranna Nakao¹, Kentaro Kasama², Yoshitoshi Ogura³, Atsushi Toyoda⁴, Tetsuya Hayashi², Ken Maeda⁵ (¹Dept. Vet. Med., Joint Fac. Vet. Med., Yamaguchi Univ., ²Dept. Bact., Fac. Med. Sci., Kyushu Univ., ³Dept. Infect. Med., Kurume Univ. Sch. Med., ⁴Dept. Genom. Evol. Biol., Natl. Inst. Genetics, ⁵Dept. Vet. Sci., Natl. Inst. Infect. Dis.)

ODP-052

Genomic diversification of *Streptococcus pyogenes* through type II DNA methyltransferase on prophage

○Atsushi Ota, Kyoko Yarimizu, So Fujiyoshi, Fumito Maruyama (Office of Academic Research and Industry-Government Collaboration, Academy of Hiroshima Univ.)

ODP-053

Genomic analysis of ST1/spa-t1784 type MRSA isolates which were prevalent in Kanto region

○Kohei Ogura¹, Tohru Miyoshi-Akiyama², Ken Kikuchi³ (¹Front. Sci. Init., Kanazawa Univ., ²Pathog. Microb. Lab., Res. Inst., NCGM, ³Dept. Infect. Dis. Tokyo Women's Med. Univ.)

4 Molecular Microbiology

b. Regulation of Gene Expression

ODP-054

PorA, a C-terminal domain-containing protein, impacts gene expression of the T9SS

○Hideharu Yukitake¹, Mikio Shoji¹, Keiko Sato¹, Yusuke Handa², Mariko Naito¹, Katsumi Imada², Koji Nakayama¹ (¹Dep. Micro. Oral Infect., Grad. Sch. Bio. Sci., Nagasaki Univ., ²Dep. Macromol. Sci., Grad. Sch. Sci., Osaka Univ.)

ODP-055

Post-transcriptional regulation by RodZ protein essential for rod shape of bacilli (2)

○Jiro Mitobe, Hideo Yonezawa, Tomoko Hanawa, Takako Osaki (Dept. Infect. Dis., Sch. Med. Kyorin Univ.)

ODP-056

Involvement of uncharacterized *ytfL* gene of *Salmonella* in polyamine tolerance

○Yumi Iwadate, Rouhallah Ramezanifard, Yekaterina A Golubeva, Luke A Fenlon, James M Slauch (Dept. Microbiology, Univ. of Illinois at Urbana-Champaign)

ODP-057/WS6-7

Analysis of regulatory mechanisms of novel Toxin-antitoxin systems found in EHEC O157 Sakai

○Shinya Ebihara, Rina Kojima, Hilo Yen, Toru Tobe (Dept. Clinic. Lab. Med. Sci., Grad. Sch. Med., Osaka Univ.)

ODP-058

Functional analysis of small regulatory RNA encoded by Shiga toxin-converting phage

○Naoki Sudo¹, Marika Sasaki¹, Takuya Imafuku¹, Sunao Iyoda², Nobuhiko Okada¹ (¹Lab. Microbiol., Sch. Pharm., Kitasato Univ., ²Dept. Bacteriol., Natl. Inst. Infect. Dis.)

ODP-059

Regulation of sRNA1 expression by ArcA in *Vibrio alginolyticus*

○Takehiko Mima¹, Agus Eka Darwinata², Kazuyoshi Gotoh¹, Yumiko Yamamoto¹, Osamu Matsushita¹ (¹Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ²Dept. Clin. Microbiol., Fac. Med., Udayana Univ., Indonesia)

ODP-060/WS6-8

Regulation of sRNA1 expression by Lrp in *Vibrio alginolyticus*

○Chieko Hino, Takehiko Mima, Naoya Isomura, Kazuyoshi Gotoh, Yumiko Yamamoto, Osamu Matsushita (Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci.)

4 Molecular Microbiology

c. Protein Structure and Function

ODP-061

Novel carbohydrate binding mechanism of proteins secreted by the T9SS in periodontal pathogens

○Mikio Shoji¹, Paul D. Veith², Koji Nakayama¹, Eric C. Reynolds², Mariko Naito¹ (¹Dep. Micro. Oral Infect., Grad. Sch. Bio. Sci., Nagasaki Univ., ²Oral Health Coop. Res. Cent., Mel. Dent. Sch., Mel. Univ.)

ODP-062/WS6-4

Functional hierarchy of JDP in biofilm formation and thermal adaptation of *E. coli*

○Shinya Sugimoto¹, Kunitoshi Yamanaka², Tatsuya Niwa³, Yurika Terasawa¹, Yoshimitsu Mizunoe¹, Teru Ogura², Yuki Kinjo¹ (¹Dept. Bacteriol., Jikei Univ. Schol. Med., ²IMEG, Kumamoto Univ., ³Cell Biol. Cent., Tokyo Inst. Technol.)

ODP-063/WS6-6**Structure-based investigation of hyaluronidase activity in *Streptococcus pyogenes***

○Kotaro Higashi^{1,2}, Masaya Yamaguchi¹, Masanobu Nakata^{1,3}, Katsuki Takebe⁴, Tomoko Sumitomo¹, Mamoru Suzuki⁵, Shigetada Kawabata¹ (¹Dept. Oral Microbiol., Grad. Sch. Dent., Osaka Univ., ²Dept. Prosthodont. Gerodontol. Oral Rehabil., Grad. Sch. Dent., Osaka Univ., ³Dept. Oral Microbiol., Grad. Sch. Med. & Dent. Sci., Kagoshima Univ., ⁴Dept. Oral Maxillofacial Surg. II, Grad. Sch. Dent., Osaka Univ., ⁵Inst. Protein Res., Osaka Univ.)

ODP-064**Magnetosomal protein MamJ regulates polymerization of MamK cytoskeleton for magnetosome positioning**

○Takumi Saito¹, Yousuke Kikuchi², Yoshihiro Fukumori³, Azuma Taoka^{2,3} (¹Grad. Sch. Natural Science and Technology, Kanazawa Univ., ²Institute of Science and Engineering, Kanazawa Univ., ³WPI-NanoLSI, Kanazawa Univ.)

ODP-065**A small structural change of FliM induces rotational direction change of bacterial flagellar motor**

Norihiro Takekawa¹, Tatsuro Nishikino², Toshiki Yamashita¹, Kiyoshiro Hori³, Yasuhiro Onoue⁴, Kunio Ihara⁵, Seiji Kojima³, Katsumi Imada¹, ○Michio Homma³ (¹Dep. Macromol. Sci., Osaka Univ., ²Inst. Protein Res., Osaka Univ., ³Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., ⁴College Life Sci., Ritsumeikan Univ., ⁵Center Gene Res., Nagoya Univ.)

ODP-066**Characterization of TsaA/TsaT TA system in *Staphylococcus aureus***

○Fuminori Kato (Grad. Sch., Biomed. Heal. Sci., Hiroshima Univ.)

ODP-067**Structural basis of bacterial actin MreB involved in *Spiroplasma* swimming**

○Daichi Takahashi¹, Ikuko Fujiwara^{1,2}, Katsumi Imada³, Makoto Miyata^{1,2} (¹Grad. Sch. Sci., Osaka City Univ., ²OCARINA, Osaka City Univ., ³Grad. Sch. Sci., Osaka Univ.)

**4 Molecular Microbiology
d. Secretion and Transport****ODP-068****MRSA-derived membrane vesicles act as an IgE-mediated stimulant to induce hypersensitivity**

○Krisana Asano^{1,2}, Shouhei Hirose¹, Kouji Narita^{1,3}, Akio Nakane^{2,4} (¹Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med., ³Inst. Anim. Exp., Hirosaki Univ. Grad. Sch. Med., ⁴Hirosaki Univ. Health Welf.)

4 Molecular Microbiology**e. Intra- and Inter-cellular Signal Transduction****ODP-069****Strategies used by *Leptospira interrogans* to disassemble the epithelial apical junctional complex**

Isabel Sebastián¹, Nobuhiko Okura², Bruno M. Humbel³, Jun Xu¹, Małgorzata Hall³, Chitoshi Takayama², Tetsu Yamashiro¹, Shuichi Nakamura⁴, ○Claudia Toma¹ (¹Dept. Bacteriol., Grad. Sch. Med., Univ. of the Ryukyus, ²Dept. Mol. Anatomy, Grad. Sch. Med., Univ. of the Ryukyus, ³Imaging Section, OIST, ⁴Applied Physics, Grad. Sch. Eng., Tohoku Univ.)

ODP-070**Purification of membrane vesicles from Gram-positive bacteria using flow cytometry**

○Tadahiro Nasukawa¹, Ryosuke Sugimoto¹, Jumpei Uchiyama¹, Iyo Uchiyama¹, Hironobu Murakami¹, Ken Fukuda², Shigenobu Matsuzaki², Masahiro Sakaguchi¹ (¹Sch. Vet. Med., Azabu Univ., ²Sch. Med., Kochi Univ.)

ODP-071**Physical properties measurements of bacterial membrane vesicles bound in living cell surface**

○Yousuke Kikuchi¹, Yuuki Ichinaka¹, Masanori Toyofuku^{2,3}, Nozomu Obana^{3,4}, Nobuhiko Nomura^{2,3}, Azuma Taoka^{1,5} (¹Inst. of Sci. and Eng., Kanazawa Univ., ²Life and Env. Sci., Tsukuba Univ., ³Microbiol. Res. Ctr. Sustain., Tsukuba Univ., ⁴Trans. Med. Res. Ctr., Tsukuba Univ., ⁵WPI Nano Life Sci. Inst., Kanazawa Univ.)

ODP-072**The role of OMVs in biofilm formation by *Aeromonas* strain**

○Soshi Seike¹, Hidetomo Kobayashi¹, Eizo Takahashi², Keinosuke Okamoto³, Hiroyasu Yamanaka¹ (¹Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ., ²Lab. of Med. Microbiol., Dept. Health Pharm., Yokohama Univ. of Pharm., ³Collab. Res. Ctr. Okayama Univ.)

ODP-073**Quorum-sensing-mediated heterogeneity in *Clostridium perfringens* biofilm**

○Tabushi Yoshihiko¹, Nozomu Obana^{2,3}, Nobuhiko Nomura^{3,4} (¹Grad Sch. Life Environ. Sci., Tsukuba Univ., ²TRMC, Fac. Med., Tsukuba Univ., ³MiCS, Tsukuba Univ. Fac., ⁴Life Environ. Sci., Tsukuba Univ.)

ODP-074**Chemotaxis of an obligate anaerobic bacteria, *Clostridium sporogenes***

○So-ichiro Nishiyama, Susumu Oogoshi, Shota Manabe, Hiroshi Urakami (Fac. App. Life Sci., Niigata Univ. Pharm. App. Life Sci.)

ODP-075

Contribution of p21-activated kinase PAK to hyphal growth in *Trichophyton rubrum*

○Masaki Ishii^{1,2}, Shinya Ohata^{1,2}, Tsuyoshi Yamada³, Hideko Uga^{1,2}, Toshiaki Katada^{1,2} (¹Mol. Cell Biol. Lab., Fac. Pharm., Musashino Univ., ²Mol. Cell Biol. Lab., Res. Inst. Pharm. Sci., Musashino Univ., ³Inst. Med. Mycol., Teikyo Univ.)

4 Molecular Microbiology f. Microbial Metabolism

ODP-076

Functional analysis of isoprenyl diphosphate synthases from mycobacteria

○Tohru Abe, Sadamu Ozaki, Daijiro Ueda, Tsutomu Sato (Grad. Sch. Sci. Technol., Niigata Univ.)

ODP-077

Longevity regulation by reactive sulfur species in yeast

○Minkyung Jung¹, Akira Nishimura², Tomoaki Ida¹, Masanobu Morita¹, Tetsuro Matsunaga¹, Hiroshi Takagi², Hozumi Motohashi³, Takaaki Akaike¹ (¹Dept. Environmental Medicine and Molecular Toxicology, Tohoku Univ. Grad. Sch. Medicine, ²Laboratory of Applied Stress Microbiology, Div. Biological Science, Nara Institute of Science and Technology, ³Dept. Gene Expression Regulation, IDAC, Tohoku Univ.)

ODP-078/WS6-5

Longevity is dependent on sulfide:quinone oxidoreductase mediated energy metabolism in fission yeast

○Masanobu Morita¹, Akira Nishimura², Tomoaki Ida¹, Minkyung Jung¹, Tetsuro Matsunaga¹, Tsuyoshi Takata¹, Hozumi Motohashi³, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Grad. Sch. Biol. Sci., NAIST, ³Dept. Gene Expression Regulation, IDAC, Tohoku Univ.)

ODP-079

The emergence of novobiocin-resistant mutants in actinomycetes and their characteristics

○Nanase Takaba^{1,2}, Kanata Hoshino^{2,3}, Ryoko Hamauzu², Takeshi Hosaka^{1,2,3} (¹Fac. of Agric. Shinshu Univ., ²IBS-ICCER, Shinshu Univ., ³Grad. Sch. of Med. Sci. and Technol. Shinshu Univ.)

ODP-080

Discovery of reactive sulfur biosynthesis pathway mediated by aminoacyl-tRNA synthetase in bacteria

○Tomoaki Ida¹, Minkyung Jung¹, Tetsuro Matsunaga¹, Akira Nishimura², Masanobu Morita¹, Tsuyoshi Takata¹, Hozumi Motohashi³, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Div. Biol. Sci., NAIST, ³Dept. Gene Exp. Regulation, IDAC, Tohoku Univ.)

ODP-081

The dose-dependent positive effects of lincomycin on secondary metabolism in streptomycetes

○Keiichiro Mukai^{1,4}, Misaki Ishizuka^{2,4}, Yu Imai³, Momoko Kobayashi^{2,4}, Kanata Hoshino^{1,4}, Takeshi Hosaka^{1,2,4} (¹Grad. Sch. of Med. Sci. and Technol., Shinshu Univ., ²Grad. Sch. Sci. and Technol., Shinshu Univ., ³Northeastern Univ., ⁴IBS-ICCER, Shinshu Univ.)

4 Molecular Microbiology g. Omics, and Bioinformatics

ODP-082/WS6-2

Single-cell level analysis of strain-level microbial diversity in human skin microbiome

○Tatsuya Saeki^{1,2}, Koji Arikawa^{1,2}, Takuya Yoda^{1,2}, Taruho Endoh¹, Keigo Ide^{3,4}, Masato Kogawa^{3,4}, Haruko Takeyama^{2,3,4,5}, Masahito Hosokawa^{1,2,5} (¹bitBiome, Inc., ²Research Organization for Nano and Life Innovation, Waseda Univ., ³Dept. Life Science and Medical Bioscience, Waseda Univ., ⁴Computational Bio Big-Data Open Innovation Laboratory, AIST-Waseda Univ., ⁵Institute for Advanced Research of Biosystem Dynamics, Waseda Research Institute for Science and Engineering, Waseda Univ.)

ODP-083

Within-host diversity of pathogens in bacteremia based on metagenomic and deep-sequencing approach

○Taiki Sonoda¹, Yasuhiro Gotoh², Ruriko Nishida^{2,3}, Nobuyuki Shimono⁴, Keiji Nakamura², Tetsuya Hayashi² (¹Dept. Biomed. Sci., Fact. Med., Kyushu Univ., ²Dept. Bact., Grad. Sch. Med. Sci., Kyushu Univ., ³Dept. Clin. Chem. Lab. Med., Kyushu Univ. Hosp., ⁴Center Study Global Infect., Kyushu Univ. Hosp.)

ODP-084

Development of a qRT-PCR method of fecal bacteria responsible for transformation of bile acids

○Satoshi Yuhara, Yuma Oka, Yuki Kawasaki, Kosei Tanaka, Koichiro Murashima, Kazuya Omi (H.U. group Reserch Inst.)

ODP-085

Development of a highly specific and quantitative qPCR panel for monitoring of microbiome

○Takeru Nakabayashi, Satoshi Yuhara, Koichiro Murashima, Kazuya Omi (H.U. group Research Inst.)

4 Molecular Microbiology h. Others

ODP-086

YecE is an endogenous inhibitor of cytoskeleton protein FtsZ in *Escherichia coli*

○Nozomi Shimamoto, Yoshihiro Yamaguchi (Grad. Sch. Sci., Osaka City Univ.)

5 Pathogens and Infectious Diseases (including Epidemiology)

a. Isolation and Characterization of Clinical Microbes

ODP-087

A family case of CA-MRSA infection with USA300 clone

- Mariko Sugawara Mikami¹, Hiroshi Kaneko², Hidemasa Nakaminami² (¹West Yokohama Sugawara Dermatology Clinic, ²Dept. Microbiology, Sch. Pharmacy, Tokyo Univ. of Pharmacy and Life Sciences)

ODP-088

Whole-genome sequencing of EHEC OX18 from a fatal HUS case and other EHEC OX18 isolates

- Ken-ichi Lee¹, Atushi Iguchi², Kazuhiro Uda³, Soushi Matsumura³, Isao Miyairi³, Kenji Ishikura³, Makoto Ohnishi¹, Sunao Iyoda¹, EHEC Working Group in Japan⁴ (¹Dept. Bacteriol. 1, Natl. Inst. Infect. Dis., ²Dept. Agriculture, Univ. Miyazaki, ³National Center for Child Health and Development, ⁴Local Public Health Institutes)

ODP-089

Staphylococcus aureus silence accessory gene regulator to be persistent and competent in hospital

- Yuriko Yamazaki¹, Mari Tanaka², Yoko Kusuya³, Reika Aoyama², Yoshiteru Osone⁴, Hiroki Takahashi³, Yuumi Nakamura², Akiko Takaya⁵ (¹Dept. Dermatology, Chiba Univ. Grad. Sch. Medicine, ²Dept. Dermatology, Osaka Univ. Grad. Sch. Medicine, ³Medical Mycology Research Center, Chiba Univ., ⁴Dept. Pediatrics, Chiba Univ. Grad. Sch. Medicine, Chiba, ⁵Dept. Natural Products Chemistry, Grad. Sch. Pharmaceutical Sciences)

ODP-090/WS9-7

Molecular epidemiology of enterohemorrhagic *Escherichia coli* from asymptomatic carriers

- Rina Takahashi¹, Yutaka Uzawa¹, Shigekazu Iguchi¹, Koichi Uno², Akio Noguchi², Hiroshi Kaneko², Toshio Sato², Ken Kikuchi¹ (¹Dept. Infectious Diseases, Tokyo Women's Medical Univ., ²Japan Biosciences Co., Ltd.)

ODP-091

The characteristics in drug resistance and biofilm production of clinically isolated MRSA

- Nanako Masuda¹, Narumi Wakasa¹, Yuta Miyake¹, Yoichi Yamada¹, Noriko Okabe¹, Yoriyuki Taira², Tomoko Wada², Tetsuhiro Sugiyama², Sumiko Shiota¹ (¹Dept. Molecular Biology, Sch. Pharm., Shujitsu Univ., ²Dept. Pharm., Tsuyama Chuo Hospital)

5 Pathogens and Infectious Diseases (including Epidemiology)

b. Methods in Detection and Identification of Clinical Microbes

ODP-092

Optimization of synthesis conditions for antimicrobial capsid applicable to bacterial gene detection

- Yutaro Nishikawa^{1,2}, Kotaro Kiga², Shinya Watanabe², Xin-Ee Tan², Takako Suzuki¹, Takayuki Simojo¹, Longzhu Cui² (¹EIKEN CHEMICAL CO., LTD, ²Div. Bacteriology, Dept. Infection and Immunity, Sch. Medicine, Jichi Medical Univ.)

ODP-093

Evaluation of IgG levels to 12 antigens in a *Mycobacterium tuberculosis*-infected Asian elephant

- Satoshi Ishikawa^{1,2}, Erina Inouchi¹, Satomi Suga², Yasuhiko Mukai², Haruka Kobayashi¹, Yuriko Ozeki¹, Akihito Nishiyama¹, Yoshitaka Tateishi¹, Sohkichi Matsumoto¹ (¹Dep. Bacteriol., Niigata Univ. Med., ²Fukuyama Zoo)

ODP-094

Detection of botulinum neurotoxins in Japanese samples by Endopep-MS assay

- Chie Monma¹, Satomi Uehara¹, Chikako Asayama¹, Wakaba Okada¹, Jun Suzuki¹, Kenji Sadamasu¹, Tomoko Kohda², Masafumi Mukamoto², Suzanne R Kalb³ (¹Dept. Microbiol., Tokyo Metropolitan Inst. Pub. Health, ²Dept. Vet. Sci., Grad. Sch. Life Environ. Sci., Osaka Pref. Univ., ³CDC)

ODP-095

Automating bacteriological tests – microscopic agglutination test for leptospirosis as an example

- Ryo Ozuru¹, Yuji Oyamada², Toshiyuki Masuzawa³, Satoshi Miyahara⁴, Yasuhiko Nikaido⁴, Mitsumasa Saito⁴, Sharon Y. A. M. Villanueva⁵, Jun Fujii¹ (¹Div. Bacteriol., Dept. Microbiol. Immunol., Faculty of Med., Tottori Univ., ²Dept. EECS, Fac. Eng., Tottori Univ., ³Lab. Microbiol. Immunol., Fac. Pharm. Sci., Chiba Inst. Sci., ⁴Dept. Microbiol., Sch. Med., Univ. of Occupational and Environmental Health, ⁵Dept. Med. Microbiol., Col. Pub. Health, Univ. the Philippines Manila)

ODP-096

Identification of *Tsukamurella inchonensis* isolated from septic pulmonary emboli (SPE) patient

- I Putu Bayu Mayura¹, Kazuyoshi Gotoh¹, Takehiko Mima¹, Yumiko Yamamoto¹, Kenji Yokota², Osamu Matsushita¹, Hideharu Hagiya³ (¹Dept. Bacteriol., Grad Sch Med, Dent and Pharm Sci., Okayama Univ, ²Grad. Sch. Health Sci., Okayama Univ., ³Dept. Gen Med, Grad Sch Med, Dent and Pharm Sci., Okayama Univ)

**5 Pathogens and Infectious Diseases
(including Epidemiology)
c. Prevention of Infection
(Vaccination and Other Methods)**

ODP-097

The anti-Helicobacter pylori colonization effect of serum and monoclonal antibody in the mice stomach

○Subsomwong Phawinee^{1,2}, Ryota Otsubo^{1,3}, Hitomi Mimuro¹
(¹Dept. Infect. Dis., RIMD, Osaka Univ., ²Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ³Toyama Pref. Inst. Pharm. Res., Toyama Univ.)

ODP-098/WS9-2

Host immune induction via membrane vesicles produced by *Clostridium perfringens*

○Mayu Okuda¹, Nozomu Obama², Hibiki Okuwaki¹, Ryoma Nakao³, Hidenobu Senpuku³, Nobuhiko Nomura⁴ (¹Grad. Life Environ. Sci., Univ. Tsukuba, ²TMRC, Fac. Medicine, Univ. Tsukuba, ³Dept. Bacteriol I., NIID., ⁴Fac. Life Environ. Sci., Univ. Tsukuba)

**5 Pathogens and Infectious Diseases
(including Epidemiology)
d. Epidemiology, and Molecular Epidemiology**

ODP-099/WS9-5

Investigation of pathogenic mechanism of invasive infection caused by emm 89 *Streptococcus pyogenes*

○Masayuki Ono^{1,2}, Masaya Yamaguchi¹, Yujiro Hirose¹, Kotaro Higashi^{1,3}, Norihiko Takemoto⁴, Tohru Miyoshi-Akiyama⁴, Tomoko Sumitomo¹, Tadayoshi Ikebe⁵, Shigetada Kawabata¹ (¹Dept. Oral Mol. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Dept. Fixed Prosthodont., Osaka Univ. Grad. Sch. Dent., ³Dept. Prosthodont. Gerodontol. Oral Rehabil., Osaka Univ. Grad. Sch. Dent., ⁴Pathogenic Microbe Lab., Dept. Infectious Diseases, NCGM, ⁵Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

ODP-100/WS9-8

Global Genome Epidemiology Database (gGENEPID) for pathogenic bacteria

○Makoto Kuroda, Tsuyoshi Sekizuka, Kentaro Itokawa, Koji Yatsu (Pathogen Genomics Center, NIID)

ODP-101

Molecular epidemiology of *Staphylococcus argenteus* clinical isolates in Hokkaido, Northern Japan

○Meijisoe Aung, Noriko Urushibara, Mitsuyo Kawaguchiya, Nobumichi Kobayashi (Dept. Hygiene, Sch. Med., Sapporo Med. Univ.)

ODP-102

Genetic analysis of the type VII secretion system of *Streptococcus intermedius*

○Toshifumi Tomoyasu, Atsushi Tabata, Hideaki Nagamune (Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

ODP-103

Antimicrobial resistance of *Neisseria gonorrhoeae* isolated in Okinawa

○Hiroshi Nakao¹, Akiko Uehara¹, Toshiaki Nakada², Tominobu Takara², Shu-ichi Nakayama³, Ken Shimuta³, Makoto Ohnishi³ (¹Lab. Molec. Genetics, Sch. Health Sci., Univ. Ryukyu, ²Lifestyle Related Dis. Med. Ctr., Naha City Med. Assoc., ³Dept. Bacteriol. 1, Natl. Inst. Infect. Dis.)

ODP-104

Genetic profiling and pan-genome analysis of pneumococcal strains isolated in Myanmar

○Masaya Yamaguchi¹, Hpoo Pwint Myo Win², Masayuki Ono¹, Kotaro Higashi¹, Yujiro Hirose¹, Mya Mya Aye², Moh Moh Htun², Hlaing Myat Thu², Shigetada Kawabata¹ (¹Dept. Oral Mol. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Bacteriol. Res. Div., Dept. Med. Res., Min. Health Sports.)

ODP-105

Survey of *Escherichia albertii* in wild birds in Japan

○Atsushi Hineno^{1,2,3}, Sharda Prasad Awasthi¹, Noritomo Yasuda¹, Keigo Nagano², Jayedul Hassan¹, Keiji Takehira¹, Noritoshi Hatanaka¹, Haruna Inoue⁴, Shinji Yamasaki^{1,2,3} (¹Dept. Vet. Sci., Grad. Sch. Life Environ. Sci., Osaka Pref. Univ., ²Fac. Vet. Sci., Sch. Life Environ. Sci., Osaka Pref. Univ., ³AHSI, Osaka Pref. Univ., ⁴Wanpark Kochi Animal Land)

ODP-106

Molecular epidemiological analysis of MRSA in the Kanto region

○Daiki Kaji^{1,2}, Masakazu Sasaki³, Yoshihito Otsuka⁴, Ken Kikuchi⁵ (¹Dept. Clin. Lab., Kimitsu Chuo Hosp., ²Div. Infect. Prevention and Control, Tokyo Healthcare Univ. Postgraduate Sch., ³Dept. Clin. Lab., Toho Univ. Med. Ctr. Omori Hosp., ⁴Dept. Clin. Lab., Kameda Med. Ctr., ⁵Dept. Infect. Dis., Tokyo Women's Med. Univ. Hosp.)

ODP-107

Whole genome analysis of *Staphylococcus aureus* ST9 strains isolated in Myanmar

○Noriko Urushibara, Meijisoe Aung, Mitsuyo Kawaguchiya, Nobumichi Kobayashi (Dept. Hygiene, Sch. Med., Sapporo Med. Univ.)

ODP-108**Local spread of VRE ascribed to the interspecies transmission of a *vanA*-carrying linear plasmid**

○Yusuke Hashimoto¹, Masato Suzuki³, Takahiro Nomura¹, Jun Kurushima¹, Hidetada Hirakawa¹, Koichi Tanimoto², Haruyoshi Tomita^{1,2} (¹Dept. Bacteriol., Grad. Sch. Med., Gunma Univ., ²Lab. Bacteriol. Drug Resist., Grad. Sch. Med., Gunma Univ., ³Antimicrobial Resistance Research Center, National Institute of Infectious Diseases)

**5 Pathogens and Infectious Diseases
(including Epidemiology)
e. Others**

ODP-109**Novel method to detect resistant bacteria by observing the morphological change using a tabletop SEM**

○Erino Matsumoto¹, Akiko Hisada¹, Ryo Hirano², Yuusuke Oominami², Jacques Bou Khalil³, Kyoko Imai², Takashi Irie², Toshihide Agemura², Didier Raoult³ (¹R&D Group, Hitachi, Ltd., ²Hitachi High-Tech Corp., ³Institut Hospitalo-Universitaire Méditerranée Infection)

ODP-110/WS9-6**bGWAS reveals putative bacterial factors that affect pathological outcomes of MAC lung disease**

○Hirokazu Yano¹, Yukiko Nishiuchi², Kentaro Arikawa³, Atsushi Ota⁴, Mari Miki⁵, Fumito Maruyama⁴, Hiroshi Kida⁵, Seigo Kitada⁵, Tomotada Iwamoto³ (¹Grad. Sch. Life Sciences, Tohoku Univ., ²Grad Sch. Medicine, Osaka City Univ., ³Kobe Institute of Health, ⁴Center for Holobiome and Built Environment (CHOBE), Hiroshima Univ., ⁵National Hospital Organization Osaka Toneyama Medical Center)

ODP-111**Empirical studies on usability of *Lactobacillus* against biofilm-related urinary tract infections**

○Reiko Kariyama^{1,2}, Ritsuko Mitsuhata¹, Masumi Yamamoto¹, Takuya Sadahira¹, Koichiro Wada¹, Ayano Ishii¹, Toyohiko Watanabe¹, Yasutomo Nasu¹ (¹Dept. Urol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ²Sch. Food Nutr., Okayama Gakuin Univ.)

ODP-112**Interfering effect of wound exudates on 222 nm-UVC light protects fibroblast in dermal damaged site**

○Kouji Narita^{1,2}, Yukihiro Morimoto^{3,4,5}, Hiroyuki Ohashi⁴, Tatsushi Igarashi⁴, Krisana Asano^{2,3}, Akio Nakane³ (¹Inst. for Animal Exp., Hirosaki Univ. Grad. Sch. of Med., ²Dept. Microbiol. and Immunol., Hirosaki Univ. Grad. Sch. Med., ³Dept. Biopolymer and Health Sci., Hirosaki Univ. Grad. Sch. Med., ⁴Ushio Inc., ⁵Inst. of Scientific and Industrial Res., Osaka Univ.)

6 Virulence Factors and Biophylaxis**a. Adhesion Factors, and Colonization Factors****ODP-113****Inhibition of the interaction between fibronectin and dermatopontin by *Clostridium perfringens* Fbps**

○Seira Egusa¹, Nozomu Matsunaga¹, Nodoka Narukawa¹, Tsutomu Yamasaki², Ryousuke Akamatsu¹, Seiichi Katayama¹, Yasuo Hitsumoto¹ (¹Dept. Life Science, Fac. Science, Okayama Univ. of Science, ²Pharmaceutical Department, Shujitsu Univ.)

ODP-114**Purification of cell wall-anchored proteins of *Streptococcus intermedius***

○Ayu Ichijo¹, Toshifumi Tomoyasu^{1,2}, Atsushi Tabata^{1,2}, Hideaki Nagamune^{1,2} (¹Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

ODP-115**Dual host cell-binding characteristics of 5-domain-type CDC with N-terminal extra-domain of *S. mitis***

○Takuya Ikeda¹, Atsushi Tabata^{1,2}, Toshifumi Tomoyasu^{1,2}, Ayuko Takao³, Hisashi Okuni⁴, Hideaki Nagamune^{1,2} (¹Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., ³Dept. Oral Bacteriol., Tsurumi Univ., ⁴Health Sci. Res. Inst. East Japan Co. Ltd.)

ODP-116***Aggregatibacter actinomycetemcomitans* enhances coaggregation by serum-culturing**

○Yuichi Oogai¹, Ayumi Fujita², Masanobu Nakata¹, Hitoshi Komatsuzawa³ (¹Dept. Oral Microbiol., Grad. Sch. Med. and Dent., Kagoshima Univ., ²Dept. Periodontol., Grad. Sch. Med. and Dent., Kagoshima Univ., ³Dept. Bacteriol., Grad. Sch., Biomedical and Health Sch., Hiroshima Univ.)

ODP-117**Molecular characteristics and the peptidoglycanase activity of *Clostridium perfringens*-derived autolysin, Acp**

○Ryo Aono¹, Nozomu Matsunaga¹, Eiji Tamai², Seiichi Katayama¹, Yasuo Hitsumoto¹ (¹Dept. Life Sci., Fac. Sci., Okayama Univ. Science, ²Dept. Infect. Dis., Coll. Pharm., Matsuyama Univ.)

ODP-118**Characterization of extracellular RNA in *Staphylococcus aureus* biofilm**

○Akio Chiba^{1,2}, Amu Baba¹, Shinya Sugimoto^{1,2}, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., Sch. Med., Jikei Univ., ²Center for Biofilm, Jikei Univ.)

ODP-119

Effect of organic acid from oral bacteria on initial attachment and colonization of *Actinomyces oris*

○Itaru Suzuki^{1,2}, Takehiko Shimizu², Hidenobu Senpuku¹

(¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Dept. Pediatric Dent. Nihon Univ. Sch. Dent. at Matsudo)

ODP-120

Function of the autolysin of *Clostridium perfringens*

○Shogo Emi¹, Ryo Aono¹, Nozomu Matsunaga², Hirofumi Nariya³, Eiji Tamai⁴, Yasuo Hitsumoto², Seiichi Katayama²

(¹Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., ²Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., ³Dept. Food Sci., Fac. Human Life., Jumonji Univ., ⁴Dept. Infect. Dis., Coll. Pharm., Matsuyama Univ.)

6 Virulence Factors and Biophylaxis

b. Toxins, Effectors, and Bioactive Substances

ODP-121

Clostridium perfringens α-toxin inhibits myogenic differentiation of C2C12 cells

○Masaya Takehara, Miho Takeuchi, Keiko Kobayashi, Masahiro Nagahama (Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ.)

ODP-122

Role of amino acid residues in the biological activities of *Clostridium perfringens* delta-toxin

○Masahiro Nagahama¹, Honoka Wada¹, Soshi Seike², Keiko Kobayashi¹, Masaya Takehara¹ (¹Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ., ²Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ.)

ODP-123

Cellular Uptake of *Clostridium botulinum* C2 Toxin

Requires Protease Activity

○Keiko Kobayashi, Anna Oka, Masaya Takehara, Masahiro Nagahama (Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ.)

ODP-124

Inhibition of LPS-induced inflammation by bioactive metabolites derived from deep-sea microorganisms

○Yinzhi Lin¹, Liyan Wang², Shiori Kojima³, Naoki Koide¹, Kazuo Umezawa⁴ (¹Dept. Microbiol. Immunol., Sch. Med., Aichi Med. Univ., ²College of Life Sciences and Oceanography, Shenzhen Univ., ³Fukuyu Med. Inst., ⁴Dept. Mol. Target, Sch. Med., Aichi Med. Univ.)

ODP-125

Analysis of IL-33-inducing activity of *Citrobacter koseri* in dendritic cells

○Hideo Kataoka, Taiki Mori, Takeshi Into (Dept. Oral Microbiology, Division of Oral Infection and Health Sciences, Asahi Univ. Sch. Dentistry)

ODP-126/WS7-8

Effect of O₂ availability on Stx1 and Stx2 productions in enterohemorrhagic *Escherichia coli*

○Takeshi Shimizu¹, Manami Onuki¹, Akio Matsumoto², Takeshi Hamahata³ (¹Dept. Molecular Infectiology, Grad. Sch. Medicine, Chiba Univ., ²Dept. Aging Pharmacology, Sch. Medicine, Toho Univ., ³Section of Bacterial Infection, Research Institute, National Center for Global Health and Medicine)

ODP-127/WS7-7

Optimization of culture conditions for type III secreted proteins production in *B. pertussis*

○Masataka Goto¹, Asaomi Kuwae¹, Tomoko Hanawa², Akio Abe¹ (¹Lab. Bact. Infect., Grad. Sch. Infect. Cont. Sci., Kitasato Univ., ²Dep. Infect. Dis., Kyorin Univ. Sch. Med.)

ODP-128

SubAB induces a novel form of Lipocalin 2, which involves in STEC survival

○Kinnosuke Yahiro¹, Kohei Ogura², Yoshiyuki Goto³, Sunao Iyoda⁴, Makoto Ohnishi⁴ (¹Dept. Molecular Infectiology, Grad. Sch. Medicine, Chiba Univ., ²Advanced Health Care Science Research Unit, Institute for Frontier Science Initiative, Kanazawa Univ., ³Div. Molecular Immunology, Medical Mycology Research Center, Chiba Univ., ⁴Dept. Bacteriology I, National Institute of Infectious Diseases)

ODP-129

Involvement of *Streptococcus pyogenes*-released extracellular vesicles in the pathogenicity

○Kazunori Murase¹, Chihiro Aikawa¹, Takashi Nozawa¹, Ayako Nakatake², Taisei Kikuchi³, Ichiro Nakagawa¹ (¹Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., ²HTLV-1/ATL Res. Ctr., Fac. Med., Univ Miyazaki., ³Dept. Infec. Dis., Fac. Med., Univ Miyazaki)

ODP-130

An anti-PFO monoclonal antibody cross-reactive with SLO protects against STSS

○Takayuki Matsumura¹, Ayae Nishiyama¹, Akira Arai², Tadayoshi Ikebe³, Joe Chiba², Manabu Ato⁴, Yoshimasa Takahashi¹ (¹Dept. Immunol., Natl. Inst. Infect. Dis., ²Dept. Pathol., Natl. Inst. Infect. Dis., ³Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ⁴Dept. Mycobacteriol., Lepr. Res. Ctr., Natl. Inst. Infect. Dis.)

ODP-131/WS7-5

E. coli-derived CirA induces the pro-inflammatory factors via extracellular vesicles

○Risa Imamiya¹, Mayuko Osada-Oka², Akari Shinohara¹, Yasuhiko Horiguchi³ (¹Food Hyg. Health., Life Env., Kyoto Pref. Univ., ²Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., ³Dept. Mol. Bact., RIMD, Osaka Univ.)

ODP-132**Virulence factors in membrane vesicle of *Bordetella pertussis* planktonic and biofilm cultures**

○Tomoko Hanawa¹, Kazunari Kamachi², Asaomi Kuwae³, Akio Abe³, Hideo Yonezawa¹, Takako Osaki¹, Fuhito Hojo⁴, Shigeru Kamiya¹, Jiro Mitobe¹ (¹Dept of Infect. Dis. Sch. Med., Kyorin Univ., ²Dept. Bac. II Natl Inst. of Infec. Dis., ³Lab. Bact. Infect., Grad. Sch. Infect. Cont. Sci., Kitasato Univ., ⁴Facit., Kyorin Univ. Sch. Med.)

ODP-133**Identification of a *Bartonella elizabethae*-derived angiogenic factor**

○Natsumi Suzuki¹, Kayo Kumadaki^{1,2}, Yohei Doi¹, Kentaro Tsukamoto¹ (¹Dept. Microbiol. Fujita Health Univ. Sch. Med., ²Fujita Health Univ. Grad. Sch. Med.)

ODP-134**Shiga toxin receptor, globotriaosylceramide, Gb3 in olfaction**

○Jun Fujii¹, Kazuya Nomura² (¹Division of Bacteriology Dept. Microbiology and Immunology Fac. Medicine Tottori Univ., ²Dept. Medical Biochemistry, Kurume Univ. Sch. Medicine)

ODP-135**Lipid A up-regulates caspase-11 expression via RIPK3 activation**

○Riyoko Tamai, Izumi Mashima, Yusuke Kiyoura (Dept. Oral Med. Sci., Sch. Dent., Ohu Univ.)

ODP-136**Analysis of the functional domain of BopN, a type III effector produced by *Bordetella***

Saaya Kinoshita, ○Asaomi Kuwae, Akio Abe (Lab. Bact. Infect., Grad. Sch. Infect. Cont. Sci., Kitasato Univ.)

ODP-137/WS7-6**A molecular mechanism of IL-1 β inhibition by mycobacterial effector protein**

○Tomomi Kurane¹, Giichi Takaesu^{1,2}, Kazuko Sawada², Masayuki Umemura^{1,2}, Goro Matsuzaki^{1,2} (¹Dept. Host defense, Grad. Sch. Med., Univ. of the Ryukyus, ²Mol. Microbiol. Group, Tropical Biosphere Research Center, Univ. of the Ryukyus)

ODP-138**Characterization of the Type 7 Secretion System in *Streptococcus intermedius* pathogenicity**

○Masanori Hashino, Tsuyoshi Sekizuka, Kentaro Itokawa, Makoto Kuroda (Pathogen Genomics Center, NID)

ODP-139**Investigation on the cytotoxicity of a cholesterol-dependent cytolysin derived from *Gemella bergeri***

○Haruka Miki¹, Atsushi Tabata^{1,2}, Ken Kikuchi³, Kanu Ryu⁴, Toshifumi Tomoyasu^{1,2}, Hideaki Nagamune^{1,2} (¹Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., ³Dept. Infect. Dis., Tokyo Women's Med. Univ., ⁴Dept. Biol. Sci. & Tech., Tokushima Univ.)

ODP-140**Investigation of the cellular response in THP-1 against Streptolysin S produced by *S. anginosus***

○Rina Shirai¹, Atsushi Tabata^{1,2}, Toshifumi Tomoyasu^{1,2}, Hideaki Nagamune^{1,2} (¹Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

ODP-141/WS7-2**Identification of signaling pathway that HA of botulinum toxin complex promotes cell proliferation**

○Sho Amatsu^{1,2}, Yukako Fujinaga¹ (¹Dept. Bacteriol., Sch. Med. Sci., Kanazawa Univ., ²Dept. Forensic Med. Pathol., Sch. Med. Sci., Kanazawa Univ.)

ODP-142**Involvement of siderophore activity of *Ralstonia solanacearum* in its virulence**

○Yuki Terazawa¹, Chika Takemura¹, Wakana Senuma¹, Akinori Kiba¹, Kouhei Ohnishi¹, Kenji Kai², Yasufumi Hikichi¹ (¹Fac. Agri. & Marine Sci., Kochi Univ., ²Sch. Life & Environmental Sci., Osaka Pre Univ.)

ODP-143/WS7-1**Regulatory mechanism of TSST-1 production in clinically isolated *Staphylococcus aureus***

○Yusuke Taki^{1,2}, Shinya Watanabe¹, Yusuke Sato'o¹, Fengyu Li¹, Kanate Thitiananpakorn¹, XinEe Tan¹, Yoshifumi Aiba¹, Kotaro Kiga¹, Teppei Sasahara¹, Longzhu Cui¹ (¹Div. Bacteriology, Sch. Med., Jichi Med. Univ., ²Dept. Gastroenterological Surg. Shizuoka Gereral Hosp.)

ODP-144***P. gingivalis* and *F. nucleatum* LPS augment *E. coli* LPS-induced IL-6 production by human monocytes**

○Yuya Sakamoto^{1,2}, Sakura Onoue³, Kazuyoshi Kawahara³, Kenji Matsushita⁴, Hiroyuki Tada² (¹Sch. Dent., Tohoku Univ., ²Dept. Oral Immunol., Sch. Dent., Tohoku Univ., ³Dept. Biosci., College Sci. Engineer., Kanto Gakuin Univ., ⁴Dept. Oral Dis. Res., NCGG)

ODP-145

Vaginal *Lactobacillus iners* impacts on barrier functions of the human vaginal mucosa

○Maho Shimada¹, Mayuko Kato¹, Shihō Sato¹, Miki Ishii¹, Yuki Kodama¹, Masahiro Ito^{1,2}, Adam J. Ratner³, Nobuhiko Okada¹, Melissa M. Herbst-Kralovetz^{2,4} (¹Dept. Microbiol., Sch. Pha., Kitasato Univ., ²Dept. Bas. Med. Sci., Col. Med.-Phoenix, Univ. Arizona, ³Dept. Ped. Microbiol., Sch. Med., New York Univ., ⁴Dept. Obs. Gyn., Col. Med.-Phoenix, Univ. Arizona)

ODP-146

***Aeromonas* serine protease disrupts epithelial junctions and contributes to bacterial translocation**

○Hidetomo Kobayashi¹, Soshi Seike¹, Eizo Takahashi², Keinosuke Okamoto³, Hiroyasu Yamanaka¹ (¹Labo. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ., ²Labo. Med. Microbiol., Dept. Health Pharm., Yokohama Univ. of Pharmacy, ³Collaborative Research Center of Okayama Univ. for Infect. Diseases in India)

ODP-147

***Bartonella* species vary in their ability to promote endothelial cell proliferation**

○Kayo Kumadaki^{1,2}, Yohei Doi¹, Kentaro Tsukamoto¹ (¹Dept. Microbiol., Fujita Health Univ. Sch. Med., ²Fujita Health Univ. Grad. Sch. Med.)

ODP-148

Inhibitory effect of nitric oxide on Subtilase cytotoxin

○Hiroyasu Tsutsuki¹, Tianli Zhang¹, Kinnosuke Yahiro², Katsuhiko Ono¹, Takaaki Akaike³, Tomohiro Sawa¹ (¹Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ²Dept. Mol. Infectiol., Grad. Sch. Med., Chiba Univ., ³Dept. Environ. Med. Mol. Toxicol., Grad. Sch. Med., Tohoku Univ.)

ODP-149

Analysis of host response against membrane vesicles derived from *Clostridium botulinum*

○Nobuhide Kobayashi, Mayu Kitamura, Kazuki Saito, Masahiro Yutani, Sho Amatsu, Takuhiro Matsumura, Yukako Fujinaga (Dept. Bacteriol., Grad. Sch. Med., Kanazawa Univ.)

ODP-150

Function analysis of HA in the intestinal toxin absorption using recombinant botulinum toxin complex

○Chiyono Morimoto, Sho Amatsu, Mayu Kitamura, Takuhiro Matsumura, Yukako Fujinaga (Dept. Bacteriol., Sch. Med. Sci., Kanazawa Univ.)

ODP-151

Potential pathogenicity of *S. mitis* strain Nm-65 based on the complete genomic information

○Atsushi Tabata¹, Hisashi Ohkuni², Toshifumi Tomoyasu¹, Hideaki Nagamune¹ (¹Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch., ²Health Sci. Res. Inst. East Japan)

ODP-152

Proteolysis of PAI-1 in human endothelial cells by gingipains from *Porphyromonas gingivalis*

○Liting Song¹, Kenji Matsushita², Hiroyuki Tada¹ (¹Dept. Oral Immunol., Sch. Dent., Tohoku Univ., ²Dept. Oral Dis. Res., NCGG)

ODP-153

Investigating the influence of EPEC infection on the host biogenesis of exosome

○Hilo Yen, Toru Tobe (Dept. Biomed. info., Grad. Sch. Med., Osaka Univ)

ODP-154

Functional analysis of mycobacterial protein PE_PGRS30

○Kazunori Matsumura¹, Satoshi Takaki¹, Teruo Kirikae² (¹Dept. Immune Reg., Inst., NCGM, ²Dept. Microbiol., Sch. Med., Juntendo Univ.)

ODP-155

[Withdrawn]

6 Virulence Factors and Biophylaxis

c. Mechanisms of Intracellular Invasion and Parasitism

ODP-156/WS9-3

Non-hematogenous dissemination of *Streptococcus pneumoniae* from nasopharynx to brain tissue

○Yuki Takahara^{1,2}, Tomoko Sumitomo¹, Masamitsu Kono³, Masaya Yamaguchi¹, Masanobu Nakata⁴, Muneki Hotomi³, Shigetada Kawabata¹ (¹Dept. Oral Mol. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Dept. Fixed Prosthodont., Osaka Univ. Grad. Sch. Dent., ³Dept. Otorhinolaryngology-Head and Neck Surgery, Wakayama Medical Univ., ⁴Dept. Oral. Microbiol., Grad. Sch. Med. and Dent., Kagoshima Univ.)

ODP-157

***Campylobacter jejuni* recruit LC3 to bacterial invasion site on host cells through Rac1 signaling**

○Shiho Fukushima, Takaaki Shimohata, Takashi Uebano, Kazuaki Mawatari, Akira Takahashi (Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch.)

ODP-158

Latent infection of *Helicobacter cinaedi* in bone marrow sustained by super sulfide

○Tetsuro Matsunaga¹, Masaaki Yoshida¹, Akira Nishimura², Masanobu Morita¹, Tomoaki Ida¹, Hiroyasu Tsutsuki³, Tomohiro Sawa³, Hozumi Motohashi⁴, Yoshiaki Kawamura⁵, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Div. Biol. Sci., Grad. Sch. Sci. Technol., NAIST, ³Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ⁴Dept. Gene Exp. Regulation, IDAC, Tohoku Univ., ⁵Dept. Microbiol., Sch. Pharmacy., Aichi-Gakuin Univ.)

6 Virulence Factors and Biophylaxis
d. Mechanisms of Immune Evasion and Proliferation in Host

ODP-159

Increased vaginal mucosal indole and IFN- γ levels critically control genital chlamydial infection

○Ryoya Tsujikawa¹, Yuki Funahashi¹, Torahiko Okubo¹, Jeewan Thapa², Hiroyuki Yamaguchi¹ (¹Fac. Health Science, Hokkaido Univ., ²Res. Cent. Zoonosis Control Hokkaido Univ.)

ODP-160

Osteopontin and exosome in THP-1 macrophage infected with *Mycobacterium bovis* BCG

○Takashi Matsuba¹, Gaowa Bai², Toshiro Niki³, Toshio Hattori² (¹Div. Bacteriol., Fac. Med., Tottori Univ., ²Dept. Health Sci. & Soc. Welfare, Kibi Int. Univ., ³Dept. Immunol., Fac. Med. Kagawa Univ.)

6 Virulence Factors and Biophylaxis
e. Basic Studies using Infection Model

ODP-161/WS9-4

Monitoring mycobacterial infection in vivo by 3D imaging CUBIC

○Mariko Hakamata^{1,2}, Erina Inouchi¹, Akira Yokoyama^{1,3}, Yuriko Ozeki¹, Akihito Nishiyama¹, Yoshitaka Tateishi¹, Riuko Ohashi⁴, Toshiaki Kikuchi², Kazuki Tainaka⁵, Sohkichi Matsumoto¹ (¹Dept. Bacteriol., Sch. Med., Niigata Univ., ²Dept. Respiratory Medicine and Infectious Disease., Sch. Med., Niigata Univ., ³Dept. Respiratory Medicine, Sch. Med., The Univ. of Tokyo, ⁴Histopathology Core Facility, Sch. Med., Niigata Univ., ⁵Dept. System Pathology for Neurological Disorders, Brain Research Institute, Niigata Univ.)

ODP-162

Hyaluronate Lyase Involved in Nutrient Acquisition and Pathogenicity of *Streptococcus dysgalactiae*

○An Van Nguyen¹, Kohei Ogura², Miki Matsue³, Norihiko Takemoto⁴, Wataru Hashimoto⁵, Shigefumi Okamoto³, Hiroshi Ichimura¹ (¹Dept. Viral Infect., Grad. Sch. Med. Sci., Kanazawa Univ., ²Inst. Front. Sci. Init., Kanazawa Univ., ³Dept. Clin. Lab. Sci., Inst. Med. Pharm. Health Sci., Kanazawa Univ., ⁴Pathog. Microb. Lab., Res. Inst., NCGM, ⁵Lab. Bas. Appl. Mole. Biotech., Div Food Sci. Biotech., Grad. Agric., Kyoto Univ.)

ODP-163

Stx2 disturbs circadian rhythm in the proximal tubular epithelial cells *in vitro* and *in vivo*

○Fumiko Obata, Ryo Ozuru, Takahiro Tsuji, Takashi Matsuba, Jun Fujii (Div. Bacteriol., Dept. Infect. Immun., Fac. Med., Tottori Univ.)

ODP-164

Effectiveness of *Lonicera caerulea* against pneumococcal infection in aging mouse

○Masaaki Minami¹, Mineo Nakamura² (¹Dept. Bacteriol., Grad. Sch. Med. Sci., ²Nakamura Pharmacy)

ODP-165

The effect of hypoxia on *Helicobacter pylori* induced inflamasome activation

○Adiza Abass, Toshihiko Suzuki (Dept. Bact. Pathol. Infect. Resp. Sch. Med. Dent., TMDU)

ODP-166

The relationship between leptospirosis and chronic renal dysfunction in a hamster model

○Tsukasa Maruoka^{1,2}, Satoshi Miyahara¹, Kazumasa Fukuda¹, Midori Ogawa¹, Mitsumasa Saito¹ (¹Dept. Microbiol., Sch. Med., UOEH., ²Dept. Anesthesiology., Sch. Med., UOEH.)

ODP-167

Effect of *Helicobacter pylori* infection on intestinal microbiota of MPS mice

○Takako Osaki¹, Hideo Yonezawa¹, Fuhito Hojo², Satoshi Kurata³, Kentaro Oka⁴, Motomichi Takahashi⁴, Tomoko Hanawa¹, Shigeru Kamiya¹, Jiro Mitobe¹ (¹Dept. Infect. Dis., Kyorin Univ. Sch. Med., ²Inst. Lab. Anim. Facilt., Kyorin Univ. Sch. Med., ³Div. Microbial., Dept. Med Technol., Fac. Health Sci., Kyorin Univ., ⁴Central Research Inst., Miyarisan Pharma. Co., Ltd.)

ODP-168

Role of secretory IgA antibodies in suppression of dental caries caused by *Streptococcus sobrinus*

○Tomomi Hashizume-Takizawa, Masanori Saito, Noriko Shinozaki-Kuwahara, Ryoki Kobayashi, Tomoko Kurita-Ochiai (Dept. Microbiol. Immunol., Sch. Dent. at Matsudo, Nihon Univ.)

ODP-169

C-type lectin Mincle is involved in protection against *Mycobacterium leprae* infection in mice

○Tomomi Kawakita^{1,3}, Yumi Maeda¹, Sho Yamasaki², Akihide Ryo³, Manabu Ato¹ (¹Dept. Mycobacteriology, Leprosy Research Center, National Institute of Infectious Diseases, ²Dept. Molecular Immunology, Research Institute for Microbial Diseases, Osaka Univ., ³Dept. Microbiology and Molecular Biodefense Research, Yokohama City Univ. Grad. Sch. Medicine)

ODP-170

Establishment of a new Streptococcal toxic shock syndrome model using immunocompromised mice

○Takahiro Tsuji¹, Fumiko Obata¹, Ryo Ozuru¹, Satoshi Miyahara², Mitsumasa Saito², Jun Fujii¹ (¹Div. Bacteriol., Dept. Microbiol. Immunol., Faculty of Med., Tottori Univ., ²Dept. Microbiol., Sch. Med., Univ. of Occupational and Environmental Health)

ODP-171

Effect of *Fusobacterium nucleatum* on COPD model mice

○Noriaki Kamio¹, Ryuta Suzuki^{1,2}, Kenichi Imai¹ (¹Dept. Microbiol., Sch. Dent., Nihon Univ., ²Dept. Oral Surg., Sch. Dent., Nihon Univ.)

ODP-172

Molecular mechanism underlying resistance to *S. aureus* conferred by *B. subtilis* (natto) in *C. elegans*

○Rina Katayama¹, Yumi Matsumoto¹, Yukina Higashi¹, Honoka Sasao², Yoshihiko Tanimoto¹, Simo Sun¹, Yoshikazu Nishikawa¹, Eriko Nakadai (Kage)¹ (¹Grad. Sch. Human Life Science, Osaka City Univ., ²Dept. Human Life Science, Osaka City Univ.)

6 Virulence Factors and Biophylaxis

f. Immune Mechanism, Development of Vaccines

ODP-173

Salmonella FimH is involved in the expression of pro-inflammatory cytokines in TLR4-dependent manner

○Kei-ichi Uchiya, Masahiro Ando (Dept. Microbiol., Fac. Pharm., Meijo Univ.)

ODP-174

Synthetic lipid A of *Alcaligenes* augments nasal vaccine efficacy to prevent pneumococcal infection

○Ken Yoshii^{1,2}, Koji Hosomi¹, Atsushi Shimoyama³, Yunru Wang^{1,4}, Haruki Yamaura³, Takahiro Nagatake¹, Hidehiko Suzuki¹, Huangwenxian Lan^{1,4}, Hiroshi Kiyono^{5,6,7,8}, Koichi Fukase³, Jun Kunisawa^{1,2,4,5,9,10,11,12} (¹The Laboratory of Vaccine Materials., NIBIOHN., ²Grad. Sch. Med., Osaka Univ., ³Grad Sch. Sci., Osaka Univ., ⁴Grad Sch. Pharmaceutical Sci., Osaka Univ., ⁵International Research and Development Center for Mucosal Vaccines, IMSUT., ⁶Dept. Mucosal Immunol., IMSUT Distinguished Professor Unit., IMSUT., ⁷Dept. Gastroenterology., Sch. Med and CU-UCSD Center for Mucosal Immunology, Allergy and Vaccine., Univ. California., ⁸Grad Sch. Med., Chiba Univ., ⁹Grad Sch. Dent., Osaka Univ., ¹⁰Grad Sch. Med., Kobe Univ., ¹¹Grad Sch. Biomedical and Health Sci., Hiroshima Univ., ¹²Research Organization for Nano & Life Innovation., Waseda Univ.)

ODP-175/WS9-1

In vitro Bacterial Evaluation Model using Human iPS Cell-derived Small Intestinal Epithelial Cells

○Nao Yamazaki¹, Shinji Mima¹, Yuki Imakura¹, Takahiro Iwao², Tamihide Matsunaga², Shinichi Watanabe¹, Kozo Nagata¹, Masahiko Taniguchi¹ (¹Bio Science & Engineering Laboratory, FUJIFILM Corporation, ²Dept. Clinical Pharmacy, Grad. Sch. Pharmaceutical Sciences, Nagoya City Univ.)

ODP-176

Difference of anti-oxidative stress responses between BCG Tokyo 172 type I and type II

○Keiichi Taniguchi¹, Daisuke Hayashi², Naomi Yasuda³, Mao Nakayama³, Saotomo Itoh¹, Saburo Yamamoto², Naoya Ohara⁴, Shigeaki Hida¹, Kikuo Onozaki¹, ○Takemasa Takii^{1,3} (¹Dept. Molecular Health Sciences, Grad. Sch. Pharmaceutical Sciences, Nagoya City Univ., ²Japan BCG Laboratory, ³Dept. Mycobacterium Reference and Research, The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, ⁴Dept. Oral Microbiology, Grad. Sch. Medicine, Dentistry, and Pharmaceutical Sciences, Okayama Univ.)

ODP-177

Novel vaccine with SseJ, *Salmonella* effector protein, against salmonellosis

○Momoko Nakayama, Swarmistha Devi Aribam, Yohsuke Ogawa, Yoshihiro Shimoji, Masahiro Eguchi (NIAH, NARO)

ODP-178

Regulation of *Clostridium ramosum*-induced disorders by antigen-specific mucosal immunity

○Koichiro Fujii¹, Kosuke Fujimoto^{1,2,3}, Satoshi Uematsu^{1,2,3} (¹Dept. Immunology and Genomics, Osaka City Univ. Grad. Sch. Medicine, ²Div. Metagenome Medicine, Human Genome Center, The Institute of Medical Science, The Univ. of Tokyo, ³Div. Innate Immune Regulation, International Research and Development Center for Mucosal Vaccine, The Institute of Medical Science, The Univ. of Tokyo)

ODP-179

NADPH oxidases and NO synthases activate super sulfur species conferring anti-microbial host defense

○Tsuyoshi Takata¹, Tomoaki Ida¹, Tetsuro Matsunaga¹, Masanobu Morita¹, Yukihiko Tsuchiya², Yasuo Watanabe², Hideki Sumimoto³, Hozumi Motohashi⁴, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch. Med., ²Dept. Pharm., Showa Pharm. Univ., ³Dept. Biochem., Kyushu Univ., Grad. Sch. Med. Sci., ⁴Dept. Gene Exp. Reg., IDAC, Tohoku Univ.)

ODP-180

Perturbation of host protective immunity by mycobacterial carbohydrates

○Shota Torigoe¹, Akira Kawano², Satoru Mizuno², Kazuhiro Matsuo², Sho Yamasaki^{1,3,4,5} (¹Dept. Mol. Immunol., RIMD, Osaka Univ., ²Japan BCG Laboratory, ³Lab. Mol. Immunol., IFReC, Osaka Univ., ⁴Div. Mol. Immunol., MIB, Kyushu Univ., ⁵Div. Mol. Immunol. MMRC, Chiba Univ.)

ODP-181

Vaccine development against tuberculosis by using BCG-derived membrane vesicles

○Takehiro Yamaguchi¹, Ryoma Nakao², Shuhei Tomita¹ (¹Dept. Pharmacol., Sch. Med., Osaka City Univ., ²Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

ODP-182**Host defense mechanism by nitric oxide and super sulfide in *Salmonella* infection**

○Masaaki Yoshida¹, Tetsuro Matsunaga¹, Tsuyoshi Takata¹, Tomoaki Ida¹, Masato Tsutsui², Masanobu Morita¹, Tomohiro Sawa³, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Dept. Pharmacol., Grad. Sch. Med., Univ. the Ryukyus, ³Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ.)

ODP-183**Gasdermin D mediates the maturation and release of IL-1 α downstream of inflammasomes**

○Kohsuke Tsuchiya, Takashi Suda (Div. Immunol., Cancer Res. Inst., Kanazawa Univ.)

ODP-184**Elucidation of mechanism of human monoclonal antibodies neutralizing botulinum neurotoxin serotype B**

○Mayu Kitamura, Takuhiro Matsumura, Sho Amatsu, Masahiro Yutani, Chiyono Morimoto, Yukako Fujinaga (Dept. Microbiol., Sch. Med. Sci., Kanazawa Univ.)

**6 Virulence Factors and Biophylaxis
g. Others**

ODP-185/WS7-4**LL-37 ameliorates mouse sepsis by releasing antimicrobial extracellular vesicles**

○Yumi Kumagai¹, Soichiro Kakuta², Kyoko Kuwahara³, Isao Nagaoka^{1,4} (¹Dept. Host Defense Biochem. Res., Sch. Med., Juntendo Univ., ²Lab. Morphol. Image Analysis, Sch. Med., Juntendo Univ., ³Dept. Microbiol., Sch. Med., Juntendo Univ., ⁴Faculty Health Sci., Juntendo Univ.)

ODP-186***P. aeruginosa* suhB and pili-associated genes related to bacterial translocation and virulence in fly**

○Chigusa Suezawa, Masashi Yasuda, Satoshi Yamane, Syouya Nagata, Chinami Kunikata, Jun Okuda (Div. Microbiol., Dept. Med. Tech., Kagawa Pref. Univ. of Health Sci.)

ODP-187**The mechanism of LL-37-induced autophagy and cell death in endothelial cells**

○Kaori Suzuki¹, Isao Nagaoka^{1,2} (¹Dept. Host Defense & Biochem Res, Juntendo Univ. Sch. Med, ²Fac. Health Science, Juntendo Univ.)

ODP-188**VuuB and IutB reduce ferric-vulnibactin in *Vibrio vulnificus* M2799**

○Katsushi Miyamoto¹, Naoko Okai¹, Koji Tomoo², Takahiro Tsuchiya¹, Jun Komano¹, Tomotaka Tanabe³, Tatsuya Funahashi³, Hiroshi Tsujibo¹ (¹Dept. Microbiol. Infect. Control, Osaka Univ. Pharm. Sci., ²Dept. Phys. Chem., Osaka Univ. Pharm. Sci., ³Dept. Hyg. Chem., Col. Pharm. Sci., Matsuyama Univ.)

ODP-189**Analysis of exacerbating factor of ulcerative colitis**

○Ryo Kutsuna, Yuna Iwashashi, Koichiro Nagata, Junko Tomida, Yoshiaki Kawamura (Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ.)

ODP-190**Autophagy-related gene 9 regulates intracellular invasion of Group A Streptococcus**

○Junpei Iibushi, Hirotaka Toh, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

ODP-191/WS7-3**Guanylate binding protein-1 regulates xenophagy through TBK1 activation**

○Miyako Hikichi, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

7 Antimicrobials and Drug Resistance**a. Antimicrobial Agents****ODP-192/WS10-8****Adduct formation of delamanid with NAD in mycobacteria**

○Akihito Nishiyama¹, Mikayo Hayashi², Ryuki Kitamoto², Yoshitaka Tateishi¹, Mayuko Osada-Oka³, Yukiko Nishiuchi⁴, Xiuhan Chen², Kentaro Kaneko⁵, Makoto Matsumoto², Sohichi Matsumoto¹ (¹Dept. Bacteriol., Sch. Med., Niigata Univ., ²Pharm. Bus. Div., Otsuka Pharmaceutical Co., Ltd., ³Div. Applied Life Sci., Grad. Sch. Life Environ. Sci., Kyoto Prefect. Univ., ⁴Toneyama Ins. for Tuberculosis Res., Med. Sch., Osaka City Univ., ⁵Grad. Sch. Sci. Technol., Niigata Univ.)

ODP-193**Growth inhibition of *Campylobacter* spp. by *Bacillus natto***

○Ryosuke Kadoya, Miyuu Iketani, Riho Kaneda (Dept. Food and Nutrition, Sch. of Life Stud., Sugiyama Jogakuen Univ.)

ODP-194**Biological effects of *Monascus* spp. fermented products on diarrheagenic bacteria and mammalian cells**

○Jun Xu¹, Rino Arakaki², Shinjiro Tachibana², Tetsu Yamashiro¹ (¹Dept. Bacteriol., Grad. Sch. Med., Univ. Ryukyus, ²Dept. Biosci. Biotechnol. Faculty Agric., Univ. Ryukyus)

ODP-195/WS10-7

Anti-inflammatory effect of *Staphylococcus aureus* phage ΦMR003 on wound infection

○Tomoya Suda¹, Tomoko Hanawa², Mayuko Tanaka², Kazuhiko Miyanaga³, Yasunori Tanjii³, Takeaki Matsuda^{1,4} (¹Dept. Gen. Med., Sch. Med., Kyorin Univ., ²Dept. Infect. Dis., Sch. Med., Kyorin Univ., ³Dept. Lif. Sci. Tech., Tokyo Tech Univ., ⁴Dept. Trauma and Crit. Care., Sch. Med., Kyorin Univ.)

ODP-196

Effect of phloridzin on biofilm formation of *Candida albicans*

○Tetsuya Sakuta^{1,2}, Yuichi Oogai¹, Masanobu Nakata¹ (¹Dept. Oral Microbiol., Grad. Sch. Med. and Dent., Kagoshima Univ., ²Dept. General Dent. Practices, Kagoshima Univ. Med. and Dent. Hosp.)

ODP-197

Red ginseng saponins suppress the release of hemolysin from *Staphylococcus aureus*

○Yuina Iwasaki¹, Mayuko Oka¹, Keiichi Samukawa², Risa Imamiya¹, Yukiko Minamiyama¹, Hiroshi Iwao³ (¹Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., ²Dept. Pharmacol., Osaka City Univ. Med. Sch., ³Dept. Educ., Shitennoji Univ.)

ODP-198

Isolation/characterization of oral antibiotic-resistant Gram-negative bacteria in nursing homes

○Azusa Haruta¹, Miki Matsuo^{2,3}, Mineka Yoshikawa¹, Maho Takeuchi¹, Mi Nguyen Tra Le^{2,3}, Koji Yahara^{3,4}, Hiroki Ouge^{3,5}, Kazuhiro Tsuga¹, Motoyuki Sugai^{3,4}, Hitoshi Komatsuwa^{2,3} (¹Dept. Advanced Prosthodont., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., ²Dept. Bacteriol., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., ³Project Research Ctr., Nosocomial Infectious Diseases, Hiroshima Univ., ⁴Antimicrobial Resistance Research Ctr., National Institute of Infectious Diseases, ⁵Dept. Infect. Dis., Hiroshima Univ. Hosp.)

ODP-199

Fennel extract induce membrane vesicle production and rapid bactericidal effect against *P.gingivalis*

○Nanami Yoshino^{1,3}, Tsuyoshi Ikeda², Ryoma Nakao³ (¹Central Res. Inst., S&B FOODS Inc., ²Pharm. Sci., Sojo Univ., ³Dept. Bacteriol. 1, Natl. Inst. Infect. Dis.)

ODP-200

The therapeutic effect of hinokitiol on the murine model of pneumococcal pneumonia

○Toshihito Isono¹, Hisanori Domon^{1,2}, Tomoki Maekawa^{1,2}, Hikaru Tamura^{1,2}, Takumi Hiyoshi¹, Katsunori Yanagihara³, Eiji Kunitomo⁴, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. & Dent. Sci., ²Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. & Dent. Sci., ³Dept. Laboratory Medicine, Nagasaki Univ. Grad. Sch. Biomed., ⁴Central R&D Lab., Kobayashi Pharma.)

ODP-201

[Withdrawn]

ODP-202

Analysis of photoinactivation mechanism of bacteria by porphyrins using electrochemical sensors

○Hisato Kato, Kazufumi Masuda, Takashi Katsu (Sch. Pharmacy, Shujitsu Univ.)

ODP-203

Enhanced bacterial killing by polysulfide donor in macrophages and neutrophils

○Tianli Zhang¹, Azizur Rahman¹, Hiroyasu Tsutsuki¹, Katsuhiko Ono¹, Kei Miyano², Akira Yamauchi², Takaaki Akaike³, Tomohiro Sawa¹ (¹Dept. Microbiol., Sch. Med Sci., Kumamoto Univ., ²Dept. Biochem., Kawasaki Med Sch., ³Dept. Environ Med and Mol Toxi., Tohoku Univ., Sch. Med)

7 Antimicrobials and Drug Resistance

b. Drug Resistance

ODP-204

Metagenomic and resistome analysis of an effluent of urban sewage treatment plants in Tokyo

○Tsuyoshi Sekizuka, Kentaro Itokawa, Koji Yatsu, Masanori Hashino, Makoto Kuroda (Pathogen Genomics Center, NIID)

ODP-205

Prevalence of virulence genes and antimicrobial resistance of *Cronobacter* spp. in Japan

○Yumiko Okada¹, Tatsuya Nakayama¹, Shogo Otake², Masashi Kasai², Hodaka Suzuki³, Hirokazu Ogihara⁴, Stephen James Forsythe⁵ (¹Nat. Inst. Health Sci., ²Hyogo Pref. Kobe Children Hosp., ³Col. Agri., Ibaraki Univ., ⁴Col. Bioresource Sci., Nihon Univ., ⁵foodmicrobe.com)

ODP-206/WS10-4

Functional analysis of intrinsic drug resistance genes in *M. tuberculosis* using CRISPR interference

○Nao Hirata, Kayo Kumadaki, Motoko Shinohara, Yui Kitagawa, Yusuke Minato (Dept. Microbiol., Med., Fujita Health Univ.)

ODP-207/WS10-1

Heterogeneity of intracellular ATP abundance in *Salmonella Typhimurium* induces diverse persisters

○Naoki Yamamoto, Satoshi Tsuneda (Dept. Life Sci. Med. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ.)

ODP-208

Evaluation of genotype-based antimicrobial resistance prediction in *Serratia marcescens*

○Debora Satie Nagano, Tomoyuki Ono, Yasuhiro Gotoh, Keiji Nakamura, Itsuki Taniguchi, Tetsuya Hayashi (Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ.)

ODP-209/WS10-5**Qualitative and quantitative assessments of ESBL-producing *Escherichia coli* in retail chicken meats**

○Shiori Yamamoto, Tatsuya Nakayama, Rika Machida, Hiroshi Asakura (Div. Biomed. Food Res., Nath. Inst. Health Sci.)

ODP-210**Identification of β -lactam ring opened carbothioic S-acids mediated by cysteine hydrosulfide**

○Katsuhiko Ono¹, Hiroyasu Tsutsuki¹, Tianli Zhang¹, Takaaki Akaike², Tomohiro Sawa¹ (¹Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ²Dept. Envir. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch. Med.)

ODP-211**Enhanced Carbapenem Resistance through Multimerization of Plasmids Carrying Carbapenemase Genes**

○Ryuichiro Abe¹, Yukihiko Akeda^{1,2}, Yo Sugawara¹, Ryuji Kawahara³, Kazunori Tomono², Shigeyuki Hamada¹ (¹RIMD, Osaka Univ., ²Dept. Infect. Cont. Prevent., Med. Hosp., Osaka Univ., ³Div. Microbiol., Osaka Inst. Public Health)

ODP-212**Identification of antibiotic tolerance related genes to AIA-1 in *Pseudomonas aeruginosa***

○Muhammad Reza Pahlevi, Keiji Murakami, Rina Murata, Hideki Fujii (Dept. Oral Microbiol., Insti. Biomed. Sciences, Tokushima Univ. Grad. Sch.)

ODP-213**The killing effect of biapenem to carbapenemase-producing *Enterobacteriaceae***

○Makoto Miyoshi¹, I Putu Bayu Mayura¹, Kazuyoshi Gotoh¹, Takehiko Mima¹, Yumiko Yamamoto¹, Kenji Yokota², Osamu Matsushita¹, Hideharu Hagiya³ (¹Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ²Grad. Sch. Health Sci., Okayama Univ., ³Dept. Gen. Med., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ.)

ODP-214/WS10-6**Exploration of host receptors in PB1-like phages infection towards *Pseudomonas aeruginosa***

○Keisuke Nakamura¹, Jumpei Fujiki¹, Takaaki Furusawa¹, Montgomery Munby¹, Tomohiro Nakamura¹, Masaru Usui², Satoshi Gondaira³, Hidetoshi Higuchi³, Yutaka Tamura², Hidetomo Iwano¹ (¹Lab. Vet. Biochem., Dept. Vet. Med., Rakuno Gakuen Univ., ²Lab. Food. Microbiol., Dept. Vet. Med., Rakuno Gakuen Univ., ³Lab. Vet. Hygiene., Dept. Vet. Med., Rakuno Gakuen Univ.)

7 Antimicrobials and Drug Resistance**c. Others****ODP-215****Development of the photo-antibacterial targeting therapy**

○Kazuhide Sato^{1,2,3,4}, Hirotoshi Yasui³, Kazuomi Takahashi³, Shunichi Taki³, Tomohiro Akashi⁵, Yoshiyuki Nakagawa⁵

(¹Nagoya Univ. Institute for Advanced Research, ²Nagoya Univ. Institute for Advanced Research, Advanced Analytical and Diagnostic Imaging Center (AADIC) / Medical Engineering Unit (MEU), ³Respiratory Medicine, Nagoya Univ. Grad. Sch. Medicine, ⁴Nagoya Univ. Institute of Nano-Life-Systems, Institutes of Innovation for Future Society, ⁵Div. OMICS analysis, Nagoya Univ. Grad. Sch. Medicine)

ODP-216**Effects of emedastine and josamycin on atopic dermatitis like-skin lesions in NC/Nga mice**

○Katsuhiko Matsui, Sayuko Komori, Atsumi Higuchi (Dept. Clin. Immunol., Meiji Pharm. Univ.)

ODP-217**Microbicidal effect of deep ultraviolet light-emitting diode irradiation**

○Masashi Yanagihara¹, Jun Nishikawa², Tatsuya Takagi², Soichiro Fukuda², Yuki Kobayashi², Ken-Ichiro Otsuyama², Junzo Nojima², Hidehiro Tsuneoka², Kohei Sakai³, Kimikazu Hamano¹ (¹Dept. Surg. Clin. Sci., Grad. Sch. Med., Yamaguchi Univ., ²Dept. Lab. Sci., Fac. Health Sci., Grad. Sch. Med., Yamaguchi Univ., ³Dept. Oncol. Lab. Med., Grad. Sch. Med., Yamaguchi Univ.)

ODP-218/WS10-3**ATP-dependent Lon protease regulates awakening from ciprofloxacin-induced persistence**

Naoki Maekawa¹, Kengo Itadera², Junichi Ishihara², Satsuki Kajiyama³, Daiki Tanaka⁴, Tetsushi Sekiguchi⁴, Shuichi Shoji³, Masami Ishibashi¹, Hiroki Takahashi², ○Akiko Takaya^{1,2} (¹Dep. Nat. Prod. Chem., Grad. Sch. Pharm. Sci., Chiba Univ., ²MMRC, Chiba Univ., ³Fac. Sci. Eng., Waseda Univ., ⁴Res. Org. Nano Life Inno., Waseda Univ.)

ODP-219/WS10-2**E. coli persister formation from ldhA expression is mediated by DNA repair via recA expression**

○Yurino Ohno, Naoki Yamamoto, Satoshi Tsuneda (Dept. Life Sci. Med. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ.)

ODP-220**Estimation of Plasmid Genetic Background by using UGS analysis of ESBL coding gene**

○Nobuyoshi Yagi, Saki Tawata, Itaru Hirai (Lab. Microbiol., Sch. Health. Sci., Univ. Ryukyus)

ODP-221

Generation of phagemid-based CRISPR-Cas13 antimicrobials against MRSA

○Fengyu Li, Kotaro Kiga, Xin-Ee Tan, Shinya Watanabe, Yusuke Sato'o, Yoshifumi Aiba, Kanate Thitiananpakorn, Yusuke Taki, Teppei Sasahara, Longzhu Cui (Div. Bacteriol., Sch. Med., Jichi Med. Univ.)

ODP-222

Inhibitory effect of thymoquinone on biofilm formation of *Fusobacterium nucleatum*

○Ayano Tada, Haruyuki Imaohji, Tomomi Kuwahara (Dept. Microbiol., Med., Kagawa Univ.)

ODP-223

Upstream Gene Sequences of IS*Ecp1* in ESBL-Producing *E. coli* collected from Indonesia and Vietnam

○Fikri Sasongko Widyatama¹, Rosantia Sarassari^{1,2}, Nobuyoshi Yagi¹, Kuntaman Kuntaman², Itaru Hirai¹ (¹Lab. Microb., Sch. Health Sci., Univ. of the Ryukyus, ²Dept. Clin. Microb., Fac. Med., Airlangga Univ.)

ODP-224

The panel of antibiotic-resistant strains of *Helicobacter pylori*

○Shunji Hayashi¹, Takako Osaki¹, Hiroaki Takeuchi¹, Kenji Yokota¹, Shin-ichi Yokota¹, Emiko Rimbara² (¹Subcommittee for the panel of resistant strains of *H. pylori*, JSHR, ²Dept. Bacteriology II, National Institute of Infectious Diseases)

ODP-225

Role(s) of the MexXY multidrug efflux system on pyoverdine production in *Pseudomonas aeruginosa*

○Kei Ikarashi¹, Shinya Suzuki², Tadashi Kumazawa², Miyu Nitta¹, Kotaro Suzuki¹, Ryo Kutsuna², Junko Tomida², Tomoe Ichikawa¹, Yoshiaki Kawamura², Yuji Morita¹ (¹Dept. Infect. Cont. Sci., Sch. Parm., Meiji Pharm. Univ., ²Dept. Micro., Sch. Pharm., Aichi Gakuin Univ.)

8 Application of Microorganisms

a. Applications of Microorganisms and Microbial Products

ODP-226

Exploration of amino acid as an indicator for proliferative activity of *Escherichia coli*

○Akane Yonezawa¹, Miki Matsue¹, Asuka Mizutani², Masato Kobayashi², Syuusei Ohata², Yuka Muranaka², Eri Mizusawa³, Hideki Maki³, Keiichi Kawai², Shigefumi Okamoto¹ (¹Dept. Clin. Lab. Sci., Kanazawa Univ., ²Grad. Sch. Med., Pharm., and Health Sci., ²Dept. Radiology. Lab. Sci., Kanazawa Univ., ³Grad. Sch. Med., Pharm., and Health Sci., ³SHIONOGI CO., LTD.)

ODP-227

***Hericium erinaceus* ethanol extracts have endotoxin-neutralizing activity**

○Hiraku Osawa^{1,2}, Sakura Onoue³, Kazuyoshi Kawahara³, Kenji Matsushita⁴, Hiroyuki Tada² (¹Sch. Dent., Tohoku Univ., ²Dept. Oral Immunol., Sch. Dent., Tohoku Univ., ³Dept. Biosci., College Sci. Engineer., Kanto Gakuin Univ., ⁴Dept. Oral Dis. Res., NCGG)

ODP-228

Analysis of collagen-anchor from Clostridial collagenase and its application for nerve regeneration

○Osamu Matsushita¹, Takehiko Mima¹, Kazuyoshi Gotoh¹, Yumiko Yamamoto¹, Perry Caviness², Joshua Sakon², Kentaro Uchida³, Hisako Fujimaki³, Gen Inoue³, Masashi Takaso³ (¹Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ²Dept. Chem. Biochem., Univ. Arkansas, USA, ³Dept. Orthop. Surg., Sch. Med., Kitasato Univ.)

ODP-229

Bilateral analgesic effect of botulinum toxin type A in chemotherapy-induced peripheral neuropathy

○Yumiko Yamamoto¹, Arief Waskitho², Huijiao Yan², Resmi Raju², Swarna Lakshmi Raman², Takehiko Mima¹, Kazuyoshi Gotoh¹, Kenji Yokota³, Osamu Matsushita¹, Yoshizo Matsuka² (¹Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ²Grad. Sch. Biomed. Sci., Tokushima Univ., ³Grad. Sch. Health Sci., Okayama Univ.)

ODP-230

The biological effect of *Monascus* spp.-extracts on cholera toxin production

○Rino Arakaki¹, Naomi Higa², Jun Xu², Shinjiro Tachibana¹, Tetsu Yamashiro² (¹Dept. Ferment. Life Sci., Grad. Sch. Agri., Univ. Ryukyus, ²Dept. Bacteriol. Grad. Sch. Med., Univ. Ryukyus)

ODP-231

Delivery of an Anti-inflammatory Bacterial Toxin to Macrophages Using PLGA-Nanoparticles

○Ayaka Harada¹, Hiroyasu Tsutsuki², Tianli Zhang², Ruda Lee³, Kinnosuke Yahiro⁴, Tomohiro Sawa², Takuro Niidome¹ (¹Fac. Adv. Sci. and Tech., Kumamoto Univ., ²Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ³Int. Res. Org. Adv. Sci. Tech., Kumamoto Univ., ⁴Dept. Mol. Infect., Grad. Sch. Med., Chiba Univ.)

**8 Application of Microorganisms
b. Biotechnology, and Synthetic Biology**

ODP-232

Clinical applicability of phage-derived lytic enzyme

S25-3LYS to canine superficial pyoderma

○Ichiro Imanishi¹, Koji Nishifuij², Ryota Asahina³, Shunji Hayashi¹, Tomohiro Tsukui⁴, Jumpei Uchiyama⁵ (¹Dept. Microbiol, Sch. Med., Kitasato Univ., ²Dept. Vet Interanal Med, Sch. Agr., Tokyo Univ. of Agriculture and Tech., ³Dept. Dermatol, Sch. Med., Kyoto Univ., ⁴Nippon Zenyaku Kogyo Co., Ltd., ⁵Dept. Microbiol 1, Sch. Vet., Azabu Univ.)

ODP-233/WS4-3

Visualization of gene expression history Using Genetic

Toggle Switch

○Miki Sekimoto¹, Naoki Yamamoto¹, Yuto Kawai¹, Daisuke Kiga², Satoshi Tsuneda¹ (¹Dept. Life Sci. Med. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ., ²Dept. Electr. Eng. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ.)

ODP-234

Whole genome cloning of unculturable bacteria

○Masaki Mizutani, Kaori Miyakoshi, Shigeyuki Kakizawa (Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology (AIST))

ODP-235

A novel arabinose-inducible expression system

developed for *Clostridium perfringens*

○Riyuki Arakawa¹, Hiroki Kawahata¹, Hirofumi Nariya², Shigeru Miyata¹ (¹Grad. Sch. Biosci. Biotech., Chubu Univ., ²Fac. Human Life, Jumonji Univ.)

8 Application of Microorganisms

c. Others

ODP-236

Inhibitory effect of biofilm formation by Abietane-type diterpenoids

○Jyunya Nakai, Keisuke Negishi, Souichi Yamamoto, Kenta Shinohara, Ryuta Nishi, Yoichi Yamada, Toshiyuki Kudo, Sumiko Shiota (Dept. Laboratory of Molecular Biology., Sch. Pha., Shujitsu Univ.)