

Digital Poster

**DP01 Taxonomy/Epidemiology/Infectious diseases -
Phylogenetics, taxonomy and strain typing/
Epidemiology and molecular epidemiology/Others**

23rd, April (Tue) 9:00–10:00
Digital Poster Zone A (Main Hall)

Chair: Hiroyuki Yamaguchi (Hokkaido Univ.)

DP01-01 (P-007)

**Emergence of colistin-resistant Enterobacteriaceae
harboring mcr-1 in medical settings in Japan**

○Hiroki Uchida¹, Tatsuya Tada¹, Kohei Uechi², Isamu Nakasone², Yoshie Sugawara³, Isao Miyairi³, Jiro Fujita², Teruo Kirikae¹ (¹Dept. Microbiology Juntendo Univ. Sch. Medicine, ²Univ. Hospital of the Ryukyus, ³National Center for Child Health and Development)

DP01-02 (P-003)

***Mycobacterium caprae* infection in a captive Borneo
elephant TB**

○Shiomi Yoshida^{1,3}, Satomi Suga², Satoshi Ishikawa^{1,2,3}, Yasuhiko Mukai³, Kazunari Tsuyuguchi³, Yoshikazu Inoue³, Taro Yamamoto³, Takayuki Wada³ (¹Clinical Research Center, NHO Kinki-chuo Chest Medical Center, ²Fukuyama Zoo, ³Dept. International Health, Institute of Tropical Medicine, Nagasaki Univ.)

DP01-03 (P-014)

**Metagenomic sequencing analysis of stool samples of
patients with *Vibrio cholerae* O1**

○Keinosuke Okamoto¹, Eizo Takahashi¹, Daichi Morita², Shin-ichi Miyoshi³, Dutta Shanta³, Asish K. Mukhopadhyay⁴, Chowdhury Goutam⁴, Daisuke Motooka⁵, Shota Nakamura⁵, Tetsuya Iida⁵ (¹Collaborative Research Center of Okayama Univ. for Infectious Diseases in India, ²Grad. Sch. Biomedical & Health Sciences of Hiroshima Univ., ³Grad. Sch. Medicine, Dentistry and Pharmaceutical Sciences of Okayama Univ., ⁴National Institute of Cholera and Enteric Diseases, Kolkata, India, ⁵Research Institute for Microbial Diseases, Osaka Univ.)

DP01-04 (P-026)

**Population structure of *Mycobacterium tuberculosis* in
Kandy, Sri Lanka: Dominance of Euro-American lineage**

○Charitha Mendis¹, Champa Ratnatunga², Vasanthi Thevanesam², Athula Kumara², Susiji Wickramasinghe³, Dushantha Madagedara⁴, Chandika Gamage², Chie Nakajima^{1,5}, Yasuhiko Suzuki^{1,5} (¹Div. Biores, Hokkaido Univ. Res Center Zoonosis Ctl, ²Dept. Microbiol., Faculty of Medicine, Univ. Peradeniya, Sri Lanka, ³Dept. Parasitol., Faculty of Medicine, Univ. Peradeniya, Sri Lanka, ⁴Respiratory Disease Treatment Unit, Teaching Hospital, Kandy, Sri Lanka, ⁵GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ.)

DP01-05 (P-018)

**Molecular analysis of MRSA isolates from
slaughterhouses and markets in Thailand**

○Wimonrat Tanomsridachchai¹, Kanjana Changkaew², Ruchirada Changkwanyeeun², Chie Nakajima^{1,3}, Orasa Suthienkul², Yasuhiko Suzuki^{1,3} (¹Div. Biores, Hokkaido Univ. Res Center Zoonosis Ctl, Japan, ²Faculty of Public Health, Thammasat Univ., Thailand, ³GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ., Japan)

DP01-06 (P-012)

**Effective surveillance using MLVA and WGS analyses in
enterohemorrhagic *Escherichia coli* O157**

○Ken-ichi Lee¹, Hidemasa Izumiya¹, Sunao Iyoda¹, Makoto Ohnishi¹, EHEC Working Group² (¹Dept. Bacteriol. 1, Natl. Inst. Infect. Dis, ²Local Inst. Publ. Health)

DP01-07 (P-024)

**Characteristic of enterotoxin-producing *Clostridium
perfringens* isolates (1988-2018)**

○Chie Monma, Hiromi Obata, Kaoru Hatakeyama, Jun Suzuki, Kenji Sadamasu (Dept. Microbiol., Tokyo Metropolitan Institute of Public Health)

DP01-08 (P-013)

**Molecular epidemiology of *Helicobacter cinaedi* isolates
during the past 14 years**

○Junko Tomida, Erika Iwata, Ryo Kutsuna, Yoshiaki Kawamura (Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ.)

DP01-09 (P-010)

**Clinical features of invasive pneumococcal disease
caused by serotype 12F in adults, Japan**

○Kazunori Oishi¹, Bin Chang², Makoto Ohnishi², Yuki Kinjo³ (¹Infectious Disease Surveillance Center, National Institute of Infectious Diseases, ²Bacteriology I, National Institute of Infectious Diseases, ³Dept. Bacteriology, The Jikei Univ. Sch. Medicine)

DP01-10 (P-025)

**Pathotypes and SCCmecIV structures in ST8
community-associated methicillin-resistant
*Staphylococcus aureus***

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

DP01-11 (P-017)

**Genetic diversity and characteristics of PVL-positive
MRSA isolated in Japan**

○Shunsuke Takadama, Hidemasa Nakaminami, Norihisa Noguchi (Dept. Microbiol., Sch. Pharm., Tokyo Univ. Pharm. Life Sci.)

DP01-12 (P-048)**Emerging antibacterial effect of polysulfide donor on macrophages**

○Tianli Zhang¹, Hiroyasu Tsutsuki¹, Katsuhiko Ono^{1,2}, Takaaki Akaike¹, Tomohiro Sawa¹ (¹Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ²Dept. Enviro Med and Mol Toxi., Tohoku Univ., Grad. Sch. Med.)

DP02 Ecology - Ecology, symbiosis and environmental microbes/Growth and culture conditions/Others

23rd, April (Tue) 9:00–9:55
 Digital Poster Zone B (Main Hall)

Chair: Masaru Usui (Rakuno Gakuen Univ.)

DP02-01 (P-053)**Genomic insights into the diversity and a co-evolution of *Rickettsia* sp. Lon and host tick by direct sequencing**

○Kentaro Kasama¹, Yasuhiro Gotoh¹, Yoshitoshi Ogura¹, Seigo Yamamoto², Hiroki Fujita³, Ai Takano⁴, Shuji Ando⁵, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Sch. Med. Sci., Kyushu Univ., ²Frontier Sci. Res. Center, Miyazaki Univ., ³Mahara Akari Med. Lab., ⁴Dept. Epidemiol., Sch. Vet. Med., Yamaguchi Univ., ⁵NIID)

DP02-02 (P-049)**Survival of *Helicobacter pylori* inoculated in collected environmental soil**

○Fuhito Hojo¹, Takako Osaki², Hideo Yonezawa², Tomoko Hanawa², Satoshi Kurata², Shigeru Kamiya³ (¹Inst. Lab. Anim., Grad. Sch. Med., Kyorin Univ., ²Dept. Infect. Dis., Kyorin Univ. Sch. Med., ³Fac. Health Sci., Kyorin Univ.)

DP02-03 (P-050)**Effects of *Veillonella infantium* sp., nov. on oral *Streptococcus* biofilm formation**

○Ratna Ramadhani^{1,3}, Izumi Mashima², Citra Theodorea³, Yoshiaki Kawamura², Futoshi Nakazawa¹ (¹Heal. Sci. Univ. Hokkaido Grad. Sch. Dent., ²Dept. Microbiol., Sch. Pharmacol., Aichi Gakuin Univ., ³Dept. Oral Biol. Fac. Dent. Univ. Indonesia)

DP02-04 (P-051)**Less diversity of *Leptospira* species in environmental water than that in soil**

○Toshiyuki Masuzawa, Rurika Uno, Nana Matsuhashi, Masaya Yamaguchi (Facul. Pharm. Sci., Chiba Inst. Sci.)

DP02-05 (P-068)**Characterization of pathogenic *Leptospira* species isolated in leptospirosis-endemic areas of Japan**

○Idam Hermawan¹, Chandika Gamage^{1,2}, Chiaki Matsuura¹, Yukuto Sato³, Tetsuya Kakita⁴, Tetsu Yamashiro¹, Claudia Toma¹ (¹Dept. Bacteriol., Grad. Sch. Med., Univ. of the Ryukyus, ²Dept. Microbiol., Fac. Med., Univ. of Peradeniya, Sri Lanka, ³Cent. for Strategic Res. Proj., Org. for Res. Promotion, Univ. of the Ryukyus, ⁴Okinawa Pref. Inst. of Health and Environ.)

DP02-06 (P-070)**Expression of outer membrane proteins by *Aggregatibacter actinomycetemcomitans* grown in body fluids**

○Ayumi Tajima^{1,2}, Yuichi Oogai², Kazuyuki Noguchi^{1,2}, Hitoshi Komatsuzawa² (¹Dept. Periodontol., Kagoshima Univ., Grad. Sch. Med. and Dent. Sciences, ²Dept. Oral Microbiol., Kagoshima Univ., Grad. Sch. Med. I and Dent. Sciences)

DP02-07 (P-071)**Improvement of liquid culture method**

○Fumio Ike¹, Hitoki Yamanaka² (¹Exp. Anim. Div., BRC, RIKEN, ²School Med, Shinshu Univ.)

DP02-08 (P-067)**Visible light-induced growth inhibition of Gram-negative denitrifiers under denitrifying conditions**

○Masayuki Masuko (Hamamatsu Photonics K. K., Tsukuba Research Center)

DP02-09 (P-073)***Pseudomonas asiatica*, a new species of *P. putida* group, isolated from patients in Japan and Myanmar**

○Mari Tohya¹, Kohei Uechi², Tatsuya Tada¹, Kyoko Kuwahara-Arai¹, Shiro Maeda³, Isamu Nakasone^{2,3}, Jiro Fujita², Teruo Kirikae¹ (¹Dept. Microbiol., Sch. Med., Juntendo Univ., ²Dept. Infectious Diseases, Respiratory, and Digestive Medicine, Univ. of the Ryukyus, ³Division of Clinical Laboratory and Blood Transfusion, Univ. Hospital of the Ryukyus)

DP02-10 (P-074)**Isolation and identification of bacteria from air samples collected by impinger method**

○Masato Sumi, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

DP02-11 (P-075)**Construction of analysis method for monitoring individual cells in biofilm**

○Kyosuke Takabe, Nobuhiko Nomura, Yutaka Yawata (Life and Env. Sci., Grad. Sch., Univ. of Tsukuba)

**DP03 Antimicrobial agents and resistance -
Antimicrobial agents**

23rd, April (Tue) 9:00–10:05
Digital Poster Zone C (Main Hall)

Chair: Shin-ichi Yokota (Sapporo Medical Univ.)

DP03-01 (P-266)

**Sulfated vizantin suppresses mucin layer penetration of
Pseudomonas aeruginosa PAO1 strain**

Naoki Hayashi¹, Hirofumi Yamamoto², Takashi Nakano³,
○Masataka Oda¹ (¹Dept. Microbiol. Infect. Control Sci, Kyoto
Pharm. Univ., ²Dept. Chem. Func. Molecule, Faculty of Pharm.
Sci, Tokushima Bunri Univ., ³Dept. Microbiol. Infect. Control,
Osaka Med. Col.)

DP03-02 (P-274)

**Investigation of Phage Selection Method for
Construction of Bacteriophage Library against
*Staphylococcus aureus***

○Junya Kitana¹, Hiromichi Takahashi¹, Jumpei Fujiki¹,
Tomohiro Nakamura¹, Masaru Usui², Hidetoshi Higuchi³, Yume
Inomata¹, Hidetomo Iwano¹ (¹Lab. Vet. Biochem., RGU, ²Lab.
Food Microbiol., RGU, ³Lab. Vet. Hygiene., RGU)

DP03-03 (P-270)

**Characterization of the lytic capability of the endolysin
derived from polyvalent staphylococcus aureus phage**

○Jumpei Fujiki¹, Tomohiro Nakamura¹, Junya Kitana¹, Masaru
Usui², Hidetoshi Higuchi³, Yutaka Tamura², Hidetomo Iwano¹
(¹Lab. Vet. Biochem., RGU, ²Lab. Food Microbiol., RGU, ³Lab.
Vet. Hygiene., RGU)

DP03-04 (P-273)

**Mycobacteriophage therapy for the treatment and
prevention of non-tuberculous mycobacterial diseases**

○Yuzuki Shimamori^{1,2}, Naoya Ohara⁵, Kazunari Tsuyuguchi³,
Kenji Oya⁴, Shiomi Yoshida³, Shigeki Takeda², Hiroki Nagai¹,
Hiroki Ando¹ (¹Gifu Univ., ²Gunma Univ., ³Kinki-chuo Chest
Med. Ctr., ⁴Gifu Univ., ⁵Okayama Univ.)

DP03-05 (P-282)

**Survey of antibiotic-resistance Staphylococci from dog
and lytic activity of Phage's enzyme against these
bacteria**

○Tomohiro Nakamura^{1,3}, Jumpei Fujiki¹, Junya Kitana¹, Keita
Iyori², Kenta Shimoike², Masayuki Takase³, Hidetomo Iwano¹
(¹Dept. Biochem., Sch. Vet., Rakuno Gakuen Univ., ²VDT Co.,
Ltd., ³ELMS Animal Medical Center)

DP03-06 (P-275)

**Investigation of the efficacy of phage therapy against
*Pseudomonas aeruginosa***

○Yume Inomata¹, Junya Obara², Jumpei Fujiki¹, Takaaki
Furusawa¹, Tomohiro Nakamura¹, Teiji Sawa², Hidetomo
Iwano¹ (¹Lab. of Vet. Biochem., RGU, ²Dept. Anesthesiology,
Kyoto Pref. Univ. of Med.)

DP03-07 (P-279)

**Identification of novel growth inhibitor for Group A
*Streptococcus***

○Chihiro Aikawa¹, Masato Hoshino², Chihiro Fukuzaki¹,
Makoto Nakakido², Satoru Nagatoishi², Kouhei Tsumoto², Ichiro
Nakagawa¹ (¹Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.,
²Dept. Bioeng., Sch. Eng., Univ. of Tokyo.)

DP03-08 (P-281)

**On soil bacteria isolated from Izu islands producing
antibacterial compounds**

○Tadashi Baba¹, Yuh Morimoto¹, Mai Akimoto², Yuuhi
Kumazawa², Teruo Kirikae², Keiichi Hiramatsu¹ (¹Center of
Infection Control Science, Grad. Sch. Med., Juntendo Univ.,
²Dept. Bacteriology, Med., Juntendo Univ.)

DP03-09 (P-283)

**Development of a new antibacterial drug targeting V-
ATPase in Vancomycin-resistant Enterococcus**

○Kouki Shimizu¹, Fabiana Lica Yakushiji¹, Katsuhiko
Moriyama¹, Yoshiyuki Goto^{2,3}, Takeshi Murata¹ (¹Grad. Sch.
Sci., Chiba Univ., ²Div. Mol. Immunol., MMRC, Chiba Univ.,
³Inter. Res. Cent. Mucosal. Vaccine., IMS, Univ. Tokyo)

DP03-10 (P-267)

Development of new metallo-beta-lactamase inhibitor

○Jun-ichi Wachino, Wanchun Jin, Kouji Kimura, Yoshichika
Arakawa (Dept. Bacteriol., Nagoya Univ. Grad. Sch. Med.)

DP03-11 (P-280)

**Carbapenemase-producing Gram-negative Bacteria in
Egypt: Untreatable Epidemic Superbugs**

○Ahmed M. Soliman^{1,2}, Hirofumi Nariya¹, Toshi Shimamoto¹,
Tadashi Shimamoto¹ (¹Lab. Food Microbiol. Hyg., Grad. Sch.
Biosphere Sci., Hiroshima Univ., Japan, ²Dept. Microbiol.
Immunol., Fac. Pharmacy, Kafrelsheikh Univ., Egypt)

DP03-12 (P-271)

**Evaluation of high resistant mechanism against
antimicrobial peptides in MRSA isolated by nisin A
exposure**

○Miki Kawada-Matsuo¹, Kaoru Arii^{1,2}, Hitoshi Komatsuzawa¹
(¹Dept. Oral Microbiol., Grad. Sch. Med. and Dent., Kagoshima
Univ., ²Dept. Periodontol., Grad. Sch. Med. and Dent.,
Kagoshima Univ.)

DP03-13 (P-278)**Anti-chlamydial activities of cell-permeable hydrophobic dipeptide-containing compounds**

○Ryota Itoh, Toshinori Soejima, Kenji Hiromatsu (Dept. Microbiol. Immunol., Sch. Med., Fukuoka Univ.)

DP04 Pathogenicity - Adhesins and colonization factors/Cell invasion and intracellular parasitism/Immune/Infection models/escape and proliferation in hosts

23rd, April (Tue) 10:10–11:20
 Digital Poster Zone A (Main Hall)

Chair: Takako Osaki (Kyorin Univ.)

DP04-01 (P-159)**Mechanism of attachment of ETEC to intestinal cells via interplay of type IV pilus and a secreted protein**

○Hiroya Oki¹, Kazuki Kawahara¹, Takahiro Maruno², Tomoya Imai³, Shigeaki Matsuda⁴, Toshio Kodama⁴, Tetsuya Iida⁴, Takuya Yoshida¹, Tadayasu Ohkubo¹, Shota Nakamura⁴ (¹Grad. Sch. Pharm. Sci., Osaka Univ., ²Grad. Sch. Eng., Osaka Univ., ³RISH, Kyoto Univ., ⁴RIMD, Osaka Univ.)

DP04-02 (P-161)**Autolysin and GAPDH as the functioning fibronectin-receptors on the *Clostridium perfringens* cell surface**

○Riyo Aono¹, Kanako Fujimoto¹, Nozomu Matsunaga¹, Eiji Tamai², Seiichi Katayama¹, Yasuo Hitsumoto¹ (¹Dept. Life Science, Faculty of Sci., Okayama Univ. of Sci., ²Dept. Infect. Disease, Col. of Pharm. Sci. Matsuyama Univ.)

DP04-03 (P-160)**X-ray structural analysis of Pili of *Clostridium perfringens***

○Eiji Tamai^{1,2}, Shigehiro Kamitori², Hiroshi Sekiya¹, Seiichi Katayama⁴, Hirofumi Nariya³ (¹Dept. Infect. Dis., Coll. Pharm., Matsuyama Univ., ²LSRC, Fac. Med., Kagawa Univ., ³Grad. Sch. Biosph. Sci., Hiroshima Univ., ⁴Dept. Life Sci., Fac. Sci., Okayama Univ. Sci.)

DP04-04 (P-158)**Analysis of Sortase-dependent cell surface protein in *Streptococcus mutans***

○Tamaki Katsumata^{1,2}, Miki Kawada-Matsuo², Yoshihiro Nishitani^{1,2}, Hitoshi Komatsuzawa² (¹Dept. Restorat. Dent. Endodont., Sch. Dent., Kagoshima Univ., ²Dept. Oral Microbiol., Sch. Dent., Kagoshima Univ.)

DP04-05 (P-163)**Effects of *Clostridium perfringens* fibronectin binding proteins on the binding of fibronectin to dermatopontin**

○Nozomu Matsunaga, Nodoka Narukawa, Seiichi Katayama, Yasuo Hitsumoto (Dept. Life Science, Faculty of Science, Okayama Univ. Science)

DP04-06 (P-206)**Analysis of the adaptation mechanism of *Mycobacterium avium* under the acid environment**

○Takemasa Takii^{1,2}, Shouta Ogawa¹, Naoya Ohara³, Kenji Ogawa⁴, Tetsuya Yagi⁵, Nagatoshi Fujiwara⁶, Shinji Maeda⁷, Saotomo Itoh¹, Shigeaki Hida¹, Kikuo Onozaki¹ (¹Dept. Hygienic Chem., Grad. Sch. Pharm. Sci., Nagoya City Univ., ²Dept. Mycobacteriol., the Res. Inst. of Tb., JATA, ³Dept. Oral Microbiol., Grad. Sch. Med. Dent. and Pharm. Sci., Okayama Univ., ⁴Dept. Pulm. Med., Natl. Hosp. Org., Higashinagoya Natl. Hosp., ⁵Dept. Infect. Dis., Nagoya Univ. Grad. Sch. Med., ⁶Dept. Food Sci. and Nutr., Fac. of Contemp. Hum. Life Sci., Tezukayama Univ., ⁷Dep. Biol. Pharm. Fac. of Pharm. Sci., Hokkaido Univ. of Sci.)

DP04-07 (P-203)**Host Autophagy was Exploited to *Campylobacter jejuni* Invasion in the Epithelial Cells**

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

DP04-08 (P-202)**Identification of Francisella virulence factors using silkworm infection model**

○Takashi Shimizu¹, Kenta Watanabe¹, Akihiko Uda^{1,2}, Masahisa Watarai¹ (¹Lab. Vet. Pub. Hlth., Dept. Jnt. Fac. Vet. Med. Yamaguchi Univ., ²Dept. Vet. Sci., NIID)

DP04-09 (P-204)**Analyses of meningococcal cysteine transport system as a nutrient virulence factor for the infection**

○Hideyuki Takahashi¹, Shigeyuki Yokoyama², Tatsuo Yanagisawa² (¹Dept. Bacterial. I, Nat. Inst. Infect. Dis., ²Yokoyama Struct Lab, RIKEN)

DP04-10 (P-205)***Chlamydia trachomatis* targets mitochondrial dynamics to promote intracellular survival and proliferation**

○Yusuke Kurihara, Kenji Hiromatsu (Dept. Microbiology & Immunology, Faculty of Medicine, Fukuoka Univ.)

DP04-11 (P-211)**Effect of cholesterol on *Campylobacter jejuni* survival in host intestinal epithelial cells**

○Kai Ishida, Takaaki Shimohata, Syou Hatayama, Junko Kido, Yuna Kanda, Aya Tentaku, Shiho Fukushima, Takashi Uebanso, Kazuaki Mawatari, Akira Takahashi (Dept. Preventive Environment and Nutrition, Inst. Biomedical Science, Univ. Tokushima Grad. Sch.)

DP04-12 (P-212)***Salmonella* Pathogenicity Island 4-encoded SiiE reduces IgG-secreting plasma cell in the bone marrow**

○Akiko Takaya¹, Koji Tokoyoda², Tomoko Yamamoto³ (1Dep. Microbiol. Immunol., Grad. Sch. Pharm. Sci., Chiba Univ.,
²DRFZ Berlin, ³MMRC, Chiba Univ.)

DP04-13 (P-209)***Shigella* effector IpaH4.5 targets RPN13 to evade antigen-specific immune response**

○Ryota Otsubo, Hitomi Mimuro (Research Institute for Microbial Diseases, Osaka Univ.)

DP04-14 (P-215)**Analysis of the role of *Streptococcus pyogenes* arginine metabolism in pathogenesis**

○Yujiro Hirose, Masaya Yamaguchi, Yasushi Mori, Kana Goto, Tomoko Sumitomo, Masanobu Nakata, Shigetada Kawabata (Dept. Oral Mol. Microbiol., Osaka Univ. Grad. Sch. Dent.)

DP05 Physiology/Structural biology - Cell surface structure, membrane structures and cytoskeleton/ Secretion and transport/Others

23rd, April (Tue) 10:05–11:20
 Digital Poster Zone B (Main Hall)

Chair: Torahiko Okubo (Hokkaido Univ.)

DP05-01 (P-106)**The growth mechanism of *E. coli* L-form**

Taku Oshima¹, ○Daiki Chikada², Daisuke Shiomi² (1Toyama Prefectural Univ., Dept. Biotechnology, ²Dept. Life Science, College of Science, Rikkyo Univ.)

DP05-02 (P-100)**Role of N-terminal region of FlhG on the polar flagellar number regulation in marine *Vibrio***

Seiji Kojima, Akira Mizhno, ○Michio Homma (Dev. Biol. Sci., Sch. Sci., Nagoya Univ.)

DP05-03 (P-110)**Movement of Gliding Motors in *Mycoplasma mobile* Visualized by High-speed Atomic Force Microscopy**

○Kohei Kobayashi¹, Noriyuki Koder², Yuhei Tahara^{1,3}, Takuma Toyonaga¹, Taishi Kasai¹, Toshio Ando², Makoto Miyata^{1,3} (1Grad. Sch. Sci., Osaka City Univ., ²WPI-NanoLSI, Kanazawa Univ., ³OCARINA, Osaka City Univ.)

DP05-04 (P-111)**Component analysis of pili in *Streptococcus sanguinis***

○Yixuan Li¹, Masanobu Nakata¹, Nobuo Okahashi^{1,2}, Masaya Yamaguchi¹, Tomoko Sumitomo¹, Shigetada Kawabata¹ (1Dept. Oral Microbio., Grad. Sch. Dent., Osaka Univ., ²Cent. Frontier Oral Sci., Grad. Sch. Dent., Osaka Univ.)

DP05-05 (P-104)**Simultaneous analysis of dynamics of morphology and membrane permeability in *Escherichia coli***

○Satoru Hirayama¹, Nobuaki Sakai², Akira Yagi², Hidenobu Senpuku¹, Makoto Ohnishi¹, Ryoma Nakao¹ (1Dept. Bac. I, Natl. Inst. Infect. Dis., ²R&D, MST, Olympus Corp.)

DP05-06 (P-107)**Function of cardiolipin in membrane vesicle secretion by *Pseudomonas aeruginosa***

○Yosuke Tashiro¹, Takuya Shiota¹, Wakana Miura^{1,2}, Masaki Shintani¹, Kazuhide Kimbara¹, Hiroyuki Futamata^{1,2} (1Dept. Engineer., Grad. Sch. Integr. Sci. Technol., Shizuoka Univ., ²Res. Inst. Green Sci. Technol., Shizuoka Univ.)

DP05-07 (P-112)**Polymerization character of MreB proteins involved in *Spiroplasma eriocheiris* swimming**

○Daichi Takahashi¹, Aya Kodama¹, Katsumi Imada², Makoto Miyata^{1,3} (1Grad. Sch. Sci., Osaka City Univ., ²Grad. Sch. Sci., Osaka Univ., ³OCARINA, Osaka City Univ.)

DP05-08 (P-103)**Dynamic molecular imaging on living bacterial cell surface by high speed AFM**

○Hayato Yamashita^{1,2}, Azuma Taoka^{3,4}, Masayuki Abe¹ (1Grad. Sch. Eng. Sci., Osaka Univ., ²PRESTO, JST, ³Grad. Sch. Nat. Sci. & Tech., Kanazawa Univ., ⁴Bio-AFM Frontier Research Center, Kanazawa Univ.)

DP05-09 (P-108)**Cell division of wall-less bacterium, *Spiroplasma eriocheiris***

○Taishi Kasai, Daisuke Shiomi (Dept. Life Science, Rikkyo Univ.)

DP05-10 (P-116)**Characterization of outer membrane vesicle secreted by *Bordetella pertussis***

○Tomoko Hanawa¹, Kazunari Kamachi², Hideo Yonezawa¹, Satoshi Kurata¹, Takako Osaki¹, Fuhito Hojo³, Shigeru Kamiya⁴ (1Dept. Infect. Dis, Sch. Med., Kyorin Univ., ²Dept. Bacteriol. II Natl. Inst. Infect. Dis., ³Inst. Lab. Anim, Grad. Sch. Med., Kyorin Univ., ⁴Sch. Health Sci., Kyorin Univ.)

DP05-11 (P-117)**GtfC-dependent biofilm formation by cellular fragments of *Streptococcus mutans***

○Tomoyo Nakamura^{1,2}, Yusuke Iwabuchi², Naoki Narisawa¹, Fumio Takenaga¹, Ryoma Nakao², Hidenobu Senpuku² (1Grad. Sch. Bioresour. Sci., Nihon Univ., ²Dept. Bacteriol. I, Nat. Inst. Infect. Des.)

DP05-12 (P-119)**Membrane vesicle of *C. perfringens* transports immunodominant antigens**

○Hibiki Okuwaki¹, Nozomu Obana², Kyoko Nagayama¹, Ryoma Nakao³, Hidenobu Senpuku³, Nobuhiko Nomura⁴ (¹Grad. Life Environ. Sci., Univ. Tsukuba, ²TMRC, Fac. Medicine, Univ. Tsukuba, ³Dept. Bacteriol., NIID., ⁴Fac. Life Environ. Sci., Univ. Tsukuba)

DP05-13 (P-122)**Analysis of a rapid growing *Mycobacterium avium* subspecies *hominissuis* 104 strain**

○Tomomi Kawakita^{1,2}, Mitsunori Yoshida¹, Masato Suzuki³, Noboru Nakata¹, Takemasa Takii⁴, Masaaki Nakayama⁵, Akihude Ryo², Yoshihiko Hoshino¹, Manabu Ato¹, Naoya Ohara⁵ (¹Dept. Mycobacteriology, Leprosy Res. Ctr., ²Dept. Mol. Biodefense Res., Grad. Sch. Med., Yokohama City Univ., ³Antimicrobial Resistance Res. Ctr., Natl. Inst. Infectious Diseases, ⁴Res. Inst. Tuberculosis, ⁵Dept. Oral Microbiol., Dent. and Pharm. Sci. Grad. Sch. Med., Okayama Univ.)

DP05-14 (P-120)**Comparison of cell morphological properties between 5 genera in family *Mycobacteriaceae***

○Hiroyuki Yamada¹, Kinuyo Chikamatsu¹, Akio Aono¹, Yuriko Igarashi¹, Yoshiro Murase¹, Yuta Morishige¹, Akiko Takaki¹, Satoshi Mitarai^{1,2} (¹Dept. Mycobacterium Ref and Res., ²Nagasaki Univ.)

DP05-15 (P-121)**Two different conformations of Gli123 protein, essential for *Mycoplasma mobile* gliding**

○Daiki Matsuike¹, Yuhei Tahara^{1,2}, Tasuku Hamaguchi³, Munehito Arai⁴, Makoto Miyata^{1,2} (¹Dept. Biol., Grad. Sch. Sci., Osaka City Univ., ²Osaka City Univ. OCARINA, ³RIKEN, SPring-8, ⁴Grad. Sch. Arts and Sci., The Univ. of Tokyo)

DP06 Antimicrobial agents and resistance - Others

23rd, April (Tue) 10:15–11:20
Digital Poster Zone C (Main Hall)

Chair: Takahito Toyotome (Obihiro Univ.)

DP06-01 (P-343)**Characterization of CRISPR-Cas13 system from *Leptotrichiaceae***

Bintao Cui, Shinya Watanabe, Kotaro Kiga, Yoshifumi Aiba, Moriyuki Kawauchi, Tanit Boonsiri, Kanate Thitiananpakorn, Yusuke Sato'o, Xin Ee Tan, ○Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP06-02 (P-345)**Mechanisms of cross-resistant to daptomycin and vancomycin in MRSA**

○Kanate Thitiananpakorn, Yoshifumi Aiba, Xin Ee Tan, Shinya Watanabe, Kotaro Kiga, Yusuke Sato'o, Moriyuki Kawauchi, Tanit Boonsiri, Bintao Cui, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP06-03 (P-346)**Generation of bactericidal chimeric phages using SaPI-phage system of *Staphylococcus aureus***

○Xin Ee Tan¹, Kotaro Kiga¹, Shinya Watanabe¹, Yusuke Sato'o¹, Yoshifumi Aiba¹, Moriyuki Kawauchi¹, Kanate Thitiananpakorn¹, Víctor Rodrigo Ibarra Chávez², José R Penadés², Longzhu Cui¹ (¹Div. Bacteriol, Sch. Med., Jichi Med. Univ., ²Inst. Infect., Immun., Inflamm., Univ. Glasgow)

DP06-04 (P-347)**Genetic Analysis of Highly β -lactam-resistant Mutants Generated from OS-MRSA**

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

DP06-05 (P-342)**Isolation and characterization of the broad-host range phage from lysogenic *E. coli* and sewage**

○Feng-Yu Li, Kotaro Kiga, Shinya Watanabe, Yusuke Sato'o, Yoshifumi Aiba, Moriyuki Kawauchi, Xin Ee Tan, Tanit Boonsiri, Kanate Thitiananpakorn, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP06-06 (P-340)**Establishment of the bacterial infection models of *Galleria mellonella* and mouse for phage therapy**

○Yusuke Sato'o, Feng-Yu Li, Kotaro Kiga, Shinya Watanabe, Yoshifumi Aiba, Moriyuki Kawauchi, Xin Ee Tan, Tanit Boonsiri, Kanate Thitiananpakorn, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP06-07 (P-335)**AMR bacteria collection and isolation and identification of MRSA phage**

○Yoshifumi Aiba, Xin Ee Tan, Kanate Thitiananpakorn, Shinya Watanabe, Kotaro Kiga, Yusuke Sato'o, Tanit Boonsiri, Feng-Yu Li, Moriyuki Kawauchi, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP06-08 (P-337)**Development of phage genome assembly system using yeast**

○Moriyuki Kawauchi, Kotaro Kiga, Feng-Yu Li, Tanit Boonsiri, Xin Ee Tan, Yusuke Sato'o, Yoshifumi Aiba, Kanate Thitiananpakorn, Shinya Watanabe, Longzhu Cui (Div. Bacteriol., Sch. Med., Jichi Med. Univ.)

DP06-09 (P-339)**Development of a novel gene-targeted bactericidal technology using bacteriophage**

○Kotaro Kiga¹, Feng-Yu Li¹, Xin Ee Tan¹, Yusuke Sato¹, Shinya Watanabe¹, Yoshifumi Aiba¹, Víctor Rodrigo Ibarra Chávez², José R Penadés², Masato Suzuki³, Longzhu Cui¹ (¹Div. Bacteriol, Sch. Med., Jichi Med. Univ., ²Inst. Infect., Immun., Inflamm., Univ. Glasgow, ³AMR Res. Ctr., Natl. Inst. Infect. Dis.)

DP06-10 (P-331)**Energy accumulation can be a novel strategy for antibiotic-tolerant *E. coli* persister cells**

○Naoki Yamamoto¹, Rino Isshiki¹, Yuto Kawai¹, Yurino Ohno¹, Shinya Matsumoto², Satoshi Tsuneda¹ (¹Dept. Life Sci. Med. Biosci., Waseda Univ., ²Dept. Mol. Bacteriol., Sch. Med., Nagoya Univ., ³Dept. Microbiol., Sch. Med., Nagoya Univ.)

DP06-11 (P-349)**Biological significance of beta-lactam antibiotics inactivation mediated by cysteine in redox-dependent manner**

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

DP06-12 (P-348)**Isolation and conjugation assay of ESBL-producing bacteria and ciliates from sewage water**

○Takaki Hasegawa, Hiroyuki Yamaguchi, Torahiko Okubo (Fac. Health Sci., Hokkaido Univ.)

DP06-13 (P-329)**Anti-biofilm effect of *Lonicera caerulea* var. *emphylocalyx* extract against *Porphyromonas gingivalis***

○Masaaki Minami¹, Mineo Nakamura², Toshiaki Makino³ (¹Dept. Bacteriol., Grad. Sch. Med. Sci., Nagoya City Univ., ²Nakamura Pharmacy, ³Dept. Pharmacog., Grad. Sch. Pharm. Sci., Nagoya City Univ.)

DP07 Taxonomy/Epidemiology/Infectious diseases - Isolation and characterization of clinical isolates/ Methods for detection, identification, and diagnosis

23rd, April (Tue) 12:50–13:55
Digital Poster Zone A (Main Hall)

Chair: Junji Matsuo (Health Sciences Univ. of Hokkaido)

DP07-01 (P-027)**Mechanism for the expression of sphingomyelinase in *Bacillus cereus***

○Atsushi Yokotani¹, Fumi Takahashi¹, Ryoko Aoyama¹, Naoki Hayashi¹, Tadashi Kosaka², Masaki Nakanishi³, Naohisa Fujita³, Masataka Oda¹ (¹Dept. Microbiol. Infect. Cont. Sci., Kyoto Pharm. Univ., ²Dept. Pharm., Univ. Hosp., Kyoto Pref. Univ. Med., ³Div. Infect. Cont. Lab. Med. Univ. Hosp., Kyoto Pref. Univ. Med.)

DP07-02 (P-031)**Study on polymorphism of nisin A resistance factor in *Streptococcus mutans***

○Toshiya Tsujii^{1,2}, Miki Kawada-Matsuo¹, Yuichi Oogai^{1,2}, Youichi Yamasaki¹, Hitoshi Komatsuzawa¹ (¹Dept. Microbiol. Med. and Dent. Grad. Sch. Kagoshima Univ., ²Dept. Pediatric. Sch. Med and Dent. Grad. Sch. Kagoshima Univ.)

DP07-03 (P-029)**Characteristic distribution of carbapenemase-producing *Enterobacteriaceae* in Thailand**

○Dan Takeuchi¹, Yukihiro Akeda^{1,2}, Yo Sugawara¹, Noriko Sakamoto¹, Shigeyuki Hamada¹ (¹Japan-Thailand Research Collaboration Center, Research Institute for Microbial Diseases, Osaka Univ., ²Division of Infection Control and Prevention, Grad. Sch. Medicine, Osaka Univ.)

DP07-04 (P-028)**Analysis of bacteriocins in *Streptococcus mutans***

○Atsuko Watanabe¹, Hitoshi Komatsuzawa², Miki Kawada-Matsuo² (¹Dept. Orthodontics and Dentofacial Orthopedics, Kagoshima Univ. Grad. Sch. Medical and Dental Sciences, ²Dept. Oral Microbiology, Kagoshima Univ. Grad. Sch. Medical and Dental Sciences)

DP07-05 (P-033)**Potential improvement of prenatal Group B *Streptococcus* screening using phages**

○Junpei Uchiyama¹, Hidehito Matsui², Tadahiro Nasukawa¹, Yoshihiko Sakaguchi⁴, Keijiro Mizukami², Masahiro Sakaguchi², Shigenobu Matsuzaki², Hideaki Hanaki² (¹Sch. Veterinary Medicine, Azabu Univ., ²Kitasato Institute for Life Sciences, Kitasato Univ., ³Kochi Univ., ⁴Kitasato Univ.)

DP07-06 (P-045)**Helicobacter pylori CagA peptide epitopes capable to detect antibodies in patients sera**

○Shamshul Ansari¹, Junko Akada¹, Seiji Shiota², Tadayoshi Okimoto³, Kazunari Murakami³, Yoshio Yamaoka¹ (¹Dept. Environmental Prevent. Med., Oita Univ. Faculty Med., Yufu, ²Dept. Gen. Med., Almeida Memorial Hosp., Oita, ³Dept. Gastroenterol., Oita Univ. Faculty of Med., Yufu)

DP07-07 (P-039)**Prevalence of enterohepatic Helicobacter spp. infection in pancreatic cancer and biliary tract cancer patients**

○Takako Osaki¹, Fuhito Hojo², Hideo Yonezawa¹, Satoshi Kurata¹, Tomoko Hanawa¹, Shigeru Kamiya³ (¹Dept. Infect. Disease., Kyorin Univ. Sch. Med., ²Grad. Sch. Medicine, Institute of Laboratory Animals, Kyorin Univ., ³Faculty of Health Sciences, Kyorin Univ.)

DP07-08 (P-041)**Rapid detection of zoonotic tuberculosis using Loop mediated isothermal amplification**

○Thoko Kapalamula¹, Jeewan Thapa¹, Chie Nakajima^{1,2}, Mwangala Akapelwa¹, Stephen V. Gordon³, Yasuhiko Suzuki^{1,2} (¹Div Biores, Hokkaido Uni Res Center Zoonosis Ctl, Japan, ²GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ., Japan, ³Sch. Veterinary Medicine, Univ. College Dublin, Ireland)

DP07-09 (P-036)**Comparison of selective media for detecting metallo-beta-lactamase producing Enterobacteriaceae**

○Takayuki Shiimoto, Eriko Kimura, Hiroe Kodama, Mutsumi Tanimura (Ishikawa Pref. Inst. of Public Health and Environ. Sci.)

DP07-10 (P-042)**Development of rapid diagnostic methods of Helicobacter suis infection in patients**

○Hidenori Matsui¹, Emiko Rimbara², Keigo Shibayama², Masato Suzuki² (¹Kitasato Institute for Life Sciences, Kitasato Univ., ²National Institute of Infectious Diseases)

DP07-11 (P-038)**Development of a rapid detection tool for Mycobacterium avium using Loop-mediated isothermal Amplification**

○Mwangala Akapelwa¹, Kapalamula Thoko¹, Chie Nakajima^{1,2}, Yasuhiko Suzuki^{1,2} (¹Hokkaido Univ. Research Center for Zoonosis Control. Div of Bioresources, ²Global Station for Zoonosis Control, Global Institution for Collaborative Research and Education (GI-CoRE), Hokkaido Univ.)

DP07-12 (P-035)**Estimation of the aetiology of acute diarrhea in Thai patients using multiplex quantitative PCR**

○Kazuhisa Okada, Shigeyuki Hamada (RCC-ERI, RIMD, Osaka Univ.)

DP07-13 (P-037)**Development of a new method for detection of bacterial proliferation activity by using bacterial amino acid uptake**

○Miki Matsue¹, Yoshie Yuasa¹, Masato Kobayashi², Asuka Mizutani², Keiichi Kawai², Shigefumi Okamoto¹ (¹Dept. Clin. Lab. Sci., Kanazawa Univ., ²Dept. Clin. Rad. Tec., Kanazawa Univ.)

DP08 Ecology - Microbiota

23rd, April (Tue) 12:50–13:30
Digital Poster Zone B (Main Hall)

Chair: Hideaki Higashi (Hokkaido Univ.)

DP08-01 (P-060)**Investigation of microbiota on retail chicken meat in relation to Campylobacter contamination**

Ryosuke Ago, Nachiko Takeshita, ○Kasumi Kuroki, Ryosuke Kadoya, Tsutomu Sekizaki (Res. Center for Food Safety, Grad. Sch. Agr. Life Sci., Univ. of Tokyo)

DP08-02 (P-064)**Effects of SCFAs on fimbriin-dependent attachment and colonization of Actinomyces oris**

Itaru Suzuki^{1,2}, Takehiko Shimizu², Makoto Ohnishi¹, ○Hidenobu Senpuku¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Dept. Pediatric Dent. Nihon Univ. Sch. Dent. at Matsudo)

DP08-03 (P-065)**Effect of lantibiotics bacteriocin produced by oral bacteria on intestinal microbiota**

○Hideo Yonezawa¹, Mizuho Motegi⁵, Takako Osaki¹, Fuhito Hojo³, Yasutoshi Kuroki², Kentaro Oka², Satoshi Kurata¹, Tomoko Hanawa¹, Motomichi Takahashi^{1,2}, Shigeru Kamiya⁴ (¹Dept. Infect. Dis., Kyorin Univ., Sch. Med., ²Miyarisan Pharmaceutical Co., Ltd, ³Inst. Lab. Anim., Grad. Sch. Med., Kyorin Univ., ⁴Kyorin Univ. Faculty of Health Sciences, ⁵Tokyo Medical and Dental Univ.)

DP08-04 (P-062)**Fecal Freeze Storage Period Influences Colonization Ability for Fecal Microbiota Transplantation**

○Takashi Sasaki^{1,2}, Dai Ishikawa³, Masahito Takahashi³, Yu Jie Lu², Kyoko Kuwahara⁴, Keiichi Hiramatsu² (¹Animal Research Center, Sch. Med., Sapporo Med. Univ., ²Center of Excellence for Infection Control Science, Sch. Med., Juntendo Univ., ³Dept. Gastroenterol., Sch. Med., Juntendo Univ., ⁴Dept. Microbiol., Sch. Med., Juntendo Univ.)

DP08-05 (P-058)**Change of microflora in gut and oral by changing oral condition**

○Ayaka Matsuoka¹, Satoshi Nagase¹, Yusuke Kotani^{1,2}, Misaki Nakamura¹, Shigefumi Okamoto¹ (¹Dept. Clin. Lab. Sci., Kanazawa Univ., ²Nat. Hosp. Org. Kanazawa. Med. Cent.)

DP08-06 (P-066)**Metagenomic analysis of human gut microbiome in post-operative status of colorectal cancer**

○Hirotsugu Shiroma¹, Sayaka Mizutani¹, Shinichi Yachida², Takuji Yamada¹ (¹Dept. Life Science and Technology, Tokyo Institute of Technology, ²Grad. Sch. Medicine, Osaka Univ.)

DP08-07 (P-055)**Candida albicans oral ingestion affects intestinal microbial flora**

○Akira Hasebe, Ayumi Saeki, Ken-ichiro Shibata (Dept. Oral Mol. Microbiol., Grad. Sch. Dent. Med., Hokkaido Univ.)

DP08-08 (P-063)**Symbiosis of Salmonella and Escherichia coli**

○Yutaka Midorikawa (Suzuka Univ. Medical Science)

DP09 Host defense - Acquired immunity, vaccines and prevention and control of infections/Others

23rd, April (Tue) 12:50–13:45
Digital Poster Zone C (Main Hall)

Chair: Eiki Yamasaki (Obihiro Univ.)

DP09-01 (P-248)**Immunization with pneumococcal EF-Tu enhances serotype-independent protection against S. pneumoniae**

○Kosuke Nagai¹, Hisanori Domon^{1,2}, Tomoki Maekawa^{1,2}, Takumi Hiyoshi¹, Hikaru Tamura^{1,2}, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. & Dent. Sci., ²Res. Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. & Dent. Sci.)

DP09-02 (P-255)**Efficacy for booster vaccine antigen of the post translationally modified Mycobacterium tuberculosis MDP1**

○Yuriko Ozeki¹, Akihito Nishiyama¹, Akira Yokoyama¹, Yukiko Ohara¹, Saburo Yamamoto², Sohkiichi Matsumoto¹ (¹Dept. Microbiol., Sch. Med., Niigata Univ., ²Japan BCG Laboratory)

DP09-03 (P-256)**Intranasal Vaccine Using Chimeric Vesicles of A Probiotic Strain Carrying Pneumococcal Capsule**

○Naoko Matsumoto^{1,2}, Satoru Hirayama¹, Karlsson Jens^{1,3}, Makoto Ohnishi¹, Ryoma Nakao¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²New Yachimata General Hospital, ³Dept. Microbiol. Tumor. Cell Biol, Karolinska Institutet)

DP09-04 (P-257)**M cell-targeting enhances immune responses induced by oral immunization with Ag-producing L. lactis**

○Keita Takahashi, Nozomi Orito, Nagisa Tokunoh, Naoki Inoue (Dept. Microbiology and Immunology, Gifu Pharmaceutical Univ.)

DP09-05 (P-258)**LAP increases the DNA delivery efficiency of Internalin A-expressing invasive Lactococcus lactis**

○Nozomi Orito, Keita Takahashi, Naoki Inoue (Dept. Microbiology and Immunology, Gifu Pharmaceutical Univ.)

DP09-06 (P-250)**Norfloxacin, a new quinolone antibiotic, inhibits Langerhans cell-mediated Th2 cell development**

○Katsuhiko Matsui, Azusa Kashima, Ayaka Motegi (Dept. Clin. Immunol., Meiji Pharm. Univ.)

DP09-07 (P-262)**Intestinal dysbiosis elicited by excessive Th2 responses induces oral dysbiosis**

○Shohei Matsui^{1,2}, Hideo Kataoka¹, Haruka Fukamachi¹, Hirobumi Morisaki¹, Nobuo Okahashi³, Hirota Kuwata¹ (¹Dept. Oral Microbiol., Sch. Dent., Showa Univ., ²Dept. Special Needs Dentistry, Div. Community Based Comprehensive Dentistry, Sch. Dent., Showa Univ., ³Center for Frontier Oral Sci., Grad. Sch. Dent., Osaka Univ.)

DP09-08 (P-265)**p14 is required for the TAX1BP1-mediated xenophagy against Group A Streptococcus**

○Ching-Yu Lin, Takashi Nozawa, Atsuko Minowa-Nozawa, Hirota Toh, Chihiro Aikawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

DP09-09 (P-261)**Fully human monoclonal antibodies effectively neutralizing botulinum neurotoxin serotype B**

○Takuhiro Matsumura, Sho Amatsu, Masahiro Yutani, Yukako Fujinaga (Dept. Bacteriol., Grad. Sch. Med. Sci., Kanazawa Univ.)

DP09-10 (P-263)**Identification of E3 ubiquitin ligase that recognizes Group A Streptococcus in selective autophagy**

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

DP09-11 (P-264)**Analysis of GBP family function in Group A Streptococcus-induced autophagy**

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

DP10 Physiology/Structural biology - Metabolism, biosynthesis and metabolome/Motility/Signal transduction (intracellular and intercellular)

23rd, April (Tue) 13:40–15:00
Digital Poster Zone B (Main Hall)

Chair: Yoshikazu Furuta (Hokkaido Univ.)

DP10-01 (P-079)

Biosynthesis pathway of reactive persulfides in photosynthetic bacteria

○Minkyung Jung¹, Taiga Amemiya², Tomoaki Ida¹, Kota Kera², Akira Nishimura¹, Hozumi Motohashi³, Nobuyuki Uozumi², Takaaki Akaike¹ (¹Tohoku Univ. Grad. Sch. Medicine, ²Tohoku Univ. Grad. Sch. Engineering, ³Institute of Development, Aging and Cancer, Tohoku Univ.)

DP10-02 (P-077)

Basic research for novel preventative method of dental caries by oral *Veillonella*

○Izumi Mashima¹, Yu-Chieh Liao², Futoshi Nakazawa³, Yoshiaki Kawamura¹, Elaine Haase⁴, Frank Scannapieco⁴ (¹Dept. Microbiol., Sch. Pharmacol., Aichi Gakuin Univ., ²Inst. Pop. Heal. Sci., Natl. Heal. Res. Inst., ³Heal. Sci. Univ. Hokkaido Grad. Sch. Dentistry, ⁴Dept. Oral Biol., Sch. Dent. Med., The State Univ. New York at Buffalo)

DP10-03 (P-082)

Hypoxia prompts *Chlamydia trachomatis* L2 growth into HEp-2 cells

○Kent Hashimoto, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

DP10-04 (P-089)

Elucidating subunit composition of the motor evolved from ATP synthase for *Mycoplasma mobile* gliding

○Takuma Toyonaga¹, Takayuki Kato², Akihiro Kawamoto³, Noriyuki Koderu⁴, Toshio Ando⁴, Keiichi Namba^{2,5}, Makoto Miyata¹ (¹Grad. Sch. Sci., Osaka City Univ., ²Grad. Sch. Front. Biosci., Osaka Univ., ³IPR, Osaka Univ., ⁴Bio-AFM FRC., Kanazawa Univ., ⁵BDR & SPring-8, Riken)

DP10-05 (P-086)

Structural analysis of the switching mutants in FlhG of marine *Vibrio* by NMR and Cryo-ET

○Tatsuro Nishikino¹, Yohei Miyanoiri², Shiwei Zhu³, Seiji Kojima¹, Jun Liu³, Michio Homma¹ (¹Div. Biol. Sci. Grad. Sch. Sci., Nagoya Univ., ²Inst. Protein Res. Osaka Univ., ³Dep. Microbial Pathogenesis, Microbial Sci. Inst. Yale Univ.)

DP10-06 (P-090)

Molecular speedometer in the gliding motility of *Mycoplasma pneumoniae*

○Kohki Murata¹, Daisuke Nakane¹, Tsuyoshi Kenri², Keigo Shibayama², Takayuki Nishizaka¹ (¹Dept. Physics, Gakushuin Univ., ²Dept. Bacteriology II, National Institute of Infectious Diseases)

DP10-07 (P-085)

Different roles of flagellar sheath proteins FcpA, FcpB and FlaA for flagellum formation in *Leptospira biflexa*

○Nobuo Koizumi¹, Akihiro Kawamoto², Yuya Sasaki^{1,3}, Makoto Ohnishi¹, Shuichi Nakamura⁴ (¹Dept. Bacteriol. I, NIID, ²Inst. Protein Res., Osaka Univ., ³BASE, Tokyo Univ. Agri. Tech., ⁴Dept. Appl. Phys., Tohoku Univ.)

DP10-08 (P-083)

Measurement of forces on *Leptospira* swimming

○Shuichi Nakamura¹, Keigo Abe¹, Kyosuke Takabe^{1,2} (¹Grad. Sch. Eng., Tohoku Univ., ²Grad. Sch. Life and Env. Sci., Univ. Tsukuba)

DP10-09 (P-092)

Adhesion and motility of *Leptospira* on animal cultured cells

○Jun Xu¹, Nobuo Koizumi², Shuichi Nakamura³ (¹Grad. Sch. Agr. Sci., Tohoku Univ., ²Dept. Bacteriol. I, NIID, ³Grad. Sch. Eng., Tohoku Univ.)

DP10-10 (P-084)

The flagellar MS ring assembly is promoted by FlhF, the number and position regulator protein

○Hiroyuki Terashima, Keiichi Hirano, Michio Homma (Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

DP10-11 (P-088)

Detailed measurements of gliding behavior in *Mycoplasma gallisepticum*

○Masaki Mizutani¹, Makoto Miyata^{1,2} (¹Grad. Sch. Sci., Osaka City Univ., ²OCARINA, Osaka City Univ.)

DP10-12 (P-097)

The extracellular vesicles from *E. coli* and macrophages mediate the inflammatory responses

○Mayuko Oka¹, Risa Imamiya¹, Hiroshi Ichikawa², Yukiko Minamiyama¹, Yasuhiko Horiguchi³ (¹Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., ²Doshisya Univ., ³Dept. Mol. Bacteriol., RIMD, Osaka Univ.)

DP10-13 (P-093)

SPY1588, two component sensor protein of *Streptococcus pyogenes*, senses proton and is phosphorylated

○Masanori Isaka¹, Ichiroh Tatsuno¹, Jun-ichi Maeyama², Tadao Hasegawa¹ (¹Dept. Microbiol., Grad. Sch. Med., Nagoya City Univ., ²Dept. Blood. Safe. NIIH)

DP10-14 (P-099)

Improvement of plasmid-containing membrane vesicle production in *Escherichia coli*

○Sharmin Aktar¹, Hiroyuki Futamata^{1,2}, Yosuke Tashiro¹
(¹Dept. Engineer., Grad. Sch. Integr. Sci. Technol., Shizuoka Univ., ²Res. Inst. Green Sci. Technol., Shizuoka Univ.)

DP10-15 (P-094)

Single-cell analysis of cell death regulated by quorum sensing in *Streptococcus mutans*

○Ryo Nagasawa¹, Nozomu Obana², Nobuhiko Nomura³ (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²TMRC, Fac. Med., Univ. Tsukuba, ³Fac. Life Environ. Sci., Univ. Tsukuba)

DP10-16 (P-096)

Quorum sensing controls the morphological change of biofilms in *Clostridium perfringens*

○Yoshihiko Tabushi¹, Nozomu Obana^{2,4}, Nobuhiko Nomura^{3,4}
(¹Sch. Life Environ. Sci., Univ. Tsukuba, ²TMRC, Fac. Med., Univ. Tsukuba, ³Fac. Life Environ. Sci., Univ. Tsukuba, ⁴MiCS, Univ. Tsukuba)

**DP11 Antimicrobial agents and resistance -
Antimicrobial resistance**

23rd, April (Tue) 13:55–15:10
Digital Poster Zone C (Main Hall)

Chair: Itaru Hirai (Univ. of the Ryukyus)

DP11-01 (P-322)

Monitoring of antimicrobial resistance in *Salmonella* spp. of food origin from 2015–2017 in Japan

Keiko Semba¹, Yuki Abe¹, Sachiyo Sonobe^{1,2}, Manabu Aono³, Koumei Shirabe³, Akemi Kai³, Keigo Shibayama³, Makoto Ohnishi¹, Haruo Watanabe¹, ○Hiroto Shinomiya¹ (¹Ehime Prefect. Instit. Public Health Environ. Sci., ²Yamaguchi Prefect. Instit. Public Health Environ., ³Nat. Instit. Infect. Dis.)

DP11-02 (P-312)

In vitro inhibition of antifugal echinocandin by antibiotics

Keiju Harada^{1,2}, Azusa Takahashi-Nakaguchi¹, Michiyo Sato¹, Kiminori Shimizu², ○Hiroji Chibana¹ (¹Med. Mycol. Res. Ctr. Chiba Univ., ²Dept. Biolog. Sci. Tech, Tokyo Univ. Sci.)

DP11-03 (P-321)

Determination of pyrazinamide resistance in *Mycobacterium tuberculosis* isolated from Lusaka, Zambia

○Precious Bwalya¹, Tomoyuki Yamaguchi¹, Georgina Mulundu³, Chie Nakajima^{1,2}, Grace Mbulo⁴, Eddie Solo⁴, Yukari Fukushima¹, Kunda Kasakwa⁴, Yasuhiko Suzuki^{1,2} (¹Div. Biores, Hokkaido Univ. Res Center Zoonosis Ctl, ²GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ., ³Sch. Medicine, Univ. of Zambia, ⁴Tuberculosis Laboratory, Univ. Teaching Hospital, MOH, Zambia)

DP11-04 (P-285)

Mirosamicin resistance of a honeybee pathogen, *Melissococcus plutonius*

○Daisuke Takamatsu¹, Emi Yoshida², Eri Watando³, Yuichi Ueno¹, Masahiro Kusumoto¹, Masatoshi Okura¹, Makoto Osaki¹, Ken Katsuda¹ (¹NIAH, NARO, ²Iwate Pref., ³Aichi Pref.)

DP11-05 (P-286)

Zinc potentiates the action of tosylloxacin to kill *Escherichia coli* persists in biofilm

○Masaru Usui¹, Hayato Yokoo¹, Yutaka Tamura¹, Chie Nakajima², Yasuhiko Suzuki², Ghigo Jean-Marc³, Christophe Beloin³ (¹Rakuno Gakuen Univ., ²Hokkaido Univ., ³Institut Pasteur)

DP11-06 (P-307)

Roles of lytic transglycosylases in biofilm formation and antibiotic resistance in MRSA

○Ken-ichi Okuda^{1,2}, Anne-Aurelie Lopes¹, Yutaka Yoshii¹, Satomi Yamada¹, Mari Nagakura¹, Yoshimitsu Mizunoe¹, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Ctr. Biofilm Res. Tech., Jikei Univ. Sch. Med.)

DP11-07 (P-323)

A megaplasmid carrying multidrug-resistance genes in *Salmonella* *Infantis* isolated from patients and broiler meat

○Yuki Abe¹, Tsuyoshi Sekizuka², Sachiyo Sonobe¹, Keiko Semba¹, Manabu Aono², Makoto Kuroda¹, Hiroto Shinomiya¹ (¹Ehime Prefect. Instit. Public Health Environ. Sci., ²Nat. Instit. Infect. Dis.)

DP11-08 (P-300)

Molecular characterization of beta-lactamase in *Shewanella* spp.

○Yuki Ohama^{1,2}, Kotaro Aoki², Yoshimi Higurashi¹, Tomoaki Sato¹, Keita Tatsuno¹, Kyoji Moriya², Yoshikazu Ishii² (¹Dept. Infect. Cont. Prev., Univ. Tokyo Hosp., ²Dept. Microbiol. Infect. Dis., Sch. Med., Toho Univ.)

DP11-09 (P-292)**The Effectiveness of UVA-LED Irradiation on ESBL Producing *Escherichia coli***

○Maria Ulfa¹, Takaaki Shimohata¹, Shiho Fukushima¹, Momoyo Azuma², Takashi Uebanso¹, Kazuaki Mawatari¹, Akira Takahashi¹ (¹Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch., ²Dept. Infect. Cont. Prevent., Tokushima Univ. Hosp.)

DP11-10 (P-304)**Dynamics of *bla*_{IMP-6} dissemination via epidemic pKPI-6 and diverse types of carriage**

○Ryuichiro Abe¹, Ryuji Kawahara², Yo Sugawara¹, Yukihiro Akeda^{1,3}, Kazunori Tomono³, Shigeyuki Hamada¹ (¹RIMD, Osaka Univ., ²Osaka Inst. Public Health, ³Med. Hosp. Osaka Univ.)

DP11-11 (P-318)**Emergence of a novel CTX-M-207 beta-lactamase-producing *E. coli* strain with mutation in OmpC porin isolated in Japan**

○Tomoki Mizuno¹, Ryuichi Nakano¹, Yuki Yamada², Akiyo Nakano¹, Akira Suwabe^{2,3}, Hisakazu Yano¹ (¹Nara Med. Univ., ²Iwate Med. Univ. Hosp., ³Iwate Med. Univ. Sch. Med.)

DP11-12 (P-305)**WQ-3810 showed strong inhibitory activity against *Mycobacterium leprae* DNA gyrase**

○JongHoon Park¹, Tomoyuki Yamaguchi¹, Yuki Ouchi¹, Hyun Kim², Chie Nakajima^{1,3}, Yasuhiko Suzuki^{1,3} (¹Div Biores, Hokkaido Univ. Res Center Zoonosis Ctl, Japan, ²Dept. Bacteriology II, National Institute of Infectious Diseases, Japan, ³GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ.)

DP11-13 (P-310)**Antimicrobial resistance genes of *Salmonella* serovars isolated from broiler chickens in Kagoshima, Japan**

○Minh Duc Vu^{1,2}, Rina Kakiuchi⁴, Hajime Toyofuku², Takeshi Obi², Takehisa Chuma¹ (¹Vet. Public Health. Joint Fac. Vet. Med., Kagoshima Univ., ²The United Grad. Sch. Vet. Sci., Yamaguchi Univ., ³Animal Microbiol., Joint Fac. Vet. Med, Kagoshima Univ., ⁴Grad. Sch. Agri., Kagoshima Univ.)

DP11-14 (P-309)**Characterization of a KPC-2-positive *Klebsiella* and *Aeromonas* spp. from urban wastewater**

○Makoto Kuroda, Tsuyoshi Sekizuka, Takaya Segawa, Masanori Hashino, Yuba Inamine (Nati. Insti. Infec. Dis.)

DP11-15 (P-324)**Alternative *Helicobacter pylori* regimen in Indonesian with High Metronidazole and Levofloxacin Resistance**

○Langgeng Waskito¹, Muhammad Miftahussurur², Ari Syam³, Yudith Rezkitha³, Yoshio Yamaoka¹ (¹Dept. Environmental and Preventive Med., Faculty Med., Oita Univ., ²Institute of Tropical Disease, Univ. Airlangga, ³Dept. Internal Med., Faculty Med., Univ. Indonesia)

DP12 Pathogenicity - Toxins, effectors and physically active substances

23rd, April (Tue) 14:05–15:10
Digital Poster Zone A (Main Hall)

Chair: Toyoko Hiroi (Obihiro Univ.)

DP12-01 (P-177)**Role of toxic shock syndrome toxin-1 on tampon-related toxic shock syndrome**

Krisana Asano, ○Akio Nakane (Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med.)

DP12-02 (P-173)**Regulatory mechanism of toxic shock syndrome toxin-1 in clinically isolated *Staphylococcus aureus***

Yusuke Taki^{1,2}, Shinya Watanabe¹, Yusuke Sato'o¹, ○Feng-Yu Li¹, Thitiananpakorn Kanate¹, Boonsiri Tanit¹, Yoshifumi Aiba¹, Kotaro Kiga¹, Longzhu Cui¹ (¹Div. Bacteriology, Sch. Medicine, Jichi Medical Univ., ²Dept. Gastroenterological Surgery, Shizuoka General Hospital)

DP12-03 (P-195)**Screening of tobacco proteins targeted by *Ralstonia solanacearum* type III effectors with yeast two hybrid system**

Laxmi Kharel, Akinori Kiba, Yasufumi Hikichi, ○Kouhei Ohnishi (Fac. Agricul. Marine Sci., Kochi Univ.)

DP12-04 (P-192)**Collagen anchors of bacterial collagenases and their application to periodontal tissue regeneration**

○Osamu Matsushita¹, Takehiko Mima¹, Kazuyoshi Gotoh¹, Yumiko Yamamoto¹, Caviness Perry², Joshua Sakon², Takaki Koide³, Kentaro Uchida⁴, Shin Nakamura¹, Shogo Takashiba¹ (¹Grad. Sch. Med Dent Pharm Sci, Okayama Univ., ²Dept. Chem Biochem, Univ. Arkansas, ³Grad. Sch. Adv Sci Eng, Waseda Univ., ⁴Sch. Med, Kitasato Univ.)

DP12-05 (P-179)**The enzyme reaction mechanism of Binary Enterotoxin of *C. perfringens* (BEC) subunit-a (BECa)**

○Kengo Ueda¹, Kazuki Kawahara¹, Shinya Yonogi^{1,2}, Hiroya Oki³, Shigeaki Matsuda³, Toshio Kodama³, Tetsuya Iida¹, Takuya Yoshida¹, Tadayasu Ohkubo³, Shota Nakamura³ (¹Grad. Sch. Pharm. Sci., Osaka Univ., ²Div. Microbiol. Osaka Institute of Public Health, ³RIMD, Osaka Univ.)

DP12-06 (P-169)**Identification of *Bordetella dermonecrotic* toxin receptor**

○Shihono Teruya¹, Yukihiro Hiramatsu¹, Noriko Shinoda^{1,2}, Kentaro Tsukamoto¹, Keiji Nakamura¹, Aya Fukui¹, Keisuke Ishigaki¹, Naoaki Shinzawa¹, Yasuhiko Horiguchi¹ (¹Dept. Mol. Bact., RIMD, Osaka Univ., ²Dept. Microbiol., Sch. Med., Fujita Health Univ.)

DP12-07 (P-189)**Quenching chemicals on quorum sensing of *Ralstonia solanacearum* and their modes of action**

○Chika Takemura¹, Kazusa Hayashi¹, Wakana Senuma¹, Ayaka Yoshihara², Akinori Kiba¹, Kouhei Ohnishi¹, Kenji Kai², Yasufumi Hikichi¹ (¹Fac. Agri & Marine Sci., Kochi Univ., ²Osaka Pref. Univ.)

DP12-08 (P-181)**How does the mycoplasmal lipopeptide FSL-1 induce IL-1beta release by living macrophages?**

○Ayumi Saeki¹, Kohsuke Tsuchiya², Takashi Suda², Takeshi Into³, Akira Hasebe¹, Toshihiko Suzuki⁴, Ken-ichiro Shibata¹ (¹Dept Oral Mol Microbiol, Hokkaido Univ. Grad. Sch. Dent Med., ²Div Immunology Molecular Biology, Kanazawa Univ. Cancer Research Institute, ³Dept. Oral Microbiol., Asahi Univ. Sch. Dent., ⁴Dept. Bacterial Pathogen, Infect Host Response, Tokyo Med Dent Univ.)

DP12-09 (P-193)**Molecular characteristics of infantilysin secreted from *Streptococcus infantis***

○Chihiro Kodama¹, Qing Tang², Hideaki Nagamune^{1,2}, Toshifumi Tomoyasu^{1,2}, Atsushi Tabata^{1,2}, Ayuko Takao³, Nobuko Maeda³ (¹Dept. Biol Tech., Tokushima Univ., ²Adv Tech Sci., Tokushima Univ. Grad. Sch., ³Dept. Oral Bacteriol., Tsurumi Univ.)

DP12-10 (P-183)**Histamine release from mast cells induced by staphylococcal enterotoxin A evokes vomiting reflex in common marmoset**

○Hisaya Ono^{1,2}, Shouhei Hirose^{2,3}, Kouji Narita^{2,4}, Krisana Asano^{2,3}, Dong-Liang Hu¹, Akio Nakane^{2,3} (¹Dept. Zoonoses, Sch. Vet. Med., Kitasato Univ., ²Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ³Dept. Biopolymer Health Science, Hirosaki Univ. Grad. Sch. Med., ⁴Inst. Animal Exp., Hirosaki Univ. Grad. Sch. Med.)

DP12-11 (P-187)**Response of human neutrophil-like cell to 5D-CDC produced by *S. mitis***

○Miho Kobayashi¹, Atsushi Tabata², Hisashi Ohkuni^{3,4}, Ayuko Takao², Toshifumi Tomoyasu⁴, Nobuko Maeda², Hideaki Nagamune² (¹Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ²Grad. Sch. Tech. Indust. & Social Sci., Tokushima Univ. Grad. Sch., ³Health Sci. Res. Inst. East Japan Co. Ltd, ⁴Dept. Oral Bacteriol., Tsurumi Univ.)

DP12-12 (P-168)**Analysis of periodontal tissue destruction induced by *A. actinomycetemcomitans* leukotoxin**

○Takumi Hiyoshi^{1,2}, Hisanori Domon^{1,3}, Tomoki Maekawa^{1,2,3}, Kosuke Nagai¹, Hikaru Tamura^{1,2,3}, Yutaka Terao^{1,3} (¹Div Microbiol Infect Dis, Niigata Univ. Grad. Sch. Med & Dent Sci, ²Div Periodontol, Niigata Univ. Grad. Sch. Med & Dent Sci, ³Res Cent Adv Oral Sci, Niigata Univ. Grad. Sch. Med & Dent Sci)

DP12-13 (P-180)**Identification of a *Legionella* deubiquitinase that interacts with COPI vesicles**

○Tomoe Kitao¹, Tomoko Kubori¹, Shintaro Seto^{2,3}, Kohei Arasaki¹, Hiroki Nagai¹ (¹Dept. Microbiol., Grad. Sch. Med., Gifu Univ., ²Research Institute of Tuberculosis, ³Sch. Life Sci., Tokyo Univ. Pharm and Life Sci.)

DP13 Genetics/Genomics/Biotechnology - Gene regulation and transcriptome analysis/Genetic manipulation and analysis, biotechnology and synthetic biology

23rd, April (Tue) 15:10–16:00
Digital Poster Zone B (Main Hall)

Chair: Hiroyuki Yamaguchi (Hokkaido Univ.)

DP13-01 (P-142)**The plasmid-encoded transcription factor ArdK contributes to the repression of *bla*_{IMP-6} expression**

○Takaya Segawa¹, Tsuyoshi Sekizuka¹, Satowa Suzuki^{2,3}, Keigo Shibayama², Mari Matsui¹, Makoto Kuroda¹ (¹Genomics Center, NIID, ²AMR Center, NIID, ³Dept. Bacteriol. II, NIID)

DP13-02 (P-140)**Bacterial target-centric view of small RNA regulation revealed by comparative CLIP-seq**

○Kotaro Chihara^{1,2}, Thorsten Bischler³, Lars Barquist^{4,5}, Naohiro Noda², Jörg Vogel^{4,5}, Satoshi Tsuneda¹ (¹Dept. Life Sci. Med. Biosci., Waseda Univ., ²Biomed. Res. Inst., Natl. Inst. Adv. Ind. Sci. Technol., ³Core Unit Sys. Med., Univ. Hosp. Würzburg, ⁴Inst. Mol. Infect. Biol. (IMIB), Univ. Würzburg, ⁵Helmholtz Inst. RNA-based Infect. Res. (HIRI))

DP13-03 (P-138)**Regulation of small RNA expression in *Vibrio alginolyticus***

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

DP13-04 (P-141)**Fine tuning of gene expression in eukaryotes by *Mycoplasmal* DNA sequences**

○Motoaki Yasuda, Akira Hasebe, Ayumi Saeki, Ken-ichirou Shibata (Dept. Oral Molecular Microbiology, Hokkaido Univ.)

DP13-05 (P-146)**Studies on CytR, a repressor for microcolony formation and flagellar expression in uropathogenic *E. coli* (UPEC)**

○Hidetada Hirakawa¹, Haruyoshi Tomita^{1,2} (¹Dept. Bacteriol., Grad. Sch. Med., Gunma Univ., ²Lab. Drug Resist., Gunma Univ.)

DP13-06 (P-145)**Post-transcriptional regulation of TCA cycle by mRNA 3'UTRs in Enterobacteriaceae**

○Masatoshi Miyakoshi (Fac. Med., Univ. Tsukuba)

DP13-07 (P-149)**Developing a method for tail-to-tail gene profiling**

○Akinori Kato¹, Taihei Kitada¹, Atsuya Tanigawa¹, Yu Kanesaki², Hirofumi Yoshikawa³, Eduardo Groisman⁴ (¹Dept. Adv Biosci, Kindai Univ., ²NGRC, Tokyo Univ. of Agric, ³Dept. Biosci, Tokyo Univ. of Agric, ⁴Dept. Microbiol Pathol, Yale Univ. Sch. Med)

DP13-08 (P-147)**The possibility of the pYT plasmid in the use of genetic analysis of NTM**

○Takayoshi Nozaki^{1,2}, Masaaki Nakayama², Midori Ogawa³, Shiomi Yoshida⁴, Manabu Ato⁵, Naoya Ohara² (¹Dept. Comprehensive Dent., Okayama Univ. Grad. Sch. Med. Dent. Pharm., ²Dept. Oral Microbiol., Okayama Univ. Grad. Sch. Med. Dent. Pharm., ³Dept. Microbiol., Sch. Med., UOEH, ⁴Clin. Res. Cent., NHO Kinki-chuo Chest Med. Cent., ⁵Dept. Mycobacteriol., Leprosy Res. Cent., NIID)

DP13-09 (P-154)**Genome-wide analysis of host genes required for T-phages**

○Keiko Inaba-Hasegawa, Hiroki Nagai, Hiroki Ando (Dept. Microbiol., Grad. Sch. Med., Gifu Univ.)

DP13-10 (P-152)**Creation of non-replicative bacteriophage for the treatment of bacterial infectious diseases**

○Shoichi Mitsunaka, Hiroki Nagai, Hiroki Ando (Dept. Microbiology Grad. Sch. Medicine Gifu Univ.)

DP14 Host defense - Innate immunity

23rd, April (Tue) 15:20–16:15
 Digital Poster Zone C (Main Hall)

Chair: Kenji Yokota (Okayama Univ.)

DP14-01 (P-242)**Resolvin E1 enhances fMLF-induced ROS generation via LTB4 receptors**

○Yuka Unno¹, Yoshinori Sato¹, Chizuru Miyazaki¹, Shigeru Nagakawa¹, Go Kamoshida¹, Satoshi Nishida¹, Takane Ueda¹, Tsuneyuki Ubagai¹, Yasuo Ono¹ (¹Dept. Microbiol. Immunol., Teikyo Univ. Sch. Med., ²Fac. of Pharm. Sci., Hokkaido Univ.)

DP14-02 (P-247)**MMP-3 mRNA expression of synovial tissue infected with Mycoplasma bovis and their regulatory system of synoviocytes**

○Koji Nishi¹, Satoshi Gondaira¹, Mariko Okamoto¹, Takanori Nebu¹, Jumpei Fujiki², Hidetomo Iwano², Hidetoshi Higuchi¹ (¹Dept. Anim. Health, Rakuno Gakuen Univ., ²Dept. Vet. Biochem., Rakuno Gakuen Univ.)

DP14-03 (P-234)**The TLR2–IL-6–Mincle axis is essential to protect against severe invasive streptococcal infection**

○Takayuki Matsumura¹, Tadayoshi Ikebe², Makoto Ohnishi², Sho Yamasaki³, Yoshimasa Takahashi¹, Manabu Ato⁴ (¹Dept. Immunol., Natl. Inst. Infect. Dis., ²Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ³Div. Mol. Immunol., RIMD, Osaka Univ., ⁴Dept. Mycobacteriol., Lepr. Res. Ctr., Natl. Inst. Infect. Dis.)

DP14-04 (P-236)**Role of host innate immunity regulated by microbiota for protection against Salmonella infection**

○Hitoshi Tsugawa¹, Ayaka Kanai¹, Yuki Sugiura¹, Hidekazu Suzuki², Makoto Suematsu¹, Yasuaki Kabe¹ (¹Dept. Biochem., Keio Univ., Sch. Med., ²Medical Education Center, Keio Univ., Sch. Med.)

DP14-05 (P-241)**Anti-inflammatory activity of reactive sulfur species: mechanisms and therapeutic potentials**

○Tomohiro Sawa¹, Tianli Zhang¹, Hiroyasu Tsutsuki¹, Katsuhiko Ono¹, Islam Waliul¹, Takaaki Akaike² (¹Dept. Microbiol. Grad. Sch. Med. Sci., Kumamoto Univ., ²Dept. Environm. Med. Mol. Toxicol., Tohoku Univ. Med. Sch.)

DP14-06 (P-246)**Immunomodulatory effects of outer membrane vesicles from acetic acid bacteria**

○Masahito Hashimoto, Risako Baba, Yuria Maki, Mami Ozono, Shuhei Hashiguchi (Sci. & Eng. Area, Kagoshima Univ.)

DP14-07 (P-243)**A molecular mechanism of IL-1b inhibition by mycobacterial effector protein**

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

DP14-08 (P-240)**Hypoxia induces enhancement of inflammasome activation by *P. gingivalis* infection**

○Tokuju Okano¹, Shiho Suzuki¹, Mikio Shoji², Koji Nakayama², Toshihiko Suzuki¹ (¹Dept. Bact. Pathogen., Infect. Host Resp. Sch. Med. Dent., TMDU, ²Div. Oral Infect., Dept. Mol. Microbiol. Immunol., Sch. Biomed. Sci., Nagasaki Univ.)

DP14-09 (P-233)**Antimicrobial peptide LL-37 ameliorates mouse sepsis through microparticle release from neutrophils**

○Yumi Kumagai¹, Taisuke Murakami¹, Kyoko Kuwahara^{1,2}, Isao Nagaoka¹ (¹Dept. Host Defense Biochem. Res., Sch. Med., Juntendo Univ., ²Dept. Microbiol., Sch. Med., Juntendo Univ.)

DP14-10 (P-237)**The contribution of neutrophils to pneumonia caused by *Mycoplasma pneumoniae***

○Shigeyuki Tamiya^{1,2}, Yasuo Yoshioka^{1,2,3} (¹Grad. Sch. Pharma. Sci., Osaka Univ., ²Vaccine Creation Project, Research Institute for Microbial Diseases, Osaka Univ., ³The Research Foundation for Microbial Diseases, Osaka Univ.)

DP14-11 (P-245)**Pyroptosis enhances antibiotic therapy of listeriosis**

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

DP15 Pathogenicity - Toxins, effectors and physically active substances/Others

23rd, April (Tue) 15:20–16:30
 Digital Poster Zone A (Main Hall)

Chair: Takashi Sasaki (Sapporo Medical Univ.)

DP15-01 (P-196)**Systematic multiple deletion analysis of T3E effectors in *Ralstonia solanacearum***

○Ni Lei¹, Li Chen³, Akinori Kiba², Yasufumi Hikichi², Kouhei Ohnishi² (¹The United Graduate School Agricul. Sci., Ehime Univ., ²Fac. Agricul. Marine Sci., Kochi Univ., ³Shaanxi Normal Univ.)

DP15-02 (P-184)**Identification and characterization of *Bartonella*-derived angiogenic factor**

○Kentaro Tsukamoto¹, Akito Kawai¹, Masahiro Suzuki¹, Yasuhiko Horiguchi², Yohei Doi¹ (¹Dept. Microbiol., Fujita Health Univ. Sch. Med., ²Dept. Mol. Bact., RIMD, Osaka Univ.)

DP15-03 (P-174)**Exploring a molecular switch for beta-barrel pore assembly in the staphylococcal bi-component toxin**

○Kein Takeda¹, Yoshikazu Tanaka², Naoki Abe¹, Jun Kaneko¹ (¹Dept. Microbial. Biotechnol., Grad. Sch. Agr. Sci., Tohoku Univ., ²Lab. Appl. Biol. Mol. Sci., Grad. Sch. Life. Sci., Tohoku Univ.)

DP15-04 (P-191)**Botulinum neurotoxin A2 enters more effectively than A1 in neuronal cells**

○Tomoko Kohda¹, Kentaro Tsukamoto², Syunji Kozaki¹, Masafumi Mukamoto¹ (¹Dept. Vet. Sci, Grad. Sch. Life Environ. Sci, Osaka Pref. Univ., ²Dept. Microbiol. Fujita Health Univ. Sch. Med.)

DP15-05 (P-198)**Group A streptococcus NAD-glycohydrolase inhibits the autophagosome formation through PIK3C3/RAB1**

○Hirota Toh, Chihiro Aikawa, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

DP15-06 (P-190)**Characterization of Cholesterol-dependent cytolysin-like molecule of *Streptococcus pseudopneumoniae***

○Airi Matsumoto¹, Atsushi Tabata², Toshifumi Tomoyasu², Hideaki Nagamune² (¹Dept. Biol. Sci. & Tech., Life Syst., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch.)

DP15-07 (P-170)**Inflammasome activation induced by *Clostridium perfringens***

○Kiyonobu Yamamura¹, Tokuju Okano¹, Kaori Ohtani², Toshihiko Suzuki¹ (¹Dept. Bacterial Pathogenesis, Tokyo Med. Dent. Univ., ²Dept. Bacteriol. Bacterial Infection, Tokai Univ.)

DP15-08 (P-175)***Bordetella bronchiseptica* Bcr4 antagonizes the negative regulatory function of BspR**

○Asaomi Kuwae, Ryutaro Nishimura, Akio Abe (Grad. Sch. Infect. Cont., Kitasato Univ.)

DP15-09 (P-201)**【Withdrawn】****DP15-10 (P-231)****Analysis of persistent infection mechanisms by *Helicobacter pylori* small RNA**

○Ryo Kinoshita¹, Kotaro Kiga¹, Ryota Otsubo², Yoshitoshi Ogura⁴, Takahito Sanada², Tokuju Okano³, Toshihiko Suzuki³, Tetsuya Hayashi⁴, Hitomi Mimuro^{1,2} (¹Div. Bacteriol., IMSUT, Univ. of Tokyo, ²Dep. Infect. Microbiol., RIMD, Osaka Univ., ³Dep. Bact. Pathogen., Grad. Sch. Med. Dent. Sci., Tokyo Med. Dent. Univ., ⁴Dep. Bact., Fac. Med. Sci., Kyushu Univ.)

DP15-11 (P-220)**Prevention of enterohemorrhagic *Escherichia coli* O157:H7 infection in gnotobiotic mice**

○Kazuki Saito, Yukako Koyanagi, Hiroshi Yoneyama, Emiko Isogai (Grad. Sch. Agricultural Science, Tohoku Univ.)

DP15-12 (P-229)**Pneumococcal endonuclease; endA enhances shedding and transmission**

○Shigeto Hamaguchi¹, Yukihiro Akeda¹, JN Weiser², Kazunori Tomono¹ (¹Division of Infection Control and Prevention, Osaka Univ. Hospital, ²Dept. Microbiology, New York Univ. Sch. Medicine)

DP15-13 (P-221)**Molecular Engineering of E-cadherin Inhibitor from Clostridium botulinum Hemagglutinin**

○Sho Amatsu^{1,2}, Takuhiro Matsumura¹, Masahiro Yutani¹, Yukako Fujinaga¹ (¹Dept. Bacteriology, Grad. Sch. Med. Sci., Kanazawa Univ., ²Dept. Forensic Med. Pathol., Grad. Sch. Med. Sci., Kanazawa Univ.)

DP15-14 (P-225)**Helicobacter japonicus infection contributes the development of potent mucosal barrier systems**

○Hitoki Yamanaka^{1,2}, Ritsuko Masuyama³, Kazutaka Ohsawa² (¹Res. Ctr. Sprt Adv. Sci., Shinshu Univ., ²Life Sci. Sprt. Ctr., Nagasaki Univ., ³Grad. Sch. Biomed. Sci., Nagasaki Univ.)

DP16 Genetics/Genomics/Biotechnology - Genomics, bioinformatics and systems biology/Horizontal gene transfer, mobile genetic element and evolution/Others

23rd, April (Tue) 16:10–16:55
 Digital Poster Zone B (Main Hall)

Chair: Ryo Murata (Rakuno Gakuen Univ.)

DP16-01 (P-123)**Genome-wide assessment of Mycobacterium tuberculosis conditionally essential metabolic pathways**

○Yusuke Minato¹, Daryl Gohl², Joshua Thiede^{1,3}, Jeremy Chacón³, William Harcombe^{4,5}, Fumito Maruyama¹, Anthony Baughn¹ (¹Dept. Microbiol. Immunol., Sch. Med., Univ. Minnesota, ²Genomics Center, Univ. Minnesota, ³Biotechnology Institute and Dept. Ecology, Evolution and Behavior, Univ. Minnesota, ⁴Dept. Micro., Sch. Med., Kyoto Univ., ⁵Scientific and Technological Bioresource Nucleus, Universidad de La Frontera)

DP16-02 (P-124)**Metagenomic approach to the identification of causative agents of a polymicrobial disease**

○Yasuhiro Gotoh¹, Rei Kajitani², Yoshitoshi Ogura¹, Takehiko Itoh², Naoaki Misawa³, Tetsuya Hayashi¹ (¹Fac. Med. Sci., Kyushu Univ., ²Sch. Biosci. Biotech., Tokyo Inst. Tech., ³Dept. Vet. Sci., Fac. Agric., Miyazaki Univ.)

DP16-03 (P-134)**Salmonella genomic island 3 is an integrative and conjugative element, and contributes to heavy-metal resistance**

○Nobuo Arai^{1,2}, Tsuyoshi Sekizuka³, Yukino Tamamura², Masahiro Kusumoto², Atsushi Hinenoya¹, Shinji Yamasaki¹, Taketoshi Iwata², Ayako Watanabe², Makoto Kuroda³, Masato Akiba^{1,2} (¹Grad. Sch. Life and Environ. Sci., Osaka Pref. Univ., ²Natl. Inst. Anim. Health, ³Natl. Inst. Infect. Dis.)

DP16-04 (P-135)**Genomic feature and virulence potential of cryptic Escherichia clade I carrying Stx2**

○Yoko Arimizu¹, Kazuko Seto², Jyunko Isobe^{2,3}, Yuki Wakabayashi¹, Mitsuhiko Sato¹, Keiji Nakamura¹, Yasuhiro Gotoh¹, Tetsuya Hayashi¹, Yoshitoshi Ogura¹ (¹Dept. Bact., Fac. Med. Sci., Kyushu Univ., ²QAU, Div. Planning, Osaka. Inst. Pub. Heal., ³Toyama Inst. Heal.)

DP16-05 (P-136)**Genome diversity of EHEC O165:H25 and the strain-to-strain variation in prophages and plasmids**

○Keiji Nakamura¹, Kazunori Murase², Yasuhiro Gotoh¹, Ken-ichi Lee³, Sunao Iyoda³, Makoto Ohnishi³, Yoshitoshi Ogura¹, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., ²Dept. Parasitol., Sch. Med., Miyazaki Univ., ³Dept. Bacteriol., Natl. Inst. Infect. Dis.)

DP16-06 (P-132)**Analysis of VSP-II in relation to attachment sequences among Vibrio cholerae strains**

○Tetsu Yamashiro¹, Tuan Hai Nguyen², Naomi Higa¹, Hanako Iwashita¹, Taichiro Takemura³, Makoto Ohnishi⁴ (¹Dept. Bacteriol., Grad. Sch. Med., Univ. of the Ryukyus, ²National Institute of Hygiene and Epidemiology, Vietnam, ³Institute of Tropical Medicine, Nagasaki Univ., ⁴National Institute of Infectious Diseases)

DP16-07 (P-126)**[Withdrawn]****DP16-08 (P-157)****Cell-penetrating-peptides as carriers for biomolecule transfer into bacteria**

Tetsushi Mori¹, ○Daichi Toyohara¹, Yasuhiro Yokoi¹, Takahiro Muraoka² (¹Dept. Biotech. Life Sci., Tokyo Univ. Agri. Tech., ²Dept. Org. Pol. Mat. Chem., Tokyo Univ. Agri. Tech.)

DP16-09 (P-156)**Development of single chain variable fragment antibodies against *Mycobacterium avium* complex**

○Yutaka Tatano¹, Yoshinori Kato¹, Ryo Mochizuki¹, Tomonobu Gomita¹, Tomoyo Ishikawa¹, Chiaki Sano², Takaya Yamada³, Haruaki Tomioka⁴, Hideki Yagi¹ (¹Dept. Pharm. Sci., Sch. Pharm., Int. Univ. of Health and Welfare, ²Dept. Community. Med. Mgt., Fac. Med., Shimane Univ., ³Dept. Exp. Anim., Interdisciplinary Cent. Sci. Res., Org. Res., Shimane Univ., ⁴Dept. Prim. Educ., Fac. Educ., Yasuda Womens Univ.)

DP17 Antimicrobial agents and resistance - Antimicrobial resistance

23rd, April (Tue) 16:25–17:35
Digital Poster Zone C (Main Hall)

Chair: Ikuo Uchida (Rakuno Gakuen Univ.)

DP17-01 (P-287)**Possibility of protease inhibitors of antibiotics resistance**

○Hayato Yokoo¹, Masaru Usui¹, Yasuhiko Suzuki², Chie Nakajima², Yutaka Tamura¹ (¹Rakuno Gakuen Univ., ²Hokkaido Univ.)

DP17-02 (P-317)**First Report of VIM-producing *Enterobacter cloacae* and *Pseudomonas aeruginosa* from Food in Egypt**

○Mustafa A. Sadek^{1,2}, Ahmed M. Soliman^{1,3}, Hirofumi Nariya¹, Toshi Shimamoto¹, Tadashi Shimamoto¹ (¹Lab. Food Microbiol. Hyg., Grad. Sch. Biosphere Sci., Hiroshima Univ., ²Dept. Food Hyg. Control, Fac. Vet. Med., South Valley Univ., Egypt, ³Dept. Microbiol. Immunol., Fac. Pharmacy, Kafrelsheikh Univ., Egypt)

DP17-03 (P-303)**Interaction of the plasmid-encoded quinolone resistance protein QnrB19 with salmonella DNA gyrases**

○Ruttana Pachanon¹, Kentaro Koide¹, Chie Nakajima^{1,3}, Yasuhiko Suzuki^{1,3} (¹Div. Biores, Hokkaido Univ. Res Center Zoonosis Ctl, ²Fac. Vet. Med, Kasetsart Univ, Thailand, ³GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ., Japan)

DP17-04 (P-298)**Genomic characterization of multidrug resistant *E. coli* in environmental water in Thailand**

○Risa Tsunoda¹, Chie Nakajima^{1,3}, Masaru Usui², Yutaka Tamura^{1,3}, Yasuhiko Suzuki^{1,3} (¹Div. Biores, Hokkaido Univ. Res Center Zoonosis Ctl, ²Dept. Health Science., Sch. Vet., Rakuno Univ., ³GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ.)

DP17-05 (P-297)**Characterization of ESBL-producing *Escherichia coli* in medical students**

○Rosantia Sarassari^{1,2}, Takuya Higa¹, Kuntaman Kuntaman², Itaru Hirai¹ (¹Lab. Micro., Sch. Health. Sci., The Ryukyus Univ., ²Dept. Clin. Micro., Fac. Med., Airlangga Univ.)

DP17-06 (P-289)**Characterization of CTX-M and TEM type ESBL-producing *E. coli* isolated from healthy individuals**

○Hidetaka Ogino¹, Ayaka Fukumoto², Kazuma Tamura², Akihiro Hasegawa¹ (¹Dept. Microbiology and Immunology, Yamaguchi Univ. Grad. Sch. Medicine, ²Yamaguchi Univ. Faculty of Medicine and Health Sciences)

DP17-07 (P-313)**First Detection of NDM-1-Producing *Klebsiella pneumoniae* from Retail Vegetable in Japan**

○Hirofumi Nariya¹, Ahmed M. Soliman^{1,2}, Toshi Shimamoto¹, Tadashi Shimamoto¹ (¹Lab. Food Microbiol. Hyg., Grad. Sch. Biosphere Sci., Hiroshima Univ., Japan., ²Dept. Microbiol. Immunol., Fac. Pharmacy, Kafrelsheikh Univ., Egypt)

DP17-08 (P-328)**The correlation between antibiotic tolerance and antioxidant ability in *Pseudomonas aeruginosa***

○Keiji Murakami¹, Takashi Amoh¹, Keiko Kataoka², Hideki Fujii¹ (¹Dept. Oral Microbiol., Biomed. Sci., Tokushima Univ., ²Dept. Mol. Microbiol., Biomed. Sci., Tokushima Univ.)

DP17-09 (P-296)**Stability of chromosomally-located *bla*_{CTX-M} in absence of antibiotic selective pressure**

○Toshiro Tokunaga, Rosantia Sarassari, Yasuaki Yakabi, Itaru Hirai (Lab, Microbiol., Sch. Health. Sci., Univ. The Ryukyus)

DP17-10 (P-291)**Observation of transfer frequency of *ISEcp1-bla*_{CTX-M-14} transposition unit on plasmid to chromosome using *Escherichia coli* model strain**

○Kouta Hamamoto^{1,2}, Toshiro Tokunaga¹, Nobuyoshi Yagi¹, Itaru Hirai¹ (¹Lab. Microbiol., Sch. Health. Sci., Univ. The Ryukyus., ²Research Fellow of Japan Society for the Promotion of Science DC1)

DP17-11 (P-327)**[Withdrawn]****DP17-12 (P-294)****Tigecycline-Nonsusceptible *Klebsiella pneumoniae* Complex Isolated from Companion Animals**

○Toyotaka Sato¹, Kazuki Harada², Shin-ichi Yokota¹ (¹Dept. Microbiol., Sch. Med., Sapporo Med. Univ., ²Dept. Vet. Internal. Med., Tottori Univ.)

DP17-13 (P-314)**Molecular characterization of ESBL producing *Escherichia coli* isolated from outpatients in Japan**

○Shiori Yamamoto¹, Kenji Kawamura², Hiroshi Asakura¹ (¹Nat. Inst. Health Sci., ²Keiju Medical Center)

DP17-14 (P-288)**Influence of antibiotic exposure in biofilm on conjugative frequency of antibiotic resistant gene**

○Shingo Okamura, Masaru Usui, Yutaka Tamura (Laboratory of Food Microbiology and Food Safety, Dept. Health and Environmental Sciences, Sch. Veterinary Medicine, Rakuno Gakuen Univ.)

DP18 Pathogenicity - Adhesins and colonization factors/Cell invasion and intracellular parasitism/Immune escape and proliferation in hosts

23rd, April (Tue) 16:40–17:25
Digital Poster Zone A (Main Hall)

Chair: Hiroshi Miyakawa (Health Sciences Univ. of Hokkaido)

DP18-01 (P-162)**Involvement of two-component regulatory system TCS08 in pneumococcal pneumonia pathogenesis**

○Mariko Honda-Ogawa, Tomoko Sumitomo, Dalia Hamd, Yasushi Mori, Masaya Yamaguchi, Masanobu Nakata, Shigetada Kawabata (Dept. Oral and Mol. Microbiol., Osaka Univ. Grad. Sch. Dent.)

DP18-02 (P-164)**Function of the fibronectin-binding proteins, FbpC and FbpD, of *Clostridium perfringens***

○Seiichi Katayama¹, Tomomi Kawai², Nozomu Matsunaga¹, Kaoru Komoto², Hirofumi Nariya³, Tadashi Shimamoto³, Yasuo Hitsumoto¹ (¹Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., ²Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., ³Lab. Food Microbiol. Hyg., Grad. Sch. Biosphere Sci., Hiroshima Univ.)

DP18-03 (P-165)**Contribution of fibronectin-binding protein FbpI to pathogenesis of *Streptococcus intermedius***

○Yoshitoyo Kodama, Taichi Ishikawa, Yu Shimoyama, Minoru Sasaki (Div. Mol. Microbiol., Iwate Med. Univ.)

DP18-04 (P-166)**Temperature-dependent pilus production of *Streptococcus pyogenes***

○Masanobu Nakata, Tomoko Sumitomo, Shigetada Kawabata (Dept. Oral Mol. Microbiol., Grad. Sch. Dent., Osaka Univ.)

DP18-05 (P-207)**Latent infection and intracellular parasitism in bone marrow by *Helicobacteri cinaedi***

○Tetsuro Matsunaga¹, Akira Nishimura¹, Masanobu Morita¹, Tomoaki Ida², Hiroyasu Tsutsuki², Tomohiro Sawa³, Yoshiaki Kawamura¹, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Dept. Microbiol., Kumamoto Univ. Grad. Sch. Med. Sci., ³Dept. Microbiol., Sch. Pharmacy, Aichi-Gakuin Univ.)

DP18-06 (P-214)**Role of evolutionary conserved pneumococcal β -galactosidase BgaA in the pathogenesis**

○Moe Takemura, Masaya Yamaguchi, Kana Goto, Yujiro Hirose, Tomoko Sumitomo, Masanobu Nakata, Shigetada Kawabata (Dept. Oral Mol. Microbiol., Grand. Sch. Dent., Osaka Univ.)

DP18-07 (P-208)***M. pneumoniae* regulates hydrogen peroxide-induced cell detachment by interfering parthanatos**

○Takeshi Yamamoto, Yutaka Kida, Koichi Kuwano (Dept. Infect. Med., Sch. Med., Kurume Univ.)

DP18-08 (P-213)**[Withdrawn]****DP18-09 (P-210)****Virulence of staphylococcal biofilm dispersed bacteria**

○Akiko Tajima^{1,2}, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., The Jikei Univ. Sch. Med., ²Jikei Ctr. Biofilm Res.)

DP19 Pathogenicity - Toxins, effectors and physically active substances

24th, April (Wed) 9:00–10:05
Digital Poster Zone A (Main Hall)

Chair: Koichi Niwa (Tokyo Univ. Of Agriculture.)

DP19-01 (P-188)**Identification of *Salmonella* effectors required for T3SS-2-dependent inflammation**

Shigeki Matsuda, ○Takeshi Haneda, Nobuhiko Okada (Lab. Microbiol. Sch. Pham. Kitasato Univ.)

DP19-02 (P-172)**Induction of pertussis like-toxin gene expression in *Salmonella* spp**

Ikuo Uchida¹, Miwa Sasaki¹, Natuko Nishimura¹, Yukino Tamamura², ○Shou Miura¹, Ryo Murata¹ (¹Dept. Pathobiol., Sch. Vet. Med. Rakuno Gakuen Univ., ²Bacterial Parasitic Dis., Res. Div., Natl. Inst. Anim. Health)

DP19-03 (P-194)**Mechanism of action of botulinum neurotoxin in trigeminal neurons**

○Yumiko Yamamoto¹, Kotaro Maruhama², Yoshizo Matsuka³, Takehiko Mima¹, Kazuyoshi Gotoh¹, Arief Waskitho³, Kenji Yokota⁴, Yoshihiko Sakaguchi⁵, Osamu Matsushita¹, Keiji Oguma¹ (¹Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ²Dept. Oral Func. Anat., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ³Grad. Sch. Biomed. Sci., Tokushima Univ., ⁴Grad. Sch. Health Sci., Okayama Univ., ⁵Kitasato Univ. Sch. Med.)

DP19-04 (P-200)**Characterization of Staphylococcal Enterotoxin Y Produced by Clinical Staphylococcus argenteus Isolates**

○Fatkhannuddin Aziz¹, Junzo Hisatsune¹, Hisaya Ono², Junko Kujimura³, Yoichiro Kusunoki³, Yusuke Sato^o⁵, Liansheng Yu⁴, Motoyuki Sugai^{1,4} (¹Dept. Bacteriol., Grad. Sch. Biomed. Heal. Sci., Hiroshima Univ., ²Dept. Zoon. Sch. Vet. Med., Kitasato Univ., ³Dept. Mol. Biosci., Rad. Eff. Res. Found. Hiroshima, ⁴Antimicrob. Resist. Res. Cent., NIID, ⁵Div. Bacteriol., Dept. Infect. Immun., Fac. Med., Jichi Med Univ.)

DP19-05 (P-197)**Signaling analysis for inhibitory effect by Subtilase cytotoxin on innate immune system**

○Hiroyasu Tsutsuki¹, Tianli Zhang¹, Kinnosuke Yahiro², Katsuhiko Ono¹, Sunao Iyoda³, Makoto Ohnishi³, Takaaki Akaike⁴, Tomohiro Sawa¹ (¹Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ²Dept. Mol. Infectiol., Grad. Sch. Med., Chiba Univ., ³Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ⁴Dept. Environ. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch. Med.)

DP19-06 (P-186)**The analysis of RtxA1 toxin produced by *Vibrio vulnificus***

○Juna Kuwahara, Kosuke Nishiwaki, Masaya Morigaki, Ryuto Saeki, Takahiro Tsuchiya, Katsushiro Miyamoto, Hiroshi Tsujibo (Dept. Microbiol., Osaka Univ. Pharm. Sci.)

DP19-07 (P-182)**Survey of *Vibrio cholerae* possessing virulence-related genes from environmental water in Kolkata**

○Eizo Takahashi¹, Goutam Chowdhury², Asish K. Mukhopadhyay², Shin-ichi Miyoshi³, Keinosuke Okamoto¹ (¹Collabo. Res. Ctr. Okayama Univ. India, ²Div. Bacteriol. NICED, ³Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ.)

DP19-08 (P-199)**Signal transduction pathway of an extracellular antigen from *Streptococcus anginosus* for inflammatory responses**

○Yu Shimoyama¹, Taichi Ishikawa¹, Yoshitoyo Kodama¹, Shigenobu Kimura², Minoru Sasaki¹ (¹Div. Mol. Microbiol., Iwate Med. Univ., ²Dept. Dent. Hygiene, Kansai Women's Col.)

DP19-09 (P-167)**The role of Ca²⁺ on *Porphyromonas gingivalis* gingipains-induced COX-2 expression**

○Masaaki Nakayama^{1,2}, Mariko Naito³, Koji Nakayama³, Naoya Ohara^{1,2} (¹Dept. Oral Microbiol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ²ARCOCS, ³Dept. Microbiol. Oral Infect., Nagasaki Univ. Grad. Sch. Biomed. Sci.)

DP19-10 (P-185)**Pathogenicity analysis of stx2e- or stx2f-positive EHEC isolated from HUS patients**

○Nozomi Ishijima, Ken-ichi Lee, Makoto Ohnishi, Sunao Iyoda (Dept. Bacteriol. I, Nat. Inst. Infect. Dis.)

DP19-11 (P-178)**Characterization of the cytotoxicity by *Streptococcus intermedius* T7SS**

○Masanori Hashino^{1,2}, Tsuyoshi Sekizuka¹, Yuba Inamine¹, Makoto Kuroda¹ (¹Pathogen Genomics Center Nat. Inst. Infect. Dis., ²AMED)

DP19-12 (P-171)**Optimization of culture conditions for the type III effector production in *Bordetella pertussis***

○Masataka Goto, Asaomi Kuwae, Akio Abe (Grad. Sch. Infection Control Sciences, Kitasato Univ.)

DP19-13 (P-176)**Mycobacterial protein PE_PGRS30 induces apoptosis through interacting host protein prohibitin 2**

○Kazunori Matsumura¹, Kumiko Saeki¹, Teruo Kirikae² (¹Dept. Disease Cont., Inst., NCGM, ²Dept. Microbiol., Sch. Med., Juntendo Univ.)

DP20 Ecology - Ecology, symbiosis and environmental microbes/Microbiota/Growth and culture conditions/ Others

24th, April (Wed) 9:00–9:40
Digital Poster Zone B (Main Hall)

Chair: Nobumichi Kobayashi (Sapporo Medical Univ.)

DP20-01 (P-052)**Detection of Differential Gene Expression in Biofilm-Forming *Mycobacterium avium* subsp. *hominissuis***

○Yukiko Nishiuchi¹, Atsushi Ota¹, Tomotada Iwamoto², Manabu Ato³, Sohkiichi Matsumoto⁴, Naoya Ohara⁵, Fumito Maruyama⁶ (¹Sch. Med., Osaka City Univ., ²Kobe Inst. Health., ³Nat. Inst. Infect. Dis., ⁴Grad. Sch. Med. Dent. Sci., Niigata Univ., ⁵Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ⁶Grad. Sch. Med., Kyoto Univ.)

DP20-02 (P-054)**Population of antibiotic resistant bacteria in agricultural soil**

○Nobuyuki Kijima (Institute of Vegetable and Floriculture Science, National Agriculture and Food Research Organization)

DP20-03 (P-056)**Analysis of gut microbiota and metabolite in fecal transplantation therapy for *Clostridioides difficile* infection**

○Yoshihiko Sakaguchi¹, Kazuyoshi Gotoh², Mitsutoshi Senoh³, Jumpei Uchiyama⁴, Hayato Osaki⁵, Yasutaka Jodai⁵, Shunji Hayashi¹, Naoki Ohmiya⁵, Haru Kato³ (¹Dept. Microbiol., Kitasato Univ. Sch. Med., ²Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ³Dept. Bacteriol. II, Natl. Inst. Infect. Dis., ⁴Lab. Vet. Microbiol. I, Sch. Vet. Med., Azabu Univ., ⁵Dept. Gastro., Fujita Heal. Univ. Sch. Med.)

DP20-04 (P-061)**The effect of metal nanocomposite beads on oral bacterial flora**

○Hugo Maruyama¹, Takayuki Nambu¹, Chiho Mashimo¹, Yasufumi Matsumura², Yasushi Enomoto², Toshinori Okinaga¹ (¹Dept. Bacteriology, Osaka Dental Univ., ²New Materials Development Center, NIPPON STEEL Chemical & Material Co., Ltd.)

DP20-05 (P-059)**Feeding style of high fat high sucrose diet affects gut environment and nonalcoholic fatty liver disease in mice**

○Keiko Kataoka¹, Misato Moriki², Akiko Sakurai¹, Haruyuki Imaohji³, Tomomi Kuwahara³ (¹Grad. Sch. Biomed. Sci, Tokushima Univ., ²Grad. Sch. Health Sci., Tokushima Univ., ³Dept. Mol. Microbiol., Sch. Med., Kagawa Univ.)

DP20-06 (P-057)**Characterization of gut microbiome after antibiotic combination therapy of ulcerative colitis**

○Tsuyoshi Sekizuka¹, Kimitoshi Kato², Toshiro Sugiyama³, Toshifumi Ohkusa⁴, Makoto Kuroda¹ (¹Pathogen Genomic Center, Nat. Inst. Infect. Dis., ²Div. of Res. Planning and Develop., Nihon Univ., ³Dept. Gast. and Hema., Univ. of Toyama Grad. Sch. Med., ⁴Dept. Microbiota Res., Juntendo Univ. Grad. Sch. Med.)

DP20-07 (P-069)**Search and analysis of genes involved in the conversion of VBNC *Vibrio cholerae* to a culturable state**

○Ayae Nishiyama¹, Mitsutoshi Senoh², Takashi Hamabata¹ (¹Dept. Infectious Diseases, Research Institute, National Center for Global Health and Medicine, ²Dept. Bacteriology II, National Institute of Infectious Diseases)

DP20-08 (P-072)**Mixed biofilms and phenotypic switching in mucoid *Pseudomonas aeruginosa***

○Andrew Utada¹, Kanako Itagaki², Nozomu Obana³, Masanori Toyofuku¹, Nobuhiko Nomura¹ (¹Faculty Life and Env. Sciences, Univ. of Tsukuba, ²Grad. Sch. Life and Env. Sciences, Univ. of Tsukuba, ³Faculty Medical Sciences, Univ. of Tsukuba)

DP21 Host defense - Innate immunity/Acquired immunity, vaccines and prevention and control of infections/Others

24th, April (Wed) 9:00–10:00
Digital Poster Zone C (Main Hall)

Chair: Toyotaka Sato (Sapporo Medical Univ.)

DP21-01 (P-244)**Calcium signaling via TBC1D9 regulates TBK1-mediated xenophagy against Group A Streptococcus**

○Takashi Nozawa, Hirotaka Toh, Atsuko Minowa-Nozawa, Chihiro Aikawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

DP21-02 (P-238)**Modification of *E. coli* lipid A by myristoyltransferase gene from *K. pneumoniae***

○Kazuyoshi Kawahara, Chiho Taniguchi, Takehiro Sugawara, Sakura Onoue (Dept. Biosci., Coll. Sci. Eng., Kanto Gakuin Univ.)

DP21-03 (P-232)**GLMN-clAP1/2 axis controls inflammasome activation in response to bacterial infection**

○Shiho Suzuki¹, Toshihiko Suzuki¹, Chihiro Sasakawa^{2,3} (¹Dept. Bacterial Infection and Host Response, Grad. Sch. Medical and Dental Sciences, Tokyo Medical and Dental Univ. (TMDU), ²Medical Mycology Research Center, Chiba Univ., ³Nippon Institute for Biological Science)

DP21-04 (P-239)**The effect of heat-killed *Candida albicans* on the response of monocyte-like cells to bacterial components**

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

DP21-05 (P-235)**Augmentation of LPS-induced inflammatory response in senescent endothelial cells**

○Kaori Suzuki, Isao Nagaoka (Dept. Host Defense and Biochemical Research, Juntendo Univ. Sch. Med.)

DP21-06 (P-249)**Effect of inhalation of combination of humidified air and perfume on nasal bacteria**

○Hiroaki Miyoshi¹, Shigemi Tsuchiya², Takuya Okamoto², Hideshi Oda², Yui Hirama¹, Takuya Mori¹, Masaaki Suzuki³
(¹Kao Corp. Biological Sci. Res, ²Kao Corp. Personal Healthcare Lab, ³Teikyo Univ. Chiba Med. Center ENT)

DP21-07 (P-253)**Protection against *Salmonella* oral infection by immunization with a recombinant *Salmonella* protein**

○Masahiro Eguchi, Marta Elsheimer Matulova, Swarmistha Aribam, Sayaka Nishikawa, Yohsuke Ogawa, Yoshihiro Shimoji (National Institute of Animal Health, NARO)

DP21-08 (P-254)**Effects of zinc metalloprotease-1 on innate and Th1/Th17 immunity during lung mycobacterial infection**

○Masayuki Umemura¹, Naoko Teruya¹, Giichi Takaesu¹, Naoya Ohara², Goro Matsuzaki¹ (¹Trop. Biosphere Res. Cent., Univ. Ryukyus, ²Grad. Sch. Med., Dent. Pharm. Sci., Okayama Univ.)

DP21-09 (P-251)**Mutant TSST-1 vaccine-induced memory T cells produce IL-10 and abrogate the vaccine effect**

○Kouji Narita^{1,2}, Dong-Liang Hu^{1,3}, Krisana Asano^{1,4}, Akio Nakane^{1,4} (¹Dept. Microbiol. and Immunol., Hirosaki Univ. Grad. Sch. Med., ²Inst. for Animal Exp., Hirosaki Univ. Grad. Sch. Med., ³Lab. of Zoonoses, Kitasato Univ. Sch. Vet. Med., ⁴Dept. Biopolymer and Health Sci., Hirosaki Univ. Grad. Sch. Med.)

DP21-10 (P-252)**Involvement of interferon-alpha in the adjuvanticity of novel type A CpG-DNA G9.1**

○Jun-ichi Maeyama¹, Sumiko Iho², Saburo Yamamoto³ (¹Dept. Safety Res. on Blood and Biologics, Natl. Inst. Infect. Dis, ²Faculty of Medical Sciences, Univ. of Fukui, ³Japan BCG Laboratory)

DP21-11 (P-259)**Role of IL-21 in *Mycoplasma pneumoniae* antigen sensitization mouse model**

○Satoshi Kurata¹, Takako Osaki¹, Hideo Yonezawa¹, Tomoko Hanawa², Haruhiko Taguchi², Shigeru Kamiya² (¹Dept. Infect. Dis., Kyorin Univ., Sch. Med., ²Dept. Immunol., Faculty of Health Sci., Kyorin Univ.)

DP21-12 (P-260)**MrgX2-mediated internalization of LL-37 and degranulation of human LAD2 mast cells**

○Taisuke Murakami, Kaori Suzuki, Isao Nagaoka (Dept. Host Def. & Biochem. Res., Sch. Med., Juntendo Univ.)

DP22 Physiology/Structural biology - Metabolism, biosynthesis and metabolome/Motility/Signal transduction (intracellular and intercellular)

24th, April (Wed) 9:50–10:30
Digital Poster Zone B (Main Hall)

Chair: Tomoko Hanawa (Kyorin Univ.)

DP22-01 (P-080)**Novel cysteine persulfide synthase ubiquitously expressed among all organisms**

○Tomoaki Ida¹, Masanobu Morita¹, Tetsuro Matsunaga¹, Akira Nishimura¹, Hideshi Ihara², Tomohiro Sawa³, Hozumi Motohashi⁴, Takaaki Akaike¹ (¹Dept. Environ. Med., Tohoku Univ., ²Dept. Biol. Sci., Osaka Pref. Univ., ³Dept. Microbiol., Kumamoto Univ., ⁴IDAC, Tohoku Univ.)

DP22-02 (P-078)**Biosynthesis pathway and physiological functions of reactive persulfides in yeast**

○Akira Nishimura¹, Hiroshi Takagi², Tomoaki Ida¹, Masanobu Morita¹, Tetsuro Matsunaga¹, Hozumi Motohashi³, Takaaki Akaike¹ (¹Tohoku Univ., Grad. Sch. Med., ²Nara Inst. of Sci. and Tech, ³Tohoku Univ.)

DP22-03 (P-076)**Assembly-line biosynthesis of vibrioferrin with PvsA/B/D/E proteins of *Vibrio parahaemolyticus***

○Tomotaka Tanabe, Shigeo Yamamoto, Tatsuya Funahashi (Col. Pharm. Sci., Matsuyama Univ.)

DP22-04 (P-081)**Characterization of novel toxin inhibiting DNA gyrase in *Staphylococcus aureus***

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

DP22-05 (P-091)**Internal helical ribbon structure responsible for Helicity-Switching swimming in *Spiroplasma***

○Yuya Sasajima¹, Isil Tulum^{1,2}, Makoto Miyata^{1,2} (¹Grad. Sch. Sci., Osaka City Univ., ²OCARINA, Osaka City Univ.)

DP22-06 (P-087)**Type IV pilus retraction in the absence of disassembly ATPase**

○Daisuke Nakane¹, Masatada Tamakoshi², Takayuki Nishizaka¹ (¹Dept. Phys., Gakushuin Univ., ²Dept. Mol Biol., Tokyo Univ. of Pharmacy and Life Sciences)

DP22-07 (P-095)**Direct imaging of membrane vesicle-mediated cell-to-cell communication using high-speed AFM**

○Yousuke Kikuchi¹, Yuuki Ichinaka¹, Masanori Toyofuku², Nozomu Obana³, Noriyuki Kodera⁴, Toshio Ando⁴, Yoshihiro Fukumori^{4,5}, Nobuhiko Nomura², Azuma Taoka^{1,4} (¹Coll. Sci. and Eng., Kanazawa Univ., ²Fac. Life and Environ. Sci., Univ. Tsukuba, ³TMRC, Univ. Tsukuba, ⁴NanoLSI, Inst. Front. Sci. Init, Kanazawa Univ., ⁵Vice Pres., Kanazawa Univ.)

DP22-08 (P-098)**The quorum sensing of *Ralstonia solanacearum* consists of two signaling pathways**

○Wakana Senuma¹, Kazusa Hayashi¹, Chika Takemura¹, Tatsuya Nobori², Akinori Kiba¹, Kouhei Ohnishi¹, Kenji Kai³, Kenichi Tsuda², Yasufumi Hikichi¹ (¹Fac. Agri. & Marine Sci., Kochi Univ., ²Max Planck Inst., ³Osaka Pref. Univ.)

DP23 Taxonomy/Epidemiology/Infectious diseases - Phylogenetics, taxonomy and strain typing/Methods for detection, identification, and diagnosis

24th, April (Wed) 10:15–11:15
 Digital Poster Zone A (Main Hall)

Chair: Motoaki Yasuda (Hokkaido Univ.)

DP23-01 (P-001)**Genetic characterization of virulence factor genes in *Staphylococcus argenteus***

○Meijisoe Aung¹, Thida San², Noriko Urushibara¹, Mitsuyo Kawaguchiya¹, Nobumichi Kobayashi¹ (¹Dept. Hygiene, Sapporo Med. Univ., ²Yangon Children's Hospital, Yangon, Myanmar)

DP23-02 (P-005)**Taxonomic studies of the Clostridial bacteria that exacerbate pathosis in a mouse model of UC**

○Ryo Kutsuna¹, Junko Tomida¹, Yuji Morita^{1,2}, Yoshiaki Kawamura¹ (¹Dept. Microbiol., Sch. Pharm. Sci., Aichi Gakuin Univ., ²Dept. Infect. Cont. Sci., Meiji Pharmaceutical Univ.)

DP23-03 (P-008)**Novel SCCmec-SCC CIs in MRSA obtained in Hokkaido: Novel SCCmec type XIV (5A)**

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

DP23-04 (P-004)**Comparison of extended-spectrum beta lactamase producing *Escherichia coli* in healthcare-associated facilities**

○Takuya Higa, Rosantia Sarassari, Kuntaman Kuntaman, Itaru Hirai (Lab, Microbiol., Sch. Health. Sci., Univ. The Ryukyus)

DP23-05 (P-002)**A multilocus sequence typing scheme of *Pseudomonas putida* for clinical and environmental isolates**

○Kohei Ogura¹, Tohru Miyoshi-Akiyama² (¹Inst. Front. Sci. Init., Kanazawa Univ., ²Res. Inst., Natl. Cent. Global Health and Medicine)

DP23-06 (P-006)**Grouping of IncF plasmids based on set of ORFs**

○Masahiro Suzuki, Yohei Doi (Dept. Microbiol., Sch. Med., Fujita Health Univ.)

DP23-07 (P-043)**Study on the detection and enumeration methods of hygiene indicator in pasteurized milk**

Yumiko Okada¹, ○Amalia Widya Rizky², Yuuki Nagashima^{1,2}, Hodaka Suzuki², Yukako Shimojima³, Rie Fukui³, Kana Morita³, Akihiko Hirai³, Hiroshi Asakura¹ (¹Div. Biomedical Food Res., NIHS, ²Dept. Agriculture, Ibaraki Univ., ³Dept. Microbiol., Tokyo Metropolitan Institute of Public Health)

DP23-08 (P-047)**Purification of *M. tuberculosis* protein, and its application for diagnosis**

○Yukiko Ohara¹, Yuriko Ozeki¹, Yoshitaka Tateishi¹, Akihito Nishiyama¹, Haruka Kobayashi¹, Ichiro Nakagawa², Saburo Yamamoto³, Sohkiichi Matsumoto¹ (¹Dept. Microbiol., Sch. Med., Niigata Univ., ²Dept. Microbiol. Med., Kyoto Univ., ³Japan BCG Laboratory)

DP23-09 (P-046)**Evaluation of NG-Test CARBA5 for the detection of carbapenemase-producing Gram-negative bacilli**

○Sayaka Ando, Ryuichi Nakano, Ayako Tanouchi, Tomoki Mizuno, Akiyo Nakano, Yuki Suzuki, Naoki Kakuta, Hisakazu Yano (Dept. Microb. Infect. Dis., Nara Med. Univ.)

DP23-10 (P-044)**Identification of serovar 1a, 1b, 2 and 5 strains of *Erysipelothrix rhusiopathiae* by a multiplex PCR**

○Yoshihiro Shimoji^{1,2}, Kazumasa Shiraiwa¹, Yohsuke Ogawa¹, Sayaka Nishikawa¹, Masahiro Eguchi¹ (¹National Institute of Animal Health, NARO, ²Research Institute for Biomedical Sciences, Tokyo Univ. of Science)

DP23-11 (P-034)**Development of XRM-MacConkey agar, a selective medium for isolation of *Escherichia albertii***

○Atsushi Hinenoya^{1,2}, Keigo Nagano², Sharda Awasthi¹, Noritoshi Hatanaka¹, Shinji Yamasaki^{1,2} (¹Grad. Sch. Life Environ., Osaka Pref. Univ., ²Sch. Life Environ., Osaka Pref. Univ.)

DP23-12 (P-040)**Comprehensive analysis of skin microbiome of propidium monazide treated scale samples**

○Tomotaka Ohkubo, Otomi Cho, Takashi Sugita (Dept. Microbiol., Meiji Pharm. Univ.)

DP24 Antimicrobial agents and resistance - Antimicrobial agents/Others

24th, April (Wed) 10:10–11:20
 Digital Poster Zone C (Main Hall)

Chair: Tsukasa Shiraishi (Sapporo Medical Univ.)

DP24-01 (P-276)**The developments of antibiotics targeting the Bam complex for multidrug-resistant *Acinetobacter***

○Nayu Taniguchi¹, Mitsuki Nakamura¹, Yoshimi Hasui¹, Naoko Maruyama¹, Takahiro Tsuchiya¹, Katsushiro Miyamoto¹, Eisaku Yoshihara², Hiroshi Tsujibo¹ (¹Dept. Microbiol. Osaka Univ. Pharm. Sci., ²Dept. Lab. Med. Tokai Univ. Sch. Med.)

DP24-02 (P-269)**Functional analysis of *Mycobacterium leprae* DNA gyrase and its role in bacterial growth and survival**

○Hyun Kim¹, Yasuo Fukutomi², Chie Nakajima³, Youn Uck Kim⁴, Shigetaru Mori¹, Keigo Shibayama¹, Noboru Nakata², Yasuhiko Suzuki³ (¹Dept. BacteriologyII, NIID, ²Dept. Mycobacteriology, Leprosy Research Center, NIID, ³Division of Bioresources, CZC., Hokkaido Univ., ⁴Dept. Biomedical Sciences, Sun Moon Univ.)

DP24-03 (P-268)**Effects of fragrance ingredients on susceptibility of MRSA against antibacterial agents**

○Mizuki Mori¹, Kiyotaka Mori¹, Harue Nomura¹, Yasunori Isshiki¹, Keisuke Sakuda², Katsuya Sakuma², Seiichi Kondo¹ (¹Dept. Microbiol., Sch. Pharm. Sci., Josai Univ., ²Ogawa & Co., Ltd.)

DP24-04 (P-277)**Isolation of a novel bacteriophage toward a fluoroquinolone resistant *Escherichia coli* strain, HUE1**

○Montgomery Munby, Jumpei Fujiki, Hidetomo Iwano (Lab. Vet. Biochem., RGU)

DP24-05 (P-272)**Inhibitory effect of tacrolimus against *Candida parapsilosis***

○Otomi Cho, Shintaro Takada, Takashi Sugita (Dept. Microbiol., Meiji Pharm. Univ.)

DP24-06 (P-284)**Study of glucosaminidase from *Clostridium difficile***

○Hiroshi Sekiya, Kenfu Nishihara, Jun Maki, Eiji Tamai (Dept. Inf. Dis., Col. Pharm. Sci., Matsuyama Univ.)

DP24-07 (P-341)**Isolation of the broad-host range phages from lysogenic *Pseudomonas aeruginosa* strains**

○Shinya Watanabe, Feng-Yu Li, Kotaro Kiga, Yoshifumi Aiba, Yusuke Sato'o, Xin Ee Tan, Moriyuki Kawachi, Tanit Boonsiri, Thitianapakorn Kanate, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP24-08 (P-330)**Antibiotic susceptibility of *M. avium* strains that cause pulmonary and disseminated infection**

○Keiichi Uchiya¹, Maho Kondoh¹, Miki Takami^{1,2}, Taku Nakagawa², Kenji Ogawa¹, Toshiaki Nikai¹ (¹Dept. Microbiol., Fac. Pharm., Meijo Univ., ²Dept. Respir Med., NHO Higashinagoya Hosp.)

DP24-09 (P-333)**Changes in saliva-derived biofilm structure after treating with cetylpyridinium chloride**

○Tomohiro Akiyama¹, Erika Yamaguchi¹, Junya Inubushi¹, Naoki Muto², Nozomu Obana^{3,5}, Nobuhiko Nomura^{4,5} (¹Sunstar Inc., ²Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ³TMRC, Fac. Med., Univ. Tsukuba, ⁴Fac. Life Environ. Sci., Univ. Tsukuba, ⁵MiCS)

DP24-10 (P-338)**Bactericidal effect of chlorous acid water against nontuberculous *Mycobacterium***

○Hitoshi Yamaoka^{1,2}, Haruyuki Imaohji¹, Ayano Tada¹, Tomomi Kuwahara¹, Hisataka Goda² (¹Dept. Microbiol. Kagawa Univ., ²HONBUSANKEI CO. LTD.)

DP24-11 (P-334)**Resistance in *Helicobacter pylori* at University Hospital in Japan**

○Kenji Yokota¹, Yumiko Yamamoto², Takehiko Mima², Kazuyoshi Gotoh², Osamu Matsushita² (¹Grad. Sch. Health Science, Okayama Univ., ²Dept. Bacteriology, Grad. Sch. Medicine, Dentistry and Pharmaceutical Sciences, Okayama Univ.)

DP24-12 (P-332)**Cleansing effect of thymoquinone on *Fusobacterium nucleatum*-associated biofilm**

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

DP24-13 (P-336)**Establish the analysis method of the *bla*_{CTX-M} location by Nanopore sequencing**

○Nobuyoshi Yagi, Kouta Hamamoto, Itaru Hirai (Lab. Microbial., Sch. Health., Ryukyuu Univ.)

DP24-14 (P-344)**Surgical treatment of non-tuberculosis mycobacteria: clinical analysis of 21 cases**

○Hikaru Watarai (Dept. Surgery 2., Sch. Med., Yamagata Univ.)

DP25 Physiology/Structural biology - Cell surface structure, membrane structures and cytoskeleton/ Secretion and transport

24th, April (Wed) 10:40–11:30
Digital Poster Zone B (Main Hall)

Chair: Ayumi Saeki (Hokkaido Univ.)

DP25-01 (P-113)

A novel glycopeptidolipid and biosynthesis gene cluster from clinical nontuberculous mycobacteria

○Nagatoshi Fujiwara¹, Yuji Miyamoto², Minoru Ayata^{1,3}, Takashi Naka⁴, Hiroataka Kuwata⁵, Shinji Maeda⁵ (¹Dept. Food and Nutrition, Facult. Contemporary Human Life Science, Tezukayama Univ., ²Dept. Mycobacteriology, Leprosy Research Center, National Institute of Infectious Diseases, ³Dept. Virology, Osaka City Univ. Grad. Sch. Med., ⁴Dept. Oral Microbiology and Immunology, Sch. Dent., Showa Univ., ⁵Hokkaido Univ. Science, Faculty of Pharmacy)

DP25-02 (P-102)

Localization of secretory glycosidases of *Streptococcus intermedius*

○Toshifumi Tomoyasu¹, Mari Deguchi², Ayuko Takao³, Atsushi Tabata¹, Nobuko Maeda³, Hideaki Nagamune¹ (¹Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch., ²Dept. Biol. Sci. & Tech., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ³Dept. Oral Microbiol., Sch. Dent. Med., Tsurumi Univ.)

DP25-03 (P-114)

[Withdrawn]

DP25-04 (P-115)

N-acyl structure in 4-amino-sugar constituting the lipopolysaccharides (LPS) of *Vibrio parahaemolyticus* O11

○Yasunori Isshiki, Fumiya Goto, Harue Nomura, Seiichi Kondo (Dept. Microbiol., Sch. Pharm. Sci., Josai Univ.)

DP25-05 (P-101)

Multimer formation and localization of bacterial cytoskeletal protein RodZ

○Jiro Mitobe¹, Fumiko Nishiumi², Itaru Yanagihara², Makoto Ohnishi¹ (¹Dept. Bacteriology I, NIID, ²Dept. Dev. Med., Res. Inst., Osaka Women's and Children's Hospital)

DP25-06 (P-109)

Mechanism of membrane vesicle production in *Bacillus subtilis*

○Kimihiro Abe¹, Nozomu Obana², Masanori Toyofuku¹, Nobuhiko Nomura¹ (¹Fac. Life Environmental Sci., Univ. Tsukuba, ²TMRC, Fac. Med., Univ. Tsukuba)

DP25-07 (P-105)

Conformational switching mechanism of a MFS-type multidrug/proton efflux transporter MdfA

○Mikio Tanabe (Structural Biology Research Center, IMSS, KEK)

DP25-08 (P-118)

PGN_0297 (porG) an essential component of the type IX secretion system in *Porphyromonas gingivalis*

○Mariko Naito, Mikio Shoji, Koji Nakayama (Dept. Microbiol. Oral Infect., Nagasaki Univ. Graduate Sch. Biomedical Sci.)

DP26 Taxonomy/Epidemiology/Infectious diseases - Epidemiology and molecular epidemiology/Isolation and characterization of clinical isolates

24th, April (Wed) 15:20–16:15
Digital Poster Zone A (Main Hall)

Chair: Chie Nakajima (Hokkaido Univ.)

DP26-01 (P-020)

Discrimination of pathogenicity and clones of clinical and environmental *Aeromonas* species

○Kazufumi Miyagi¹, Shogo Shimoji¹, Rina Tahara¹, Noriaki Shimoji², Itaru Tamaki², Ayumi Uechi², Haruna Ohshiro², Asami Komiyama², Itaru Hirai¹ (¹Lab. Microbiol. Sch. Health Sci., Fac. Med., Univ. of the Ryukyus, ²Dept. Clin. Lab., Urasoe General Hospital)

DP26-02 (P-016)

Different genomic traits of colonizing and infecting carbapenemase-producing *Enterobacteriaceae*

○Yo Sugawara¹, Yukihiko Akeda^{1,2}, Hideharu Hagiya², Noriko Sakamoto¹, Dan Takeuchi¹, Kazunori Tomono², Shigeyuki Hamada¹ (¹RCC-ERI, RIMD, Osaka Univ., ²Osaka Univ. Hosp.)

DP26-03 (P-011)

Genetic diversity of pneumococcal surface protein A (PspA) in non-invasive pneumococcal isolates

○Mitsuyo Kawaguchiya¹, Noriko Urushibara¹, Meijisoe Aung¹, Masahiko Ito², Kenji Kudou², Nobumichi Kobayashi² (¹Dept. Hygiene, Sapporo Medical Univ. Sch. Med., ²Sapporo Clinical Laboratory Inc.)

DP26-04 (P-009)

Prevalence and diversity of various toxin genes in clinical isolates of *C. perfringens* in Hokkaido

○Asami Matsuda¹, Meijisoe Aung¹, Masahiko Ito², Mitsuyo Kawaguchiya¹, Noriko Urushibara¹, Nobumichi Kobayashi¹ (¹Dept. Hygiene, Sapporo Medical Univ. Sch. Medicine, ²Sapporo Clinical Laboratory Inc)

DP26-05 (P-021)**Molecular epidemiology of multidrug-resistant *Pseudomonas aeruginosa* clinical isolates in Myanmar**

○Tatsuya Tada¹, Hiroki Uchida¹, Tomomi Hishinuma¹, Mya San², Tin Htay Htay², Teruo Kirikae¹ (¹Dept. Microbiol., Grad. Sch. Med., Juntendo Univ., ²National Health Laboratory)

DP26-06 (P-015)**Draft Genome Sequences of *Lawsonia intracellularis* Swine Strains Causing Ileitis in Japan**

○Sayaka Nishikawa¹, Yohsuke Ogawa¹, Masahiro Eguchi¹, Anura Rambukkana³, Yoshihiro Shimoji^{1,2} (¹NARO, Natl. Inst. Anim. Health., ²Research Institute for Biomedical Sciences, Tokyo Univ. of Science, ³MRC Centre for Regenerative Medicine, Centre for Infectious Diseases, The Univ. of Edinburgh)

DP26-07 (P-019)**Quinolone Resistance Determinants in *E. coli* and *Salmonella* from Food animals in the Philippines**

○Lawrence Belotindos^{1,2}, Claro Mingala², Marvin Villanueva², Chie Nakajima^{1,3}, Yasuhiko Suzuki^{1,3} (¹Div. Biores, Hokkaido Univ. Res Center Zoonosis Ctl, ²Biosafety Environ, Philippine Carabao Center, the Philippines, ³GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ., Japan)

DP26-08 (P-023)**Genetic diversity of *Chlamydia trachomatis* isolates collected from 2016-2018 in Sapporo, Japan**

○Jeewan Thapa, Takanori Watanabe, Torahiko Okubo, Hiroyuki Yamaguchi (Dept. Medical Laboratory Science, Faculty of Health Sciences, Hokkaido Univ.)

DP26-09 (P-022)***Staphylococcus aureus* is more easily replaced in pharynx than in nasal cavity**

○Miyo Murai¹, Rumi Tano², Kozue Kishii¹, Junko Amemura-Maekawa³ (¹Div. Lab. Sci., Dept. Health Sci., Saitama Pref. Univ., ²Nat. Inst. Public Health, ³Dept. Bacteriol. I, Nat. Inst. Infect. Dis.)

DP26-10 (P-030)**Hemolytic *Gemella* is Associated with Suppression of Periodontal Disease**

○Tomohiro Miyoshi¹, Satoshi Nakata¹, Shogo Oge¹, Yuji Ueno¹, Hidehiko Ukita¹, Reiko Kousaka¹, Nobuo Yoshinari², Akihiro Yoshida¹ (¹Dept. Oral Microbiology, Matsumoto Dental Univ., ²Dept. Periodontology, Matsumoto Dental Univ.)

DP26-11 (P-032)**Development of an isolation method for *Escherichia albertii* from chickens**

○Sakura Arai¹, Kayoko Otsuka², Noriko Konishi³, Hiromi Nagaoka⁴, Kenji Ohya¹, Yukiko Kudo¹ (¹Division of Microbiology, National Institute of Health Sciences, ²Saitama Institute of Public Health, ³Tokyo Metropolitan Institute of Public Health, ⁴Shizuoka Institute of Environment and Hygiene)

DP27 Genetics/Genomics/Biotechnology - Genomics, bioinformatics and systems biology/Horizontal gene transfer, mobile genetic element and evolution

24th, April (Wed) 15:20–16:00
Digital Poster Zone B (Main Hall)

Chair: Izumi Mashima (Aichi Gakuin Univ.)

DP27-01 (P-125)**VITCOMIC2 and MicrobeDB.jp: Analyzing taxonomic composition of microbial communities**

○Hiroshi Mori, Ken Kurokawa (Center for Information Biology, National Institute of Genetics)

DP27-02 (P-137)**[Withdrawn]****DP27-03 (P-127)****Duplication of large genomic region of epidemic *Vibrio cholerae* by rolling circle replication**

○Daisuke Imamura¹, Tamaki Mizuno², Shin-ichi Miyoshi², Tsutomu Sato¹ (¹Facult. Biosci. Appl. Chem., Hosei Univ., ²Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ.)

DP27-04 (P-129)**Transconjugation of Tn5432 containing *erm(X)* among *Cutibacterium acnes* strains**

○Sae Aoki¹, Keisuke Nakase¹, Nobukazu Hayashi^{1,2}, Norihisa Noguchi¹ (¹Dept. Microbiol., Sch. Pharm., Tokyo Univ. of Pharm. and Life Sci., ²Dept. Dermatol., Toranomon Hospital)

DP27-05 (P-133)**Methylome diversification through mobile elements acquisition in *Streptococcus pyogenes***

○Atsushi Ota¹, Yukiko Nishiuchi¹, Fumito Maruyama² (¹Toneyama Institute for Tuberculosis Research, Osaka City Univ. Medical Sch., ²Dept. Microbiology, Grad. Sch. Medicine, Kyoto Univ.)

DP27-06 (P-131)**Investigation of immune targets of periodontal pathogen CRISPR in the peri-implantitis microbiota**

○Takayasu Watanabe¹, Takahiko Shiba², Yoshio Nakano¹ (¹Nihon Univ. Sch. Dentistry, ²Dept. Periodontol., Grad. Sch. Med. Dent. Sci., Tokyo Med. Dent. Univ.)

DP27-07 (P-130)**Characterization of lysogenic phage from *Streptococcus anginosus***

○Atsushi Tabata, Toshifumi Tomoyasu, Hideaki Nagamune (Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch.)

DP27-08 (P-128)**Distribution and expression of insertion sequences in *Aggregatibacter actinomycetemcomitans***

○Yuichi Oogai, Hitoshi Komatsuzawa (Dept. Oral-Microbiol., Grad. Sch. Med. and Dent., Kagoshima Univ.)

DP28 Antimicrobial agents and resistance - Antimicrobial resistance

24th, April (Wed) 15:20–16:35
Digital Poster Zone C (Main Hall)

Chair: Keiji Nagano (Health Sciences Univ. of Hokkaido)

DP28-01 (P-299)**Identification of mutations responsible for clofazimine resistance of *Mycobacterium avium***

Noboru Nakata^{1,2}, ○Yasuhisa Iwao¹, Yoshitoshi Ogura³, Tetsuya Hayashi³, Manabu Ato¹, Yoshihiko Hoshino¹ (¹Dept. Mycobacteriol., Leprosy Research Center, NIID, ²Antimicrobial Resistance Research Center, NIID, ³Dept. Bacteriology, Faculty of Medicine, Kyushu Univ.)

DP28-02 (P-311)**An analysis of amikacin resistance factors in carbapenem-resistant *Escherichia coli* detected in northern Osaka**

Minase Maki, ○Yuji Nakada (Faculty of Healthcare Science, Aino Univ.)

DP28-03 (P-326)**Comparative analysis of antibiotic resistant *Escherichia coli* isolated from laying hens and broiler chicken**

Tatsuya Nakayama¹, Yoshimasa Sasaki¹, Hiroshi Asakura¹, ○Shizunobu Igimi², Haruo Watanabe^{3,4} (¹Division of Biomedical Food Research, National Institute of Health Science, ²Faculty of Applied Bio-Science, Tokyo Univ. of Agriculture, ³Faculty of Medicine, International Univ. of Health and Welfare, ⁴Dept. Bacteriology 1, National Institute of Infectious Disease)

DP28-04 (P-315)**Analysis of high-level linezolid resistant *Mycobacterium tuberculosis* mutants**

○Akiko Takaki, Tomoko Kato, Akio Aono, Kinuyo Chikamatsu, Yuriko Igarashi, Yoshiko Shimomura, Yuta Morishige, Yoshiro Murase, Hiroyuki Yamada, Satoshi Mitarai (Dept. Mycobacterium Reference & Research, Research Institute of Tuberculosis, JATA)

DP28-05 (P-290)**Antimicrobial-resistant bacteria in clinical specimens and feces of companion animals**

○Mayo Yasugi¹, Shingo Hatoya¹, Daisuke Motooka², Shunsuke Shimamura¹, Hiroyuki Tani¹, Masaru Furuya¹, Keiichiro Mie¹, Masami Miyake¹, Shota Nakamura², Terumasa Shimada¹ (¹Grad. Sch. Life Environ. Sci., Osaka Pref. Univ., ²RIMD, Osaka Univ.)

DP28-06 (P-306)**Genomic characterization of carbapenem-resistant *Escherichia coli* with chromosomally encoded *bla*_{NDM-1}**

○Noriko Sakamoto¹, Yo Sugawara¹, Yukihiko Akeda^{1,2}, Dan Takeuchi¹, Daisuke Motooka¹, Kazunori Tomono², Shigeyuki Hamada¹ (¹RIMD, Osaka Univ., ²Osaka Univ. Hosp.)

DP28-07 (P-325)**Regulation of inducible carbapenemase NmCA expression in *Enterobacter ludwigii***

○Ryuichi Nakano¹, Akiyo Nakano¹, Yuki Yamada², Kazuya Narita², Yuki Suzuki¹, Akira Suwabe^{2,3}, Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara Med. Univ., ²Iwate Med. Univ. Hosp., ³Iwate Med. Univ. Sch. Med.)

DP28-08 (P-316)**Survey of drug-resistant *Salmonella* isolated from layer chicken and egg production environment**

○Hiroaki Shigemura¹, Toshi Maeda², Shikou Nakayama¹, Yuki Carle¹, Nobuyuki Sera³, Kouichi Murakami⁴ (¹Fukuoka Institute of Health and Environmental Sciences, ²MP AGRO CO., LTD., ³Teikyo Univ., ⁴National Institute of Infectious Diseases)

DP28-09 (P-302)**Antimicrobial resistance of avian pathogenic *Escherichia coli* isolated from chickens in Kagoshima, Japan**

○Wakako Misumi¹, Asami Magome², Erina Yoshida^{1,3}, Ken-ichi Chitose⁴, Masahiro Kusumoto⁴ (¹Kagoshima Central Livest. Hyg. Serv. Cntr., ²Kagoshima Nansatsu Livest. Hyg. Serv. Cntr., ³Miyazaki Livest. Hyg. Serv. Cntr., ⁴Natl. Inst. Anim. Health, NARO)

DP28-10 (P-308)**Prevalence and characterization of methicillin-resistant staphylococci in animal rearing facilities**

○Airi Watanabe¹, Daisuke Takamatsu^{2,3}, Ken Katsuda², Masatoshi Okura², Yukio Yagi¹ (¹Grad. Sch. Sci., Teikyo Univ. of Science, ²Natl. Inst. Anim. Hlth., NARO, ³Utd. Grad. Sch. Vet. Sci., Gifu Univ.)

DP28-11 (P-295)**Emergence and spread of GES-type carbapenemase-producing *Pseudomonas aeruginosa* clinical isolates in Japan**

○Tomomi Hishinuma¹, Tatsuya Tada¹, Masahiro Shimosima², Teruo Kirikae¹ (¹Dept. Microbiology, Juntendo Univ., ²BML, Inc)

DP28-12 (P-293)**Characterization of class D beta-lactamase from carbapenem resistant *Bacteroides fragilis***

○Takatsugu Goto¹, Masahiro Hayashi¹, Yuji Morita^{1,2}, Kaori Tanaka¹ (¹Div. Anaerobe Res., Life Sci. Res. Ctr., Gifu Univ., ²Dept. Infect. Control Sci., Meiji Pharm. Univ.)

DP28-13 (P-301)**Antimicrobial susceptibility of genus *Arcobacter* isolated from poultry meat in the poultry processing plant**

○Tomoya Yamamoto, Tomoko Mizote (Yamaguchi Prefectural Univ.)

DP28-14 (P-320)**Investigation of ESBL producing *E. coli* in rivers flowing into Lake**

○Nanami Koide^{1,2}, Tetsuo Asai² (¹Dept. Applied Biological Sciences., Gifu Univ., ²Dept. Applied Veterinary Science, the United Graduated Sch. Veterinary Science., Gifu Univ.)

DP28-15 (P-319)**Isolation and antimicrobial susceptibility of Enterobacteriaceae from Arthropods in Gifu city**

○Tetsuo Asai (Dept. Applied Veterinary Science, the United Grad. Sch. Veterinary Sciences, Gifu Univ.)

DP29 Genetics/Genomics/Biotechnology - Gene regulation and transcriptome analysis/Genetic manipulation and analysis, biotechnology and synthetic biology/Others

24th, April (Wed) 16:10–16:50
Digital Poster Zone B (Main Hall)

Chair: Akira Hasebe (Hokkaido Univ.)

DP29-01 (P-144)**Transcriptomic change by knockout of genes involving DNA modifications in *Helicobacter cinaedi***

○Emiko Rimbara¹, Atsushi Toyoda², Shigetaru Mori¹, Hyun Kim¹, Keigo Shibayama¹ (¹Bacteriology II, NIID, ²Comparative Genomics Lab., NIG)

DP29-02 (P-139)**An investigation of the role of a gene encoding a transcriptional regulator in *Treponema denticola***

○Keiko Yamashita^{1,2}, Eitoyo Kokubu^{2,3}, Yuichirou Kikuchi^{2,3}, Atsushi Saito^{1,2}, Kazuyuki Isihara^{2,3} (¹Tokyo Dental College. Dept. Periodontol., ²Tokyo Dental College. Oral Health Science Center, ³Tokyo Dental College. Dept. Microbiol.)

DP29-03 (P-143)**RNA-binding protein Hfq represses the LEE expression in an sRNA-independent manner in enterohemorrhagic *E. coli***

○Naoki Sudo¹, Sunao Iyoda¹, Yasuhiko Sekine^{1,2}, Makoto Ohnishi¹ (¹Dept. Bacteriol., Natl. Inst. Infect. Dis., ²Dept. Life Sci., Coll. Sci., Rikkyo Univ.)

DP29-04 (P-153)**Analysis of *Clostridium acetobutylicum* cellulosomal genes using *C. perfringens* T7 expression system**

○Hiroki Kawahata¹, Shunya Sawairi¹, Hirofumi Nariya², Ryuichi Moriyama¹, Shigeru Miyata¹ (¹Grad. Sch. Biosci. Biotech., Chubu Univ., ²Grad. Sch. Biosphere Sci., Hiroshima Univ., ³Grad. Sch. Biosphere Sci., Hiroshima Univ.)

DP29-05 (P-150)**Metabolic engineering of *Clostridium perfringens* for the production of hydrogen from glycerol**

○Miki Kato¹, Mina Kawano², Chinami Yano^{1,2}, Toshio Wada^{1,2}, Shigeru Miyata^{1,2} (¹Grad. Sch. Biosci. Biotech., Chubu Univ., ²Dept. Food Nutr. Sci., College Biosci. Biotech., Chubu Univ.)

DP29-06 (P-148)**Development of Technology to Visualize Transient Gene Expression History**

○Miiki Sekimoto¹, Yuto Kawai¹, Daisuke Kiga², Satoshi Tsuneda¹ (¹Dep. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., ²Dept. Elect. Eng. Biosci., Sch. Adv. Sci. Eng., Waseda Univ.)

DP29-07 (P-151)**Type II restriction modification system in *Ureaplasma parvum* OMC-P162 strain**

○Kounei Go, Yukiko Nakura, Michinobu Yoshimura, Itaru Yanagihara (Dept. Developmental Medicine, Research Institute, Osaka WCH, Japan)

DP29-08 (P-155)**Large-scale comparative genomic analyses in *Serratia marcescens***

○Tomoyuki Ono^{1,2}, Keiji Nakamura¹, Yasuhiro Gotoh¹, Mitsuhiko Sato¹, Ruriko Nishida¹, Jun Iguchi³, Naomasa Gotoh⁴, Takehiko Itoh⁵, Akira Shiose², Yoshitoshi Ogura¹ (¹Dept. Bacteriol., Sch. Med., Kyushu Univ., ²Dept. Cardiovasc. Surg., Grad. Sch. Med., Kyushu Univ., ³Dept. Hyg. Microbiol., Fac. Agr., Univ. Miyazaki., ⁴Kyoto Pharm. Univ., ⁵Grad. Sch. Biosci. Biotech., Tokyo Tech)

DP30 Pathogenicity - Infection models/Others

24th, April (Wed) 16:25–17:20
Digital Poster Zone A (Main Hall)

Chair: Yasuhiko Suzuki (Hokkaido Univ.)

DP30-01 (P-217)**The pathogenicity analysis of clinical isolate *Acinetobacter baumannii* with pulmonary infection model**

○Shigeru Nagakawa, Tsuneyuki Ubagai, Takane Ueda, Go Kamoshida, Yoshinori Sato, Yuka Unno, Satoshi Nishida, Yasuo Ono (Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ.)

DP30-02 (P-216)**Analysis of immune responses in klotho mice infected with *Acinetobacter baumannii***

○Yoshinori Sato, Shigeru Nagakawa, Yuka Unno, Go Kamoshida, Satoshi Nishida, Takane Ueda, Tsuneyuki Ubagai, Yasuo Ono (Dept. Microbiology and Immunology, Teikyo Univ. Sch. Medicine)

DP30-03 (P-219)**X-ray Crystallographic analysis of lipase secreted from *Staphylococcus aureus***

Mutsumi Tanaka¹, ○Shigeki Kamitani², Kengo Kitadokoro¹
(¹Dept. Biomol. Eng, Grad. Sch. Sci. and Tech., Kyoto Inst. Tech., ²Div. Clin, Nutr., Dept. Comp. Rehab., Osaka Pref. Univ.)

DP30-04 (P-222)**Search for *Staphylococcus pseudintermedius* molecules exacerbating canine atopic dermatitis**

○Tadahiro Nasukawa¹, Jumpei Uchiyama¹, Hiroki Tsurui¹, Syuji Sakamoto², Takuma Higuchi², Keita Iyori³, Kenta Shimoike³, Hidekatsu Shimakura¹, Shigenobu Matsuzaki², Masahiro Sakaguchi¹ (¹Sch. Veterinary Medicine, Azabu Univ., ²Kochi Univ., ³Vet Derm Tokyo Co., Ltd.)

DP30-05 (P-227)

[Withdrawn]

DP30-06 (P-224)**Identification of the chromosomal region defining serovars 1 and 2 of *Erysipelothrix rhusiopathiae***

○Yohsuke Ogawa¹, Kazumasa Shiraiwa¹, Sayaka Nishikawa¹, Masahiro Eguchi¹, Yoshihiro Shimoji^{1,2} (¹NIAH, NARO, ²Research Inst. for Biomedical Sciences, Tokyo Univ. of Science)

DP30-07 (P-223)**The effect of bacterial infection on the expression of TAS2R in human umbilical vein endothelial cells**

○Taichi Ishikawa¹, Yu Shimoyama¹, Yoshitoyo Kodama¹, Masahito Ogasawara², Minoru Sasaki¹ (¹Div. Mol. Microbiol., Iwate Med. Univ., ²Div. Bioreg. Pharma., Iwate Med. Univ.)

DP30-08 (P-228)**Detection of hyper-virulent strain of *Streptococcus pyogenes***

○Mei Horino^{1,2}, Norihiko Takemoto¹, Shinya Watanabe^{1,3}, Tohru Miyoshi-Akiyama¹ (¹Pathogenic Microbe Lab., Dept. Infectious Diseases NCGM, ²Tokyo College of Biotechnology, ³Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

DP30-09 (P-230)**Toxin-antitoxin systems repress virulence gene expression in enterohaemorrhagic *E. coli***

○Shinya Ebihara, Hilo Yen, Toru Tobe (Grad. Sch. Med., Osaka Univ.)

DP30-10 (P-226)**Identification of functional factors of *Mycobacterium tuberculosis* M strain using non-synonymous SNP**

○Shinji Maeda¹, Takayuki Wada², Nagatoshi Fujiwara³
(¹Faculty of Pharmaceutical Sciences, Hokkaido Univ. Science, ²Institute of Tropical Medicine, Nagasaki Univ., ³Faculty of Contemporary Human Life Science, Tezukayama Univ.)

DP30-11 (P-218)**Transposon sequencing assay of essential genes for biofilm formation in nontuberculous mycobacteria**

○Yoshitaka Tateishi¹, Yusuke Minato², Akihito Nishiyama¹, Yuriko Ozeki¹, Sohkichi Matsumoto¹ (¹Dept. Bacteriol., Sch. Med., Niigata Univ., ²Dept. Microbiol. Immunol., Sch. Med., Minnesota Univ.)

Luncheon Seminar

LS1

23rd, April (Tue) 11:40–12:40

Room 1 (Conference Hall)

Chair: Shigeru Kamiya (Faculty of Health Sciences, Kyorin Univ.)

Sponsored: MIYARISAN PHARMACEUTICAL CO., LTD.

LS1-1

Overview of The Japanese Clinical Practice Guidelines for Management of *Clostridioides (Clostridium) difficile* infections

○Hiroyuki Kunishima (Dept. Infectious Diseases, St. Marianna Univ. Sch. Medicine)

LS1-2

***Clostridioides (Clostridium) difficile* infections up to date**

○Hiroshige Mikamo (Dept. Clinical Infectious Diseases, Aichi Medical Univ. Grad. Sch. Medicine)

LS2

24th, April (Wed) 11:40–12:40

Room 1 (Conference Hall)

Sponsored: Illumina K.K.

LS2

From 16S Amplicon Deep Sequencing to Shotgun Metagenomics

○Shota Nakamura (Dept. Infection Metagenomics, Research Institute for Microbial Diseases, Osaka Univ.)

LS3

25th, April (Thu) 11:40–12:40

Room 1 (Conference Hall)

Chair: Haruhiko Siomi (Keio Univ. Sch. Medicine)

Sponsored: Japan Science and Technology Agency (JST)

LS3

CREST/PRESTO research program [Large-scale genome synthesis and cell programming]