Flash Talk

WS2　Flash Talk 1: Taxonomy, Epidemiology, Infectious diseases/Ecology/Physiology, Structural/ Genetics, Genomics, Biotechnology

Thursday, May 29　15:25–16:35
Room 2（Hougaku Hall）

Chairs: Manabu Ato (NIID)
Tomomi Kuwahara (Kagawa University)

FL1-01/P1-004
Proposal of *Lysobacter claricitrinus* sp. nov., isolated from soil in Japan
○Ryota Mori, Ryo Kutsuna, Junko Tomida, Yoshiaki Kawamura (Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ.)

FL1-02/P1-005
Toxin-related genes and MLST analysis of *Bacillus cereus* from edible insects retailed in Japan
○Yukako Shimojima[1], Kurumi Oka[1], Hibiki Tsuchiya[1], Yumiko Okada[2], Yukio Morita[3] ([1]Dept. Food Life Sci., F. Food Nutr. Sci., Toyo Univ., [2]Div. Biomed. Food Res., Nat. Inst. Health Sci., [3]Sch. Vet. Med., Azabu Univ.)

FL1-03/P1-008
Plasmid structure prediction using Upstream Genetic Structures (UGS) and replicon types
○Sora Miyazato[1], Nobuyoshi Yagi[2], Itaru Hirai[1] ([1]Lab. Microbiol., Dept. Health Sci., Univ. Ryukyus, [2]Lab. Clin. Physiol., Dept. Health Sci., Univ. Ryukyus)

FL1-04/P1-012
Virulence-type IV secretion system and cell wall-anchored protein folding structures in CA-MRSA/J
○Tsai-Wen Wan[1,2], Lee-Jene Teng[2], Tatsuo Yamamoto[1] ([1]Dept. Epidemiol. Genomics Evol., Intl. Med. Edu. Research Center, [2]Dept. Clin. Lab. Sci. Med. Biotechnol., National Taiwan Univ.)

FL1-05/P1-018
Classification of clinical isolates of *Pseudomonas aeruginosa* based on virulence genes
○Takayuki Sano[1], Kohei Yamazaki[1], Hiroki Kitagawa[2], Kazuo Imai[3], Shintarou Ichimura[3], Hideharu Hagiya[4], Takashige Kashimoto[1] ([1]Lab. Vet. Public Health. Sch. Vet. Med., Kitasato Univ., [2]Dept. Infect. Dis., Hiroshima Univ. Hosp., [3]Central Lab., Saitama Med Univ. Hosp., [4]Dept. Infect. Dis., Okayama Univ. Hosp.)

FL1-06/P1-023
Development of detection system for *S. intermedius* with isothermal nucleic acid amplification assay
○Asuka Shibatou[1], Toshifumi Tomoyasu[1,2], Hideaki Nagamune[2], Atsushi Tabata[1,2] ([1]Dept. Biosci & Bioindust., Fac. Biosci & Bioindust., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

FL1-07/P1-024
Evaluation of the usefulness of tuberculosis diagnostic method by detection of Ag85B antibody titer
○Tomoya Yamazaki[1], Desak Nyoman Suria Suametria Dewi[1,2], Yutaka Yoshida[1], Satoshi Ishikawa[1,3], Ni Made Mertaniasih[4], Yuriko Ozeki[1], Amina Shaban[1], Akihito Nishiyama[1], Yoshitaka Tateishi[1], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]Dept. Microbiol., Sch. Med., Ciputra Univ., [3]Fukuyama Zoo, [4]Dept. Microbiol., Sch. Med., Airlangga Univ.)

FL1-08/P1-025
Development of anti-*Helicobacter cinaedi* antibody titer assay
○Toshihiro Fukai[1], Sho Yoshida[1], Yusuke Murakami[1], Masaki Sato[1], Sae Aoki[2], Emiko Rimbara[2], Hideki Araoka[3], Jien Saito[4] ([1]EIKEN CHEMICAL CO., LTD., [2]Dept. Bacteriol. II, NIID, [3]Dept. Infect. Dis., Toranomon Hospital, [4]Dept. Cardiovasc. Surg., Nagoya City Univ., NEMC)

FL1-09/P1-026
Diagnosis of Latent Tuberculosis Infection: Insights from a Cross-Sectional Study in Kwale, Kenya
○Yuriko Ozeki[1], Tomoya Yamazaki[1], Amina Kaboso Saban[1], Yoshitaka Tateishi[1], Akihito Nishiyama[1], Thoru Abe[1], Shinjiro Hamano[2], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]Dept. Paragitol., Nekken, Nagasaki Univ.)

FL1-10/P1-027
Development and application of PCR-based *Leptospira* serogroup identification for Japanese isolates
○Kazuki Kiuno[1], Tetsuya Kakita[2], Kyosuke Takabe[3], Ai Takano[4], Nobuo Koizumi[3], Hiroshi Shimoda[1], Daisuke Hayasaka[1] ([1]Dept. Micro., Vet. Med., Yamaguchi Univ., [2]Inst. Health & Environ., Okinawa Pref., [3]Dept. Bacteriol. I, Nati. Inst. Infect. Dis., [4]Dept. Epi., Vet. Med., Yamaguchi Univ.)

FL1-11/P1-028
Effects of oral resident bacteria in the genus *Streptococcus* on risk of ocular infections
○Yuna Kimura, Ai Watanabe, Taizo Sumide (Menicon Co., Ltd.)

FL1-12/P1-029
Redesigning of the Microorganism Risk Information List to consider changes in scientific names
○Akane Kimura, Aya Uohara, Akiko Ishida, Shoko Ohji, Ryosuke Nakatani, Takeru Nakazato, Natsuko Ichikawa (NITE-NBRC)

FL1-13/P1-030
Evaluation of phage therapy for vancomycin-resistant Enterococcus infection in mice
○Shinjiro Ojima[1], Wakana Yamashita[1,2], Kotaro Kiga[1] ([1]Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [2]Sch. Adv. Sci. Engr., Waseda Univ.)

FL1-14/P1-033

Evaluation of the anti-obesity effect of Christensenella minuta feeding using Caenorhabditis elegans

○Kanamu Chikuba[1,2], Yoshihiko Tanimoto[1,2,3], Eriko Nakadai[1,2,3] ([1]Grad. Sch. Human Life & Ecology, Osaka Metropolitan Univ., [2]Grad. Sch. Biostudies, Kyoto Univ., [3]LiMe. Kyoto Univ.)

FL1-15/P1-034

An investigation into the benefits of Legionella to their protist hosts

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

FL1-16/P1-035

Analysis of the mechanism of eDNA release during biofilm formation in *Clostridium perfringens*

○Takeshi Ando[1], Nozomu Obana[2,3], Nobuhiko Nomura[2,4] ([1]Degree. Programs. Life. Earth. Sci., Univ. Tsukuba, [2]MiCS, Univ. Tsukuba, [3]TMRC, Inst. Med., Univ. Tsukuba, [4]Fac. Life Environ. Sci., Univ. Tsukuba)

FL1-17/P1-042

Cross-feeding analysis of Streptococcus and Rothia isolated from the oral cavity

Soutaro Hanawa[1,2], ○Aoi Son[2], Kazuma Noguchi[1], Takayuki Ohmae[1], Kyohei Yoshikawa[1], Yoshiyuki Matsuo[3], Tamotsu Kato[5], Koji Yamanegi[4], Satoshi Ishido[2], Hiromitsu Kishimoto[1] ([1]Dept. Oral and Maxillofacial Surgery, Sch. Med., Hyogo Medical Univ., [2]Dept. Microbiol., Sch. Med., Hyogo Medical Univ., [3]Dept. Inst. Bionedical Science, Kanasai Med. Univ., [4]Dept. Pathology, Sch. Med., Hyogo Medical Univ., [5]IMS, Riken)

FL1-18/P1-043

Phosphofructokinase deficiency enhances growth of Escherichia coli in plant extracts

○Saki Yamaguchi, Kazuya Ishikawa, Kazuyuki Furuta, Chikara Kaito (Lab. Mol. Biol., Fac. Pharm., Okayama Univ.)

FL1-19/P1-046

Cleavage cascade of the sigma regulator FecR orchestrates TonB-dependent signal transduction

○Tatsuhiko Yokoyama[1], Ryoji Miyazaki[2], Takehiro Suzuki[3], Naoshi Dohmae[3], Hiroki Nagai[1], Tomoya Tsukazaki[2], Tomoko Kubori[1], Yoshinori Akiyama[4] ([1]Dept. Microbiol., Grad. Sch. Med., Gifu Univ., [2]Grad. Sch. Sci. Tech., NAIST, [3]CSRS, RIKEN, [4]Inst. Life Med. Sci., Kyoto Univ.)

FL1-20/P1-050

Characterization of novel actin-like protein Mad28 encoded in magnetotactic *Thermodesulfobacteriota*

○Rino Shimoshige[1], Hirokazu Shimoshige[2], Yoshihiro Fukumori[3], Azuma Taoka[3,4] ([1]Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., [2]Bio-Nano Electronics Research Centre, Toyo Univ., [3]Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., [4]NanoLSI, Kanazawa Univ.)

FL1-21/P1-052

Nanoscale AFM measurement of cell wall of Colletotrichum orbiculare

○Jun Tanaka[1], Keisuke Miyazawa[1,2], Naoyoshi Kumakura[3], Kaisei Matsumori[1], Ken Shirasu[3], Takeshi Fukuma[1,2] ([1]Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., [2]WPI-NanoLSI, [3]RIKEN)

FL1-22/P1-056

Effects of membrane vesicles released by S.mutans on bone resorption during orthodontic force

○Kosuke Matsuura[1], Shinichi Negishi[1], Hidenobu Senpuku[2] ([1]Dept. Orthodontics., Sch. Dent., Nihon Univ. Matsudo, [2]Dept. Microbiol. Immunol., Sch. Dent., Nihon Univ Matsudo)

FL1-23/P1-058

Unraveling Biofilm Initiation through Active Matter Physics and Microfluidics Engineering

○Fumiaki Yokoyama, Kazumasa Takeuchi (Dept. Phys., Sch. Sci., UTokyo)

FL1-24/P1-064

Functional analyses of the cell wall-binding domain of autolysin in *Clostridium perfringens*

○Miyu Shiraga[1], Riyo Aono[2], Hirofumi Nariya[3], Nozomu Matsunaga[4], Hiroshi Sekiya[5], Eiji Tamai[5], Seiichi Katayama[4] ([1]Dept. Natural Sci., Grad. Sch. Sci. and Technol., Okayama Univ. Sci., [2]Dept. Med. Tech., Kagawa Pref. Univ. of Health Sci., [3]Dept. Food Sci., Fac. Human Life, Jumonji Univ., [4]Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., [5]Dept. Infec. Dis., Col. Pharm. Sci., Matsuyama Univ.)

FL1-25/P1-069

TsrA-mediated gene regulation in *Vibrio parahaemolyticus*

○Tan Paramita Wibowo Sutanto, Andre Pratama, Eiji Ishii, Tetsuya Iida, Shigeaki Matsuda (Dept. Bact. Infect., RIMD, Osaka Univ.)

FL1-26/P1-072

Function of phased A-tracts on α-toxin gene expression of *Clostridium perfringens virRS vrr* mutant

○Manami Jou[1], Saya Matsui[2], Naoya Hashikawa[3], Hinata Sato[2], Kazuyoshi Aibara[2], Chiharu Tanaka[2], Hirofumi Nariya[4], Nozomu Matsunaga[3], Seiichi Katayama[3] ([1]Dept. Natural Sci., Grad. Sch. Sci. and Technol., Okayama Univ. Sci., [2]Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., [3]Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., [4]Dept. Food Sci., Fac. Human Life, Jumonji Univ.)

FL1-27/P1-078

Phage Displayed Peptides: Exploring Cancer Specificity and Therapeutic Potentials

○Varsha Rani, Myat Thu, Vivekanandan Palaninathan, Srivani Veeranarayanan, Yoshifumi Aiba, Tan XinEe, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

FL1-28/P1-079
Engineering of Phage capsid with antibiofilm enzyme targeting *Pseudomonas aeruginosa* biofilm
◯Esakkiraj Palanichamy, Shinya Watanabe, Geofrey Peterkins Kumwenda, Tomofumi Kawaguchi, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

FL1-29/P1-081
Understanding Bacteriophage Internalization Kinetics in Mammalian Cells
◯Takashi Sugano, Veeranarayanan Srivani, Yoshifumi Aiba, Kazuhiko Miyanaga, Tan XinEe, Kanate Thitiananpakorn, Shinya Watanabe, Longzhu Cui (Div. Bacteriology, Dept. Infection & Immunol., Sch. Med., Jichi Med. Univ.)

FL1-30/P1-083
Construction of novel expression vectors for *C. perfringens* and screening of xylan-degrading enzymes
◯Arisa Koizumi, Nanako Uchiyama, Shiho Kato, Ryuichi Moriyama, Shigeru Miyata (Grad. Sch. Biosci. Biotech., Chubu Univ.)

FL1-31/P1-086
Growth history under starvation influences subsequent reproduction in a clonal bacterial microcolony
◯Sotaro Takano[1,2], Miki Umetani[3,4,5], Hidenori Nakaoka[6], Ryo Miyazaki[2,7,8] ([1]IBID, BRC, RIKEN, [2]Bioprod. Res. Inst., AIST, [3]Dept. Basic Sci., Grad. Sch. of Arts and Sci., The Univ. of Tokyo, [4]Res. Center for Complex Syst. Biol., The Univ. of Tokyo, [5]UBI, The Univ. of Tokyo, [6]Dept. Optical Imaging, Adv. Res. Promotion Center, Tokushima Univ., [7]Fac. Life and Env. Sci., Univ. of Tsukuba, [8]CBBD-OIL, AIST)

WS3　Flash Talk 2: Pathogenicity/Host defense/ Antimicrobial agents and resistance

Thursday, May 29　15:25–16:35
Room 3（Koryu Hall）

Chairs: Hitoshi Komatsuzawa (Hiroshima University)
Keigo Shibayama (Nagoya University)

FL2-01/P1-091
***Salmonella* induces cell death through a small membrane peptide MgtU under low Mg^{2+} stress**
◯Yumi Iwadate, James Slauch (Dept. Microbiol., MCB, U. of I.)

FL2-02/P1-104
***S. pneumoniae* expresses multiple plasminogen-binding proteins to convert plasminogen into plasmin**
◯Yoshihito Yasui[1,2], Satoru Hirayama[1], Hisanori Domon[1,3], Yutaka Terao[1,3] ([1]Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., [2]Div. Periodontol., Niigata Univ. Grad. Sch. Med. Dent. Sci., [3]Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

FL2-03/P1-107
Establishment of an infection model of human pathogenic bacteria using Xenopus frog
◯Ayano Kuriu[1], Kazuya Ishikawa[1], Kohsuke Tsuchiya[2], Kazuyuki Furuta[1], Chikara Kaito[1] ([1]Lab. Mol. Biol., Grad. Sch. Med. Dent. Pharm, Okayama Univ., [2]Div. Immunol. Mol Biol., Cancer Res. Inst., Kanazawa Univ.)

FL2-04/P1-110
***Prevotella intermedia* suppresses the release of IL-1β**
◯Machiko Kasai[1], Miyuki Takahama[1], Ji-Won Lee[1], Mikio Shoji[2], Mariko Naito[2], Toshihiko Suzuki[3], Akira Hasebe[1] ([1]Microbiology, Dept. Oral Pathobiological Science, Fac. and Grad. Sch. Dental Medicin, Hokkaido Univ., [2]Dept. Microbiol. Oral Infect., Nagasaki Univ. Grad. Sch. Biomedical Sci., [3]Dept. Bact. Pathogenesis, Science Tokyo)

FL2-05/P1-113
Aggregatibacter actinomycetemcomitans-derived EVs promote pancreatic cancer malignancy
◯Takehiro Yamaguchi[1], Masayuki Shiota[2], Ryoma Nakao[1], Kimihiro Abe[1], Yukihiro Akeda[1] ([1]Dept. Bacteriol. I, Nat. Inst. Infect. Dis., [2]Dept. Mol. Bio. Med., Grad. Sch. Med., Osaka Metropolitan Univ.)

FL2-06/P1-117
Genomic characteristics of *P. alcalifaciens* isolates causing a large foodborne outbreak in Japan
◯Jayedul Hassan[1,2,3], Shigeaki Matsuda[1], Eiji Ishii[1], Tetsuya Iida[1] ([1]Dept. Bact. Infect., RIMD, Osaka Univ., [2]JSPS, [3]Dept. Microbiol. Hyg., Bang. Agric. Univ.)

FL2-07/P1-120
Optimizing Phage Production: Streamlined Propagation and Purification for Enhanced Phage Therapy
◯Myat Thu, Srivani Veeranarayanan, Kanate Thitiananpakorn, Yoshifumi Aiba, Tan XinEe, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

FL2-08/P1-127
Phage-Based DNA Vaccine Development Using mEmerald Gene as Proof of Concept
◯Vivekanandan Palaninathan, Yi Liu, Myat Thu, Srivani Veeranarayanan, Yoshifumi Aiba, XinEe Tan, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

FL2-09/P1-128
The production mechanism and immunogenicity of membrane vesicles from Clostridioides difficile
◯Yotaro Isamu[1], Mayu Okuda[1], Nobuhiko Nomura[2,4], Nozomu Obana[3,4] ([1]Sch. Sci. Tech., Life Ear. Sci., Univ. Tsukuba, [2]Fac. Life Environ., Sci. Univ. Tsukuba, [3]TMRC, Fac. Med., Univ. Tsukuba, [4]MiCS, Univ. Tsukuba)

FL2-10/P1-130

Analysis of mechanism of Th17 cell induction by dendritic cells stimulated with Bacillus subtilis

○Kazuyuki Furuta[1], Yohei Chishaki[1], Kazuya Ishikawa[1], Shin-Ichi Miyoshi[2,3], Chikara Kaito[1] ([1]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [2]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [3]Res. Cent. Intest. Health Sci., Okayama Univ.)

FL2-11/P1-131

The inhibitory effects of silver ions and moisturizing gel on GTF activities and biofilm formation

○Xuefei Cheng[1], Takafumi Miyazaki[2], Yoshiaki Kamikawa[3], Hidenobu Senpuku[1] ([1]Dept. Microbiol. Immunol., Dent., Sch. St Matsudo, Nihon Univ., [2]Pikasshu, [3]Sch. Dent., Kagoshima Univ.)

FL2-12/P1-135

Mechanisms of colonization resistance against Clostridium botulinum infection by gut microbiota

○Nobuhide Kobayashi[1], Takuhiro Matsumura[1], Seiga Komiyama[2], Hiroki Toriumi[2], Yotaro Kodaira[2], Wanping Aw[3], Jiayue Yang[3], Shinji Fukuda[3], Koji Hase[2], Yukako Fujinaga[1] ([1]Dept. Bacteriol., Grad. Sch. Med., Kanazawa Univ., [2]Div. Biochem., Fac. Pharm., Keio Univ., [3]IAB, Keio Univ.)

FL2-13/P1-140

Identification and characterization of colistin-resistant *Acinetobacter* producing IMP-1 and OXA-58

○Satoshi Nishida[1], Yasuo Ono[1,2], Yusuke Yoshino[1] ([1]Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ., [2]Faculty Health Med. Sci., Teikyo Heisei Univ.)

FL2-14/P1-146

Identification of gene for the survival of fluoroquinolone-resistant *E. coli* ST131 in the canine gut

○Aiko Maeda[1,2], Toyotaka Sato[1,2,3], Kaho Okada[2], Akio Suzuki[2,3], Motohiro Horiuchi[1,2,3] ([1]Grad. Sch. Infect. Dis., Hokkaido Univ., [2]Lab. Vet. Hyg., Fac. Vet. Med., Hokkaido Univ., [3]OHRC., Hokkaido Univ.)

FL2-15/P1-148

The difference in plasmids transfer rates between *Salmonella* serovars from broiler chickens

○George Sanga[1], Vu Minh Duc[1], Saki Hiramoto[2], Rika Miyajima[2], Yui Tamura[2], Takehisa Chuma[1] ([1]Dept. Veterinary Public Health, Joint Grad. Sch. Veterinary Medicine, Kagoshima Univ., [2]Dept. Veterinary Public Health, Joint Faculty of Veterinary Medicine, Kagoshima Univ.)

FL2-16/P1-159

Identification of nanaomycin A and its analogs as T9SS inhibitors in *Porphyromonas gingivalis*

○Yuko Sasaki[1], Takehiro Matsuo[1], Yoshihiro Watanabe[2], Masato Iwatsuki[2], Yuki Inahashi[2], Satoshi Nishida[3], Mariko Naito[1], Mikio Shoji[1] ([1]Dept. Microbiol. Oral Infect. Sch. Biomed. Sci., Nagasaki Univ., [2]Omura Inst., Kitasato Univ., [3]Dept. Microbiol. Imunol., Sch. Med., Teikyo Univ.)

FL2-17/P1-160

222-nm Far UV-C generates ROS in Staphylococcus aureus and inhibits its photoreactivation

○Risako Fukushi[1,2], Kouji Narita[1,3], Kyosuke Yamane[4], Toru Koi[4], Krisana Asano[1,5], Akio Nakane[2,5] ([1]Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., [2]Dept. Nursing, Sch. Health. Sci., Hirosaki Univ. Health Welfare, [3]Inst. Animal Exp., Hirosaki Univ. Grad. Sch. Med., [4]Ushio Inc., [5]Dept. Biopolymer Health. Sci., Hirosaki Univ. Grad. Sch. Med.)

FL2-18/P1-163

Interaction between phage long tail fibers and bacterial porins

○Haruka Terasaki, Yuichi Otsuka (Grad. Sch. Science and Engineering, Saitama Univ.)

FL2-19/P1-164

Anti-T4 phage defense in Escherichia coli O157

○Honoka Ishikawa, Yuichi Otsuka (Grad. Sch. Sci. Eng., Saitama Univ.)

FL2-20/P1-165

Activation of the toxin-antitoxin system in phage defense

○Daiki Oki, Yuichi Otsuka (Grad. Sch. Sci. Eng., Saitama Univ.)

FL2-21/P1-168

Characterization of phage-resistant mutants of ESBL-producing uropathogenic *E. coli*

○Mayuko Tanaka[1], Tomoko Hanawa[1], Kohei Kondo[2], Aa Haeruman Azam[3], Yasunori Tanji[4], Tomoya Suda[1], Kotaro Kiga[3], Takeaki Matsuda[1,4] ([1]Dept. Gen. Med., Sch. Med., Kyorin Univ., [2]AMR Res. Cent., Natl. Inst. Infect. Dis., [3]Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [4]Dept. Traum. Crit. Care Med., Kyorin Univ. Sch. Med.)

FL2-22/P1-170

Isolation of Phages Targeting Outer Membrane Protein of *Escherichia coli* Pandemic Clone ST131

○Kento Habe[1], Kanata Nakatsuka[1], Tomoyoshi Kaneko[1,2], Satoshi Tsuneda[1,2] ([1]Dept. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., [2]Phage Therapy Inst., Waseda Univ.)

FL2-23/P1-173

Photoimmuno-antimicrobial strategy against biofilm based on molecular targeting

○Sota Yamada[1], Akane Nishitani[2,3], Makoto Mitsunaga[4], Tadayuki Iwase[2,5] ([1]Undergrad., Sch. Med., Jikei Univ., [2]Res. Cent. Med. Sci., Jikei Univ., [3]Dept. Biotech., Tokyo Coll. Biotech., [4]Dept. Intern. Med., Sch. Med., Jikei Univ., [5]Mol. Diagn. Ther., Grad. Sch. Med., Jikei Univ.)

FL2-24/P1-094
Candida glabrata genes regulating phagosome maturation in macrophages
◯Fujiang Zhao, Azusa Takahashi-Nakaguchi, Michiyo Sato-Okamoto, Kaname Sasamoto, Hiroji Chibana (Divi. Molecul. Bio., Med. Mycol. Reaear. Cen., Chiba Univ.)

FL2-25/P1-096
Identification of Resistance Genes against the Antibacterial Peptide LL-37 in *Vibrio vulnificus*
◯Shinji Kawate, Taro Irifune, Kohei Yamazaki, Takashige Kashimoto (Lab. Vet. Public Health. Sch. Vet. Med., Kitasato Univ.)

FL2-26/P1-097
ThyX Overexpression Promotes the In Vivo Growth of BCG
◯Ikue Tosa[1], Tomoyuki Yamaguchi[1,2], Goro Matsuzaki[3], Masayuki Umemura[3], Giichi Takaesu[3], Masaaki Nakayama[1], Manabu Ato[4], Naoya Ohara[1] ([1]Dept. Oral Microbiol., Fac. Med., Dent. and Pharm. Sci., Okayama Univ., [2]Dept. Vet. Med., Rakuno Gakuen Univ., [3]Trop. Biosphere Res. Ctr., Univ. Ryukyus, [4]Dept. Mycobacteriol., Leprosy Res. Ctr., NIID, [5]Res. Ctr. Intest. Health Sci., Okayama Univ.)

FL2-27/P1-100
Genome-scale Metabolic Network Reconstruction Reveals Pathogenic *Leptospira* Metabolism in Hosts
◯Ryo Ozuru[1,2], Michinobu Yoshimura[1], Takumi Sonoda[1], Jason Papin[2], Fumiko Obata[3], Glynis Kolling[2], Kenji Hiromatsu[1] ([1]Dept. Microbiol. Immunol., Fac. Med., Fukuoka Univ., [2]Dept. Biomed. Eng., Univ. Virginia, [3]Div. Bacteriol., Dept. Microbiol. Immunol., Fac. Med., Tottori Univ.)

FL2-28/P1-103
Pangenome-scale Metabolic Models Uncovered Pathogenicity-Specific Pathways in *Leptospira*
◯Takumi Sonoda[1], Ryo Ozuru[1,2], Michinobu Yoshimura[1], Jason Papin[2], Fumiko Obata[3], Glynis Kolling[2], Kenji Hiromatsu[1] ([1]Dept. Microbiol. Immunol., Fac. Med., Fukuoka Univ., [2]Dept. Biomed. Eng., Univ. Virginia, [3]Div. Bacteriol., Dept. Microbiol. Immunol., Fac. Med., Tottori Univ.)

FL2-29/P1-174
Mechanism of host-inflammatory response against Streptolysin S produced by *Streptococcus anginosus*
◯Yugo Yamamori[1], Hideaki Nagamune[1,2], Toshifumi Tomoyasu[1,2], Atsushi Tabata[1,2] ([1]Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

FL2-30/P1-175
Characteristics of the *Streptococcus mitis* strain possessing three different CDC-encoding genes
◯Ichiyou Fukumoto[1], Toshifumi Tomoyasu[1,2], Hideaki Nagamune[2], Atsushi Tabata[1,2] ([1]Dept. Biosci & Bioindust., Fac. Biosci & Bioindust., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

WS5　Flash Talk 3: Taxonomy, Epidemiology, Infectious diseases/Ecology/Physiology, Structural/ Genetics, Genomics, Biotechnology/Pathogenicity

Friday, May 30　15:55–17:05
Room 2（Hougaku Hall）

Chairs: Takako Osaki (Kyorin University)
Hitomi Mimuro (Oita University)

FL3-01/P2-003
A comprehensive characterisation of Stenotrophomonas maltophilia isolated from the oral cavity
◯Saki Nishihama[1,2], Miki Matsuo[2,3], Vo Minh Ngoc[2], Tomoki Kawayanagi[1,2], Yo Sugawara[4], Junzo Hisatsune[4], Motoyuki Sugai[3,4], Hideki Shiba[1], Hitoshi Komatsuzawa[2,3] ([1]Dept. Biol Endod., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [3]Proj. Res. Ctr. for Nosocominal Infectious Diseases, Hiroshima Univ., [4]Res. Cent for AMR, NIID.)

FL3-02/P2-008
Active surveillance of Streptococcus suis in porcine products in Nakhon Ratchasima, Thailand
◯Nitchatorn Sungsirin[1,2], Tanit Boonsiri[2], Anusak Kerdsin[3], Thanaboon Chanwong[4], Chuleeporn Mutuwong[4], Marwah Abah[4], Teerapat Phueakphong[5], Sudaluck Thunyaharn[4] ([1]Dept. Microbiology, Fac. Medicine, Shimane Univ., [2]Dept. Microbiology, Phramongkutklao College of Medicine, Thailand, [3]Fac. Public Health, Kasetsart Univ. Chalermphrakiat Sakon Nakhon Province Campus, Sakon Nakhon, Thailand, [4]Fac. Allied Health Sciences, Nakhonratchasima College, Nakhon Ratchasima, Thailand, [5]Dept. Biology, Sch. Science, King Mongkut Institute of Technology Ladkrabang, Bangkok, Thailand)

FL3-03/P2-009
Combination of E. coli phage to enhance antimicrobial efficacy and inhibit resistance
◯Yuki Tomari, Shinjiro Ojima, Kotaro Kiga (Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis)

FL3-04/P2-010
Characteristics of enterotoxin-producing *Clostridium perfringens* type E isolates
◯Chie Monma, Hirofumi Nariya (Dept. Food Science, Jumonji Univ.)

FL3-05/P2-028
【Withdrawn】

FL3-06/P2-029
Metagenomic detection of antimicrobial resistance genes in the oral microbiome of Thai children
◯Momoko Kobayashi[1,2], Lapirattanakul Jinthana[3], Masayuki Ono[1], Daisuke Motooka[4], Tansriratanawong Kallapat[5], Tantivitayakul Pornpen[3], Smutkeeree Apiwan[6], Shigetada Kawabata[1,7], Masaya Yamaguchi[2] ([1]Dept. Microbiol., Grad. Sch. Dent., [2]NIBIOHN, [3]Dept. Oral Microbiol., Mahidol Univ., [4]OUBIC, [5]Dept. Oral Med. Periodontol., Mahidol Univ., [6]Dept. Pediatr. Dent., Mahidol Univ., [7]CiDER, Osaka Univ.)

FL3-07/P2-031
Intestinal mucosa-associated bacteria Adlercreutzia attenuates colitis
◯Jiayue Yang[1], Nozomu Obana[2,3], Gaku Nakato[4], Nobuhiko Nomura[3], Shinji Fukuda[1,2,4,5,6] ([1]Inst. Adv. Biosci., Keio Univ., [2]TMRC, Inst. Med., Univ. of Tsukuba, [3]Inst. Life Env. Sci., Univ. of Tsukuba, [4]KISTEC, [5]Grad. Sch. Med., Juntendo Univ., [6]Metagen. Inc.)

FL3-08/P2-032
Time-Series Causal Discovery Reveals the Ecological Importance of Patescibacteria (CPR)
◯Genta Shima[1], Hirokazu Toju[1], Kenta Suzuki[2] ([1]Div. Integr. Life Sci., GSB, Kyoto Univ., [2]Integr. Bioresour. Info. Div., BRC, RIKEN)

FL3-09/P2-036
Investigation of the coexistence relationship between S.a fatty acid resistance and Cb bacteria
◯Yasuyuki Asada[1,2], Keijuro Ohdan[1,3], Yujin Suzuk[1], Miki Kawada-Matsuo[1], Mikari Asakawa[4], Junzo Hisatsune[5], Yo Sugawara[5], Toru Takeshita[4], Motoyuki Sugai[5], Hitoshi Komatsuzawa[1] ([1]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Dept. Oral Oncology., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [3]Dept. Oral and Maxillofacial Surgery., Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., [4]Dept. Oral Preventive Medicine., Grad. Sch. of Dental Sci., Kyushu Univ., [5]Antimicrobial Resistance Res. Ctr., National Inst. Infectious Diseases)

FL3-10/P2-041
Development of a Mouse Model to Evaluate Wild-Type Phages in Eliminating Enterotoxigenic *B. fragilis*
◯Md Razib Hossain, Mahmoud Arbaah, Yoshifumi Aiba, Shinya Watanabe, Kazuhiko Miyanaga, XinEe Tan, Srivani Veeranarayanan, Priyanka Baranwal, Longzhu Cui (Div. Bacteriology, Sch. Medicine, Jichi Medical Univ.)

FL3-11/P2-042
Spatial distribution and diversity of *Escherichia coli* in the bovine gastrointestinal tract
◯Atsushi Iguchi[1], Masaya Ono[2], Taisei Kikuchi[2] ([1]Fac. Agr., Miyazaki Univ., [2]Grad. Sch. Front. Sci., Tokyo Univ.)

FL3-12/P2-049
The role of mitochondria in the cellular adaptation mechanism of *Chlamydia trachomatis* (L2/434/Bu)
◯Tsubasa Tatsumiya, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

FL3-13/P2-050
Effect of a mutation in *metK* from BCG on the SAM synthesis activity
◯Yuki Nishiya[1,2], Katsuki Takebe[3], Keiko Sato[4], Ikue Tosa[2], Masaaki Nakayama[2], Yuki Arimura[1], Manabu Ato[5], Seiji Iida[1], Naoya Ohara[2] ([1]Dept. Oral Maxillofac. Reconst. Surg., Grad. Sch. Med., Dent. and Pharm. Sci., Okayama Univ., [2]Dept. Oral Microbiol., Grad Schl. Med., Dent. and Pharm. Sci., Okayama Univ., [3]Dept. Dent. Pharmacol, Grad. Sch. Med., Dent. and Pharm. Sci., Okayama Univ., [4]Dept. Front. Oral Sci., Grad. Sch. Biomed. Sci., Nagasaki Univ., [5]Dept. Mycobacteriol., Leprosy Res. Cent., NIID)

FL3-14/P2-051
Intracellular elemental analysis of long-term cultured *Corynebacterium matruchotii*
Naoko Ohara[1], Midori Ogawa[2], Katsuki Takebe[3], Ikue Tosa[4], Mitsumasa Saito[2], ◯Naoya Ohara[4,5] ([1]Dept. Operative Dent., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [2]Dept. Microbiol., Sch. Med., UOEH Univ., [3]Dept. Dent. Pharm., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [4]Dept. Oral Microbiol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [5]Res. Cent. Intest. Health Sci., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci.)

FL3-15/P2-052
The effect of amino acid and succinate metabolism on *Campylobacter jejuni* virulence
◯Mana Makimoto[1,2], Takaaki Shimohata[1,2], Shiho Fukushima[1], Saki Yamanaka[1], Takashi Uebanso[1], Kazuaki Mawatari[1], Akira Takahashi[1] ([1]Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch., [2]Marine Bio., Fukui Prefect Univ.)

FL3-16/P2-053
Identification of Oral Bacteria and Metabolites Associated with Periodontal Disease
◯Chikako Ishihara, Misato Sako, Kota Tsutsumi, Naumi Fujii, Daiki Hashimoto, Atushi Sato, Takashi Chikazawa, Yasushi Kakizawa (R&D Headquarters., Lion Co., Ltd.)

FL3-17/P2-059
Inhibition of sodium ion flux in the flagellar stator from Vibrio due to an inhibitor binding
◯Tatsuro Nishikino[1,2], Norihiro Takekawa[3], Jun-ichi Kishikawa[4], Mika Hirose[4], Seiji Kojima[5], Michio Homma[5], Takayuki Kato[4], Katsumi Imada[3] ([1]Dept. Life Sci. & Applied Chem., Nagoya Inst. of Tech., [2]OptoBioTech. Res. Ctr., Nagoya Inst. of Tech., [3]Dept. Macromole. Sci., Grad. Sch. of Sci., Osaka Univ., [4]Inst. for Protein Res., [5]Dept. of Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

FL3-18/P2-060

LafTU functions as the lateral flagellar stator of *Vibrio alginolyticus*

○Seiji Kojima[1], Kazuki Yokoyama[1], Norihiro Takekawa[2] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [2]Dept. Macromol. Sci., Grad. Sch. Sci., Osaka Univ.)

FL3-19/P2-064

Functional analysis of chaperone-like protein in periodontitis bacteria based on structural biology

○Katsuki Takebe[1], Keiko Sato[2], Shuhei Miyakawa[3], Ikue Tosa[4], Yujiang Chen[4], Kana Kashima[5], Naoya Ohara[4] ([1]Dept. Dent. Pharmacol, Grad. Sch. Med., Dent. and Pharm. Sci., Okayama Univ., [2]Dept. Front. Oral Sci., Grad Schl. Biomed. Sci., Nagasaki Univ., [3]Dept. Quantum Life Sci and Bioinfo., Grad. Sch. Pharma. Sci., Osaka Univ., [4]Dept. Dent. Pharmacol, Grad. Sch. Med., Dent. and Pharm. Sci., Okayama Univ., [5]Dept. Oral & Maxillofac. Onco and Surg, Grad. Sch. Dent., Osaka Univ.)

FL3-20/P2-066

Ancestral estimation revealed pneumococcal genes abandoned to obtain virulence

○Masayuki Ono[1,2], Masaya Yamaguchi[3], Shigetada Kawabata[1,4] ([1]Dept. Microbiol., Sch. Dent., Osaka Univ., [2]Bioinformatics Res. Unit, Sch. Dent., Osaka Univ., [3]NIBIOHN, [4]CiDER, Osaka Univ.)

FL3-21/P2-067

Deep learning-based enzyme screening to identify orphan enzyme

○Keisuke Hirota[1], Takuji Yamada[1,2,3,4] ([1]LST, Science Tokyo, [2]Metagen, Inc., [3]MGTx, [4]digzyme, Inc)

FL3-22/P2-068

Detection of 1000s beneficial genome changes within a species

○Ichizo Kobayashi[1] ([1]Micro-nano, HOSEI Univ., [2]NIBB)

FL3-23/P2-069

Analysis of antibiotic resistance genes in STEC isolated from asymptomatic carriers

○Yumi Imai[1], Hiroshi Kaneko[2], Miki Okuno[1], Takeshi Yamamoto[1], Akio Noguchi[2], Toshio Sato[2], Yoshitoshi Ogura[1] ([1]Div. Microbiol. Dept. Infect. Med. Kurume Univ. Sch. Med., [2]Japan Microbiological Laboratory Co., Ltd.)

FL3-24/P2-071

Helicobacter pylori base-excision restriction enzyme in stomach carcinogenesis

○Masaki Fukuyo[1], Noriko Takahashi[2,3], Katsuhiro Hanada[4], Koji Yahara[5], Hideo Yonezawa[3,6], Naoki Osada[7], Atushi Kaneda[1,8], Ikuo Uchiyama[9], Takako Osaki[3], Ichizo Kobayashi[2,3,10] ([1]Grad. Sch. Med., Chiba Univ., [2]Grad. Sch. Frontier Sci., Univ. Tokyo, [3]Fac. Med., Kyorin Univ., [4]Fac. Med., Oita Univ., [5]Antimicrob. Resist. Res. Cent., Natl. Inst. Infect. Dis., [6]Dept. Microbiol., Tokyo Dent. Coll., [7]Div. Bioeng. & Bioinf., Hokkaido Univ., [8]Health & Dis. Omics Ctr., Chiba Univ., [9]Lab. Genome Inform., Natl. Inst. Basic Biol., [10]Res. Ctr. Micro/ Nanotechnol., Hosei Univ.)

FL3-25/P2-079

A novel Retron targeting multiple tRNAs confers robust phage resistance

○Aa Haeruman Azam, Matthew Imanaka, Wenhan Nie, Kotaro Chihara, Shinjiro Ojima, Yoshimasa Takahashi, Koichi Watashi, Kotaro Kiga (Research Center for Drug and Vaccine Development, National Institute of Infectious Diseases)

FL3-26/P2-080

Identification of novel conjugation gene of pELF-type linear plasmid of *Enterococcus faecium*

○Jun Kurushima[1], Haruyoshi Tomita[1,2] ([1]Lab. Bact. Drug Resist., Sch. Med., Gunma Univ., [2]Dept. Bact., Sch. Med., Gunma Univ.)

FL3-27/P2-084

Diversity of operon structure in kappa-chaperone usher (CU) fimbriae

○Hiharu Inoue[1], Takayuki Wada[2] ([1]Dept. Microbiol. Grad. Sch. Hum. Life Ecol., Osaka Metro. Univ., [2]Osaka Intl. Res. Ctr. Infect. Dis., Osaka Metro. Univ.)

FL3-28/P2-085

Cryo-electron microscopy structure of Type IV pilus CFA/III from ETEC

○Teruhoshi Baba[1], Hiroya Oki[2], Ryuki Muramoto[1], Tomoya Imai[4], Takuya Yoshida[3], Takumi Ueda[3], Shigeaki Matsuda[2,5], Tetsuya Iida[2,5], Shota Nakamura[2,5], Kazuki Kawahara[3,5] ([1]Sch. Pharm. Sci., Osaka Univ., [2]RIMD, Osaka Univ., [3]Grad. Sch. Pharm. Sci. Osaka Univ., [4]RISH, Kyoto Univ., [5]CiDER, Osaka Univ.)

FL3-29/P2-090

Identification of *Helicobacter pylori* virulence factor that regulates bacterial pathogenicity

○Naomi Aini[1], Weichen Gong[2], Kana Nishida[2], Tomohiro Miyoshi[1], Hitomi Mimuro[1] ([1]RCGLID, Oita Univ., [2]RIMD, Osaka Univ.)

FL3-30/P2-169

Isolation of hexavalent chromium-reducing *Staphylococcus sciuri 3W100* strain from tannery effluent

◯Tanjina Afrin Hira[1,2], Samiul Alam Rajib[2,3], Mahia Ferdushi[2] ([1]Dept. Microbiology, Sch. Medicine, Shimane Univ., Japan, [2]Dept. Pharmacy, BRAC Univ., Dhaka, Bangladesh, [3]Joint Research Center for Human Retrovirus Infection, Kumamoto Univ.)

FL3-31/P2-171

Engineering Bacteriophages for Enhanced Intracellular Delivery Against *Mycobacterium tuberculosis*

◯Yuzuki Shimamori, Shinya Watanabe, Orawee Kaewprasert, Sharmin Sultana, Akemi Saito, Srivani Veeranarayanan, Kazuhiko Miyanaga, Yoshifumi Aiba, XinEe Tan, Longzhu Cui (Div. Bacteriology, Dept. Infection and Immunity, Jichi Med. Univ.)

WS6 Flash Talk 4: Pathogenicity/Host defense/ Antimicrobial agents and resistance/Others

Friday, May 30 15:55–17:05
Room 3（Koryu Hall）

Chairs: Tomoko Sumitomo (Tokushima University)
Kinnosuke Yahiro (Kyoto Pharmaceutical University)

FL4-01/P2-091

Role of *Streptococcus pyogenes* hemolytic toxins in necrotizing fasciitis mouse model pathogenesis

◯Arisa Mori[1], Yujiro Hirose[1], Eri Ikeda[1], Masayuki Ono[1,2], Shigetada Kawabata[1,3] ([1]Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., [2]Bioinfo., Osaka Univ. Grad. Sch. Dent., [3]CiDER. Osaka Univ.)

FL4-02/P2-093

Analysis of the expression control mechanism of endo-β-*N*-acetylglucosaminidase from *S.intermedius*.

◯Riku Hiraoka[1], Atsushi Tabata[1,2], Hideaki Nagamune[2], Toshifumi Tomoyasu[1,2] ([1]Dept. Biosci. & Bioindust., Fac. Biosci & Bioindust., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

FL4-03/P2-094

Response of human vascular endothelium-derived cells to the action of Sm-hPAF produced from S. mitis

◯Yui Koga[1], Toshifumi Tomoyasu[1,2], Hideaki Nagamune[2], Atsushi Tabata[1,2] ([1]Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

FL4-04/P2-095

Recruitment of Rab33B to LCV through Legionella effector for association of LCV with the ER

◯Ryo Sugano, Kohei Arasaki (Sch. Life Sci., Tokyo Univ. Pharm. Life Sci.)

FL4-05/P2-096

Effect of enterotoxigenic *Escherichia coli* on host defense responses of *Caenorhabditis elegans*

◯Chinatsu Yamamura[1], Yoshihiko Tanimoto[1,2,3], Ryohei Nomoto[4], Takayuki Wada[1,5], Eriko Nakadai[1,2,3] ([1]Dept. Microbiol. Grad. Sch. Hum. Life Ecol., Osaka Metro. Univ., [2]Grad. Sch. Biostudies, Kyoto Univ., [3]LiMe, Kyoto Univ., [4]Kobe Inst, Heal., [5]Osaka Intl. Res. Ctr. Infect. Dis., Osaka Metro. Univ.)

FL4-06/P2-100

Characterization of human antibody against diphtheria toxin

◯Tomoko Kohda[1], Himena Tomita[1], Mitsutoshi Senoh[2], Masaaki Iwaki[2] ([1]Grad. Sch. Vet. Sci., Osaka Metropolitan Univ., [2]Dept. Bact. II., National Institute of Infectious Diseases)

FL4-07/P2-101

Cellular response of human gingival carcinoma cell against human-specific cytolysin, Intermedilysin

◯Aika Tanaka[1], Hideaki Nagamune[2], Toshifumi Tomoyasu[1,2], Ai Fujimoto[3], Atsushi Tabata[1,2] ([1]Dept. Biosci. & Bioindust., Fac. Biosci & Bioindust., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., [3]Sunstar Inc., R&D)

FL4-08/P2-103

Engineered Chimeric Botulinum Neurotoxin for Targeted Antibody Delivery to Treat Botulism

◯Shin-Ichiro Miyashita[1], Jie Zhang[2,3,4], Akane Kanazawa[1], Rintaro Ohono[1], Hanae Kojima[1], Min Dong[2,3,4], Yoshimasa Sagane[1] ([1]Dept. Food Aroma Cosme. Chem., Fac. of Bio-ind., Tokyo NODAI, [2]Dept. Urol., Boston Child. Hosp., [3]Dept. Surg., Harvard Med. Sch., [4]Dept. Microbiol., Harvard Med. Sch.)

FL4-11/P2-109

The role of PLC and extracellular Ca^{2+} influx in the inflammation induced by *Pg* infection

◯Masaaki Nakayama[1,2], Mariko Naito[3], Ikue Tosa[1], Naoya Ohara[1,2,4] ([1]Dept. Oral Microbiol., Okayama Univ. Fac. Med. Dent. Pharm. Sci., [2]ARCOCS, Okayama Univ. Dent. Sch., [3]Dept. Microbiol. Oral Infect., Nagasaki Univ. Grad. Sch. Biomed. Sci., [4]Res. Ctr. Intest. Health Sci., Okayama Univ.)

FL4-12/P2-111

Red ginseng extracts have role of inhibition of toxin production by Staphylococcus aureus

◯Rinko Moriguchi[1], Akari Shinohara[2], Dendi Krisna Nugraha[3], Ichiro Nakagawa[4], Yasuhiko Horiguchi[3], Mayuko Osada-Oka[1,2] ([1]Food Hyg. and Environ Health, Grad. Sch. Life and Environ. Sci., Kyoto Pref. Univ., [2]Food Hyg. and Environ. Health, Fac. of Agr. and Food Sci., Kyoto Pref. Univ., [3]Dept. Mol. Bac., Res. Inst. for Microb. Dis., Osaka Univ., [4]Dept. Microb., Grad. Sch. Med., Kyoto Univ.)

FL4-13/P2-112

The role of T3SS-2 effector, SseF, on macrophage cell death induced by Salmonella infection

◯Risa Ohshima, Takeshi Haneda, Masahiro Ito, Tsuyoshi Miki, Yun-Gi Kim (Dept. Microbiol. Sch. Pharm. Kitasato Univ.)

FL4-14/P2-121

***Acinetobacter* LPS aggravates infection severity through gasdermin D-mediated cell membrane rupture**

◯Yasuyuki Matsuda[1], Hajime Yamauchi[1], Go Kamoshida[2], Tsukasa Shiraishi[3], Shin-ichi Yokota[3], Hideki Hara[1] ([1]Dept. Infect. Dis., Div. Microbiol. Immunochem., Asahikawa Med. Univ., [2]Dept. Infect. Cont. Sci., Meiji Pharm. Univ., [3]Dept. Microbiol., Sch. Med., Sapporo Med. Univ.)

FL4-15/P2-122

Genetic diversity of paired receptors and their bacterial ligands suggest host-bacteria co-evolution

◯Gen Hasegawa[1], Kouyuki Hirayasu[1], Yifan Li[1], Hisashi Arase[2,3,4], Masaya Yamaguchi[4,5,6,7], Shigetada Kawabata[4,7], Rikinari Hanayama[1] ([1]Adv. Prev. Med. Sci. Res. Cen., Kanazawa Univ., [2]Dept. Immunochem., RIMD, Osaka Univ., [3]Lab. Immunochem., IFReC, Osaka Univ., [4]CiDER, Osaka Univ., [5]Bioinform. Res. Unit, Osaka Univ. Grad. Sch. Dent., [6]Bioinform. Cent., RIMD, Osaka Univ., [7]Dept. Microbiol., Osaka Univ. Grad. Sch. Dent.)

FL4-16/P2-126

IL-8 inducing activity of periodate-oxidized peptidoglycan from lactic acid bacteria

◯Sho Noguchi, Sakura Onoue, Kazuyoshi Kawahara (Dept. Biosci., Col. Sci. Eng., Kanto Gakuin Univ.)

FL4-17/P2-128

Supersulfides enhance neutrophil-mediated bacterial killing

◯Tomohiro Sawa[1], Azizur Rahman[1], Touya Toyomoto[1], Hiroyasu Tsutsuki[1], Takaaki Akaike[2] ([1]Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., [2]Dept. Environ. Sci. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med.)

FL4-18/P2-129

Characterization of outer membrane vesicles of *E. coli* BL21 and the isogenic lipid A mutant strains

◯Ryunosuke Tominaga[1,2], Kimihiro Abe[1], Tomoyo Nakamura[2,3], Tomohiko Nishino[2,3], Takehiro Yamaguchi[1], Yukihiro Akeda[1], Ryoma Nakao[1] ([1]Dept. Bacteriol. I, Natl. Inst. Infect. Dis., [2]Grad. Sch. Bionics, Tokyo Univ. Technol, [3]Sch. Biosci. Biotechnol.,Tokyo Univ. Technol.)

FL4-19/P2-130

Antimicrobial peptide LL-37 induces apoptosis in senescent alveolar epithelial A549 cells

◯Kazuki Sanata[1], Kaori Suzuki[2], Yumi Kumagai[2], Toshiaki Iba[1], Isao Nagaoka[1] ([1]Fac. Med. Sci., Juntendo Univ., [2]Dept. Biochem. Syst. Biomed., Juntendo Univ. Grad. Sch. Med.)

FL4-20/P2-137

***Polygonum tinctorium* extract reduces MRSA virulence via extracellular vesicle disruption**

◯Naoko Watabe[1], Phawinee Subsomwong[1], Kyosuke Yamane[2], Krisana Asano[1,3], Akio Nakane[3] ([1]Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., [2]Ushio Inc., [3]Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med.)

FL4-21/P2-139

Probiotic effect of Bacillus natto with antibacterial activity

◯Ryosuke Kadoya[1], Momoka Nakatani[1], Kotone Kawashima[1], Yuuka Yasuda[1], Kaori Suzuki[2], Hikaru Ikarugi[2], Sayumi Fukuda[2], Takanobu Nishikawa[2] ([1]Dept. Food and Nutrition, Sch. Life Stud., Sugiyama Jogakuen Univ., [2]Dept. Natto Research and Development, Takanofoods Co.,Ltd)

FL4-22/P2-140

Characterization and identification of antibacterial substances produced by Aeribacillus composti

◯Emika Inoue[1], Yoji Kato[1], Mana Yoneyama[1], Masahiro Hayashi[1], Hideyuki Arimitsu[1] ([1]Dept. Microbiol., Sch. Human Sci. Env., Univ. of Hyogo, [2]Div. Anaerobe Res., Inst. for Glyco-core Res., Gifu Univ.)

FL4-23/P2-142

Overexpression of YaiX confers drug resistance and increases virulence in Escherichia coli

◯Kinuka Hongu[1], Kazuya Ishikawa[1], Tomoki Kosaki[1], Shin-Ichi Miyoshi[2,3], Kazuyuki Furuta[1], Chikara Kaito[1] ([1]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [2]Grad. Sch. Med. Dent. Pharm. Sci., Sch. Pharm. Sci., Okayama Univ., [3]Res. Cent. Intest. Health Sci., Okayama Univ.)

FL4-24/P2-143

Isolation and antibacterial evaluation of bacteriophages targeting Enterococci

◯Bingxin Song[1,2], Miki Kawada-Matsuo[1], Hideki Shiba[2], Hitoshi Komatsuzawa[1] ([1]Dept. Bacteriol., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., [2]Dept. Biological Endodont., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ.)

FL4-25/P2-146

Establishing a library of Cas13a phage capsids for the elimination of CRC-associated *E. coli*

◯Ola Alessa[1], Yoshifumi Aiba[1], Kanate Thitiananpakorn[1], Kotaro Kiga[1,2], Shinya Watanabe[1], Kazuhiko Miyanaga[1], Tan XinEe[1], Teppei Sasahara[1], Longzhu Cui[1] ([1]Div. Bacteriol, Sch. Med., Jichi Med. Univ., [2]Research Center for Drug and Vaccine Development, NIID)

FL4-26/P2-149

Analysis of S.capitis strain with antibacterial activity against antimicrobial resistant bacteria

◯Keijuro Ohdan[1,2], Yujin Suzuki[1], Miki Matsuo[1,3], Junzo Hisatsune[3,4], Tomonao Aikawa[2], Motoyuki Sugai[3,4], Hitoshi Komatsuzawa[1,3] ([1]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Dept. Oral and Maxillofacial Surgery., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [3]Proj. Res. Ctr. for Nosocominal Infectious Diseases, Hiroshima Univ., [4]Antimicrobial Resistance Res. Ctr., National Institute of Infectious Diseases)

FL4-27/P2-153

Visualization of bacterial growth using Salmonella, antibacterial properties of copper-iron alloys

◯Yutaka Midorikawa (Fac. Bioresources, Mie Univ.)

FL4-28/P2-154

Development of a Neonatal Mouse Model for Evaluating MRSA Infection and Phage Therapy

◯Yeo Syin Lian Adeline, XinEe Tan, Yoshifumi Aiba, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

FL4-29/P2-155

Development of an effective antibiofilm therapy based on phage-gold nanorod conjugates

◯Sarangi Jayathilake, Tomofumi Kawaguchi, Srivani Veeranarayanan, Palaninathan Vivekanandan, Hossain Razib, Kanate Thitiananpakorn, Shinya Watanabe, Longzhu Cui (Dept. Bacteriol., Sch. Med., Jichi Med. Univ.)

FL4-30/P2-164

Red ginseng increases antibiotic sensitivity of methicillin-resistant Staphylococcus aureus

◯Natsumi Misao[1], Akari Shinohara[2], Dendi Krisna Nugraha[3], Ichiro Nakagawa[4], Yasuhiko Horiguchi[3], Mayuko Osada-Oka[1,2] ([1]Food Hyg. and Environ Health, Grad. Sch. Life and Environ. Sci., Kyoto Pref. Univ., [2]Food Hyg. and Environ. Health, Fac. Agr. and Food Sci., Kyoto Pref. Univ., [3]Dept. Mol. Bac., Res. Inst. for Microb. Dis., Osaka Univ., [4]Dept. Microb., Grad. Sch. Med., Kyoto Univ.)

Poster

1. Taxonomy / Epidemiology /Infectious diseases -a. Phylogenetics, taxonomy and strain typing

P1-001

The symbiotic bacteria of Paramecium nephridiatum discovered through long-read sequencing

◯Masato Tachibana[1], Shintaro Maeno[1], Hideo Dora[2], Kenta Watanabe[3], Takashi Shimizu[3], Masahisa Watarai[3] ([1]Org. Res. Ini., Yamaguchi Univ., [2]Ins. Ana. Cen., Shizuoka Univ., [3]Joi. Fac. Vet. Med., Yamaguchi Univ.)

P1-002

Differentiating closely related *Actinotignum* species using a novel genetic marker

◯Junko Tomida, Ryo Kutsuna, Ryota Mori, Yoshiaki Kawamura (Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ.)

P1-003

Genomic analyses of a toxinotype-untypable *Clostridium perfringens* strain isolated from a cow

◯Takashi Mada[1], Kenta Ochi[2], Mariko Okamoto[1], Daisuke Takamatsu[1,3] ([1]Anim. Infect. Dis. Res. Div., Natl. Inst. Anim. Hlth., NARO, [2]Imabari Br., Toyo LHSC, Ehime Pref., [3]Grad. Sch., Gifu Univ.)

P1-004/FL1-01

Proposal of *Lysobacter claricitrinus* sp. nov., isolated from soil in Japan

◯Ryota Mori, Ryo Kutsuna, Junko Tomida, Yoshiaki Kawamura (Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ.)

P1-005/FL1-02

Toxin-related genes and MLST analysis of *Bacillus cereus* from edible insects retailed in Japan

◯Yukako Shimojima[1], Kurumi Oka[1], Hibiki Tsuchiya[1], Yumiko Okada[2], Yukio Morita[3] ([1]Dept. Food Life Sci., F. Food Nutr. Sci., Toyo Univ., [2]Div. Biomed. Food Res., Nat. Inst. Health Sci., [3]Sch. Vet. Med., Azabu Univ.)

P1-006

Genomic analysis of *Listeria monocytogenes* isolated from patients and foods in Japan

◯Yumiko Okada[1], Tomoko Nishida[1], Shiori Yamamoto[2], Ken-ichi Lee[3], Hidemasa Izumiya[3], Yukari Nishino[4], Miki Ida[4], Yukako Shimojima[5], Akiko Tomaru[1] ([1]Div. Biomed. Food Res., Nat. Inst. Health Sci., [2]Dept. Nutr. Diet., Kamakura Womens Univ., [3]Dept. Bacteriol. I, NIID, [4]Dept. Bacteriol., Tokyo Met. Res. Inst., [5]Dept. Food Life Sci., F. Food Nutr. Sci., Toyo Univ.)

P1-007

Detection of *Orientia tsutsugamushi* from bat-related mites in Yaeyama Islands, Okinawa

○Yongjin Qiu[1], Hisao Tamura[2], Kuniko Kawai[3], Ryo Nakao[1] ([1]Lab. Parasitol., Grad. Sch. Vet. Med., Hokkaido Univ., [2]The Asian Bat Res. Inst., [3]Dept. Biol., Sch. Biol. Sci., Tokai Univ.)

P1-008/FL1-03

Plasmid structure prediction using Upstream Genetic Structures (UGS) and replicon types

○Sora Miyazato[1], Nobuyoshi Yagi[2], Itaru Hirai[1] ([1]Lab. Microbiol., Dept. Health Sci., Univ. Ryukyus, [2]Lab. Clin. Physiol., Dept. Health Sci., Univ. Ryukyus)

P1-009

Genetic diversity and genome stability in clinical strains of *Mycobacterium shinjukuense*

○Takayuki Wada[1,2], Hiharu Inoue[1], Shiomi Yoshida[3], Yoshiro Murase[4], Chie Nakajima[5,6], Yasuhiko Suzuki[5,6], Satoshi Mitarai[4] ([1]Dept. Microbiol. Grad. Sch. Hum. Life Ecol., Osaka Metro. Univ., [2]Osaka Intl. Res. Center Infect. Dis., Osaka Metro. Univ., [3]Clin. Res. Center, NHO Kinki Chuo Chest Med. Center, [4]Dept. Mycobacterium Ref. Res., Res. Inst. Tuberculosis, [5]Intl. Inst. Zoonosis Control, Hokkaido Univ., [6]Insti. Vac. Res. Dev., Hokkaido Univ.)

P1-010

Phylogenetic and comparative genomics analysis of Bordetella parapertussis isolated in Japan

○Kentaro Koide, Kazunari Kamachi, Nao Otsuka, Masataka Goto, Tsuyoshi Kenri (Dept. Bact. II, Natl. Inst. Infect. Dis.)

1. Taxonomy / Epidemiology /Infectious diseases -b. Epidemiology and molecular epidemiology

P1-011

Clinical utility of new MLST scheme in vancomycin-resistant *Enterococcus faecium* outbreak analysis

○Masashi Yanagihara[1], Masaki Karino[1,2,3], Tetsuya Harada[4], Megumi Sugo[3], Mizuki Karino[3], Hirofumi Ohtaki[2], Hiroyuki Hanada[3], Toru Takano[3], Masaya Yamato[3], Shigefumi Okamoto[1] ([1]Dept. Clin. Lab. Biomed. Sci., Grad. Sch. Med., Osaka Univ., [2]Dept. Med. Tech., Fac. Health Sci., Kansai Health Sci. Univ., [3]Rinku Gen. Med. Ctr., [4]Div. Microbiol., Osaka Inst. Pub. Health)

P1-012/FL1-04

Virulence-type IV secretion system and cell wall-anchored protein folding structures in CA-MRSA/J

○Tsai-Wen Wan[1,2], Lee-Jene Teng[2], Tatsuo Yamamoto[1] ([1]Dept. Epidemiol. Genomics Evol., Intl. Med. Edu. Research Center, [2]Dept. Clin. Lab. Sci. Med. Biotechnol., National Taiwan Univ.)

P1-013

SNPcaster: core genome-SNP analysis pipeline for bacteria

○Ken-ichi Lee[1], Masatomo Morita[1], Hidemasa Izumiya[1], Sunao Iyoda[1], Keiji Nakamura[2], Toshiaki Yamagishi[1], Yukihiro Akeda[1] ([1]Dept Bacteriol. I, Natl. Inst. Infect. Dis., [2]Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ.)

P1-014

Isolation of M1UK lineage from patients with Group A Streptococcus infections in Toyama Prefecture

○Kazuki Saito, Kaho Ikeda, Hina Shimizu, Junichi Kanatani, Keiko Kimata, Moe Oshima, Kazunori Oishi (Dept. Bacteriol., Toyama Inst. Health)

P1-015

A food-poisoning case due to Staphylococcus aureus carrying sep and the characteristics of isolates

○Rie Doi, Risa Yoshida, Yuka Yamazaki, Shunsuke Kubokawa, Yuki Koyama, Yusuke Chiba, Kazumi Narisawa (Saitama Inst. Public Health)

P1-016

Population structure and epidemic dynamics of *Salmonella* Dublin isolated from cattle in Japan

○Nobuo Arai[1], Makiko Yamada[2], Ayano Yamamoto[3], Mika Matsumoto[4], Yukino Tamamura[1], Anna Momoki[1], Ayako Watanabe[1], Taketoshi Iwata[1], Masato Akiba[5], Masahiro Kusumoto[1,6] ([1]Natl. Inst. Anim. Health, NARO, [2]Abashiri Live. Hygi. Serv. Cent., Hokkaido Pref., [3]Tokachi Live. Hygi. Serv. Cent., Hokkaido Pref., [4]Inst. Food Res., NARO, [5]Lab. Vet. Bac., Dept. Pathobiol., Rakuno Gakuen Univ., [6]Grad. Sch. Vet. Sci., Osaka Metro. Univ.)

P1-017

Molecular epidemiological analysis of PVL-positive MSSA isolates in Japan

Rikuto Kurihara, Hiroshi Kaneko, ○Hidemasa Nakaminami (Dept. Clin. Microbiol., Sch. Pharm., Tokyo Univ. Pharm. Life Sci.)

P1-018/FL1-05

Classification of clinical isolates of *Pseudomonas aeruginosa* based on virulence genes

○Takayuki Sano[1], Kohei Yamazaki[1], Hiroki Kitagawa[2], Kazuo Imai[3], Shintarou Ichimura[3], Hideharu Hagiya[4], Takashige Kashimoto[1] ([1]Lab. Vet. Public Health. Sch. Vet. Med., Kitasato Univ., [2]Dept. Infect. Dis., Hiroshima Univ. Hosp., [3]Central Lab., Saitama Med Univ. Hosp., [4]Dept. Infect. Dis., Okayama Univ. Hosp.)

P1-019

Occurrence and cross contamination of *Escherichia albertii* in retail chicken outlets in Bangladesh

○Atsushi Hinenoya[1,2,3,4], Jayedul Hassan[5], Kishor Sosmith Utsho[5], Susmita Karmakar[5], Md. Wohab Ali[5], Sharda Prasad Awasthi[1,2,3], Chiharu Uyama[4], Noritoshi Hatanaka[1,2,3,4], Shinji Yamasaki[1,2,3,4] ([1]Grad. Sch. Vet. Sci., Osaka Metrop. Univ., [2]Asian Health Sci. Res. Inst., Osaka Metrop. Univ., [3]Osaka Int. Res. Cent. Infect. Dis., Osaka Metrop. Univ., [4]Fac. Vet. Sci., Sch. Life Environ. Sci., Osaka Pref. Univ., [5]Dept. Microbiol. Hyg., Bangladesh Ag. Univ.)

P1-020

Emergence of new subtypes of US *Neisseria meningitidis* urethritis clade isolates in Japan

○Hideyuki Takahashi[1], Masatomo Morita[1], Mitsuru Yasuda[2], Yuki Ohama[1], Ken Shimuta[1], Yukihiro Akeda[1], Makoto Ohnishi[3] ([1]Dept. Bacteriol 1, Nat. Inst. Infect. Dis., [2]Dept. Infect. Cont. Lob. Med., Sch. Med., Sapporo Univ., [3]Cent. Infect. Dis. Res.)

P1-021

Genome Characterization of *mecA*-positive *M. fleurettii*: the origin and evolution of SCC/SCC*mec* units

○Noriko Urushibara[1], Meiji Soe Aung[1], Takashi Sasaki[2], Mitsuyo Kawaguchiya[1], Nobuhide Ohashi[1,3], Nobumichi Kobayashi[1] ([1]Dept. Hygiene, Sch. Med., Sapporo Medical Univ., [2]Animal Research Center, Sch. Med., Sapporo Medical Univ., [3]Dept. Oral Surgery, Sch. Med., Sapporo Medical Univ.)

P1-022

***Salmonella* status monitoring using bulk milk and calf sera and antibiogram of *Salmonella* isolates**

○Masashi Okamura[1], Chihiro Aikawa[1], Yoshimasa Sasaki[1], Shotaro Suzuki[1], Nobuyuki Kusaba[2] ([1]Dept. Vet. Med., Obihiro Univ. Agri. Vet. Med., [2]Field Center Anim. Sci. Agri., Obihiro Univ. Agri. Vet. Med.)

1. Taxonomy / Epidemiology /Infectious diseases -d. Methods for detection, identification, and diagnosis

P1-023/FL1-06

Development of detection system for *S. intermedius* with isothermal nucleic acid amplification assay

○Asuka Shibatou[1], Toshifumi Tomoyasu[1,2], Hideaki Nagamune[2], Atsushi Tabata[1,2] ([1]Dept. Biosci & Bioindust., Fac. Biosci & Bioindust., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

P1-024/FL1-07

Evaluation of the usefulness of tuberculosis diagnostic method by detection of Ag85B antibody titer

○Tomoya Yamazaki[1], Desak Nyoman Suria Suametria Dewi[1,2], Yutaka Yoshida[1], Satoshi Ishikawa[1,3], Ni Made Mertaniasih[4], Yuriko Ozeki[1], Amina Shaban[1], Akihito Nishiyama[1], Yoshitaka Tateishi[1], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]Dept. Microbiol., Sch. Med., Ciputra Univ., [3]Fukuyama Zoo, [4]Dept. Microbiol., Sch. Med., Airlangga Univ.)

P1-025/FL1-08

Development of anti-*Helicobacter cinaedi* antibody titer assay

○Toshihiro Fukai[1], Sho Yoshida[1], Yusuke Murakami[1], Masaki Sato[1], Sae Aoki[2], Emiko Rimbara[2], Hideki Araoka[3], Jien Saito[4] ([1]EIKEN CHEMICAL CO., LTD., [2]Dept. Bacteriol. II, NIID, [3]Dept. Infect. Dis., Toranomon Hospital, [4]Dept. Cardiovasc. Surg., Nagoya City Univ., NEMC)

P1-026/FL1-09

Diagnosis of Latent Tuberculosis Infection: Insights from a Cross-Sectional Study in Kwale, Kenya

○Yuriko Ozeki[1], Tomoya Yamazaki[1], Amina Kaboso Saban[1], Yoshitaka Tateishi[1], Akihito Nishiyama[1], Thoru Abe[1], Shinjiro Hamano[2], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]Dept. Paragitol., Nekken, Nagasaki Univ.)

P1-027/FL1-10

Development and application of PCR-based *Leptospira* serogroup identification for Japanese isolates

○Kazuki Kiuno[1], Tetsuya Kakita[2], Kyosuke Takabe[3], Ai Takano[4], Nobuo Koizumi[3], Hiroshi Shimoda[1], Daisuke Hayasaka[1] ([1]Dept. Micro., Vet. Med., Yamaguchi Univ., [2]Inst. Health & Environ., Okinawa Pref., [3]Dept. Bacteriol. I, Nati. Inst. Infect. Dis., [4]Dept. Epi., Vet. Med., Yamaguchi Univ.)

1. Taxonomy / Epidemiology /Infectious diseases -e. Others

P1-028/FL1-11

Effects of oral resident bacteria in the genus *Streptococcus* on risk of ocular infections

○Yuna Kimura, Ai Watanabe, Taizo Sumide (Menicon Co., Ltd.)

P1-029/FL1-12

Redesigning of the Microorganism Risk Information List to consider changes in scientific names

○Akane Kimura, Aya Uohara, Akiko Ishida, Shoko Ohji, Ryosuke Nakatani, Takeru Nakazato, Natsuko Ichikawa (NITE-NBRC)

P1-030/FL1-13
Evaluation of phage therapy for vancomycin-resistant Enterococcus infection in mice
◯Shinjiro Ojima[1], Wakana Yamashita[1,2], Kotaro Kiga[1] ([1]Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [2]Sch. Adv. Sci. Engr., Waseda Univ.)

2. Ecology-a. Ecology, symbiosis and environmental microbes

P1-031
Isolation of gut microbes using liquid-liquid co-culture and discussion of symbiotic relationships
◯Atsushi Hisatomi, Moriya Ohkuma, Mitsuo Sakamoto (RIKEN BRC-JCM)

P1-032
Bacterial and environmental factors that determine the bacterial backpacking in symbiotic amoebae
◯Ruo Takeda, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

P1-033/FL1-14
Evaluation of the anti-obesity effect of Christensenella minuta feeding using Caenorhabditis elegans
◯Kanamu Chikuba[1,2], Yoshihiko Tanimoto[1,2,3], Eriko Nakadai[1,2,3] ([1]Grad. Sch. Human Life & Ecology, Osaka Metropolitan Univ., [2]Grad. Sch. Biostudies, Kyoto Univ., [3]LiMe. Kyoto Univ.)

P1-034/FL1-15
An investigation into the benefits of Legionella to their protist hosts
◯Kenta Watanabe, Takashi Shimizu, Masahisa Watarai (Dept. Vet. Med., Yamaguchi Univ.)

P1-035/FL1-16
Analysis of the mechanism of eDNA release during biofilm formation in *Clostridium perfringens*
◯Takeshi Ando[1], Nozomu Obana[2,3], Nobuhiko Nomura[2,4] ([1]Degree. Programs. Life. Earth. Sci., Univ. Tsukuba, [2]MiCS, Univ. Tsukuba, [3]TMRC, Inst. Med., Univ. Tsukuba, [4]Fac. Life Environ. Sci., Univ. Tsukuba)

P1-036
Bacterial Diversity and Potential Pathogenic Bacteria on Mobile Phones of Thai Medical Cadets
◯Tanit Boonsiri[1], Passara Wongthai[1], Pimwan Thongdee[1], Paphavee Lertsethtakarn[2], Kasidach Chuenchom[3], Kanlaya Krataipech[3], Jantima Raksatham[3], Pongthorn Narongroeknawin[1], Putt Narongdej[1] ([1]Dept. Microbiol., Phramongkutklao College of Med., Thailand, [2]Dept. Bacterial and Parasitic Diseases, Armed Forces Res. Inst. of Med. Sci., Thailand, [3]Dept. Biol, Sch. Science, King Mongkut Inst. of Technol. Ladkrabang, Thailand)

P1-037
In vitro evaluation of the efficacy of various disinfectants against Streptococcus spp. biofilms
◯Marina Komatsubara[1], Serika Kuwagi[1], Kazuyoshi Gotou[1], Jumpei Uchiyama[2], Akari Watanabe[3], Kenji Yokota[1] ([1]Grad. Sch. Health Science, Okayama Univ., [2]Dept. Path. Bacteriol., Grad. Sch. Med. Dent. Pharm., Okayama Univ., [3]Oral Health Care and Rehabilitation, Inst of Biomed. Sci. Tokushima Univ.)

P1-038
Occurrence of Legionella pneumophila in Hospital Water Systems at Phramongkutklao Hospital, Thailand
◯Pongthorn Narongroeknawin[1], Tanit Boonsiri[1], Nitchatorn Sungsirin[1], Piyanate Kesakomol[1], Sirachat Nitchapanit[1], Pimwan Thongdee[1], Passara Wongthai[1], Anuthida Kuisakhon[2], Poorin Phuminart[2], Veerachai Watanaveeradej[3] ([1]Dept. Microbiol., Phramongkutklao College of Medicine, Thailand, [2]Dept. Biol., Sch. Sci., King Mongkut Inst. of Technol. Ladkrabang, Thailand, [3]Dept. Peds, Phramongkutklao Hospital, Thailand)

P1-039
Analysis of antagonistic effect of commensal bacteria on MRSA
◯Akiko Tajima[1,2], Yuki Kinjo[1,2] ([1]Dept. Bacteriol. The Jikei Univ. Sch. Med., [2]Jikei Ctr. Biofilm Sci. & Tech.)

P1-040
Undescribed bacterial species isolated using a novel plant-derived culture medium
◯Fumiaki Tabuchi[1], Masanobu Miyauchi[1], Kazuhiro Mikami[1,2], Masaki Ishii[3], Atsushi Miyashita[1] ([1]Lab. Antifungal Immunobiol., Inst. Med. Mycol., Teikyo Univ., [2]Dept. Med. Tech., Grad. Sch. Clinical Lab. Sci., Teikyo Univ., [3]Lab. Mol. Cell Biol., Sch. Pharm., Musashino Univ.)

P1-041
Analysis of the co-aggregation mechanism of *Fusobacterium nucleatum* and *Streptococcus mutans*
◯Hideo Yonezawa, Eitoyo Kokubu, Yuichiro Kikuchi, Kazuyuki Ishihara (Dept. Microbiol., Tokyo Dent. Col.)

P1-042/FL1-17
Cross-feeding analysis of Streptococcus and Rothia isolated from the oral cavity
Soutaro Hanawa[1,2], ◯Aoi Son[2], Kazuma Noguchi[1], Takayuki Ohmae[1], Kyohei Yoshikawa[1], Yoshiyuki Matsuo[3], Tamotsu Kato[5], Koji Yamanegi[4], Satoshi Ishido[2], Hiromitsu Kishimoto[1] ([1]Dept. Oral and Maxillofacial Surgery, Sch. Med., Hyogo Medical Univ., [2]Dept. Microbiol., Sch. Med., Hyogo Medical Univ., [3]Dept. Inst. Bionedical Science, Kanasai Med. Univ., [4]Dept. Pathology, Sch. Med., Hyogo Medical Univ., [5]IMS, Riken)

2. Ecology -b. Microbiota

P1-043/FL1-18
Phosphofructokinase deficiency enhances growth of Escherichia coli in plant extracts
◯Saki Yamaguchi, Kazuya Ishikawa, Kazuyuki Furuta, Chikara Kaito (Lab. Mol. Biol., Fac. Pharm., Okayama Univ.)

3. Physiology / Structural biology-c. Signal transduction (intracellular and intercellular)

P1-044
The Role of MreB in the Intrabacterial Nanotransportation System for VacA in *Helicobacter pylori*
◯Hong Wu[1], Yoshihiko Fujioka[1], Noritaka Iwai[2], Shoichi Sakaguchi[1], Youichi Suzuki[1], Takashi Nakano[1] ([1]Dept. Microbiol. & Infect. Cont., Fac. Med., Osaka Med. & Pharm. Univ., [2]Dept. Life Science and Technology, Science Tokyo)

P1-045
***Staphylococcus aureus* extracellular vesicles enhance *Pseudomonas aeruginosa* pathogenicity via PslE**
Phawinee Subsomwong[1], Naoko Watabe[1], Akio Nakane[2], ◯Krisana Asano[1,2] ([1]Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., [2]Depart. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med.)

P1-046/FL1-19
Cleavage cascade of the sigma regulator FecR orchestrates TonB-dependent signal transduction
◯Tatsuhiko Yokoyama[1], Ryoji Miyazaki[2], Takehiro Suzuki[3], Naoshi Dohmae[3], Hiroki Nagai[1], Tomoya Tsukazaki[2], Tomoko Kubori[1], Yoshinori Akiyama[4] ([1]Dept. Microbiol., Grad. Sch. Med., Gifu Univ., [2]Grad. Sch. Sci. Tech., NAIST, [3]CSRS, RIKEN, [4]Inst. Life Med. Sci., Kyoto Univ.)

P1-047
Chemotactic responses and motilities of *Clostridium* spp.
◯So-ichiro Nishiyama, Shohei Koike, Shota Asuke, Takumu Akatsuka (Fac. App. Life Sci., Niigata Univ. Pharm. Med. Life Sci.)

P1-048
Multiple ligand recognition mechanisms of the Escherichia coli membrane stress sensor kinase BaeS
◯Hirotaka Tajima[1,2], Riku Takei[3], Kentaro Yamamoto[4], Ikuro Kawagishi[1,2,3] ([1]Dept. Frontier Biosci., Hosei Univ., [2]Res. Cen. Micro-Nano Tech., Hosei Univ., [3]Grad. Sch. Sci. Eng., Hosei Univ., [4]Dept. Mycobacteriol., Lepr. Res. Ctr., NIID)

3. Physiology / Structural biology -d. Cell surface structure, membrane structures and cytoskeleton

P1-049
Elucidating the role of MamJ in the polymerization process of actin-like protein MamK
◯Yuanyuan Pan[1], Yoshihiro Fukumori[2], Azuma Taoka[2,3] ([1]Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., [2]Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., [3]NanoLSI, Kanazawa Univ.)

P1-050/FL1-20
Characterization of novel actin-like protein Mad28 encoded in magnetotactic *Thermodesulfobacteriota*
◯Rino Shimoshige[1], Hirokazu Shimoshige[2], Yoshihiro Fukumori[3], Azuma Taoka[3,4] ([1]Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., [2]Bio-Nano Electronics Research Centre, Toyo Univ., [3]Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., [4]NanoLSI, Kanazawa Univ.)

P1-051
The role of magnetosome surface protein MamA in the dispersion of magnetosome particles
◯Ryuki Ohira[1], Yuta Moriguchi[2], Yoshihiro Fukumori[2], Azuma Taoka[2,3] ([1]Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., [2]Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., [3]NanoLSI, Kanazawa Univ.)

P1-052/FL1-21
Nanoscale AFM measurement of cell wall of Colletotrichum orbiculare
◯Jun Tanaka[1], Keisuke Miyazawa[1,2], Naoyoshi Kumakura[3], Kaisei Matsumori[1], Ken Shirasu[3], Takeshi Fukuma[1,2] ([1]Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., [2]WPI-NanoLSI, [3]RIKEN)

P1-053
Crystal structure of the MlaC-MlaD complex involved in the periplasmic phospholipid transport
Sayaka Ozu, Daiki Matsumoto, ◯Yasunori Watanabe (Fac. Sci., Yamagata Univ.)

P1-054
Development of the APLICoT Method for Unraveling the Essential Role of GrpE
◯Liz Ishikawa[1], Rintaro Shigemori[1,2,3], Keiichiro Hara[1,2,3], Yuki Kinjo[1,2], Shinya Sugimoto[1,2,3] ([1]Dept. Bacteriol., Jikei Univ. Sch. Med., [2]Cent. Biofilm Sci. Technol., Jikei Univ. Sch. Med., [3]Lab. Amyloid Regulation, Jikei Univ. Sch. Med.)

P1-055

The diversity of rhamnosyltransferases in serotype-specific glycopeptidolipid biosynthesis

○Nagatoshi Fujiwara[1], Makoto Nakaya[2], Yoshihiko Hoshino[2], Shinji Maeda[3] ([1]Dept. Food and Nutrition, Facul. Contemp. Hum. Life Sci., Tezukayama Univ., [2]Nat. Inst. Infec. Disea., Lep. Res. Cent., [3]Facul. Pharm., Hokkaido Univ. Scie.)

P1-056/FL1-22

Effects of membrane vesicles released by S.mutans on bone resorption during orthodontic force

○Kosuke Matsuura[1], Shinichi Negishi[1], Hidenobu Senpuku[2] ([1]Dept. Orthodontics., Sch. Dent., Nihon Univ. Matsudo, [2]Dept. Microbiol. Immunol., Sch. Dent., Nihon Univ Matsudo)

P1-057

Increased membrane vesicle production by altered membrane conditions in *Escherichia coli*

○Shun Tanishita[1], Erika Suzuki[1], Yuhei Tahara[2], Makoto Miyata[2], Hiroyuki Futamata[1,3], Yosuke Tashiro[1] ([1]Grad. Sch. Intgr. Sci. Technol., Shizuoka Univ., [2]Grad. Sch. Sci., Osaka Metropolitan Univ., [3]Res. Inst. Green Sci. Technol., Shizuoka Univ.)

3. Physiology / Structural biology -f. Others

P1-058/FL1-23

Unraveling Biofilm Initiation through Active Matter Physics and Microfluidics Engineering

○Fumiaki Yokoyama, Kazumasa Takeuchi (Dept. Phys., Sch. Sci., UTokyo)

P1-059

DNA phase separation mechanism by mycobacterial dormancy-inducing intrinsically disordered protein

○Akihito Nishiyama[1], Kensuke Nojiri[1], Noriyuki Kodera[2], Tsuyoshi Shirai[3], Kosuke Ito[4], Kouta Mayanagi[5], Masahiro Shimizu[6], Mika Shioya[1], Yutaka Yoshida[1], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Niigata Univ. Sch. Med., [2]NanoLSI, Kanazawa Univ., [3]Dept. Biosci., Nagahama Inst. Bio-Sci. & Technol., [4]Grad. Sch. Sci. & Technol., Niigata Univ., [5]Dept. Drug Discov. Struct. Biol., Grad. Sch. Pharm. Sci., Kyushu Univ., [6]Inst. Integr. Radiat. Nuclear Sci., Kyoto Univ.)

P1-060

Staphylococcal nucleoid clogging enhances ureE expression and confers acid tolerance

○Yuri Ushijima[1], Tan Tin Ming[2], Mais Maree[1], Ryosuke L Ohniwa[1], Kazuya Morikawa[1] ([1]Inst. Med. Microbiol., Univ. Tsukuba, [2]Grad. Sch. Comprehensive Human Sciences, Univ. Tsukuba)

P1-061

SpoIVA is an essential morphogenetic protein for a mature spore in Clostridium sporogenes NBRC 14293

○Ritsuko Kuwana[1], Bruno Dupuy[2], Isabelle Martin-Verstraete[2], Hiromu Takamatsu[1] ([1]Pharm. Sci. Setsunan. Univ., [2]Institut Pasteur)

P1-062

Analysis of the localization of housekeeping proteins during sporulation in Bacillus subtilis

○Hiromu Takamatsu, Ritsuko Kuwana (Pharm. Sci., Setsunan Univ.)

P1-063

Tolerance to oxidative stress by sulfide; quinone oxidoreductase in Mycobacterium smegmatis

○Yuichi Matsuo[1], Tomoo Shiba[2], Jun-ichi Kishikawa[2], Kenji Iyoda[2], Uta Nakai[2], Akina Ota[2], Tomohiro Sawa[3], Touya Toyomoto[3], Kiyoshi Kita[4,5], Daniel Ken Inaoka[4,6] ([1]Dept. Health Sciences., Sch. Med., Kumamoto Univ., [2]Dept. Appl. Biol., Grad Sch. Sci. Technol., Kyoto Inst of Technol., [3]Dept. Microbiol., Sch. Med., Kumamoto Univ., [4]Sch. Trop. Med. and Glob. Health, Nagasaki Univ., [5]Dept. Host-Defense Biochem., Inst. of Trop. Med. (NEKKEN), Nagasaki Univ., [6]Dept. Molecular Infection Dynamics, Inst. of Trop. Med. (NEKKEN), Nagasaki Univ.)

P1-064/FL1-24

Functional analyses of the cell wall-binding domain of autolysin in *Clostridium perfringens*

○Miyu Shiraga[1], Riyo Aono[2], Hirofumi Nariya[3], Nozomu Matsunaga[4], Hiroshi Sekiya[5], Eiji Tamai[5], Seiichi Katayama[4] ([1]Dept. Natural Sci., Grad. Sch. Sci. and Technol., Okayama Univ. Sci., [2]Dept. Med. Tech., Kagawa Pref. Univ. of Health Sci., [3]Dept. Food Sci., Fac. Human Life, Jumonji Univ., [4]Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., [5]Dept. Infec. Dis., Col. Pharm. Sci., Matsuyama Univ.)

4. Genetics / Genomics / Biotechnology-c. Gene regulation and transcriptome analysis

P1-065

Evaluating MDP1 gene regulation and its role in survival of Mycobacteria tuberculosis var. BCG

○Amina Kaboso Shaban[1], Geberemichal Geberetsadik[1,2], Mariko Hakamata[1,3], Hayato Takihara[4], Akihito Nishiyama[1], Yuriko Ozeki[1], Yoshitaka Tateishi[1], Takehiro Yamaguchi[1,5], Shujiro Okuda[4], Sohkichi Matsumoto[1,6] ([1]Dept. Bacteriol., Niigata Univ., [2]Biology Dept., Assosa Univ., Assosa, Ethiopia, [3]Respiratory Medicine and Infectious Disease Dept., Niigata Univ., [4]Bioinformatics Dept., Niigata Univ., [5]Pharmacology Dept., Osaka Metropolitan Univ., [6]Tuberculosis Lab. Tropical Disease Inst. Airlangga Univ., Indonesia)

P1-066

Regulation of iron Uptake machinery with curli formation via the BasS/BasR-CsgD cascade in *E. coli*

◯Nozomi Matsuyoshi[1,2], Hiroshi Ogasawara[2,3,4,5] ([1]Grad. Sch. Med., Sci. Tech., Shinshu Univ., [2]Res. Ctr. Adv. Sci. Tech., Div. Gene Res., Shinshu Univ., [3]Acad. Assy. Sch. Hum. SoSci. Inst. Hum., Shinshu Univ., [4]Rn. Ctr. Appl. Microbiol., Shinshu Univ., [5]Inst. Fiber Eng., Shinshu Univ.)

P1-067

Regulation of lateral flagellum by ArcB/ArcA two-component regulatory system in *Vibrio alginolyticus*

◯Moe Fujii[1], Kenji Yokota[2], Takehiko Mima[1] ([1]Microbiol., Dept. Med. Techn., Fac. Health Sci., Ehime Pref. Univ. Health Sci., [2]Okayama Univ. Grad. Sch. Health Sci.)

P1-068

Sponge RNAs: the regulators of bacterial small RNAs

◯Masatoshi Miyakoshi (Dept. Infect. Biol., Inst. Med., Univ. Tsukuba)

P1-069/FL1-25

TsrA-mediated gene regulation in *Vibrio parahaemolyticus*

◯Tan Paramita Wibowo Sutanto, Andre Pratama, Eiji Ishii, Tetsuya Iida, Shigeaki Matsuda (Dept. Bact. Infect., RIMD, Osaka Univ.)

P1-070

Phosphorothioate modification in *Helicobacter cinaedi* and its association with host response

◯Emiko Rimbara, Sae Aoki, Tsuyoshi Kenri (Bacteriology II, NIID)

P1-071

Oxidative stress promotes the expression of Mfa1 fimbriae in *Bacteroides vulgatus*

◯Emmanuel Munyeshyaka[1], Haruyuki Imaohji[1], Hisashi Yamasaki[2], Ayano Tada[1], Nafisa Tabassum[1], Tomomi Kuwahara[1] ([1]Dept. Microbiol., Sch. Med., Kagawa Univ., [2]Dept. Biology, Hyogo Med. Univ.)

P1-072/FL1-26

Function of phased A-tracts on α-toxin gene expression of *Clostridium perfringens virRS vrr* mutant

◯Manami Jou[1], Saya Matsui[2], Naoya Hashikawa[3], Hinata Sato[2], Kazuyoshi Aibara[2], Chiharu Tanaka[2], Hirofumi Nariya[4], Nozomu Matsunaga[3], Seiichi Katayama[3] ([1]Dept. Natural Sci., Grad. Sch. Sci. and Technol., Okayama Univ. Sci., [2]Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., [3]Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., [4]Dept. Food Sci., Fac. Human Life, Jumonji Univ.)

P1-073

Identification of genes involved in swarming motility in Vibrio alginolyticus

◯Mayu Kusunoki, Moe Fujii, Takehiko Mima (Microbiol., Dept. Med. Techn., Fac. Health Sci., Ehime Pref. Univ. Health Sci.)

4. Genetics / Genomics / Biotechnology -d. Genetic manipulation and analysis, biotechnology and synthetic biology

P1-074

Construction of knockout mutants in nontuberculous mycobacteria

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

P1-075

Natural competence in Porphyromonas gingivalis

◯Kimihiro Abe[1], Hiroko Yahara[2], Ryoma Nakao[1], Takehiro Yamaguchi[1], Yukihiro Akeda[1] ([1]Dept. Bacteriol. I, NIID, [2]Genome Med. Sci., NCGM)

P1-076

Effect of chromosome number variation on the growth phenotype of Vibrio cholerae

◯Shouji Yamamoto[1], Takamasa Azuma[2], Yasunori Saito[1], Ken-ichi Lee[1], Yukihiro Akeda[1] ([1]Dept. Bac. I., Natl. Inst. Infect. Dis., [2]Dept. Microbiol., Grad. Sch. Pharm. Sci, Kitasato Univ.)

P1-077

Development of highly efficient and convenient transformation method for minimal genome mycoplasma

◯Masaki Mizutani[1], John I Glass[2], Takema Fukatsu[3,4,5], Yo Suzuki[2], Shigeyuki Kakizawa[3] ([1]Dept. Phys., Gakushuin Univ., [2]Synt. Biol., J. Craig Venter Inst., [3]Bioproduct. Res. Inst., AIST, [4]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [5]Grad. Sch. Life. Environ. Sci., Univ. Tsukuba)

P1-078/FL1-27

Phage Displayed Peptides: Exploring Cancer Specificity and Therapeutic Potentials

◯Varsha Rani, Myat Thu, Vivekanandan Palaninathan, Srivani Veeranarayanan, Yoshifumi Aiba, Tan XinEe, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-079/FL1-28

Engineering of Phage capsid with antibiofilm enzyme targeting *Pseudomonas aeruginosa* biofilm

◯Esakkiraj Palanichamy, Shinya Watanabe, Geofrey Peterkins Kumwenda, Tomofumi Kawaguchi, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-080

Effect of the antibiotics prophylaxis on oral microbiota

◯Mayuko Takada[1,2], Akihiko Miyawaki[2], Mitsumasa Saito[1], Kazumasa Hukuda[1] ([1]Dept. Microbiol. Sch. Med., UOEH., [2]Dept. Dentistry and Oral Surgery. Hosp., UOEH)

P1-081/FL1-29

Understanding Bacteriophage Internalization Kinetics in Mammalian Cells

◯Takashi Sugano, Veeranarayanan Srivani, Yoshifumi Aiba, Kazuhiko Miyanaga, Tan XinEe, Kanate Thitiananpakorn, Shinya Watanabe, Longzhu Cui (Div. Bacteriology, Dept. Infection & Immunol., Sch. Med., Jichi Med. Univ.)

P1-082

Elongation, division and fusion manipulation in the minimal synthetic bacterium JCVI-syn3B

◯Algiffari Muhammad[1], Hana Kiyama[1], Makoto Miyata[1,2] ([1]Grad. Sch. Sci., Osaka Metropolitan Univ., [2]OCARINA, Osaka Metropolitan Univ.)

P1-083/FL1-30

Construction of novel expression vectors for *C. perfringens* and screening of xylan-degrading enzymes

◯Arisa Koizumi, Nanako Uchiyama, Shiho Kato, Ryuichi Moriyama, Shigeru Miyata (Grad. Sch. Biosci. Biotech., Chubu Univ.)

4. Genetics / Genomics / Biotechnology -e. Others

P1-084

Genetic variation of hemolysin co-regulated protein 1 of *Burkholderia pseudomallei*

◯Sarunporn Tandhavanant[1,2], Ratana Charoenwattanasatien[3], Andrey A Lebedev[4], Eric R Lafontaine[5], Robert J Hogan[5], Claire Chewapreecha[6], T Eoin West[7], Paul J Brett[8], Mary N Burtnick[8], Narisara Chantratita[2,6] ([1]Dept. Bacteriol., NEKKEN, NU, [2]Dept. Microbiol. Immuno., FTM, MU, [3]Beamline Div, SLR Inst, [4]CCP4, RCaH, [5]Dept. Infect. Dis., CVM, UGA, [6]MORU, FTM, MU, [7]Dept. Med., UW, [8]Dept. Microbiol. Immunol., Sch. Med., UNR)

P1-085

Analysis of the relationship between temperature and activity of *Mycobacterium leprae* DNA gyrase

◯Ryu Yashiro[1], Hyun Kim[2], Pondpan Suwanthada[3], Charlotte Poussier[3], Chie Nakajima[3], Yasuhiko Suzuki[3], Manabu Ato[1], Noboru Nakata[1] ([1]Leprosy Res. Ctr., Dept. Mycobacteriology, NIID, [2]Dept. Bacteriology 2, NIID, [3]Div. Bioresources, Intl. Inst. for Zoonosis Control, Hokkaido Univ.)

P1-086/FL1-31

Growth history under starvation influences subsequent reproduction in a clonal bacterial microcolony

◯Sotaro Takano[1,2], Miki Umetani[3,4,5], Hidenori Nakaoka[6], Ryo Miyazaki[2,7,8] ([1]IBID, BRC, RIKEN, [2]Bioprod. Res. Inst., AIST, [3]Dept. Basic Sci., Grad. Sch. of Arts and Sci., The Univ. of Tokyo, [4]Res. Center for Complex Syst. Biol., The Univ. of Tokyo, [5]UBI, The Univ. of Tokyo, [6]Dept. Optical Imaging, Adv. Res. Promotion Center, Tokushima Univ., [7]Fac. Life and Env. Sci., Univ. of Tsukuba, [8]CBBD-OIL, AIST)

5. Pathogenicity-c. Cell invasion and intracellular parsitism

P1-087

Effect of bacteria-derived hydroxy oxidase on the autophagy dynamism in pneumococci infected cells

◯Sayaka Shizukuishi, Michinaga Ogawa, Yukihiro Akeda (Bacteriol. I, Nat. Inst. Infect. Dis.)

P1-088

Quantification of phospho-Akt accumulated around the inclusions of *Chlamydia trachomatis* (L2 434/Bu)

◯Taiki Deguchi, Sora Kuroiwa, Miyu Neshiro, Shinji Nakamura, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

P1-089

Analysis of the cytotoxicity to host cell related to the pathogenicity of Mycobacteria

◯Takemasa Takii[1,2,3], Hiroyuki Yamada[1], Jordi Torrelles[4], Joanne Turner[4], Naoya Ohara[5,6] ([1]Dept. Mycobacterium Ref. &Res., RIT, JATA, [2]Memori. Inst. Omura Satoshi, Kitasato Univ., [3]Dept. Hyg. Chem., Grad. Sch. Pharm. Sci., Nagoya City Univ., [4]Texas Biomed. Res. Inst., [5]Dept. Oral Microbiol., Grad. Sch. Med. Deantal. Phar. Sci., Okayama Univ., [6]Ctr. Intestinal. Helt. Sci., Okayama Univ.)

P1-090

A novel method of Francisella infection using HeLa cells expressing fc gamma receptor

Takemasa Nakamura[1], ◯Takashi Shimizu[2], Kohei Arasaki[3], Akihiko Uda[4], Kenta Watanabe[5], Masahisa Watarai[5] ([1]Dept. Appl. Chem., Grad. Sch. Engr., Univ. Tokyo, [2]Ctr. One Welf., Jnt. Fac. Vet. Med., Yamaguchi Univ., [3]Dept. Mol. Cell Biol., Sch. Life Sci., Tokyo Univ. Pharm and Life Sci., [4]Dept. Vet. Sci., NIID, [5]Lab. Vet. Pub. Hlth., Jnt. Fac. Vet. Med., Yamaguchi Univ.)

P1-091/FL2-01

***Salmonella* induces cell death through a small membrane peptide MgtU under low Mg^{2+} stress**

◯Yumi Iwadate, James Slauch (Dept. Microbiol., MCB, U. of I.)

P1-092

Rab5C regulates bacterial internalization into the non-phagocytic cells through CRKL-RAC1 pathway

◯Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

P1-093

Host polyamines fuel blooms of enteric bacterial pathogens

◯Tsuyoshi Miki[1], Tohru Minamino[2], Miki Kinoshita[2], Masahiro Ito[1], Takeshi Haneda[1], Nobuhiko Okada[1], Yun-Gi Kim[1] ([1]Dept. Microbiol., Sch. Pharm., Kitasato Univ., [2]Grad. Sch. Frontier Biosci., Osaka Univ.)

P1-094/FL2-24

Candida glabrata genes regulating phagosome maturation in macrophages

◯Fujiang Zhao, Azusa Takahashi-Nakaguchi, Michiyo Sato-Okamoto, Kaname Sasamoto, Hiroji Chibana (Divi. Molecul. Bio., Med. Mycol. Reaear. Cen., Chiba Univ.)

5. Pathogenicity-d. Immune escape and proliferation in hosts

P1-095

Complement resistance genes in *Borrelia fainii* from human relapsing fever

◯Kozue Sato[1], Kentaro Itokawa[2], Yongjin Qiu[3], Ian Szejbach[1], Hirofumi Sawa[4], Bernard Mudenda Hangombe[5], Yukihiro Akeda[1], Hiroki Kawabata[1] ([1]Dept. Bacteriol. I., NIID, [2]Dept. Med. Entomol., NIID, [3]Lab. Parasitol. Sch. Vete. Med., Hokkaido Univ., [4]VReD, Hokkaido Univ., [5]Dep. Paraclinical Studies, Sch. Vet. Med., Zambia Univ.)

P1-096/FL2-25

Identification of Resistance Genes against the Antibacterial Peptide LL-37 in *Vibrio vulnificus*

◯Shinji Kawate, Taro Irifune, Kohei Yamazaki, Takashige Kashimoto (Lab. Vet. Public Health. Sch. Vet. Med., Kitasato Univ.)

P1-097/FL2-26

ThyX Overexpression Promotes the In Vivo Growth of BCG

◯Ikue Tosa[1], Tomoyuki Yamaguchi[1,2], Goro Matsuzaki[3], Masayuki Umemura[3], Giichi Takaesu[3], Masaaki Nakayama[1], Manabu Ato[4], Naoya Ohara[1] ([1]Dept. Oral Microbiol., Fac. Med., Dent. and Pharm. Sci., Okayama Univ., [2]Dept. Vet. Med., Rakuno Gakuen Univ., [3]Trop. Biosphere Res. Ctr., Univ. Ryukyus, [4]Dept. Mycobacteriol., Leprosy Res. Ctr., NIID, [5]Res. Ctr. Intest. Health Sci., Okayama Univ.)

P1-098

Functional analysis of toxin-antitoxin systems in Bordetella pertussis

◯Masataka Goto, Nao Otsuka, Tsuyoshi Kenri (Dept. Bacteriol. II, NIID)

P1-099

Role of Gab2 on the intracellular growth of *Chlamydia trachomatis*

Sora Kuroiwa, Torahiko Okubo, ◯Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

P1-100/FL2-27

Genome-scale Metabolic Network Reconstruction Reveals Pathogenic *Leptospira* Metabolism in Hosts

◯Ryo Ozuru[1,2], Michinobu Yoshimura[1], Takumi Sonoda[1], Jason Papin[2], Fumiko Obata[3], Glynis Kolling[2], Kenji Hiromatsu[1] ([1]Dept. Microbiol. Immunol., Fac. Med., Fukuoka Univ., [2]Dept. Biomed. Eng., Univ. Virginia, [3]Div. Bacteriol., Dept. Microbiol. Immunol., Fac. Med., Tottori Univ.)

P1-101

Analysis of small RNA-mediated nitric oxide resistance mechanism by RNA-binding proteins of EHEC

◯Takeshi Shimizu[1], Shin Suzuki[1], Takeshi Hamabata[2] ([1]Dept. Mol. Infect., Sch. Med, Chiba Univ., [2]Dept. Infect. Dise., NCGM)

P1-102

Host immune evasion and bactericidal killing mechanism in hard tick-born relapsing fever borreliae

◯Tomohi Takeuchi[1], Kozue Sato[2], Hiroki Kawabata[2], Yasuhiro Gotoh[3], Ai Takano[1] ([1]Dept. Veterinary Medicine. Epidemiology. Yamaguchi Univ., [2]Dept. Bacteriology-I. National Institute of Infectious Diseases, [3]Advanced Genomics Center. National Institute of Genetics)

P1-103/FL2-28

Pangenome-scale Metabolic Models Uncovered Pathogenicity-Specific Pathways in *Leptospira*

◯Takumi Sonoda[1], Ryo Ozuru[1,2], Michinobu Yoshimura[1], Jason Papin[2], Fumiko Obata[3], Glynis Kolling[2], Kenji Hiromatsu[1] ([1]Dept. Microbiol. Immunol., Fac. Med., Fukuoka Univ., [2]Dept. Biomed. Eng., Univ. Virginia, [3]Div. Bacteriol., Dept. Microbiol. Immunol., Fac. Med., Tottori Univ.)

5. Pathogenicity -e. Infection models

P1-104/FL2-02

***S. pneumoniae* expresses multiple plasminogen-binding proteins to convert plasminogen into plasmin**

◯Yoshihito Yasui[1,2], Satoru Hirayama[1], Hisanori Domon[1,3], Yutaka Terao[1,3] ([1]Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., [2]Div. Periodontol., Niigata Univ. Grad. Sch. Med. Dent. Sci., [3]Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

P1-105

Transcriptional analysis of pneumococcal plasminogen-binding proteins

○Satoru Hirayama[1], Hisanori Domon[1,2], Yutaka Terao[1,2] ([1]Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., [2]Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

P1-106

Mechanisms leading to epithelial cell barrier destruction by human *Leptospira* isolated in Okinawa

○Tetsuya Kakita[1,2], Claudia Toma[1], Isabel Sebastian[1], Hunter Barbee[1], Tetsu Yamashiro[1] ([1]Dept. Bacteriol., Grad. Sch. Med., Univ. of the Ryukyus., [2]Res. Ctr. Infect. Dis., Okinawa Pref. Inst. Health and Env.)

P1-107/FL2-03

Establishment of an infection model of human pathogenic bacteria using Xenopus frog

○Ayano Kuriu[1], Kazuya Ishikawa[1], Kohsuke Tsuchiya[2], Kazuyuki Furuta[1], Chikara Kaito[1] ([1]Lab. Mol. Biol., Grad. Sch. Med. Dent. Pharm, Okayama Univ., [2]Div. Immunol. Mol Biol., Cancer Res. Inst., Kanazawa Univ.)

P1-108

Effect of organoselenium compounds on the pathology of UC model mice

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

P1-109

Oral bacteria associated with periodontitis attenuates inflammation of ulcerative colitis

○Eri Ikeda[1], Masaya Yamaguchi[2], Shigetada Kawabata[1,3] ([1]Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., [2]NIBIOHN, [3]CiDER. Osaka Univ.)

5. Pathogenicity -f. Others

P1-110/FL2-04

***Prevotella intermedia* suppresses the release of IL-1β**

○Machiko Kasai[1], Miyuki Takahama[1], Ji-Won Lee[1], Mikio Shoji[2], Mariko Naito[2], Toshihiko Suzuki[3], Akira Hasebe[1] ([1]Microbiology, Dept. Oral Pathobiological Science, Fac. and Grad. Sch. Dental Medicin, Hokkaido Univ., [2]Dept. Microbiol. Oral Infect., Nagasaki Univ. Grad. Sch. Biomedical Sci., [3]Dept. Bact. Pathogenesis, Science Tokyo)

P1-111

Quantitative detection method for tyramine produced by the European foulbrood pathogen of honeybees

○Mariko Okamoto[1], Daisuke Takamatsu[1,2], Ryuichi Uegaki[1] ([1]NIAH, NARO, [2]UGSVS, Gifu Univ.)

P1-112

The effect of *Prevotella intermedia* on oral squamous cell carcinoma cells

○Miyuki Takahama[1,2], Machiko Kasai[2,3], Ji-Won Lee[2], Mikio Shoji[4], Mariko Naito[4], Akira Hasebe[2] ([1]Oral Maxillofacial Surgery, Grad. Sch. Den. Med., Hokkaido Univ., [2]Microbiol., Grad. Sch. Den. Med., Hokkaido Univ., [3]Orthodontics., Grad. Sch. Den. Med., Hokkaido Univ., [4]Dept. Microbiol. Oral Infect., Grad. Sch. Biomed. Sci., Nagasaki Univ.)

P1-113/FL2-05

Aggregatibacter actinomycetemcomitans-derived EVs promote pancreatic cancer malignancy

○Takehiro Yamaguchi[1], Masayuki Shiota[2], Ryoma Nakao[1], Kimihiro Abe[1], Yukihiro Akeda[1] ([1]Dept. Bacteriol. I, Nat. Inst. Infect. Dis., [2]Dept. Mol. Bio. Med., Grad. Sch. Med., Osaka Metropolitan Univ.)

P1-114

Biological impacts of Klebsiella pneumoniae-derived extracellular vesicles

Shogo Tsubaki[1], Jin Imai[2], Rika Tanaka[3], Daisuke Sakai[4], Juntaro Matsuzaki[5], Hiroyasu Tsutsuki[6], Tomohiro Sawa[6], ○Hitoshi Tsugawa[1] ([1]Transkingdom Signaling Research Unit, Tokai Univ., [2]Dept. Clin. Health Sci., Tokai Univ., [3]Dept. Immunol., Tokai Univ., [4]Dept. Orthop. Surg., Tokai Univ., [5]Div. Pharmacother., Keio Univ., [6]Microbiol., Kumamoto Univ.)

P1-115

Virulence of *Escherichia coli* ST131 based on *Galleria mellonella* assay

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

P1-116

Relation of secretory proteins and virulence of Salmonella enterica serovar Typhimurium wild strains

○Akari Tachibana, Momoko Nakayama, Sayaka Nishikawa, Masahiro Eguchi (Div. Infect. Animal Dis. Res., NARO, NIAH)

P1-117/FL2-06

Genomic characteristics of *P. alcalifaciens* isolates causing a large foodborne outbreak in Japan

○Jayedul Hassan[1,2,3], Shigeaki Matsuda[1], Eiji Ishii[1], Tetsuya Iida[1] ([1]Dept. Bact. Infect., RIMD, Osaka Univ., [2]JSPS, [3]Dept. Microbiol. Hyg., Bang. Agric. Univ.)

P1-118

***Campylobacter jejuni* activates host amino acid transporters to enhance intracellular survival**

○Takaaki Shimohata[1,2], Shiho Fukushima[2], Junko Kido[2], Mana Makimoto[1,2], Takashi Uebanso[2], Kazuaki Mawatari[2], Akira Takahashi[2] ([1]Marine-Bio, Fukui Prefectural Univ., [2]Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch.)

6. Host defense -b. Acquired immunity, vaccines and prevention and control of infections

P1-119

Control of Campylobacter jejuni infection by targeting energy metabolism

◯Koji Hosomi[1,2], Noritoshi Hatanaka[1], Atsushi Hinenoya[1], Jun Adachi[2], Takahiro Nagatake[3], Shinji Yamasaki[1], Jun Kunisawa[2] ([1]Osaka Metropolitan Univ., [2]NIBIOHN, [3]Meiji Univ.)

P1-120/FL2-07

Optimizing Phage Production: Streamlined Propagation and Purification for Enhanced Phage Therapy

◯Myat Thu, Srivani Veeranarayanan, Kanate Thitiananpakorn, Yoshifumi Aiba, Tan XinEe, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-121

The development of Tetanus Toxin detection methods *in vitro* using a FRET

◯Hyun Kim, Tsuyoshi Kenri, Mitsutoshi Senoh (BacteriologyII, National Institute of Infectious Dieases)

P1-122

Development of Targeted Phage Particles for DNA Vaccine Delivery

◯Yi Liu, Srivani Veeranarayanan, Yoshifumi Aiba, XinEe Tan, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

P1-123

Development of a Plug-and-Display vaccine using Bacillus subtilis membrane vesicles

◯Takehito Wakabayashi[1], Kimihiro Abe[2], Ryoma Nakao[2], Takehiro Yamaguchi[2], Tsutomu Sato[1], Yukihiro Akeda[2] ([1]Grad. Sch. Sci. Eng., Hosei Univ., [2]Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

P1-124

Characterization of immune responses against nasal *Staphylococcus aureus* membrane vesicles

◯Tomomi Hashizume-Takizawa, Masanori Saito, Hidenobu Senpuku (Dept. Microbiol. Immunol., Nihon Univ. Sch. Dent. at Matsudo)

P1-125

Nasal vaccine using *E.coli* MVs displaying pneumococcal capsule confers long-term protective immunity

◯Ryoma Nakao[1], Soichiro Kimura[2,3], Kimihiro Abe[1,4], Takehiro Yamaguchi[1], Eisuke Kuroda[5], Shigeto Hamaguchi[5], Kazuhiro Tateda[3], Naoki Narisawa[6], Makoto Ohnishi[1], Yukihiro Akeda[1] ([1]Dept. Bacteriol. I, Natl. Inst. Infect. Dis., [2]Div. Infect. Prevent. Cont., Fac. Pharm Sci., Shonan Univ Med Sci., [3]Dept. Microbiol. Infect. Dis., Fac. Med., Toho Univ., [4]Drug Vaccine Dev., Natl. Inst. Infect. Dis., [5]Div. Infect. Cont. Prevent., Osaka Univ. Hosp., [6]Dept. Food Biosci. Biotech. Col. Biores. Sci., NIhon Univ.)

P1-126

The effects of Monascus Fermented Rice Extract on the pathogenicity of toxigenic Vibrio cholerae

◯Tetsu Yamashiro[1], Jun Xu[1], Rena Kinjyo[2], Aino Kinjyo[2], Kei-Ichiro Ishihara[2], Alfi Rashid[3], Shinjiro Tachibana[2] ([1]Dept. Bacteriol. Grad. Sch. Med., Univ. Ryukyus, [2]Grad. Sch. Agri., Univ. Ryukyus, [3]icddr, b)

P1-127/FL2-08

Phage-Based DNA Vaccine Development Using mEmerald Gene as Proof of Concept

◯Vivekanandan Palaninathan, Yi Liu, Myat Thu, Srivani Veeranarayanan, Yoshifumi Aiba, XinEe Tan, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-128/FL2-09

The production mechanism and immunogenicity of membrane vesicles from Clostridioides difficile

◯Yotaro Isamu[1], Mayu Okuda[1], Nobuhiko Nomura[2,4], Nozomu Obana[3,4] ([1]Sch. Sci. Tech., Life Ear. Sci., Univ. Tsukuba, [2]Fac. Life Environ., Sci. Univ. Tsukuba, [3]TMRC, Fac. Med., Univ. Tsukuba, [4]MiCS, Univ. Tsukuba)

P1-129

Immune responses induced by nasal vaccine of aP with OMVs derived from Bordetella Pertussis

Sora Ishikawa[1], Kei Asayama[1,3], Rena Sakamoto[1,3], Ryoma Nakao[2], Tadaki Suzuki[1], Koji Tamura[3], ◯Akira Ainai[1] ([1]Dept. Pathology, NIID, [2]Dept. Bact 2, NIID, [3]TUS. BioSys)

P1-130/FL2-10

Analysis of mechanism of Th17 cell induction by dendritic cells stimulated with Bacillus subtilis

◯Kazuyuki Furuta[1], Yohei Chishaki[1], Kazuya Ishikawa[1], Shin-Ichi Miyoshi[2,3], Chikara Kaito[1] ([1]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [2]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [3]Res. Cent. Intest. Health Sci., Okayama Univ.)

P1-131/FL2-11
The inhibitory effects of silver ions and moisturizing gel on GTF activities and biofilm formation
○Xuefei Cheng[1], Takafumi Miyazaki[2], Yoshiaki Kamikawa[3], Hidenobu Senpuku[1] ([1]Dept. Microbiol. Immunol., Dent., Sch. St Matsudo, Nihon Univ., [2]Pikasshu, [3]Sch. Dent., Kagoshima Univ.)

P1-132
Polyreactive IgA clones induced by specific commensals protect against pathogenic infections
○Hikari Maruta[1], Koji Hase[1,2,3,4], Daisuke Takahashi[1], Kisara Hattori[1] ([1]Dept. Biochemi., Sch. Pha., Keio Univ., [2]Ctr. Human Biol- Microbiom- Quantum Research., Keio Univ., [3]Inst. Ferm Sci., Sch. Food & Agri., Fukushi Univ., [4]Dept. Mucosal Patches., Inst. Med Sci., Tokyo Univ.)

6. Host defense -c. Others

P1-133
Investigation of LCV targeting machinery by Interferon-γ-inducible GTPase, GBP2
○Hiromu Oide, Kohei Arasaki (Sch. Life Sci., Tokyo Univ. Pharm and Life Sci.)

P1-134
Role of IL-35 in aspiration pneumonia involving *Porphyromonas gingivalis*
Shotaro Kawamura[1], Hisashi Goto[1], Takeshi Kikuchi[1], Teppei Okabe[1], Yoshiaki Hasegawa[2], Yoshihiko Sugita[3], Hirotaka Fujitsuka[1], Jun-ichiro Hayashi[1], ○Masayuki Umemura[4], Akio Mitani[1] ([1]Dept. Periodontol., Sch. Dent., Aichi Gakuin Univ., [2]Dept. Microbiol., Sch. Dent., Aichi Gakuin Univ., [3]Dept. Oral Pathol. Forensic Odontol., Sch. Dent., Aichi Gakuin Univ., [4]Mol. Microbiol. Gr., Trop. Biosphere Res. Cent., Univ. Ryukyus)

P1-135/FL2-12
Mechanisms of colonization resistance against Clostridium botulinum infection by gut microbiota
○Nobuhide Kobayashi[1], Takuhiro Matsumura[1], Seiga Komiyama[2], Hiroki Toriumi[2], Yotaro Kodaira[2], Wanping Aw[3], Jiayue Yang[3], Shinji Fukuda[3], Koji Hase[2], Yukako Fujinaga[1] ([1]Dept. Bacteriol., Grad. Sch. Med., Kanazawa Univ., [2]Div. Biochem., Fac. Pharm., Keio Univ., [3]IAB, Keio Univ.)

P1-136
Salmonella infection Induces transient melanoma dedifferentiation with attenuated antigenicity
○Yutaka Horiuchi, Sara Hatazawa, Yukie Ando, Riko Kumatabara, Momo Mataki, Yutaro Nakagawa, Mio Nakajima, Akihiro Nakamura, Tomonaga Ichikawa, Takashi Murakami (Dept. Microbiol. Saitama. Med. Univ.)

7. Antimicrobial agents and resistance-b. Antimicrobial resistance

P1-137
Effects of ozone ultrafine bubble water against *Porphyromonas gingivalis* and gingipain activity
○Mana Endo[1], Hisanori Domon[1,2], Satoru Hirayama[1], Akiomi Ushida[3], Yutaka Terao[1,2] ([1]Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., [2]Cent. For Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., [3]Inst. Sci. Tech., Niigata Univ.)

P1-138
Surveillance of the third-generation cephem-resistant *Enterobacteriaceae* in chicken meat in Japan
○Kenji Ohya[1], Christine Ajero[2], Yo Sugawara[3], Koji Yahara[3], Norikazu Kitamura[3], Katsuhiko Hayashi[1], Yukiko Hara-Kudo[1], Takahiro Ohnishi[1], Motoyuki Sugai[3], Kanako Ishihara[2] ([1]Div. Microbiol., Nat. Inst. Health Sci., [2]Coop. Dep. Vet. Med., TUAT, [3]Antimicrob. Resist. Res. Center, Nat. Inst. Infect. Dis.)

P1-139
D-alanine affects antimicrobial susceptibility of Staphylococcus aureus
○Yujin Suzuki[1], Miki Matsuo[1,2], Hitoshi Komatsuzawa[1,2] ([1]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Proj. Res. Ctr. for Nosocominal Infectious Diseases, Hiroshima Univ.)

P1-140/FL2-13
Identification and characterization of colistin-resistant *Acinetobacter* producing IMP-1 and OXA-58
○Satoshi Nishida[1], Yasuo Ono[1,2], Yusuke Yoshino[1] ([1]Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ., [2]Faculty Health Med. Sci., Teikyo Heisei Univ.)

P1-141
Epidemiology and mechanisms of drug resistance in *Brachyspira hyodysenteriae* in Japan
○Taketoshi Iwata[1], Yoshitoshi Ogura[2], Keiji Nakamura[3], Chiaki Kawazoe[4], Chieko Kato[5], Anna Momoki[1], Nobuo Arai[1], Yukino Tamamura[1], Ayako Watanabe[1], Masahiro Kusumoto[1,6] ([1]Natl. Inst. Anim. Health, NARO, [2]Sch. Med., Kurume Univ., [3]Fac. Med. Sci., Kyushu Univ., [4]Shiga Livest. Hyg. Serv. Cntr., [5]Hokkaido Kushiro Livest. Hyg. Serv. Cntr., [6]Grad. Sch. Vet. Sci., Osaka Metro Univ.)

P1-142
Genetic characterization of antimicrobial resistance bacteria detected from Viet Nam environment
○Nobuyoshi Yagi[1], Sora Miyazato[2], Itaru Hirai[2] ([1]Lab. Clin. Physiol., Dept. Health Sci., Univ. Ryukyus, [2]Lab. Microbiol., Dept. Health Sci., Univ. Ryukyus)

P1-143

Multiple drug-resistant factor analysis of IMP-6 MBL producing *E. coli* AUH-310

○Azuki Morishita[1], Hinako Yokoyama[2], Shoichi Sakaguchi[3], Takashi Nakano[3], Yuji Nakada[1,2] ([1]Grad. Sch. Nurs., Aino. Univ., [2]Fac. Healthcare Sci., Aino. Univ., [3]Dept. Microbiol. & Infect. Cont., Fac. Med., Osaka Med. & Pharm. Univ.)

P1-144

Genomic characterization of colistin-resistant *Acinetobacter baumannii* and *Aeromonas hydrophila*

○Christian Xedzro[1], Tomomi Kimura[2], Toshi Shimamoto[1], Liansheng Yu[3], Hui Zuo[3], Yo Sagawara[3], Motoyuki Sugai[3], Tadashi Shimamoto[1] ([1]Lab. Food Microbiol. Hyg., Grad. Sch. Integ. Sci. Life., Hiroshima Univ., [2]GeneDesign, Inc., [3]Antimicrob. Resist. Res. Cent., Nat. Inst. Infect. Dis.)

P1-145

Development of phage-based antibacterial agent using synthetic biology

○Wakana Yamashita[1,2], Longzhu Cui[3], Satoshi Tsuneda[2], Kotaro Kiga[1,2,3] ([1]Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [2]Dept. Life Sci. and Med., Sch. Advanced Sci. and Eng., Waseda Univ., [3]Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-146/FL2-14

Identification of gene for the survival of fluoroquinolone-resistant *E. coli* ST131 in the canine gut

○Aiko Maeda[1,2], Toyotaka Sato[1,2,3], Kaho Okada[2], Akio Suzuki[2,3], Motohiro Horiuchi[1,2,3] ([1]Grad. Sch. Infect. Dis., Hokkaido Univ., [2]Lab. Vet. Hyg., Fac. Vet. Med., Hokkaido Univ., [3]OHRC., Hokkaido Univ.)

P1-147

The tetracycline-resistant Clostridium tetani isolated from livestock bovine feces

Chie Shitada[1], Tomoko Kohda[2], Motohide Takahashi[1], ○Makoto Kuroda[3] ([1]Kumamoto Health Science Univ., Toxin and Biologicals Research Laboratory, [2]Lab. Epidemiology, Grad. Sch. Veterinary Sciences, Osaka Metropolitan Univ., [3]Dept. Medical Technology, Fac. Health Sciences, Kumamoto Health Science Univ.)

P1-148/FL2-15

The difference in plasmids transfer rates between *Salmonella* serovars from broiler chickens

○George Sanga[1], Vu Minh Duc[1], Saki Hiramoto[2], Rika Miyajima[2], Yui Tamura[2], Takehisa Chuma[1] ([1]Dept. Veterinary Public Health, Joint Grad. Sch. Veterinary Medicine, Kagoshima Univ., [2]Dept. Veterinary Public Health, Joint Faculty of Veterinary Medicine, Kagoshima Univ.)

P1-149

Atypical susceptibilization of biofilm cells to antibiotics during long-term cultivation

○Keiichiro Hara[1,2], Shinya Sugimoto[1,2,3], Yuki Kinjo[1,2] ([1]Dept. Bacteriol., Jikei Univ. Sch. Med., [2]Jikei Center for Biofilm Sci. Technol., Jikei Univ. Sch. Med., [3]Lab. Amyloid Reg., Jikei Univ. Sch. Med.)

P1-150

Analysis of antimicrobial resistance, udder pathogenicity and on-farm dynamics of coliform bacteria

○Toshi Shimamoto[1], Naoki Suzuki[2], Christian Xedzro[1], Jant Cres Caigoy[1], Tadashi Shimamoto[1] ([1]Dept. Microbiol. Food Safety, Grad. Sch. Integrated Sci. Life, Hiroshima Univ., [2]Dept. Terrestrial Field Sci., Grad. Sch. Integrated Sci. Life, Hiroshima Univ.)

P1-151

Impact of antimicrobial treatment history on *Enterococcus* resistance in pig farms

○Miki Okuno[1], Ryohei Toya[2], Yuichiro Deguchi[2], Yumi Imai[1], Takeshi Yamamoto[1], Yoshitoshi Ogura[1] ([1]Dept. Infectious Med., Kurume Univ. Sch. Med., [2]Agric. Mutual Aid Assoc. in Miyazaki Pref.)

P1-152

Whole genome sequencing of *Escherichia albertii* strains with high resistance to potassium tellurite

○Yuki Wakabayashi, Shunya Nishijima, Takahiro Yamaguchi, Kazuko Seto, Takao Kawai (Div. Microbiol., Osaka Inst. Pub. Health)

P1-153

Analysis of mutations in Cluster II of the *Mycobacterium leprae rpoB* gene and rifampicin resistance

○Noboru Nakata[1], Ryu Yashiro[1], Ruwen Jou[2], Manabu Ato[1] ([1]Dept. Mycobacteriol, Leprosy Res. Cent., [2]Cent. Diagnost. Vac. Develop., Taiwan CDC)

P1-154

Development of a multipronged bactericidal system targeting E. coli using colicinogenic-phage

○Maniruzzaman, Huong Minh Nguyen, Yoshifumi Aiba, Kanate Thitiananpakorn, Duyen Ho Thi My, Shinya Watanabe, Kotaro Kiga, Kazuhiko Miyanaga, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-155

Extracellular release of metallo-β-lactamases IMP-1 and VIM-2 from P. aeruginosa

○Rika Fukushima, Touya Toyomoto, Ayaka Uegama, Hiroyasu Tsutsuki, Tomohiro Sawa (Dept. Microbiol., Sch. Med. Sci., Kumamoto Univ.)

P1-156
Characterization of carbapenemase-nonproducing carbapenem-resistant *Klebsiella pneumoniae*
○Ryuichi Nakano[1], Akiyo Nakano[1], Yuki Suzuki[1], Go Kamoshida[2], Ryuji Sakata[3], Miho Ogawa[3], Hisakazu Yano[1] ([1]Dept. Microbiol. Infect. Dis., Nara Med. Univ., [2]Dept. Infect. Cont. Sci., Meiji Pharm. Univ., [3]Dept. Bacteriol., BML Inc.)

P1-157
General Phenotype of NADase Induction by CLI Treatment in Streptococcus pyogenes
○Ichiro Tatsuno, Masanori Isaka, Tadao Hasegawa (Dept. Bacteriol., Sch. Med., Nagoya City Univ.)

P1-158
Linezolid and Vancomycin-resistance genes harboring pELF-type plasmids in Enterococci
○Yusuke Hashimoto[1], Masato Suzuki[2], Ikuro Kasuga[3,4], Haruyoshi Tomita[1,5] ([1]Dept. Bacteriol., Grad. Sch. Med., Gunma Univ., [2]Antimicrobial Resistance Research Center, National Institute of Infectious Diseases, [3]Research Center for Advanced Science and Technology, The Univ. of Tokyo, [4]Dept. Urban Engineering, The Univ. of Tokyo, [5]Lab. Bacteriol. Drug Resist., Grad. Sch. Med., Gunma Univ.)

7. Antimicrobial agents and resistance -c. Others

P1-159/FL2-16
Identification of nanaomycin A and its analogs as T9SS inhibitors in *Porphyromonas gingivalis*
○Yuko Sasaki[1], Takehiro Matsuo[1], Yoshihiro Watanabe[2], Masato Iwatsuki[2], Yuki Inahashi[2], Satoshi Nishida[3], Mariko Naito[1], Mikio Shoji[1] ([1]Dept. Microbiol. Oral Infect. Sch. Biomed. Sci., Nagasaki Univ., [2]Omura Inst., Kitasato Univ., [3]Dept. Microbiol. Imunol., Sch. Med., Teikyo Univ.)

P1-160/FL2-17
222-nm Far UV-C generates ROS in Staphylococcus aureus and inhibits its photoreactivation
○Risako Fukushi[1,2], Kouji Narita[1,3], Kyosuke Yamane[4], Toru Koi[4], Krisana Asano[1,5], Akio Nakane[2,5] ([1]Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., [2]Dept. Nursing, Sch. Health. Sci., Hirosaki Univ. Health Welfare, [3]Inst. Animal Exp., Hirosaki Univ. Grad. Sch. Med., [4]Ushio Inc., [5]Dept. Biopolymer Health. Sci., Hirosaki Univ. Grad. Sch. Med.)

P1-161
Analysis of lytic enzyme CD010360 of *Clostridioides difficile*
○Hiroshi Sekiya[1], Matsuri Murakami[1], Suguru Kouno[1], Yasuhiro Nonaka[2], Shigehiro Kamitori[3], Eiji Tamai[1] ([1]Dept. Infect. Dis., Pharm., Matsuyama Univ., [2]Dept. Pharma., Sch. Med., Kagawa Univ., [3]Res. Infra. Cent., Sch. Med., Kagawa Univ.)

P1-162
Control of Staphylococcus aureus biofilm formation by small compounds
○Ken-ichi Okuda (Dept. Life, Env. & Appl. Chem., Fac. Eng., Fukuoka Inst. of Tech.)

P1-163/FL2-18
Interaction between phage long tail fibers and bacterial porins
○Haruka Terasaki, Yuichi Otsuka (Grad. Sch. Science and Engineering, Saitama Univ.)

P1-164/FL2-19
Anti-T4 phage defense in Escherichia coli O157
○Honoka Ishikawa, Yuichi Otsuka (Grad. Sch. Sci. Eng., Saitama Univ.)

P1-165/FL2-20
Activation of the toxin-antitoxin system in phage defense
○Daiki Oki, Yuichi Otsuka (Grad. Sch. Sci. Eng., Saitama Univ.)

P1-166
Development of a phage cocktail against colibactin-producing *Escherichia coli*
○Yuya Hidaka[1], Kanate Thitiananpakorn[1], Tan XinEe[1], Yoshifumi Aiba[1], Kazuhiko Miyanaga[1], Teppei Sasahara[1,2], Shinya Watanabe[1], Longzhu Cui[1] ([1]Div. Bacteriol, Sch. Med., Jichi Med. Univ., [2]Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-167
Exploring of the Trade-off Between Antibiotic Resistance and Staphylococcus aureus Phages Resistance
○Hiromasa Mizutani[1], Tomoyoshi Kaneko[1,2], Aa Haeruman Azam[3], Kazuki Kitaoka[2,5], Kotaro Kiga[2,3,4], Satoshi Tsuneda[1,2] ([1]Dept. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., [2]Phage Therapy Inst., Waseda Univ., [3]Res. Ctr. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [4]Div. Bacteriol, Sch. Med., Jichi Med. Univ., [5]Shinjuku Satellite Clinic)

P1-168/FL2-21
Characterization of phage-resistant mutants of ESBL-producing uropathogenic *E. coli*
○Mayuko Tanaka[1], Tomoko Hanawa[1], Kohei Kondo[2], Aa Haeruman Azam[3], Yasunori Tanji[4], Tomoya Suda[1], Kotaro Kiga[3], Takeaki Matsuda[1,4] ([1]Dept. Gen. Med., Sch. Med., Kyorin Univ., [2]AMR Res. Cent., Natl. Inst. Infect. Dis., [3]Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [4]Dept. Traum. Crit. Care Med., Kyorin Univ. Sch. Med.)

P1-169

Identification of phage genes involved in evading bacterial defense systems

◯Yuta Sato[1,2], Aa Haeruman Azam[1], Azumi Tamura[1], Wakana Yamashita[1,2], Shinjiro Ojima[1], Kotaro Chihara[1], Yoshimasa Takahashi[1], Koichi Watashi[1], Satoshi Tsuneda[1,2], Kotaro Kiga[1,3] ([1]Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [2]Waseda Univ., [3]Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-170/FL2-22

Isolation of Phages Targeting Outer Membrane Protein of *Escherichia coli* Pandemic Clone ST131

◯Kento Habe[1], Kanata Nakatsuka[1], Tomoyoshi Kaneko[1,2], Satoshi Tsuneda[1,2] ([1]Dept. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., [2]Phage Therapy Inst., Waseda Univ.)

P1-171

Role of TRR regions in phage evasion of bacterial defense systems

◯Tomoya Maeda[1,2], Aa Haeruman Azam[2], Shinjiro Ojima[2], Kotaro Chihara[2], Yoshimasa Takahashi[2], Koichi Watashi[2], Satoshi Tsuneda[1], Kotaro Kiga[1,2] ([1]Dept. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., [2]Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis.)

P1-172

Evaluation of the Utility of POURMEDIA MRSA SELECTIVE AGAR 3

◯Yasuyuki Sugiura (JA Aichi Koseiren Anjo Kosei Hospital, Clinical Laboratory, Microbiology Section)

P1-173/FL2-23

Photoimmuno-antimicrobial strategy against biofilm based on molecular targeting

◯Sota Yamada[1], Akane Nishitani[2,3], Makoto Mitsunaga[4], Tadayuki Iwase[2,5] ([1]Undergrad., Sch. Med., Jikei Univ., [2]Res. Cent. Med. Sci., Jikei Univ., [3]Dept. Biotech., Tokyo Coll. Biotech., [4]Dept. Intern. Med., Sch. Med., Jikei Univ., [5]Mol. Diagn. Ther., Grad. Sch. Med., Jikei Univ.)

8. Others

P1-174/FL2-29

Mechanism of host-inflammatory response against Streptolysin S produced by *Streptococcus anginosus*

◯Yugo Yamamori[1], Hideaki Nagamune[1,2], Toshifumi Tomoyasu[1,2], Atsushi Tabata[1,2] ([1]Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

P1-175/FL2-30

Characteristics of the *Streptococcus mitis* strain possessing three different CDC-encoding genes

◯Ichiyou Fukumoto[1], Toshifumi Tomoyasu[1,2], Hideaki Nagamune[2], Atsushi Tabata[1,2] ([1]Dept. Biosci & Bioindust., Fac. Biosci & Bioindust., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

1. Taxonomy / Epidemiology /Infectious diseases-c. Isolation and characterization of clinical isolates

P2-001

Detection of enterotoxigenic *Escherichia coli* in retail food and river water

◯Sakura Arai[1], Ryohei Nomoto[2], Ichiro Izu[3], Yuta Ohno[4], Satoko Yamaya[5], Akihiko Tsuchiya[6], Yuka Kojima[7], Noriko Konishi[8], Yusuke Chiba[9], Takahiro Ohnishi[1], Yukiko Kudo-Hara[10] ([1]Div. Microbiol., Natl. Inst. Health Sci., [2]Dept. Infect. Dis., Kobe Inst. Health, [3]Kumamoto Prefect. Inst. Public-Health and Environmental Sci., [4]Hokkaido Inst. Public Health, [5]Miyagi Pref. Inst. Public Health and Env., [6]Saitama City Inst. Health Sci. and Research, [7]Kawasaki City Inst. for Public Health, [8]Tokyo Metropol. Inst. Public Health, [9]Saitama Inst. Public Health, [10]Hoshi Univ.)

P2-002

Virulence traits of *stx2f*-positive *E. albertii* isolated from a HUS patient

◯Nozomi Ishijima[1], Tadayuki Iwase[6], Toshio Kodama[5], Ken-ichi Lee[1], Tadasuke Ooka[2], Yoshiyuki Goto[3], Kinnosuke Yahiro[4], Yukihiro Akeda[1], Sunao Iyoda[1] ([1]Dept. Bacteriol. I, Nat. Inst. Infect. Dis., [2]Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ., [3]Div. Mol. Immunol., MMRC., Chiba Univ., [4]Infect. Cont. Kyoro Pharm. Univ., [5]Dept. Bacteriol., NIKKEN., Nagasaki Univ., [6]Core Res. Facil., Res. Cent. Med. Sci., Jikei Univ.)

P2-003/FL3-01

A comprehensive characterisation of Stenotrophomonas maltophilia isolated from the oral cavity

◯Saki Nishihama[1,2], Miki Matsuo[2,3], Vo Minh Ngoc[2], Tomoki Kawayanagi[1,2], Yo Sugawara[4], Junzo Hisatsune[4], Motoyuki Sugai[3,4], Hideki Shiba[1], Hitoshi Komatsuzawa[2,3] ([1]Dept. Biol Endod., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [3]Proj. Res. Ctr. for Nosocominal Infectious Diseases, Hiroshima Univ., [4]Res. Cent for AMR, NIID.)

P2-004

Analysis of biofilm forming ability in vancomycin-resistant *Enterococcus faecium* clinical isolates

◯Yuna Hamagata, Masashi Yanagihara, Shigefumi Okamoto (Dept. Clin. Lab. Biomed. Sci., Grad. Sch. Med., Osaka Univ.)

P2-005

Prevalence and characteristics of *Escherichia albertii* isolated from farm animals in Japan

○Anna Momoki[1], Yukino Tamamura-Andoh[1], Chihiro Kitajima[2], Nobuo Arai[1], Taketoshi Iwata[1], Ayako Watanabe-Yanai[1], Junichiro Nishi[3], Tadasuke Ooka[3], Masahiro Kusumoto[1,4] ([1]Natl. Inst. Anim. Health, NARO., [2]Kenpoku LHSC, Ibaraki Pref., [3]Grad. Sch. Med. Dent. Sci., Kagoshima Univ., [4]Grad. Sch. Vet. Sci., Osaka Metro. Univ.)

P2-006

Isolation of drug-resistant bacteria from nasal and oral cavities and their follow-up studies

○Kosuke Ueda[1,2], Tomoki Kawayanagi[1,2], Miki Matsuo[2], Junzo Hisatsune[3], Yo Sugawara[3], Toru Takeshita[4], Hideki Shiba[1], Motoyuki Sugai[3], Hitoshi Komatsuzawa[2] ([1]Dept. Biol Endod., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [3]Res. Cent for AMR, NIID., [4]Sect. Prev. Publ Health. Dent., Div. Oral Health. Growth. Dev., Fac. Dent. Sci., Kyushu Univ.)

P2-007

Drug resistance mechanisms and molecular epidemiology of MDR *P. aeruginosa* outbreak strains

○Shin Suzuki[1,2], Kohei Ogura[3], Shota Murata[2], Akiko Miyabe[2], Kenji Kawasaki[2], Kazuyuki Matsushita[2], Tohru Miyoshi-Akiyama[4], Takeshi Shimizu[1] ([1]Dept. Molecular Infectiology, Grad. Sch. Medicine, Chiba Univ., [2]Dept. Laboratory Medicine, Chiba Univ. Hospital, [3]Div. Food Sci. Biotech., Grad. Sch. Agric., Kyoto Univ., [4]Dept. Infect. Dis, Nat. Center. Global Health Med.)

P2-008/FL3-02

Active surveillance of Streptococcus suis in porcine products in Nakhon Ratchasima, Thailand

○Nitchatorn Sungsirin[1,2], Tanit Boonsiri[2], Anusak Kerdsin[3], Thanaboon Chanwong[4], Chuleeporn Mutuwong[4], Marwah Abah[4], Teerapat Phueakphong[5], Sudaluck Thunyaharn[4] ([1]Dept. Microbiology, Fac. Medicine, Shimane Univ., [2]Dept. Microbiology, Phramongkutklao College of Medicine, Thailand, [3]Fac. Public Health, Kasetsart Univ. Chalermphrakiat Sakon Nakhon Province Campus, Sakon Nakhon, Thailand, [4]Fac. Allied Health Sciences, Nakhonratchasima College, Nakhon Ratchasima, Thailand, [5]Dept. Biology, Sch. Science, King Mongkut Institute of Technology Ladkrabang, Bangkok, Thailand)

P2-009/FL3-03

Combination of E. coli phage to enhance antimicrobial efficacy and inhibit resistance

○Yuki Tomari, Shinjiro Ojima, Kotaro Kiga (Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis)

P2-010/FL3-04

Characteristics of enterotoxin-producing *Clostridium perfringens* type E isolates

○Chie Monma, Hirofumi Nariya (Dept. Food Science, Jumonji Univ.)

1. Taxonomy / Epidemiology /Infectious diseases-d. Methods for detection, identification, and diagnosis

P2-011

The diverse expression status of H antigen in the field strains of *Salmonella* Typhimurium

○Momoko Nakayama, Nobuo Arai, Yohsuke Ogawa, Masahiro Kusumoto, Masahiro Eguchi (National Institute of Animal Health, NARO)

P2-012

Improved immunochromatographic test highly detecting heat-labile enterotoxin produced by ETEC

Nana Fujimoto[1], Nonoka Yokomizo[1], Sakura Hayashi[1], Mana Yoneyama[1], Emika Inoue[1], Masahiro Kusumoto[2], ○Hideyuki Arimitsu[1] ([1]Dept. Microbiol., Sch. Human Sci. Env., Univ. of Hyogo, [2]Natl. Inst. Animal Health, NARO)

P2-013

One-step loop-mediated isothermal amplification system for *Mycobacterium marinum* detection

○Kayo Okumura[1], Yuji Miyamoto[2], Satoshi Mitarai[3], Manabu Ato[2] ([1]Res. Ctr., Biosafety, Lab., Anim., and Pathog. Bank, NIID, [2]Dept. Mycobacteriol., Lepr. Res. Ctr., NIID, [3]Dept. Mycobac. Ref. Res., Res. Inst. Tubercul., JATA)

P2-014

Development of a novel ELISA antigen for detection of swine erysipelas protective antibodies

○Sayaka Nishikawa[1], Yohsuke Ogawa[2], Momoko Nakayama[1], Akari Tachibana[1], Masahiro Eguchi[1] ([1]Div. Infect. Animal Dis. Res., NARO, NIAH, [2]Div. Hygiene Mgmt. Res., NARO, NIAH)

P2-015

Absolute quantification of viable *Campylobacter jejuni* using digital PCR with propidium monoazide

○Md. Jannat Hossain[1,2], Yasuo Inoshima[1,3,4], Ayaka Okada[1,3] ([1]Joint Grad. Sch. Vet. Sci., Gifu Univ., [2]Dept. Microbiol. Publ. Hea., Khulna Agri, Univ., [3]Joint Depart. Vet. Med., Gifu Univ., [4]GeFAH)

P2-016

E. coli and Shigella spp. O-antigen analysis by MALDI glycotyping

○Shogo Urakami, Hiroshi Hinou (Grad. Sch. Life. Sci., Hokkaido Univ.)

P2-017

The method for strain-level identifying *Fusobacterium nucleatum* in colorectal cancer specimen

○Wataru Tanaka[1], Takuma Higurashi[2], Mitsuharu Matsumoto[1] ([1]Dairy Science and Technology Institute, Kyodo Milk Industry Co. Ltd., [2]Dept. Gastroenterol. Hepatol., Yokohama City Univ.)

P2-018

Application of a newly developed PCR detection and sequencing method for *lafA* to *Aeromonas* isolates

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

P2-019

Bioluminescence resonance energy transfer imaging of bacterial membrane vesicles

○Daisuke Shimura[1], Mayu Kimoto[1], Ryoma Nakao[2], Yosuke Tashiro[1] ([1]Grad. Sch. Intgr. Sci. Tech., Shizuoka Univ., [2]Dep. Bacteriol. I)

P2-020

Development of a novel in vitro detection method for botulinum neurotoxin

○Masahiro Yutani, Tsuyoshi Kenri, Mitsutoshi Senoh (Dept. Bacteriol. II., Natl. Inst. Infect. Dis.)

P2-021

Development of *in vitro* detection method for diphtheria toxin

○Mitsutoshi Senoh[1], Hyun Kim[1], Masaaki Iwaki[1,2], Noriko Shimasaki[3], Tsuyoshi Kenri[1] ([1]Dept. Bacteriol. II, Natl. Inst. Infect. Dis., [2]Res. Ctr. Biosafety, Lab. Anim., and Pathog. Bank, Natl. Inst. Infect. Dis., [3]Dept. Virol. III, Natl. Inst. Infect. Dis.)

1. Taxonomy / Epidemiology /Infectious diseases-e. Others

P2-022

Detection methods for novel pathogenic bacteria of honeybee brood and survey of their distribution

○Daisuke Takamatsu[1,2], Mariko Okamoto[1], Takashi Mada[1], Kayo Okumura[3] ([1]Natl. Inst. Anim. Health, NARO, [2]Gifu Univ., [3]Natl. Inst. Infect. Dis.)

P2-023

Household food poisoning caused by *Clostridium botulinum* typeA(B)

○Keiko Kimata[1], Kazuki Saito[1], Junichi Kanatani[1], Kazunori Oishi[1], Masahiro Yutani[2], Mitsutoshi Senoh[2], Tsuyoshi Kenri[2], Yoshika Momose[3], Yumiko Okada[3], Masashi Uema[3] ([1]Dept. Bac. Toyama Inst. Health, [2]Dept. Bacteriol.II Natl. Inst. Infect. Dis., [3]Div. Biomed. Food Res. Natl. Inst. Health Sci.)

2. Ecology -b. Microbiota

P2-024

Ovarian cancer malignant transformation involving extracellular vesicles from vaginal microflora

○Eri Inami, Akira Yokoi, Kosuke Yoshida, Yukari Nagao, Masami Kitagawa, Hiroaki Kajiyama (Dept. Obst & Gyne., Nagoya Univ. Grad. Sch. Med.)

P2-025

Changes in gut microbiota in allergic mice treated with Lonicera caerulea extract

○Masaaki Minami[1], Mineo Nakamura[2] ([1]Dept. Bacteriol. Nagoya City Univ. Grad. Sch. Med., [2]Nakamura Pharm.)

P2-026

Prevention of Fish skin Infections by Antimicrobial Bacteria isolated from fish Epidermal Mucus

○Hajime Nakatani, Naoto Suetake, Yuya Tsukamoto, Michio Homma, Katsutoshi Hori (Dept. Mol. Eng., Grad. Sch. Eng., Nagoya Univ.)

P2-027

Development of phage therapy against skin-resident bacteria associated with axillary odor

○Kosuke Fujimoto[1,2], Satoshi Uematsu[1,2] ([1]Dept. Immunol. Genom., Sch. Med., Osaka Met. Univ., [2]Div. Metagenome Med., HGC, IMS, UTokyo)

P2-028/FL3-05

【Withdrawn】

P2-029/FL3-06

Metagenomic detection of antimicrobial resistance genes in the oral microbiome of Thai children

○Momoko Kobayashi[1,2], Lapirattanakul Jinthana[3], Masayuki Ono[1], Daisuke Motooka[4], Tansriratanawong Kallapat[5], Tantivitayakul Pornpen[3], Smutkeeree Apiwan[6], Shigetada Kawabata[1,7], Masaya Yamaguchi[2] ([1]Dept. Microbiol., Grad. Sch. Dent., [2]NIBIOHN, [3]Dept. Oral Microbiol., Mahidol Univ., [4]OUBIC, [5]Dept. Oral Med. Periodontol., Mahidol Univ., [6]Dept. Pediatr. Dent., Mahidol Univ., [7]CiDER, Osaka Univ.)

P2-030

Bacterial biofilm profiles on the surface of smartphone touchscreen and elevator buttons

○Yuki Kato[1], Anna Wakui[1,2], Mirai Sekiguchi[1], Miho Kawachi[1,3], Manami Imai[1], Haruna Sato[1], Rika Okabe[1], Yuka Naruse[1], Jumpei Washio[4], Takuichi Sato[1] ([1]Div. Clin. Chem., Niigata Univ. Grad. Sch. Health Sci., [2]Dept. Med. Technol., Niigata Univ. Health Welfare, [3]Dept. Pathol., Nippon Dent. Univ. at Niigata, [4]Div. Oral Ecol. Biochem., Tohoku Univ. Grad. Sch. Dent.)

P2-031/FL3-07

Intestinal mucosa-associated bacteria Adlercreutzia attenuates colitis

○Jiayue Yang[1], Nozomu Obana[2,3], Gaku Nakato[4], Nobuhiko Nomura[3], Shinji Fukuda[1,2,4,5,6] ([1]Inst. Adv. Biosci., Keio Univ., [2]TMRC, Inst. Med., Univ. of Tsukuba, [3]Inst. Life Env. Sci., Univ. of Tsukuba, [4]KISTEC, [5]Grad. Sch. Med., Juntendo Univ., [6]Metagen. Inc.)

P2-032/FL3-08

Time-Series Causal Discovery Reveals the Ecological Importance of Patescibacteria (CPR)

◯Genta Shima[1], Hirokazu Toju[1], Kenta Suzuki[2] ([1]Div. Integr. Life Sci., GSB, Kyoto Univ., [2]Integr. Bioresour. Info. Div., BRC, RIKEN)

P2-033

Bacteriophages as a tool for reducing target bacteria while preserving microbial diversity

◯Priyanka Baranwal[1], Kazuhiko Miyanaga[1], Yoshifumi Aiba[1], Shinya Watanabe[1], XinEe Tan[1], Srivani Veeranarayanan[1], Huong Minh Nguyen[1], Kazumasa Sasaki[1], Longzhu Cui[1] ([1]Dept. Inf. Immunity., Sch. Med., Jichi Med. Univ., [2]Dept. Inf. Immunity., Sch. Med., Jichi Med. Univ.)

P2-034

Bacterial biofilm profiles on the surface of multifunctional non-woven fabric masks

◯Mirai Sekiguchi[1], Hiroto Sano[1,2], Anna Wakui[1,3], Yuki Kato[1], Miho Kawachi[1], Manami Imai[1], Haruna Sato[1], Rika Okabe[1], Yuka Naruse[1], Takuichi Sato[1] ([1]Div. Clin. Chem., Niigata Univ. Grad. Sch. Health Sci., [2]Dept. Pathol., Nippon Dent. Univ. at Niigata, [3]Dept. Med. Technol., Niigata Univ. Health Welfare)

P2-035

Bacterial profiling of the remaining bottled black tea and coffee beverages: Effects of adding milk

◯Haruna Sato[1], Miho Kawachi[1], Anna Wakui[1,2], Manami Imai[1], Yuki Kato[1], Rika Okabe[1], Yuka Naruse[1], Momoko Morohashi[1], Nanami Asano[1], Takuichi Sato[1] ([1]Div. Clin. Chem., Niigata Univ. Grad. Sch. Health Sci., [2]Dept. Med. Technol., Niigata Univ. Health Welfare)

P2-036/FL3-09

Investigation of the coexistence relationship between S.a fatty acid resistance and Cb bacteria

◯Yasuyuki Asada[1,2], Keijuro Ohdan[1,3], Yujin Suzuk[1], Miki Kawada-Matsuo[1], Mikari Asakawa[4], Junzo Hisatsune[5], Yo Sugawara[5], Toru Takeshita[4], Motoyuki Sugai[5], Hitoshi Komatsuzawa[1] ([1]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Dept. Oral Oncology., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [3]Dept. Oral and Maxillofacial Surgery., Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., [4]Dept. Oral Preventive Medicine., Grad. Sch. of Dental Sci., Kyushu Univ., [5]Antimicrobial Resistance Res. Ctr., National Inst. Infectious Diseases)

P2-037

Characterization of oral and nasal microbiota and factors associated with their uniqueness

◯Mikari Asakawa[1], Tomoki Kawayanagi[2,3], Shinya Kageyama[1], Miki Kawada-Matsuo[2], Hideki Shiba[3], Hitoshi Komatsuzawa[2], Toru Takeshita[1] ([1]Sect. Prevent. Dent. Public Health., Grad. Sch. Dent., Kyushu Univ., [2]Dept. Bacteriol., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., [3]Dept. Biological Endodont., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ.)

P2-038

Dietary protein alters gut microbiota composition and susceptibility to enteric bacterial infection

◯Yukinobu Inoue[1,2], Yun-Gi Kim[1] ([1]Dept. Microbiol. Pha., Kitasato Univ., [2]Pha., Keio Univ.)

P2-039

Bacterial profiling in catechin-enriched green tea bottled beverages: a screening experiment

◯Manami Imai[1], Miho Kawachi[1], Anna Wakui[1,2], Haruna Sato[1], Yuki Kato[1], Rika Okabe[1], Yuka Naruse[1], Nanami Asano[1], Jumpei Washio[3], Takuichi Sato[1] ([1]Div. Clin. Chem., Niigata Univ. Grad. Sch. Health Sci., [2]Dept. Med. Technol., Niigata Univ. Health Welfare, [3]Div. Oral Ecol. Biochem., Tohoku Univ. Grad. Sch. Dent.)

P2-040

High-fat diet and antibiotic in early life affect gut environment and fatty liver disease in mice

Ryuji Ishikawa[1], Maki Nakamura[1], Haruyuki Imaohji[2], Tomomi Kuwahara[2], Masami Shishibori[3], Mayuko Shimizu[4], Akiko Sakurai[5], ◯Keiko Kataoka[5] ([1]Grad. Sch. Health Sci., Tokushima Univ., [2]Dept. Mol. Microbiol., Sch. Med., Kagawa Univ., [3]Dept. Intelligent Systems, Sch. Sci. Tech., Tokushima Univ., [4]Dept. Pathol. Lab. Med., Sch. Med., Tokushima Univ., [5]Dept. Microbiol. Genetic Anal., Sch. Health Sci., Tokushima Univ.)

P2-041/FL3-10

Development of a Mouse Model to Evaluate Wild-Type Phages in Eliminating Enterotoxigenic *B. fragilis*

◯Md Razib Hossain, Mahmoud Arbaah, Yoshifumi Aiba, Shinya Watanabe, Kazuhiko Miyanaga, XinEe Tan, Srivani Veeranarayanan, Priyanka Baranwal, Longzhu Cui (Div. Bacteriology, Sch. Medicine, Jichi Medical Univ.)

P2-042/FL3-11

Spatial distribution and diversity of *Escherichia coli* in the bovine gastrointestinal tract

◯Atsushi Iguchi[1], Masaya Ono[2], Taisei Kikuchi[2] ([1]Fac. Agr., Miyazaki Univ., [2]Grad. Sch. Front. Sci., Tokyo Univ.)

P2-043

Relationship between intergenerational transmission of gut microbiome and longevity in Okinawa

◯Hidehiro Yokoda[1], Yukitoshi Iha[1], Yuko Murayama[1], Akio Ishida[2], Shinya Ikematsu[1] ([1]Dept. Bioresource Engr., NIT, Okinawa College, [2]Med., Ryukyu Univ.)

2. Ecology -c. Growth and culture conditions

P2-044

Sulfur-acquisition pathways confer a fitness advantage to bacteria in plant tissue

◯Kazuya Ishikawa[1], Saki Yamaguchi[1], Makoto Tsunoda[2], Kazuyuki Furuta[1], Chikara Kaito[1] ([1]Grad. Sch. Med. Dent. Pharm., Okayama Univ., [2]Grad. Sch. Pharm., Tokyo Univ.)

P2-045

Effects of incubation conditions on bacterial porphyrin production and photoinactivation

○Hisato Kato, Miyu Ohta, Haruki Ohtani, Kazufumi Masuda (Sch. Pharm., Shujitsu Univ.)

P2-046

Inter-subspecific differences in dormancy of *Mycobacterium abscessus* species via hypoxic stress

○Yuta Morishige[1], Yoshiro Murase[1], Satoshi Mitarai[1,2] ([1]Dept. Mycobac. Ref. Res., Res. Inst. Tubercul., JATA, [2]Dept. Basic Mycobacteriol., Grad. Sch. Biomed. Sci., Nagasaki Univ.)

3. Physiology / Structural biology-a. Metabolism, biosynthesis and metabolome

P2-047

Activation mechanism of B. subtilis ClpP protease by antibiotics Acyldepsipeptide 1 (AEDP1)

○Michio Homma[1,4], Fumihiro Ishikawa[2], Kanji Takahashi[1], Akiko Takaya[3], Genzoh Tanabe[2], Takayuki Uchihashi[1] ([1]Div. Material Sci., Grad. Sch. Sci., Nagoya Univ., [2]Fac. Pharmacy, Kinki Univ., [3]Grad. Sch. Pharma. Sci., Chiba Univ., [4]Grad. Sch. Eng., Nagoya Univ.)

P2-048

Transition of energy sources in oral *Veillonella* depending on the growth phases

○Izumi Mashima[1], Futoshi Nakazawa[2], Kiyoshi Murata[3] ([1]Dept. Oral Med. Sci., Sch. Dent., Ohu Univ., [2]Dept. Oral Biol., Fac. Dent., Univ. Indonesia, [3]Dept. Pharm. Nat. Resour. Sci., Sch. Pharm. Sci., Ohu Univ.)

P2-049/FL3-12

The role of mitochondria in the cellular adaptation mechanism of *Chlamydia trachomatis* (L2/434/Bu)

○Tsubasa Tatsumiya, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

P2-050/FL3-13

Effect of a mutation in *metK* from BCG on the SAM synthesis activity

○Yuki Nishiya[1,2], Katsuki Takebe[3], Keiko Sato[4], Ikue Tosa[2], Masaaki Nakayama[2], Yuki Arimura[1], Manabu Ato[5], Seiji Iida[1], Naoya Ohara[2] ([1]Dept. Oral Maxillofac. Reconst. Surg., Grad. Sch. Med., Dent. and Pharm. Sci., Okayama Univ., [2]Dept. Oral Microbiol., Grad Schl. Med., Dent. and Pharm. Sci., Okayama Univ., [3]Dept. Dent. Pharmacol, Grad. Sch. Med., Dent. and Pharm. Sci., Okayama Univ., [4]Dept. Front. Oral Sci., Grad. Sch. Biomed. Sci., Nagasaki Univ., [5]Dept. Mycobacteriol., Leprosy Res. Cent., NIID)

P2-051/FL3-14

Intracellular elemental analysis of long-term cultured *Corynebacterium matruchotii*

Naoko Ohara[1], Midori Ogawa[2], Katsuki Takebe[3], Ikue Tosa[4], Mitsumasa Saito[2], ○Naoya Ohara[4,5] ([1]Dept. Operative Dent., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [2]Dept. Microbiol., Sch. Med., UOEH Univ., [3]Dept. Dent. Pharm., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [4]Dept. Oral Microbiol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [5]Res. Cent. Intest. Health Sci., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci.)

P2-052/FL3-15

The effect of amino acid and succinate metabolism on *Campylobacter jejuni* virulence

○Mana Makimoto[1,2], Takaaki Shimohata[1,2], Shiho Fukushima[1], Saki Yamanaka[1], Takashi Uebanso[1], Kazuaki Mawatari[1], Akira Takahashi[1] ([1]Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch., [2]Marine Bio., Fukui Prefect Univ.)

P2-053/FL3-16

Identification of Oral Bacteria and Metabolites Associated with Periodontal Disease

○Chikako Ishihara, Misato Sako, Kota Tsutsumi, Naumi Fujii, Daiki Hashimoto, Atushi Sato, Takashi Chikazawa, Yasushi Kakizawa (R&D Headquarters., Lion Co., Ltd.)

P2-054

Metabolic changes of *Vibrio parahaemolyticus* under different salinity conditions

○Yusuke Fujii[1], Mana Makimoto[1,2], Kai Ishida[2,3], Akira Takahashi[2], Takaaki Shimohata[1,2] ([1]Marine Bio., Fukui Prefect Univ., [2]Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch., [3]Dept. Infectious Diseases. Kyoto Prefec. Univ. Medicine)

P2-055

Study on Growth-Promoting Factor for Leptospira Produced by the Massilia

○Michinobu Yoshimura[1], Ryo Ozuru[1,2], Takumi Sonoda[1], Satoshi Miyahara[3], Mitsumasa Saito[3], Jason Papin[2], Fumiko Obata[4], Glynis Kolling[2], Shin-Ichi Yoshida[5], Kenji Hiromatsu[1] ([1]Dept. Microbiol. Immunol., Fac. Med., Fukuoka Univ., [2]Dept. Biomed. Eng., Univ. Virginia, [3]Dept. Microbiol., Sch. Med., UOEH, [4]Div. Bacteriol., Dept. Microbiol. Immunol., Fac. Med., Tottori Univ., [5]Kyushu Univ.)

P2-056

Supersulfides-dependent energy metabolism by *cyclo*-octasulfur (S_8) produced across species

○Tetsuro Matsunaga[1], Uladzimir Barayeu[2], Seiryo Ogata[2], Minkyung Jung[2], Tkayuki Shimizu[3], Masanobu Morita[2], Michito Yoshizawa[4], Hozumi Motohashi[5] ([1]Center for Integrated Control, Epidemiology and Molecular Pathophysiology of Infectious Diseases, Akita Univ., [2]Dept. Environ. Health Sci. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., [3]Fac. Div. Nat. Sci., Biol. Sci. Res. Group, Nara Women's Univ., [4]Lab. Chem. Life Sci., Inst. Innov. Res., Inst. Sci. Tokyo, [5]Dept. Med. Biochem., Tohoku Univ. Grad. Sch. Med.)

3. Physiology / Structural biology -b. Motility

P2-057

Analysis of chemotaxis to lactate/pyruvate in Vibrio parahaemolyticus

○Hiroyuki Terashima[1], Toshio Kodama[2] ([1]Col. Pharm., Kinjo Gakuin Univ., [2]Dept. Bacteriol., Inst. Trop. Med. (NEKKEN), Nagasaki Univ.)

P2-058

Light-responsive mechanism of photokinesis in Vibrio cholerae

○Jun Xu[1], Shuichi Nakamura[2], Tetsu Yamashiro[1] ([1]Dept. Bacteriol., Grad. Sch. Med., Univ. Ryukyus, [2]Dept. Appl. Phys., Grad. Sch. Eng., Tohoku Univ.)

P2-059/FL3-17

Inhibition of sodium ion flux in the flagellar stator from Vibrio due to an inhibitor binding

○Tatsuro Nishikino[1,2], Norihiro Takekawa[3], Jun-ichi Kishikawa[4], Mika Hirose[4], Seiji Kojima[5], Michio Homma[5], Takayuki Kato[4], Katsumi Imada[3] ([1]Dept. Life Sci. & Applied Chem., Nagoya Inst. of Tech., [2]OptoBioTech. Res. Ctr., Nagoya Inst. of Tech., [3]Dept. Macromole. Sci., Grad. Sch. of Sci., Osaka Univ., [4]Inst. for Protein Res., [5]Dept. of Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

P2-060/FL3-18

LafTU functions as the lateral flagellar stator of *Vibrio alginolyticus*

○Seiji Kojima[1], Kazuki Yokoyama[1], Norihiro Takekawa[2] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [2]Dept. Macromol. Sci., Grad. Sch. Sci., Osaka Univ.)

P2-061

A 6-blade β-propeller domain-containing protein is essential for the motility of *Leptospira*

○Kyosuke Takabe, Nobuo Koizumi (Dept. Bacteriol. I, NIID)

P2-062

Analysis of *Campylobacter jejuni* response to bile stimulation

○Miyuu Ono[1], Mana Makimoto[1,2], Takaaki Shimohata[1,2], Takashi Uebanso[1], Kazuaki Mawatari[1], Akira Takahashi[1] ([1]Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch., [2]Marine Bio., Fukui Prefect Univ.)

3. Physiology / Structural biology -e. Secretion and transport

P2-063

Structural Basis of TolC-mediated Drug Efflux Channel and Development of Novel Inhibition Strategies

○Mikio Tanabe[1], Satomi Inaba-Inoue[2], Tosihio Moriya[1] ([1]Struct. Biol. Res. Cen, Inst. Mat. Struct. Sci. KEK, [2]Adv. Life. Sci, Hokkaido Univ.)

P2-064/FL3-19

Functional analysis of chaperone-like protein in periodontitis bacteria based on structural biology

○Katsuki Takebe[1], Keiko Sato[2], Shuhei Miyakawa[3], Ikue Tosa[4], Yujiang Chen[4], Kana Kashima[5], Naoya Ohara[4] ([1]Dept. Dent. Pharmacol, Grad. Sch. Med., Dent. and Pharm. Sci., Okayama Univ., [2]Dept. Front. Oral Sci., Grad Schl. Biomed. Sci., Nagasaki Univ., [3]Dept. Quantum Life Sci and Bioinfo., Grad. Sch. Pharma. Sci., Osaka Univ., [4]Dept. Dent. Pharmacol, Grad. Sch. Med., Dent. and Pharm. Sci., Okayama Univ., [5]Dept. Oral & Maxillofac. Onco and Surg, Grad. Sch. Dent., Osaka Univ.)

4. Genetics / Genomics / Biotechnology-a. Genomics, bioinformatics and systems biology

P2-065

iYH543, a genome-scale metabolic model of the serotype M1 strain of *Streptococcus pyogenes*

○Yujiro Hirose[1], Eri Ikeda[1], Masayuki Ono[1,2], Masaya Yamaguchi[3], Shigetada Kawabata[1,4] ([1]Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., [2]Bioinfo., Osaka Univ. Grad. Sch. Dent., [3]NIBIOHN, [4]CiDER. Osaka Univ.)

P2-066/FL3-20

Ancestral estimation revealed pneumococcal genes abandoned to obtain virulence

○Masayuki Ono[1,2], Masaya Yamaguchi[3], Shigetada Kawabata[1,4] ([1]Dept. Microbiol., Sch. Dent., Osaka Univ., [2]Bioinformatics Res. Unit, Sch. Dent., Osaka Univ., [3]NIBIOHN, [4]CiDER, Osaka Univ.)

P2-067/FL3-21

Deep learning-based enzyme screening to identify orphan enzyme

○Keisuke Hirota[1], Takuji Yamada[1,2,3,4] ([1]LST, Science Tokyo, [2]Metagen, Inc., [3]MGTx, [4]digzyme, Inc)

P2-068/FL3-22

Detection of 1000s beneficial genome changes within a species

◯Ichizo Kobayashi[1] ([1]Micro-nano, HOSEI Univ., [2]NIBB)

P2-069/FL3-23

Analysis of antibiotic resistance genes in STEC isolated from asymptomatic carriers

◯Yumi Imai[1], Hiroshi Kaneko[2], Miki Okuno[1], Takeshi Yamamoto[1], Akio Noguchi[2], Toshio Sato[2], Yoshitoshi Ogura[1] ([1]Div. Microbiol. Dept. Infect. Med. Kurume Univ. Sch. Med., [2]Japan Microbiological Laboratory Co., Ltd.)

P2-070

Prediction of medium components for bacteria using Machine Learning

◯Ryuhi Sato, Keisuke Hirota, Takuji Yamada (LST., Science Tokyo)

P2-071/FL3-24

Helicobacter pylori base-excision restriction enzyme in stomach carcinogenesis

◯Masaki Fukuyo[1], Noriko Takahashi[2,3], Katsuhiro Hanada[4], Koji Yahara[5], Hideo Yonezawa[3,6], Naoki Osada[7], Atushi Kaneda[1,8], Ikuo Uchiyama[9], Takako Osaki[3], Ichizo Kobayashi[2,3,10] ([1]Grad. Sch. Med., Chiba Univ., [2]Grad. Sch. Frontier Sci., Univ. Tokyo, [3]Fac. Med., Kyorin Univ., [4]Fac. Med., Oita Univ., [5]Antimicrob. Resist. Res. Cent., Natl. Inst. Infect. Dis., [6]Dept. Microbiol., Tokyo Dent. Coll., [7]Div. Bioeng. & Bioinf., Hokkaido Univ., [8]Health & Dis. Omics Ctr., Chiba Univ., [9]Lab. Genome Inform., Natl. Inst. Basic Biol., [10]Res. Ctr. Micro/ Nanotechnol., Hosei Univ.)

4. Genetics / Genomics / Biotechnology-b. Horizontal gene transfer, mobile genetic element and evolution

P2-072

Evasion of Phage Defense Systems by Selfish Mobile Genetic Elements

◯Kotaro Chihara, Aa Haeruman Azam, Kotaro Kiga (Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis.)

P2-073

F-factor-dependent mobility of FRI-type carbapenemase-encoding plasmids

◯Hiroaki Kubota[1], Kai Kobayashi[1], Morika Mitobe[1], Yoshifumi Uwamino[2], Yasunori Suzuki[3], Jun Suzuki[1], Kenji Sadamasu[1] ([1]Dept. Microbiol., Tokyo Metr. Inst. Pub. Health, [2]Dept. Lab. Med., Sch. Med., Keio Univ., [3]Lab. Animal Hygiene, Sch. Vet., Kitasato Univ.)

P2-074

Mycobacterial giant linear plasmids carry a tRNA array

◯Hirokazu Yano[1,2], Kentaro Arikawa[3], Haruo Ikeda[4], Shouta Nonoyama[2], Fumito Maruyama[5], Hiroshi Kida[6], Manabu Ato[7], Tomotada Iwamoto[3], Nishiuchi Yukiko[5] ([1]AMR-RC, NIID, [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Kobe Inst. Health, [4]NGNPC, [5]IDEC, Hiroshima Univ., [6]NHO Osaka Toneyama Med. Cntr., [7]Leprosy Res. Cntr., NIID)

P2-075

Diversity of Stx phages and the Stx2 production levels associated with short- or long-tailed phages

◯Keiji Nakamura[1], Sunao Iyoda[2], Tetsuya Hayashi[1] ([1]Dept. Bacteriol., Grad. Sch. Med, Sci., Kyushu Univ., [2]Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

P2-076

Elucidation of the mechanism of the phage defense system derived from *Escherichia coli* prophage

◯Azumi Tamura[1,2,3], Kotaro Chihara[1], Aa Haeruman Azam[1], Shinjiro Ojima[1], Kohei Kondo[4], Tomohiro Nakamura[1], Koichi Watashi[1], Yoshimasa Takahashi[1], Hiroshi Yotsuyanagi[2,3], Kotaro Kiga[1,5] ([1]Res. Ctr. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [2]Dept. Comp. Biol. Med. Sci., Grad. Sch. Front. Sci., Univ. of Tokyo, [3]Div. Infect. Dis., Inst. of Med. Sci., Univ. of Tokyo, [4]AMR Res. Ctr., Natl. Inst. Infect. Dis., [5]Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P2-077

Search for *Escherichia coli* with low conjugation frequency against IncF plasmid encoding AMR genes

◯Kengo Hayashi[1], Masahiro Suzuki[1], Yohei Doi[1,2,3] ([1]Dept. Microbiol., Sch. Med., Fujita Health Univ., [2]Dept. Infect. Dis., Sch. Med., Fujita Health Univ., [3]Div. Infect. Dis., Sch. Med., Pittsburgh Univ.)

P2-078

Importance of H-NS homologs in the transcriptional regulation of E. coli

◯Taku Oshima (Dept. Biotechn., Toyama Pref. Univ.)

P2-079/FL3-25

A novel Retron targeting multiple tRNAs confers robust phage resistance

◯Aa Haeruman Azam, Matthew Imanaka, Wenhan Nie, Kotaro Chihara, Shinjiro Ojima, Yoshimasa Takahashi, Koichi Watashi, Kotaro Kiga (Research Center for Drug and Vaccine Development, National Institute of Infectious Diseases)

P2-080/FL3-26

Identification of novel conjugation gene of pELF-type linear plasmid of *Enterococcus faecium*

◯Jun Kurushima[1], Haruyoshi Tomita[1,2] ([1]Lab. Bact. Drug Resist., Sch. Med., Gunma Univ., [2]Dept. Bact., Sch. Med., Gunma Univ.)

P2-081

Genetic variants of hyper-mucoid Group A streptococcus emerged in vitro

○Chang Ma[1], Kazunori Murase[1], Takashi Nozawa[1], Norihiko Takemoto[2], Ichiro Nakagawa[1] ([1]Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., [2]Dept. Infectious Diseases, Research Inst., NCGM)

5. Pathogenicity -a. Adhesins and colonization factors

P2-082

Correlation between cell detachment and chaperone-usher fimbria in uropathogenic Escherichia coli

○Kazuha Shimamoto[1], Hiharu Inoue[1], Yoshikazu Nishikawa[2,3], Takayuki Wada[1,3] ([1]Dept. Microbiol. Grad. Sch. Hum. Life Ecol., Osaka Metro. Univ., [2]Sch. Food Nutr Sci., Tezukayama Gakuin Univ., [3]Osaka Intl. Res. Ctr. Infect. Dis., Osaka Metro. Univ.)

P2-083

Distribution and diversity of *E. coli* multicellularization factor EibG in enterohemorrhagic *E. coli*

○Yuto Kotaka[1,2], Ken-ichi Lee[2], Nozomi Ishijima[2], Yukihiro Akeda[2], Sunao Iyoda[2], EHEC Working Group[3] ([1]Dept. Biol. Sci., Tokyo Metropolitan Univ., [2]Dept. Bacteriol. 1, Natl. Inst. Infect. Dis., [3]Pub. Health Inst.)

P2-084/FL3-27

Diversity of operon structure in kappa-chaperone usher (CU) fimbriae

○Hiharu Inoue[1], Takayuki Wada[2] ([1]Dept. Microbiol. Grad. Sch. Hum. Life Ecol., Osaka Metro. Univ., [2]Osaka Intl. Res. Ctr. Infect. Dis., Osaka Metro. Univ.)

P2-085/FL3-28

Cryo-electron microscopy structure of Type IV pilus CFA/III from ETEC

○Teruhoshi Baba[1], Hiroya Oki[2], Ryuki Muramoto[1], Tomoya Imai[4], Takuya Yoshida[3], Takumi Ueda[3], Shigeaki Matsuda[2,5], Tetsuya Iida[2,5], Shota Nakamura[2,5], Kazuki Kawahara[3,5] ([1]Sch. Pharm. Sci., Osaka Univ., [2]RIMD, Osaka Univ., [3]Grad. Sch. Pharm. Sci. Osaka Univ., [4]RISH, Kyoto Univ., [5]CiDER, Osaka Univ.)

P2-086

High cell density drives biofilm formation in *Vibrio cholerae* despite HapR repression

○Jant Cres Caigoy[1], Toshi Shimamoto[1], Hirofumi Nariya[2], Zhiqun Yan[3], Tadashi Shimamoto[1] ([1]Grad. Sch. Int. Sci. Life, Hiroshima Univ., [2]Grad. Sch. Human Life Sci. Jumonji Univ., [3]Res. Cent. Maruzen Pharm. Co. Ltd)

P2-087

Functional analysis of genes highly expressed during gut colonization in Mediterraneibacter gnavus

○Ryu Ashina[1], Nobuhiko Nomura[2,3], Nozomu Obana[3,4], Shinji Fukuda[3,4,5,6,7,8] ([1]Biol. Resource Sci., Tsukuba Univ., [2]Fac. Life Environ. Sci., Univ. Tsukuba, [3]MiCS, Univ. Tsukuba, [4]TMRC, Inst. Med., Univ. Tsukuba, [5]Inst. Adv. Biosci., Keio Univ., [6]KISTEC, [7]Inst. Med., Univ. Juntendo, [8]Metagen. Inc.)

P2-088

Complex formation of GAPDH with autolysin (Acp) on *Clostridium perfringens* surfaces

○Nozomu Matsunaga[1], Riyo Aono[2], Yasuo Hitsumoto[1], Seiichi Katayama[1] ([1]Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., [2]Dept. Med. Tech., Kagawa Pref. Univ. Health Sci.)

P2-089

Identification of UPEC derived proteins highly expressed in the bladder of mice with UTI

Ayako Takita[1], Mizuki Shimokawa[1], Kazutomo Suzue[2], Ayuko Kimura[3], Himari Tabo[2], Yumika Sato[1], Haruyoshi Tomita[1], ○Hidetada Hirakawa[1] ([1]Dept. Bacteriol., Sch. Med., Gunma Univ., [2]Dept. Biodefen., Sch. Med., Gunma Univ., [3]Dept. MedSci., Sch. Health Sci., Gunma Paz Univ.)

P2-090/FL3-29

Identification of *Helicobacter pylori* virulence factor that regulates bacterial pathogenicity

○Naomi Aini[1], Weichen Gong[2], Kana Nishida[2], Tomohiro Miyoshi[1], Hitomi Mimuro[1] ([1]RCGLID, Oita Univ., [2]RIMD, Osaka Univ.)

5. Pathogenicity -b. Toxins, effectors and physically active substances

P2-091/FL4-01

Role of *Streptococcus pyogenes* hemolytic toxins in necrotizing fasciitis mouse model pathogenesis

○Arisa Mori[1], Yujiro Hirose[1], Eri Ikeda[1], Masayuki Ono[1,2], Shigetada Kawabata[1,3] ([1]Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., [2]Bioinfo., Osaka Univ. Grad. Sch. Dent., [3]CiDER. Osaka Univ.)

P2-092

The analysis of functional domain of MARTX toxin produced by *Vibrio vulnificus*

○Nene Kurata[1], Mai Sasaki[1], Takahiro Tsuchiya[1,2], Katsushiro Miyamoto[1], Jun Komano[1], Hiroshi Tsujibo[1] ([1]Dept. Microbiol. Infect. Cont., Osaka Med. Pharm. Univ., [2]Ctr. Advance. Pharm. Educ., Osaka Med. Pharm. Univ.)

P2-093/FL4-02

Analysis of the expression control mechanism of endo-β-*N*-acetylglucosaminidase from *S.intermedius*.

○Riku Hiraoka[1], Atsushi Tabata[1,2], Hideaki Nagamune[2], Toshifumi Tomoyasu[1,2] ([1]Dept. Biosci. & Bioindust., Fac. Biosci & Bioindust., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

P2-094/FL4-03

Response of human vascular endothelium-derived cells to the action of Sm-hPAF produced from S. mitis

○Yui Koga[1], Toshifumi Tomoyasu[1,2], Hideaki Nagamune[2], Atsushi Tabata[1,2] ([1]Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

P2-095/FL4-04

Recruitment of Rab33B to LCV through Legionella effector for association of LCV with the ER

○Ryo Sugano, Kohei Arasaki (Sch. Life Sci., Tokyo Univ. Pharm. Life Sci.)

P2-096/FL4-05

Effect of enterotoxigenic *Escherichia coli* on host defense responses of *Caenorhabditis elegans*

○Chinatsu Yamamura[1], Yoshihiko Tanimoto[1,2,3], Ryohei Nomoto[4], Takayuki Wada[1,5], Eriko Nakadai[1,2,3] ([1]Dept. Microbiol. Grad. Sch. Hum. Life Ecol., Osaka Metro. Univ., [2]Grad. Sch. Biostudies, Kyoto Univ., [3]LiMe, Kyoto Univ., [4]Kobe Inst, Heal., [5]Osaka Intl. Res. Ctr. Infect. Dis., Osaka Metro. Univ.)

P2-097

Exploratory study of new drugs for gas gangrene caused by *Clostridium perfringens* type A

○Masaya Takehara[1], Yuta Homma[1], Yoshihiko Sakaguchi[2], Toshiyuki Yamaji[1], Masahiro Nagahama[2] ([1]Dept. Microbiol. Immunol, Fac. Pharm., Juntendo Univ., [2]Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ.)

P2-098

Enhanced Hepatocyte Lethality via Cholix Toxin with Extracellular Vesicle Inhibitors Mechanism

○Kinnosuke Yahiro[1], Kazuya Ozaki[2,3], Hiyo Nagahara[1], Asaka Kawamura[1] ([1]Lab. Microbiol. and Infect. Cont., Kyoto Pharm. Univ., [2]SNAKEN, Osaka Univ., [3]Grad. Sch. Pharm., Osaka Univ.)

P2-099

Analysis of factors that regulate transcription of serine protease gene in *Aeromonas sobria*

○Eizo Takahashi[1], Sadayuki Ochi[1], Risa Nishimura[1], Yuuki Kashiwagi[1], Ryo Murao[1], Hidetomo Kobayashi[2], Soshi Seike[2], Hiroyasu Yamanaka[2], Keinosuke Okamoto[3] ([1]Fac. Pharm. Sci., Yokohama Univ. Pharm., [2]Fac. Pharm. Sci., Hiroshima Int. Univ., [3]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ.)

P2-100/FL4-06

Characterization of human antibody against diphtheria toxin

○Tomoko Kohda[1], Himena Tomita[1], Mitsutoshi Senoh[2], Masaaki Iwaki[2] ([1]Grad. Sch. Vet. Sci., Osaka Metropolitan Univ., [2]Dept. Bact. II., National Institute of Infectious Diseases)

P2-101/FL4-07

Cellular response of human gingival carcinoma cell against human-specific cytolysin, Intermedilysin

○Aika Tanaka[1], Hideaki Nagamune[2], Toshifumi Tomoyasu[1,2], Ai Fujimoto[3], Atsushi Tabata[1,2] ([1]Dept. Biosci. & Bioindust., Fac. Biosci & Bioindust., Tokushima Univ., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., [3]Sunstar Inc., R&D)

P2-102

Exploring the Mechanism of Vacuole Induction by Escherichia coli-derived Outer Membrane Vesicles

○Teresia Kimeu, Kazunori Murase, Atsuko Nozawa, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol. Sch. Med., Kyoto Univ.)

P2-103/FL4-08

Engineered Chimeric Botulinum Neurotoxin for Targeted Antibody Delivery to Treat Botulism

○Shin-Ichiro Miyashita[1], Jie Zhang[2,3,4], Akane Kanazawa[1], Rintaro Ohono[1], Hanae Kojima[1], Min Dong[2,3,4], Yoshimasa Sagane[1] ([1]Dept. Food Aroma Cosme. Chem., Fac. of Bio-ind., Tokyo NODAI, [2]Dept. Urol., Boston Child. Hosp., [3]Dept. Surg., Harvard Med. Sch., [4]Dept. Microbiol., Harvard Med. Sch.)

P2-105

Interaction between BteA and BopN produced by Bordetella

○Toshinobu Ogawa, Asaomi Kuwae, Akio Abe (Grad. Sch. Infect. Cont. Sci., Kitasato Univ.)

P2-106

Antibiotics-induce extracellular vesicles from E. coli stimulate macrophages to induce inflammation

○Mika Tanaka[1], Akari Shinohara[2], Yasuhiko Horiguchi[3], Mayuko Oka[1,2] ([1]Food Hyg. and Environ. Health, Grad. Sch. Life and Environ. Sci., Kyoto Pref. Univ., [2]Food Hyg. and Environ. Health, Fac. of Agr. and Food Sci., Kyoto Pref. Univ., [3]Dept. Mol. Bac., Res. lnst. for Microb. Dis., Osaka Univ.)

P2-107

Host factor-mediated pathogenicity mechanism of SubAB from Shiga toxin-producing *Escherichia coli*

○Hiroyasu Tsutsuki[1], Tianli Zhang[2], Kinnosuke Yahiro[3], Takaaki Akaike[4], Tomohiro Sawa[1] ([1]Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., [2]Cent. Integr. Cont. Epidemiol. Mol. Pathophysiol. Infect. Dis., Akita Univ., [3]Dept. Microbiol. Infect. Cont. Sci, Kyoto Pharm. Univ., [4]Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med.)

P2-109/FL4-11
The role of PLC and extracellular Ca^{2+} influx in the inflammation induced by *Pg* infection
○Masaaki Nakayama[1,2], Mariko Naito[3], Ikue Tosa[1], Naoya Ohara[1,2,4] ([1]Dept. Oral Microbiol., Okayama Univ. Fac. Med. Dent. Pharm. Sci., [2]ARCOCS, Okayama Univ. Dent. Sch., [3]Dept. Microbiol. Oral Infect., Nagasaki Univ. Grad. Sch. Biomed. Sci., [4]Res. Ctr. Intest. Health Sci., Okayama Univ.)

P2-110
Production and functional characteristics of membrane vesicles in Streptococcus mitis
○Airi Matsumoto[1], Yuichi Oogai[1], Tomoko Sumitomo[2], Atsushi Tabata[3], Masanobu Nakata[1] ([1]Dept. Oral Microbiol., Grad. Sch. Med. & Dent. Sci., Kagoshima Univ., [2]Dept. Oral Microbiol., Grad. Sch. Biomed Sci., Tokushima Univ., [3]Dept. Bioeng. Div. Biosci. & Bioind., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

P2-111/FL4-12
Red ginseng extracts have role of inhibition of toxin production by Staphylococcus aureus
○Rinko Moriguchi[1], Akari Shinohara[2], Dendi Krisna Nugraha[3], Ichiro Nakagawa[4], Yasuhiko Horiguchi[3], Mayuko Osada-Oka[1,2] ([1]Food Hyg. and Environ Health, Grad. Sch. Life and Environ. Sci., Kyoto Pref. Univ., [2]Food Hyg. and Environ. Health, Fac. of Agr. and Food Sci., Kyoto Pref. Univ., [3]Dept. Mol. Bac., Res. Inst. for Microb. Dis., Osaka Univ., [4]Dept. Microb., Grad. Sch. Med., Kyoto Univ.)

P2-112/FL4-13
The role of T3SS-2 effector, SseF, on macrophage cell death induced by Salmonella infection
○Risa Ohshima, Takeshi Haneda, Masahiro Ito, Tsuyoshi Miki, Yun-Gi Kim (Dept. Microbiol. Sch. Pharm. Kitasato Univ.)

P2-113
Growth, Biofilm Formation, and Enterotoxin Production of S. aureus in Different Conditions
○Zuo Hu[1], Hisaya Ono[1], Kanako Okada[1], Shouhe Hirose[2], Dong-Liang Hu[1] ([1]Kitasato Univ. School. Vet. Med., [2]National Institute of Health Sciences)

P2-114
Involvement of Btk in *Listeria monocytogenes*-induced inflammasome activation through Lyn-Syk pathway
○Hajime Yamauchi, Yasuyuki Matsuda, Hideki Hara (Dept. Infect. Dis., Div. Microbiol. Immunochem., Asahikawa Med. Univ.)

5. Pathogenicity -f. Others

P2-115
Antibiotic tolerance and biofilm formation of *E. coli* from recurrent urinary tract infection
○Satoka Senoura[1], Mayu Sebe[1], Ritsuko Mitsuhata[2], Ayano Ishii[2], Reiko Kariyama[3], Keiji Murakami[1] ([1]Dept. Clin Nutr., Fac. Health Sci. Technol., Kawasaki Univ. Med. Welfare., [2]Dept. Urol., Okayama Univ. Graduate Sch. Med. Dent. Pharm. Sci., [3]Dept. Food Nutr., Fac. Hum. Life., Okayama Gakuin Univ.)

P2-116
Functional conservation of D-amino acid racemase variants in *Mycoplasma hominis*
○Takeshi Yamamoto[1], Yuichi Tsuchiya[2], Miki Okuno[1], Nanae Yamamoto[2], Yumi Imai[1], Mayako Uchida[2], Yoshitoshi Ogura[1] ([1]Dept. Infect. Med., Sch. Med., Kurume Univ., [2]Dept. Pharmacy., Kyushu Univ. Hosp.)

P2-117
Effects of co-culture of nitrate-reducing bacteria from H. pylori associated gastritis and gastric
○Serika Kuwagi[1], Marina Komatsubara[1], Kazuyoshi Gotoh[1], Jumpei Uchiyama[2], Akari Watanabe[3], Kenji Yokota[1] ([1]Health Science, Okayama Univ., [2]Dept. Path. Bacteriol., Grad. Sch. Med. Dent. Pham. Okayama Univ., [3]Oral Health Care and Rehabilitation, Inst. Biomed. Sciences, Tokushima Univ.)

P2-118
***Salmonella* Gallinarum *ratA* is responsible for a fatal systemic infection in chickens**
○Chihiro Aikawa, Masashi Okamura (Lab. Vet. Microbiol., Div. Vet. Sci., Obihiro Univ. Agric. Vet. Med.)

P2-119
Effect of *Fusobacterium nucleatum* on mouse mammary epithelial cells
○Akihiro Nakamura[1], Yutaka Horiuchi[1], Tomonaga Ichikawa[1], Akihiro Yoshida[2], Takashi Murakami[1] ([1]Dept. Microbiol., Sch. Med., Saitama Medical Univ., [2]Dept. Microbiol., Matsumoto Dental Univ.)

6. Host defense -a. Innate immunity

P2-120
Analysis of innate immune activation triggered by pneumococcal pneumolysin
○Hisanori Domon[1,2], Satoru Hirayama[1], Yutaka Terao[1,2] ([1]Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., [2]Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

P2-121/FL4-14

***Acinetobacter* LPS aggravates infection severity through gasdermin D-mediated cell membrane rupture**

◯Yasuyuki Matsuda[1], Hajime Yamauchi[1], Go Kamoshida[2], Tsukasa Shiraishi[3], Shin-ichi Yokota[3], Hideki Hara[1] ([1]Dept. Infect. Dis., Div. Microbiol. Immunochem., Asahikawa Med. Univ., [2]Dept. Infect. Cont. Sci., Meiji Pharm. Univ., [3]Dept. Microbiol., Sch. Med., Sapporo Med. Univ.)

P2-122/FL4-15

Genetic diversity of paired receptors and their bacterial ligands suggest host-bacteria co-evolution

◯Gen Hasegawa[1], Kouyuki Hirayasu[1], Yifan Li[1], Hisashi Arase[2,3,4], Masaya Yamaguchi[4,5,6,7], Shigetada Kawabata[4,7], Rikinari Hanayama[1] ([1]Adv. Prev. Med. Sci. Res. Cen., Kanazawa Univ., [2]Dept. Immunochem., RIMD, Osaka Univ., [3]Lab. Immunochem., IFReC, Osaka Univ., [4]CiDER, Osaka Univ., [5]Bioinform. Res. Unit, Osaka Univ. Grad. Sch. Dent., [6]Bioinform. Cent., RIMD, Osaka Univ., [7]Dept. Microbiol., Osaka Univ. Grad. Sch. Dent.)

P2-123

Alendronate augments lipid A-induced interferon beta release via upregulation of RIG-I expression

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

P2-124

***Clostridioides difficile* enhances proteolysis and apoptosis under hypoxia**

◯Saki Higano, Tokuju Okano, Toshihiko Suzuki (Dept. Bact., Sch. Dentistry., Science Tokyo)

P2-125

Caspase-12 is an innate immune sensor for bacteria-associated molecular patterns

◯Kohsuke Tsuchiya, Shoko Hosojima, Hernandez-Cuellar Eduardo, Shenghui Zhi, Takashi Suda (Div. Immunol., Cancer Res. Inst., Kanazawa Univ.)

P2-126/FL4-16

IL-8 inducing activity of periodate-oxidized peptidoglycan from lactic acid bacteria

◯Sho Noguchi, Sakura Onoue, Kazuyoshi Kawahara (Dept. Biosci., Col. Sci. Eng., Kanto Gakuin Univ.)

P2-127

Inhibition of JAK promotes inflammasome activation by oral bacterial infection

◯Tokuju Okano, Toshihiko Suzuki (Dept. Bact. Path. Host Resp. Inst. Sci. Tokyo)

P2-128/FL4-17

Supersulfides enhance neutrophil-mediated bacterial killing

◯Tomohiro Sawa[1], Azizur Rahman[1], Touya Toyomoto[1], Hiroyasu Tsutsuki[1], Takaaki Akaike[2] ([1]Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., [2]Dept. Environ. Sci. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med.)

P2-129/FL4-18

Characterization of outer membrane vesicles of *E. coli* BL21 and the isogenic lipid A mutant strains

◯Ryunosuke Tominaga[1,2], Kimihiro Abe[1], Tomoyo Nakamura[2,3], Tomohiko Nishino[2,3], Takehiro Yamaguchi[1], Yukihiro Akeda[1], Ryoma Nakao[1] ([1]Dept. Bacteriol. I, Natl. Inst. Infect. Dis., [2]Grad. Sch. Bionics, Tokyo Univ. Technol, [3]Sch. Biosci. Biotechnol.,Tokyo Univ. Technol.)

P2-130/FL4-19

Antimicrobial peptide LL-37 induces apoptosis in senescent alveolar epithelial A549 cells

◯Kazuki Sanata[1], Kaori Suzuki[2], Yumi Kumagai[2], Toshiaki Iba[1], Isao Nagaoka[1] ([1]Fac. Med. Sci., Juntendo Univ., [2]Dept. Biochem. Syst. Biomed., Juntendo Univ. Grad. Sch. Med.)

P2-131

Anti-inflammatory Effects of Supersulfides on Influenza A Virus Infection in Mice

◯Foysal Hossen[1], Hiroyasu Tsutsuki[1], Takahisa Kouwaki[2], Tianli Zhang[3], Yukio Fujiwara[4], Hiroyuki Oshiumi[2], Takaaki Akaike[5], Tomohiro Sawa[1] ([1]Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., [2]Dept. Immunol., Grad. Sch. Med. Sci., Kumamoto Univ., [3]Cent. Integr. Cont. Epidemiol. Mol. Pathophysiol. Infect. Dis., Akita Univ., [4]Dept. Cell Pathol., Grad. Sch. Med. Sci., Kumamoto Univ., [5]Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med.)

P2-132

Study the antibiotic mechanism of Rab32-LRO in macrophages

Yangjie Li, ◯Shiou-Ling, Sally Lu, Takeshi Noda (Dept. Oral Cellular Biology, Center for Frontier Oral Science, Grad. Sch. Dentistry, Osaka Univ.)

P2-133

Macrophages respond to lipopolysaccharide by modulating NLRP3 supersulfidation

◯Tianli Zhang[1], Akiyuki Nishimura[2], Hiroyasu Tsutsuki[3], Kazuaki Monde[3], Tetsuro Matsunaga[1], Motohiro Nishida[2,4], Takaaki Akaike[5], Tomohiro Sawa[3] ([1]Cent. Integr Cont. Epidemiol. Mol. Pathophysiol. Infect. Dis., Akita Univ., [2]Dept. Microbiol., Grad. Sch. Med Sci., Kumamoto Univ., [3]Div. Card Signal., Natl. Inst. Physiol. Sci., [4]Dept. Physiol., Grad. Sch. Pharm Sci., Kyushu Univ., [5]Dept. Environ. Med. and Mol. Toxicol., Tohoku Univ. Grad. Sch. Med.)

P2-134

Exploration of food-derived bioactive compounds using the silkworm immune priming assay

○Kazuhiro Mikami[1,2], Hiroto Nakajima[2], Fumiaki Tabuchi[2], Masaki Ishii[3], Atsushi Miyashita[2] ([1]Dept. Med. Tech., Grad. Sch. Clinical Lab Sci., Teikyo Univ., [2]Lab. Antifungal Immunobiol., Inst. Med. Mycol., Teikyo Univ., [3]Lab. Mol. Cell. Biol., Sch. Pharm., Musashino Univ.)

P2-135

The E3 ubiquitin ligase SIAH1 targets a bacterial pore-forming toxin to facilitate xenophagy

○Min Wu, Xin Hu, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

7. Antimicrobial agents and resistance-a. Antimicrobial agents

P2-136

The Development and Demonstration of the Antibacterial Sheet by filling dehydroabietic acid

○Yoichi Yamada[1], Hisato Kato[1], Keisuke Yoshii[1], Kento Yamanishi[2], Toshiyuki Shibakawa[3], Kenichi Shimada[1], Hideki Hayashi[2], Takeji Ueda[4], Hajime Suzuki[5], Wakano Ogawa[1] ([1]Sch. Pharm., Shujitsu Univ., [2]Fac. Psych., Shujitsu Univ., [3]Shujitu J.C., [4]ENERGYFRONT INC., [5]Shinagawa General Co.,Ltd.)

P2-137/FL4-20

***Polygonum tinctorium* extract reduces MRSA virulence via extracellular vesicle disruption**

○Naoko Watabe[1], Phawinee Subsomwong[1], Kyosuke Yamane[2], Krisana Asano[1,3], Akio Nakane[3] ([1]Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., [2]Ushio Inc., [3]Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med.)

P2-138

Effect of β2-microglobulin to dental plaque biofilm

○Taiki Mori, Eisuke Domae, Mariko Hanaoka, Takeshi Into (Dept. Oral Microbiol., Div. Oral Infect. Health Sci., Asahi Univ. Sch. Dent.)

P2-139/FL4-21

Probiotic effect of Bacillus natto with antibacterial activity

○Ryosuke Kadoya[1], Momoka Nakatani[1], Kotone Kawashima[1], Yuuka Yasuda[1], Kaori Suzuki[2], Hikaru Ikarugi[2], Sayumi Fukuda[2], Takanobu Nishikawa[2] ([1]Dept. Food and Nutrition, Sch. Life Stud., Sugiyama Jogakuen Univ., [2]Dept. Natto Research and Development, Takanofoods Co.,Ltd)

P2-140/FL4-22

Characterization and identification of antibacterial substances produced by Aeribacillus composti

○Emika Inoue[1], Yoji Kato[1], Mana Yoneyama[1], Masahiro Hayashi[1], Hideyuki Arimitsu[1] ([1]Dept. Microbiol., Sch. Human Sci. Env., Univ. of Hyogo, [2]Div. Anaerobe Res., Inst. for Glycocore Res., Gifu Univ.)

P2-141

Phage Therapy via Fitness Trade-offs: Infection Control and Microbiota Editing

○Jumpei Fujiki[1,2], Tomohiro Nakamura[1,2,3,4], Derrick E. Fouts[5], Bernd Schnabl[2,6], Hidetomo Iwano[1,4] ([1]Sch. Vet. Med., Rakuno Gakuen Univ., [2]Dept. Med., UCSD., [3]Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., [4]Res. Cent. Phage., Comp. Res. Org., Waseda Univ., [5]Dept. Human Gen Med., JCVI., [6]Dept. Med, VASDHS)

P2-142/FL4-23

Overexpression of YaiX confers drug resistance and increases virulence in Escherichia coli

○Kinuka Hongu[1], Kazuya Ishikawa[1], Tomoki Kosaki[1], Shin-Ichi Miyoshi[2,3], Kazuyuki Furuta[1], Chikara Kaito[1] ([1]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [2]Grad. Sch. Med. Dent. Pharm. Sci., Sch. Pharm. Sci., Okayama Univ., [3]Res. Cent. Intest. Health Sci., Okayama Univ.)

P2-143/FL4-24

Isolation and antibacterial evaluation of bacteriophages targeting Enterococci

○Bingxin Song[1,2], Miki Kawada-Matsuo[1], Hideki Shiba[2], Hitoshi Komatsuzawa[1] ([1]Dept. Bacteriol., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., [2]Dept. Biological Endodont., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ.)

P2-144

Evaluation of *Rhodococcus equi* bactericidal effects using recombinant endolysin

○Yasunori Suzuki, Neneka Kaji, Tsutomu Kakuda (Lab. Animal Hygiene, Sch. Vet., Kitasato Univ.)

P2-145

Antibacterial activity of *Dillenia indica* Linn. fruit extracts

○Pimwan Thongdee[1], Teerapat Phueakphong[2], Kirana KaewpanphaI[2], Nilnate Assavasirijinda[2], Passara Wongthai[1], Nitchatorn Sungsirin[1], Pongthorn Narongroeknawin[1], Tanit Boonsiri[1] ([1]Dept. Microbiology, Phramongkutklao College of Medicine, [2]Dept. Biology, Sch. Science, King Mongkut's Institute of Technology Ladkrabang)

P2-146/FL4-25

Establishing a library of Cas13a phage capsids for the elimination of CRC-associated *E. coli*

◯Ola Alessa[1], Yoshifumi Aiba[1], Kanate Thitiananpakorn[1], Kotaro Kiga[1,2], Shinya Watanabe[1], Kazuhiko Miyanaga[1], Tan XinEe[1], Teppei Sasahara[1], Longzhu Cui[1] ([1]Div. Bacteriol, Sch. Med., Jichi Med. Univ., [2]Research Center for Drug and Vaccine Development, NIID)

P2-147

Dissociation between ClpP activation ability and antibacterial activity of koetjapic acid

Takumi Segawa[1], Keisuke Sugimoto[1], Kana Eguchi[1], ◯Akiko Takaya[1,2] ([1]Dep. Infect. Cont. Sci., Grad. Sch. Pharm. Sci., Chiba Univ., [2]MMRC, Chiba Univ.)

P2-148

Analysis of the diversity of sensitivity of *Streptococcus mutans*-specific bacteriophage φKSM96

◯Yumi Yamauchi[1,2], Saki Nishihama[1,2], Miki Matsuo[2,3], Junzo Hisatsune[4], Yo Sugawara[4], Motoyuki Sugai[3,4], Hideki Shiba[1], Hitoshi Komatsuzawa[2,3] ([1]Dept. Biol. Endod., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [3]Proj. Res. Ctr. for Nosocominal Infectious Diseases, Hiroshima Univ., [4]Res. Cent for AMR, NIID.)

P2-149/FL4-26

Analysis of S.capitis strain with antibacterial activity against antimicrobial resistant bacteria

◯Keijuro Ohdan[1,2], Yujin Suzuki[1], Miki Matsuo[1,3], Junzo Hisatsune[3,4], Tomonao Aikawa[2], Motoyuki Sugai[3,4], Hitoshi Komatsuzawa[1,3] ([1]Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [2]Dept. Oral and Maxillofacial Surgery., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., [3]Proj. Res. Ctr. for Nosocominal Infectious Diseases, Hiroshima Univ., [4]Antimicrobial Resistance Res. Ctr., National Institute of Infectious Diseases)

P2-150

Biochemical and structural analysis of the Catalytic Domain of C. difficile-specific autolysin

◯Eiji Tamai[1], Hiroshi Sekiya[1], Kumi Nakaya[1], Haruka Ogaki[1], Yuma Kabe[1], Yasuhiro Nonaka[2], Shigehiro Kamitori[3] ([1]Dept. Infec. Dis., Col. Pharm. Sci., Matsuyama Univ., [2]Dept. Pharmacol., Fac. Med., Kagawa Univ., [3]Res. Faci. Cent. Sci. & Tec. Facul. Med., Kagawa Univ.)

P2-151

Antifungal activity and mechanism of action of antimicrobial peptides against *Candida albicans*

◯Misaki Hiyoshi[1], Daisuke Koizumi[2], Rie Togawa[2], Masataka Kawarasaki[2], Michiyo Honda[1] ([1]Dept. Appl. Chem., Grad. Sch. Sci. Tech., Meiji Univ., [2]Maruha Nichiro Corporation)

P2-152

Mycobacteriophages isolated from soils and sewages in Japan

◯Jun Sakai, Aa Haeruman Azam, Shinjiro Ojima, Kotaro Kiga (Dept. Reser. Cent. Drug Vacci. Develop., Nat. Insti. Infec. Disea.)

P2-153/FL4-27

Visualization of bacterial growth using Salmonella, antibacterial properties of copper-iron alloys

◯Yutaka Midorikawa (Fac. Bioresources, Mie Univ.)

P2-154/FL4-28

Development of a Neonatal Mouse Model for Evaluating MRSA Infection and Phage Therapy

◯Yeo Syin Lian Adeline, XinEe Tan, Yoshifumi Aiba, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P2-155/FL4-29

Development of an effective antibiofilm therapy based on phage-gold nanorod conjugates

◯Sarangi Jayathilake, Tomofumi Kawaguchi, Srivani Veeranarayanan, Palaninathan Vivekanandan, Hossain Razib, Kanate Thitiananpakorn, Shinya Watanabe, Longzhu Cui (Dept. Bacteriol., Sch. Med., Jichi Med. Univ.)

P2-156

Surfactin inhibits lactic acid production by cariogenic bacteria

◯Nobuhiro Wakamatsu[1,2], Ryota Yamasaki[2], Yoshie Yoshioka[2], Manabu Habu[1], Wataru Ariyoshi[2] ([1]Div. Oral and Maxillofacial Surgery, Kyushu Dental Univ., [2]Div. Infections and Molecular Biology, Kyushu Dental Univ.)

P2-157

Development of a potent CRISPR-Cas13a-based antibacterial agent through crRNA sequence optimization

◯Sarah Hossain, XinEe Tan, Kotaro Kiga, Kazuhiko Miyanaga, Shinya Watanabe, Yoshifumi Aiba, Teppei Sasahara, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

P2-158

Induction of β-defensin mRNAs in human cell line TR146 by the natural antifungal agent holotoxin A1

◯Akira Yano, Akiko Shiraishi, Sayaka Yuki (Dept. Bioresour. Sci., Iwate Biotech. Res. Ctr.)

P2-159

Colistin-conjugated silver nanoparticle as a new type of animal drug

◯Poowadon Muenraya[1,2], Thamonwan Wanganuttara[1,2], Iyo Takemura-Uchiyama[1], Kenji Yokota[1], Jumpei Uchiyama[1], Osamu Matsushita[1] ([1]Okayama Univ., [2]Walailak Univ.)

P2-160

A novel antimicrobial agent against *Staphylococcus aureus* derived from *Brevibacillus* sp. WUL10

◯Thamonwan Wanganuttara[1,2], Poowadon Muenraya[1,2], Iyo Takemura-Uchiyama[1], Kenji Yokota[1], Jumpei Uchiyama[1], Osamu Matsushita[1] ([1]Okayama Univ., [2]Walailak Univ.)

P2-161

Development of a System to Evaluate Phage Effectiveness against Intracellular Mycobacteria

◯Orawee Kaewprasert, Shinya Watanabe, Yuzuki Shimamori, Sharmin Sultana, Akemi Saito, Srivani Veeranarayanan, Kazuhiko Miyanaga, Yoshifumi Aiba, XinEe Tan, Longzhu Cui (Div. Bacteriology, Dept. Infection and Immunity, Sch. Medicine, Jichi Medical Univ.)

P2-162

Antimicrobial properties of phenolic brominated compounds from marine sponges and seaweed

◯Wakano Ogawa[1], Yoichi Yamada[1], Yukiko Fujii[2], Koichi Harada[2] ([1]Sch. Pharm., Shujitsu Univ., [2]Sch. Pharm., Daiichi Univ. Pharm.)

P2-163

Prevalence and antimicrobial susceptibility of Salmonella spp. in chicken meat in Japan

◯Shiori Yamamoto[1,2], Yumiko Okada[2], Eiki Yamasaki[2], Masashi Uema[2] ([1]Dept. Nutr. Diet., Kamakura Women's Univ., [2]Div. Biomedical Food Res., Nat. Inst. Health Sci.)

P2-164/FL4-30

Red ginseng increases antibiotic sensitivity of methicillin-resistant Staphylococcus aureus

◯Natsumi Misao[1], Akari Shinohara[2], Dendi Krisna Nugraha[3], Ichiro Nakagawa[4], Yasuhiko Horiguchi[3], Mayuko Osada-Oka[1,2] ([1]Food Hyg. and Environ Health, Grad. Sch. Life and Environ. Sci., Kyoto Pref. Univ., [2]Food Hyg. and Environ. Health, Fac. Agr. and Food Sci., Kyoto Pref. Univ., [3]Dept. Mol. Bac., Res. Inst. for Microb. Dis., Osaka Univ., [4]Dept. Microb., Grad. Sch. Med., Kyoto Univ.)

P2-165

Cas13a-loaded Capsids Restore Drug Susceptibility in Carbapenem-resistant *Pseudomonas aeruginosa*

◯Tomofumi Kawaguchi[1], Shinya Watanabe[1], Yi Liu[1], Kotaro Kiga[1,2], XinEe Tan[1], Longzhu Cui[1] ([1]Div. Bacteriol, Sch. Med., Jichi Med. Univ., [2]Drug and Vaccine Development, NIID)

P2-166

Screening of plant extracts inhibiting biofilm formation in *Staphylococcus aureus*

◯Anna Amagai, Masatoshi Takeiri, Keiko Arai, Yoshihide Kimura (IVY Cosme. Corp.)

P2-167

Study on antimicrobial enzyme 27DS against gram negative bacilli

◯Iyo Uchiyama, Jumpei Uchiyama, Kenji Yokota, Osamu Matsushita (Okayama Univ.)

P2-168

Effect of amino acid type of peptides on bacterial cell membranes and antimicrobial activity

◯Kentaro Hirosawa, Michiyo Honda (Dept. Appl. Chem., Grad. Sch. Sci. Tech., Meiji Univ.)

8. Others

P2-169/FL3-30

Isolation of hexavalent chromium-reducing *Staphylococcus sciuri 3W100* strain from tannery effluent

◯Tanjina Afrin Hira[1,2], Samiul Alam Rajib[2,3], Mahia Ferdushi[2] ([1]Dept. Microbiology, Sch. Medicine, Shimane Univ., Japan, [2]Dept. Pharmacy, BRAC Univ., Dhaka, Bangladesh, [3]Joint Research Center for Human Retrovirus Infection, Kumamoto Univ.)

P2-170

Effectiveness of extraoral suction in controlling aerosol dispersion in dentistry

◯Masanori Saito[1], Yasutoshi Ojima[2], Itaru Suzuki[3], Yukitoshi Kurakawa[4], Ryoya Imamura[2], Toshikazu Uchiyama[4], Hidenobu Senpuku[1] ([1]Dept. Microbiol. Immunol., Sch. Dent. Matsudo, Nihon Univ., [2]Dent. Matsudo, Nihon Univ. Grad. Sch., [3]Dept. Community Oral Health., Sch. Dent. Matsudo, Nihon Univ., [4]Dept. Oper. Dent., Sch. Dent. Matsudo, Nihon Univ.)

P2-171/FL3-31

Engineering Bacteriophages for Enhanced Intracellular Delivery Against *Mycobacterium tuberculosis*

◯Yuzuki Shimamori, Shinya Watanabe, Orawee Kaewprasert, Sharmin Sultana, Akemi Saito, Srivani Veeranarayanan, Kazuhiko Miyanaga, Yoshifumi Aiba, XinEe Tan, Longzhu Cui (Div. Bacteriology, Dept. Infection and Immunity, Jichi Med. Univ.)

P2-172

Comparison of analgesic effect between botulinum toxin A1 and A2 on neuropathic pain

◯Yasushi Torii[1], Sayumi Hirata[1], China Tsurumaki[1], Tomoko Kohda[2] ([1]Dept. Animal Sci., Tokyo Univ. of Agriculture, [2]Grad. Sch., Osaka Metropolitan Univ.)

P2-173

Isolation and Characterization of a Broad-Host-Range Temperate Phage Infecting *Staphylococcus aureus*

◯XinEe Tan, Feng-Yu Li, Kotaro Kiga, Shinya Watanabe, Yoshifumi Aiba, Kazuhiko Miyanaga, Srivani Veeranarayanan, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immun., Sch. Med., Jichi Med. Univ.)

P2-174

Investigation of gene expression levels to pH changes in *Tannerella forsythia*

◯Noriko Shinozaki-Kuwahara[1], Masanori Saito[2], Yoko Tanaka[3], Chieko Taguchi[4], Manabu Yaguchi[5], Takatoshi Nomura[5], Reiri Takeuchi[1], Koichi Hiratsuka[1] ([1]Dept. Biochem. Mol. Biol., Nihon Univ. Sch. Dent. at Matsudo, [2]Dept. Microbiol. Immunol., Nihon Univ. Sch. Dent. at Matsudo, [3]Dept. Lab. Med. Dent. Compromised Patient, Nihon Univ. Sch. Dent. at Matsudo, [4]Dept. Community Oral Health., Nihon Univ. Sch. Dent. at Matsudo, [5]Dept. Special Needs Dent., Nihon Univ. Sch. Dent. at Matsudo)