

Digital Poster

DP1-01 Taxonomy / Epidemiology / Infectious diseases 01

Wednesday, August 7 9:00–10:00
Digital Poster Group 1 (Main Hall)

Chair: Noriko Urushibara (Sapporo Medical University)

DP1-01-01/P1-001**New species belonging to the genus *Waltera***

○Mitsuo Sakamoto, Atsushi Hisatomi, Moriya Ohkuma (RIKEN BRC-JCM)

DP1-01-02/P1-002***Clostridium massilioidielmoense* from dead cattle suggests the need for improved PCR for *Clostridium***

○Takashi Mada¹, Asami Umeda², Akira Kodama², Daisuke Takamatsu^{1,3} (¹Anim. Infect. Res. Div., Natl. Inst. Anim. Hlth., NARO, ²Oita LHSC, Oita Pref., ³Utd. Grad. Sch. Vet. Sci., Gifu Univ.)

DP1-01-03/P1-003**Shallow-Seq; the method for presuming genetic lineage of bacteria with small amount of sequence data**

○Nobuyoshi Yagi¹, Nanase Miyagi², Itaru Hirai² (¹Lab. Clin. Physiol., Dept. Health Sci., Univ. Ryukyus, ²Lab. Microbiol., Dept. Health Sci., Univ. Ryukyus)

DP1-01-04/P1-004**Molecular epidemiological characterization of MRSA from bloodstream infections in Hokkaido**

○Meiji Soe Aung¹, Noriko Urushibara¹, Mitsuyo Kawaguchiya¹, Nobuhide Ohashi¹, Rou Araki², Kana Matsubara², Masahiko Ito², Nobumichi Kobayashi¹ (¹Dept. Hygiene, Sch. Med., Sapporo Med. Univ., ²Sapporo Clin. Lab. Inc.)

DP1-01-05/P1-005**Isolation of Oral Drug-Resistant Bacteria from Home-care Patient and Relation to Medical Information**

○Saki Nishihama¹, Miki Matsuo^{2,3}, Nguyen Tra Mi Le^{2,3}, Chika Arai^{3,4}, Toshiki Kajihara^{3,4}, Yo Sugawara⁴, Hiroki Ohge^{3,5}, Motoyuki Sugai^{3,4}, Hideki Shiba¹, Hitoshi Komatsuzawa^{2,3} (¹Dept. Biol. Endod., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ²Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ³Proj. Res. Ctr. for Nosocomial Infectious Diseases, Hiroshima Univ., ⁴Res. Cent. for AMR, NIID., ⁵Dept. Infectious Diseases., Hiroshima Univ. Hosp.)

DP1-01-06/P1-006**Phylogenetic analysis of *C. ulcerans* isolated from patients and protected cats in Kumamoto**

○Chie Shitada¹, Takatoshi Yamamoto¹, Mikoto Moriguchi², Hideyuki Hayashi³, Misato Mori⁴, Hideaki Tokuoka⁴, Kazutoshi Matsumoto⁴, Chihiro Horiba⁵, Makoto Kuroda⁵, Motohide Takahashi¹ (¹Dept. Toxin and Biologicals., Kumamoto Health Science Univ., ²Kumamotorousai Hospital Clinical Laboratory Center, ³Kumamoto Univ. Hospital Clinical Laboratory Center, ⁴Kumamoto Prefectural Inst. Public Health and Environmental Science, ⁵Pathogen Genomics Center Nat. Inst. Infect. Dis.)

DP1-01-07/P1-007**Comparative genomic analysis of *C. jejuni* isolates from Kolkata, India and Toyama**

○Daichi Morita¹, Junko Isobe², Emi Maenishi², Fumito Maruyama³, Yuki Yamamoto¹, Hidetoshi Tahara¹, Ayumi Ohno⁴, Kei Kitahara³, Shin-ichi Miyoshi^{4,5}, Teruo Kuroda¹ (¹Grad. Sch. Bio. Heal. Sci., Hiroshima Univ., ²Toyama Inst. Heal., ³The IDEC Inst., Hiroshima Univ., ⁴Collab. Res. Cent. of Okayama Univ. for Inf. Dis. India, ⁵Grad. Sch. Med., Dent. & Pharm. Sci., Okayama Univ.)

DP1-01-08/P1-008**Whole-genome analysis of *Bordetella parapertussis* Isolated in Japan**

○Kentarō Koide¹, Azusa Onodera², Masahiro Kodana², Shintarou Ichimura², Nao Otsuka¹, Masataka Goto¹, Kazunari Kamachi¹, Tsuyoshi Kenri¹ (¹Dept. Bact. II, Nat. Inst. Infectious Diseases, ²Dept. Clin. Lab., Saitama Med. Univ. Hosp.)

DP1-01-09/P2-001**Prevalence of *Listeria monocytogenes* in retail foods in Japan**

○Yumiko Okada¹, Akiko Tomaru¹, Tomoko Nishida¹, Shiori Yamamoto^{1,2}, Yukako Shimojima³ (¹Div. Biomed. Food Res., Nat. Inst. Health Sci., ²Dept. Nutr. Diet., Kamakura Women's Univ., ³Dept. Food Life Sci., F. Food Nutr. Sci., Toyo Univ.)

DP1-01-10/P2-002**Differential angiogenic properties and phylogenetic characteristics of *Bartonella henselae* strains**

Yuka Kondo¹, Masahiro Suzuki¹, Shingo Sato², Soichi Maruyama², Yohei Doi^{1,3}, ○Kentarō Tsukamoto⁴ (¹Dept. Microbiol., Fujita Health Univ. Sch. Med., ²Dept. Vet. Med., Coll. Bioresource Sci., Nihon Univ., ³Dept. Infect. Dis., Fujita Health Univ. Sch. Med., ⁴Dept. Bact. Zoonoses, RIMD, Osaka Univ.)

DP1-01-11/P2-003**Development of PCR-based serotyping method for *Mannheimia haemolytica***

○Atsushi Iguchi¹, Miki Okuno², Yoshitoshi Ogura², Kaori Hoshino³, Yuichi Ueno³, Daisuke Takamatsu³ (¹Fac. Agr., Miyazaki Univ., ²Dept. Infect. Med., Kurume Univ. Sch. Med., ³Natl. Inst. Anim. Hlth., NARO)

DP1-01-12/P2-004

A novel *Filobacterium* sp. detected in deposited 16S rRNA metagenome data of rhesus macaque

○Fumio Ike (RIKEN BRC)

DP1-01-13/P2-005

Comparison of Tn1549/5382 containing vanB gene among VRE strains from different sources

○Takako Nakayama, Takashi Kikuchi, Yushi Hachisu, Naoshi Ando, Masaki Nakamura, Natsuki Ueda, Mitsuru Kishizawa (Div. Bact., Chiba Pref. Inst. Pub. Health)

DP1-01-14/P2-006

Phylogenetic analysis of drug-resistant *Escherichia coli* isolated from domestic meat and livestock

○Ryuji Kawahara¹, Takahiro Yamaguchi¹, Yuki Wakabayashi¹, Yuki Matsumoto², Daisuke Motooka², Shota Nakamura², Tatsuya Nakayama³, Yoshimasa Yamamoto⁴, Kentaro Kawatsu¹ (¹Div. Microbiol., Osaka Inst. Pub. Health, ²Dept. Infect. Metagenomics, RIMD, Osaka Univ., ³Integ. Sci. Life, Hiroshima Univ., ⁴Drug Discov. Med. Info. Sci., Gifu Univ.)

DP1-01-15/P2-007

Genetic diversity and binding ability of *Streptococcus mutans* collagen binding adhesin Cnm

○Hideo Yonezawa, Yuichiro Kikuchi, Eitoyo Kokubu, Kazuyuki Ishihara (Dept. Microbiol., Tokyo Dent. Col.)

DP1-01-16/P2-008

Development of multiplex PCR for virulence-associated genes in *Bacillus cereus sensu lato*

○Akira Okamoto (Sch. Health Sciences, Aichi Univ. Edu.)

DP1-01-17/P1-009

Drug Resistance and Molecular Typing of *Campylobacter* Associated with Food Poisoning in Saitama

○Yuki Koyama, Shunsuke Kubokawa, Kotaro Yagi, Asami Arashima, Satomi Kando, Rie Doi, Kazumi Narisawa (Dept. Food Microbiol., Saitama Inst. Pub. Health)

DP1-01-18/P1-010

Molecular epidemiology of pathogenic *Leptospira* spp. in bats in Japan

○Kazuki Kiuno¹, Miyuka Nishizato¹, Weuyin Hu¹, Saki Mitsunaga¹, Takashi Murakami², Daisuke Koyabu³, Ai Takano⁴, Nobuo Koizumi⁵, Hiroshi Shimoda¹, Daisuke Hayasaka¹ (¹Dept. Micro., Vet. Med., Yamaguchi Univ., ²Div. Cultural Properties Protection, Mine City, ³Dept. Precision Medicine., Res and Dev. Ctr., Tsukuba Univ., ⁴Dept. Epi., Vet. Med., Yamaguchi Univ., ⁵Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

DP1-01-19/P1-011

Molecular epidemiological analysis of Legionnaires' disease in Toyama Prefecture, Japan

○Jun-ichi Kanatani, Junko Isobe, Keiko Kimata, Kaho Ikeda, Kazuki Saito, Emi Maenishi, Kazunori Oishi (Dept. Bacteriol., Toyama Inst. Health)

DP1-02 Physiology / Structural biology 01

Wednesday, August 7 9:00–10:00
Digital Poster Group 2 (Main Hall)

Chair: Tsukasa Shiraishi (Sapporo Medical University)

DP1-02-01/P1-049

Serum albumin promotes reactivation of VBNC (viable but non-culturable) *Mycobacterium tuberculosis*

○Yuta Morishige¹, Yoshiro Murase¹, Kinuyo Chikamatsu¹, Hiroyuki Yamada¹, Akio Aono¹, Yuriko Igarashi¹, Akiko Takaki¹, Satoshi Mitarai^{1,2} (¹Dept. Mycobac. Ref. Res., Res. Inst. Tubercul., JATA, ²Dept. Basic Mycobacteriol., Grad. Sch. Biomed. Sci., Nagasaki Univ.)

DP1-02-02/P1-050

Malate dehydrogenase and malate: quinone oxidoreductase works as NADH oxidation system in *C. jejuni*

○Augustin Kabongo^{1,2}, Rajib Acharjee^{1,2}, Sakura Takaya^{1,2}, Ozan Gundogdu⁴, Tomoo Shiba³, Kiyoshi Kita⁵, Daniel Ken Inaoka^{1,2} (¹Dept. Glob. Health, Sch. Trop. Med. and Glob. Health, Nagasaki Univ., ²Dept. Mol. Infect. Dyn., Inst. Trop. Med., Nagasaki Univ., ³Grad. Sch. Sc. Tech., Kyoto Inst. Techn., ⁴London Sch. Hyg. Trop. Med., ⁵Dept. Host Defens. Biochem., Inst. Trop. Med., Nagasaki Univ.)

DP1-02-03/P1-051

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

○Yuichi Matsuo¹, Tomoo Shiba², Kenji Iyoda², Uta Nakai², Akina Ota², Kiyoshi Kita^{3,4}, Daniel Ken Inaoka^{3,5} (¹Dept. Health Sciences., Sch. Med., Kumamoto Univ., ²Dept. Appl. Biol., Grad. Sch. Sci. Technol., Kyoto Inst. Technol., ³Sch. Trop. Med. and Glob. Health, Nagasaki Univ., ⁴Dept. Host-Defense Biochem., Inst. of Trop. Med. (NEKKEN), Nagasaki Univ., ⁵Dept. Molecular Infection Dynamics, Inst. of Trop. Med. (NEKKEN), Nagasaki Univ.)

DP1-02-04/P2-048

Exploring novel metabolism of modified nucleosides in bacteria

○Kayo Nishiguchi^{1,2}, Yu Nagayoshi^{1,2}, Ryosuke Yamamura^{1,2}, Kazuhito Tomizawa¹ (¹Dept. Mol. Physiol., Fac. Life. Sci., Kumamoto Univ., ²Dept. Nephrol., Fac. Life. Sci., Kumamoto Univ.)

DP1-02-05/P2-049**Generation and physiological functions of cyclo-octasulfur conserved from bacteria to mammals**

○Tetsuro Matsunaga¹, Uladzimir Barayeu¹, Takayuki Shimizu², Masanobu Morita¹, Seiryō Ogata¹, Minkyung Jung¹, Shinji Masuda³, Michito Yoshizawa⁴, Hozumi Motohashi⁵, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Fac. Div. Nat. Sci., Biol. Sci. Res. Group, Nara Women's Univ., ³Sch. Life Sci. & Tech., Tokyo Tech, ⁴Lab. Chem. Life Sci., Inst. Innov. Res., Tokyo Inst. Tech., ⁵Dept. Med. Biochem., Tohoku Univ. Grad. Sch. Med.)

DP1-02-06/P2-050**Supersulfide activation and host defense through NADPH oxidase and NO synthase**

○Masanobu Morita¹, Tsuyoshi Takata¹, Tetsuro Matsunaga¹, Tomoaki Ida¹, Minkyung Jung¹, Yukihiro Tsuchiya², Yasuo Watanabe², Hozumi Motohashi³, Hideki Sumimoto⁴, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Dept. Pharm., Showa Pharm. Univ., ³Dept. Gene Exp. Reg., IDAC, Tohoku Univ., ⁴Dept. Biochem., Kyushu Univ., Grad. Sch. Med. Sci.)

DP1-02-07/P1-052**The Role of Morphological Adaptability in *Vibrio cholerae*'s Motility and Pathogenicity**

○Jun Xu¹, Keigo Abe², Toshio Kodama³, Marzia Sultana⁴, Erika Kuba¹, Shiyu Tsunoda¹, Shuichi Nakamura², Tetsu Yamashiro¹ (¹Dept. Bacteriol., Grad. Sch. Med., Univ. Ryukyus, ²Dept. Appl. Phys., Grad. Sch. Eng., Tohoku Univ., ³NEKKEN, Grad. Sch. Med., Nagasaki Univ., ⁴Infectious Diseases Division, ICDDR, B.)

DP1-02-08/P1-053**Distinct roles of sheath proteins in coiling and rigidity reinforcement of *Leptospira* flagella**

○Nobuo Koizumi¹, Akihiro Kawamoto², Toshiki Kuribayashi³, Masatomo Morita¹, Shuichi Nakamura³ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²IPR, Osaka Univ., ³Dept. Appl. Phys., Tohoku Univ.)

DP1-02-09/P1-054**Water flow triggers adhesion of gliding bacteria to solid surfaces**

○Motomu Araki, Naoki Uemura, Daisuke Nakane (Dept. Eng. Sci., UEC)

DP1-02-10/P1-055**An outer membrane protein governs cell rigidity and swimming stability of *Leptospira interrogans***

○Shuichi Nakamura¹, Keigo Abe¹, Hiroko Takazaki², Mika Hirose², Kyosuke Takabe³, Takayuki Kato², Nobuo Koizumi³ (¹Grad. Sch. Eng., Tohoku Univ., ²IPR, Osaka Univ., ³Dept. Bacteriol. I, NIID)

DP1-02-11/P1-056**Correlation between morphological and motile traits indicated by artificial intelligence**

○Kyosuke Takabe¹, Souichi Ugawa², Nobuo Koizumi¹, Shuichi Nakamura² (¹Dept. Bacteriol. I, NIID, ²Dept. Appl. Phys., Grad. Sch. Eng., Tohoku Univ.)

DP1-02-12/P2-051**Investigation of cell motility mechanism of *Spiroplasma* using a minimal synthetic bacterium**

○Hana Kiyama¹, Shigeyuki Kakizawa², Daichi Takahashi^{1,3}, Makoto Miyata^{1,4} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²Bioproduction Res. Inst., AIST, ³Res. Inst. Interdisciplinary Sci., Okayama Univ., ⁴OCARINA, Osaka Metropolitan Univ.)

DP1-02-13/P2-052**Sheet-like structure of bacterial actin MreBs driving helicity switching by cryo electron tomography**

○Haruka Yuasa¹, Yuya Sasajima¹, Hana Kiyama¹, Daichi Takahashi^{1,2}, Takuma Toyonaga^{1,3}, Tomoko Miyata^{4,5}, Fumiaki Makino^{4,5,6}, Keiichi Namba^{4,5}, Makoto Miyata^{1,3} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²RIIS, Okayama Univ., ³OCARINA, Osaka Metropolitan Univ., ⁴Grad. Sch. Frontier Biosci., Osaka Univ., ⁵JEOL YOKOGUSHI Res. Alliance Lab., Osaka Univ., ⁶JEOL Ltd.)

DP1-02-14/P2-053***Haloplasma* motility reconstituted in minimal synthetic bacterium, JCVI-syn3B**

○Mone Mimura¹, Hana Kiyama¹, Shingo Kato², Yuya Sasajima¹, Atsuko Uenoyama¹, Shigeyuki Kakizawa³, Tomoko Miyata⁴, Fumiaki Makino⁴, Keiichi Namba⁴, Makoto Miyata^{1,5} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²RIKEN BRC., JCM, ³Bioproduction Res. Inst., AIST, ⁴Grad. Sch. Frontier Biosci., Osaka Univ., ⁵OCARINA, Osaka Metropolitan Univ.)

DP1-02-15/P2-054**Stator dynamics of hybrid-fuel *E. coli* flagellar motor observed by fluorescence microscopy**

○Tomoya Shoji¹, Naoki Hidaka², Yong-Suk Che³, Yoshiyuki Sowa^{1,2} (¹Dep. Front. Biosci., Hosei Univ., ²Micro-Nano Tech., Hosei Univ., ³Grad. Sch. Front. Biosci., Osaka Univ.)

DP1-02-16/P2-055**Inner cellular structure of *Mycoplasma mobile* gliding machinery observed by electron cryotomography**

○Minoru Fukushima¹, Tomoko Miyata^{2,3}, Keiichi Namba^{2,3}, Takuma Toyonaga¹, Makoto Miyata^{1,4} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²Grad. Sch. Frontier Biosci., Osaka Univ., ³JEOL YOKOGUSHI Res. Alliance Lab., Osaka Univ., ⁴OCARINA, Osaka Metropolitan Univ.)

DP1-02-17/P2-056**Visualization and analysis of MreBs driving *Spiroplasma* motility in minimal synthetic bacterium**

○Yoshiki Tanaka¹, Hana Kiyama¹, Takuma Toyonaga^{1,2}, Makoto Miyata^{1,2} (¹Grad. Sch. Sci., Osaka Metro Univ., ²OCARINA, Osaka Metro Univ.)

DP1-03 Ecology 01

Wednesday, August 7 9:00–10:00
Digital Poster Group 3 (Main Hall)

Chair: Chie Nakajima (Hokkaido University)

DP1-03-01/P1-031**Reactivity of autologous serum IgG to gut microbes in pediatric ulcerative colitis patients**

○Tabassum Nafisa¹, Haruyuki Imaohji¹, Takeo Kondo², Sonoko Kondo², Emmanuel Munyeshyaka¹, Ayano Tada¹, Takashi Kusaka², Tomomi Kuwahara¹ (¹Dept. Microbiol., Sch. Med., Kagawa Univ., ²Dept. Pediatr., Sch. Med., Kagawa Univ.)

DP1-03-02/P1-033**Comparative analysis of *Legionella* symbiosis mechanisms between different protist hosts**

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

DP1-03-03/P2-031**The inhibition of *Staphylococcus aureus* by commensal bacterium via its metabolites**

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

DP1-03-04/P2-032**Indoor Microbiome: Interactions with Occupants and Environmental Factors in Residential Settings**

○Jianjian Hou¹, Makiko Nakajima^{2,3}, So Fujiyoshi^{1,2}, Yukiko Nishiuchi¹, Daisuke Ogura^{2,4}, Fumito Maruyama^{1,2} (¹IDEC Inst., Hiroshima Univ., ²CHOBE, Hiroshima Univ., ³Fac. Engineer., Hiroshima Inst. Tech., ⁴Grad. Sch. Engineer., Kyoto Univ.)

DP1-03-05/P2-033**Ingestion of *Campylobacter jejuni* by *Acanthamoeba polyphaga***

Mako Kitade¹, ○Takaaki Shimohata^{1,2} (¹Marine-Bio, Fukui Prefectural Univ., ²Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch.)

DP1-03-06/P2-034**Symbiotic bacteria break through narrow passage by flagellar wrapping**

Aoba Yoshioka¹, Tetsuo Kan², Kazutaka Takeshita³, Hirofumi Wada⁴, Yoshitomo Kikuchi⁵, ○Daisuke Nakane¹ (¹Dept. Eng. Sci., UEC, ²Dept. Mech. Int. Sys. Eng., UEC, ³Fac. Bioresour. Sci., Akita Pref. Univ., ⁴Dept. Phys., Ritsumeikan Univ., ⁵Biopro. Res. Inst, AIST)

DP1-03-07/P2-035**Induction of antibiotic tolerance of *Escherichia coli* by microbial volatile organic compounds**

○Takehiko Kenzaka^{1,2}, Kaho Nishizawa², Natsumi Doi² (¹Fac. Sci. Eng., Setsunan Univ., ²Fac. Pharm., Osaka Ohtani Univ.)

DP1-03-08/P2-036**A challenge toward discover of symbiotic mechanism over Insects-Plants**

○Hiroyuki Morimura¹, Kazutaka Takeshita², Kota Ishigami^{1,3}, Yu Matsuura⁴, Peter Mergaert⁵, Yoshitomo Kikuchi^{1,3} (¹Bioprod. Res. Inst., AIST, ²Dept. Biotech., Appl. Biol. Sci., Akita Pref. Univ., ³Grad. Sch. Ag., Hokkaido Univ., ⁴TBRC, Univ. Ryukyus, ⁵I2BC, CNRS, Paris-Saclay Univ.)

DP1-03-09/P1-037**Dysbiosis of oral microbiome persists after treatment-induced remission of periodontal disease**

○Kazuma Yama, Takuya Inokuchi, Atsushi Sato, Kota Tsutsumi, Yasushi Kakizawa (R&D., Lion Corp.)

DP1-03-10/P1-038**An intestinal mucosa-associated bacterium which attenuates colitis**

○Jiayue Yang¹, Nozomu Obana^{2,3}, Gaku Nakato⁴, Nobuhiko Nomura³, Shinji Fukuda^{1,5} (¹Inst. Adv. Biosci., Keio Univ., ²TMRC, Inst. Med., Univ. of Tsukuba, ³Inst. Life Env. Sci., Univ. of Tsukuba, ⁴KISTEC, ⁵Metagen. Inc.)

DP1-03-11/P1-039**Gut microbiota controls the severity of dextran sulfate sodium-induced colitis in mice**

○Eri Ikeda¹, Masaya Yamaguchi^{1,2,3,4}, Shigetada Kawabata^{1,3} (¹Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Bioinfo., Osaka Univ. Grad. Sch. Dent., ³CiDER. Osaka Univ., ⁴Bioinfo, RIMD, Osaka Univ.)

DP1-03-12/P1-040**Subgingival Plaque-Specific Bacteria in Severe Periodontitis Identified by Long-Read Sequencing**

○Jiale Ma, Shinya Kageyama, Mikari Asakawa, Toru Takeshita (Sect. Prev. Public Health Dent., Grad. Sch. Dent., Kyushu Univ.)

DP1-03-13/P1-041**Relationship between the skin bacterial community and skin condition**

○Ryosuke Kadoya, Ayano Kondo, Ayaka Matsukawa (Dept. Food and Nutrition, Sch. Life Studies, Sugiyama Jogakuen Univ.)

DP1-03-14/P1-042**Characterization and application of lytic bacteriophage to control *T. ramosa* in microbial consortia**

○Priyanka Baranwal, Kazuhiko Miyanaga, Yuya Hidaka, XinEe Tan, Kanate Thititanapakorn, Yoshifumi Aiba, Shinya Watanabe, Longzhu Cui (Dept. Inf. Immunity., Sch. Med., Jichi Med. Univ.)

DP1-04 Pathogenicity 01

Wednesday, August 7 10:10–11:10
Digital Poster Group 1 (Main Hall)

Chair: Takashi Sasaki (Sapporo Medical University)

DP1-04-01**[Withdrawn]****DP1-04-02/P2-100**

The role of TusDCB, a sulfur transferase complex on pathogenesis and microcolony formation in UPEC

○Yumika Sato¹, Ayako Takita¹, Kazutomo Suzue², Yusuke Hashimoto¹, Suguru Hiramoto³, Masami Murakami³, Haruyoshi Tomita¹, Hidetada Hirakawa¹ (¹Dept. Bacteriol., Sch. Med., Gunma Univ., ²Dept. Host Def., Sch. Med., Gunma Univ., ³Dept. Clin. Lab. Med., Sch. Med., Gunma Univ.)

DP1-04-03/P2-101

In silico analysis of genetic diversity in chaperone-usher fimbria of E.coli from human samples

○Hiharu Inoue¹, Takayuki Wada^{1,2} (¹Dept. Microbiol., Grad. Sch. Hum. Life Ecol., Osaka Metropolitan Univ., ²Osaka Intl. Res. Ctr. Infect. Dis.)

DP1-04-04/P2-102

Assembly mechanism and structural insights into the Mfa1 minor pilus from *Porphyromonas gingivalis*

○Satoshi Shibata^{1,2}, Hideyuki Matsunami², Kazuhisa Ouhara⁴, Yuri Taniguchi⁴, Mikio Shoji³, Matthias Wolf² (¹Div. Bacteriol, Dept. Microbiol. Immunol., Med., Tottori Univ., ²Molecular Cryo-Electron Microscopy Unit, OIST, ³Dept. Microbiol. Oral Infect., Grad. Sch. Bio. Sci., Nagasaki Univ., ⁴Dept. Periodontal Medicine, Grad. Sch. Biomed. and Health Sci., Hiroshima Univ.)

DP1-04-05/P2-103

Identification of diffusely adherent *Escherichia albertii* from raccoon

○Atsushi Hinenoya¹, Sharda Awasthi^{1,2,3}, Noritoshi Hatanaka^{1,2,3}, Shinji Yamasaki^{1,2,3} (¹Grad. Sch. Vet. Sci., Osaka Metro. Univ., ²Asian Health Sci. Res. Inst., Osaka Metro. Univ., ³Osaka Int. Res. Cent. Infect. Dis., Osaka Metro. Univ.)

DP1-04-06/P1-098

Biofilm formation of *A. acitnomycetemcomitans* associates with genes expression regulated by Hfq

○Yuichi Oogai, Airi Matsumoto, Masanobu Nakata (Dept. Oral-Microbiol., Sch. Med. and Dent., Kagoshima Univ.)

DP1-04-07/P1-099

Identification of *Clostridium perfringens* FbpA binding site to dermatopontin

○Nozomu Matsunaga, Akiba Endo, Yasuo Hitsumoto, Seiichi Katayama (Dept. Life Sci., Fac. Sci., Okayama Univ. Sci.)

DP1-04-08/P1-100

Colocalization of GAPDH and autolysin on the *Clostridium perfringens* cell surface

○Riyo Aono^{1,2}, Nozomu Matsunaga¹, Yasuo Hitsumoto¹, Seiichi Katayama¹ (¹Dept. Life Sci., Fac. Sci., Okayama Univ. of Sci., ²Dept. Med. Tech., Kagawa Pref. Univ. of Health Sci.)

DP1-04-09/P1-101

ETEC colonization factor CS6 binds to β -actin and myosin-9 on epithelial cells

○Alafate Ayibieke, Takaki Nishi, Takashi Hamabata (Dept. Infect. Dis., RI., NCGM)

DP1-04-10/P1-102

Clarification of the colonization mechanism of vaginal *Lactobacillus* on the vaginal Mucosa

○Kirika Yoshioka, Masahiro Ito, Riho Tabata, Tsuyoshi Miki, Takeshi Haneda, Nobuhiko Okada (Dept. Microbiol., Sch. Pha., Kitasato Univ.)

DP1-04-11/P1-103

The role of lipoprotein signal peptidase in the innate immune stimulatory activity of pneumococci

○Hisanori Domon^{1,2}, Satoru Hirayama¹, Toshihito Isono¹, Rui Saito¹, Katsunori Yanagihara³, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., ²Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Dept. Lab. Med., Nagasaki Univ. Grad. Sch. Biomed. Sci.)

DP1-04-12/P1-104

Alteration of gene expression in macrophages by D-amino acids from *Mycobacterium avium* complex

○Yutaka Tatano¹, Tatsuo Munakata¹, Madoka Sawai¹, Hideki Yagi², Chiaki Sano³, Haruaki Tomioka⁴ (¹Dept. Pharm. Sci., Sch. Pharm. Fukuoka, IUHW., ²Dept. Pharm. Sci., Sch. Pharm., IUHW, ³Dept. Community. Med. Mgt., Fac. Med., Shimane Univ., ⁴Fac. Med., Shimane Univ.)

DP1-04-13/P1-105

Investigation of LCV-mitochondria communication machinery through Rab32 function

○Hiromu Oide, Kohei Arasaki (Dept. Mol. Cell Biol., Sch. Life Sci., Tokyo Univ. Pharm and Life Sci.)

DP1-04-14**[Withdrawn]****DP1-04-15/P1-107**

The analysis of C-terminal side domain of MARTX toxin produced by *Vibrio vulnificus*

○Nene Kurata¹, Shoko Takeuchi¹, Takahiro Tsuchiya^{1,2}, Katsushiro Miyamoto¹, Jun Komano¹, Hiroshi Tsujibo¹ (¹Dept. Microbiol. Infect. Cont., Osaka Med. Pharm. Univ., ²Ctr. Advance. Pharm. Educ., Osaka Med. Pharm. Univ.)

DP1-04-16/P1-196**A water-in-oil droplet-based method for detecting and isolating infectious bacteriophage particles**

○Miu Hoshino¹, Yuri Ota^{2,3}, Tetsushi Suyama², Yuji Morishita³, Satoshi Tsuneda⁴, Naohiro Noda^{1,2,4} (¹Dept. CBMS, Grad. Sch. Frontier Sci., Univ. Tokyo, ²Biomed. Res. Inst., Natl. Inst. of Adv. Sci. & Tech. (AIST), ³On-chip Biotechnologies Co., Ltd., ⁴Dept. Adv. Sci. & Eng., Grad. Sch. Adv. Sci. & Eng., Waseda Univ.)

DP1-05 Host defense 01

Wednesday, August 7 10:10–11:10
Digital Poster Group 2 (Main Hall)

Chair: Tomoyuki Yamaguchi (Rakuno Gakuen University)

DP1-05-01/P2-133**Alendronate augments lipid A-induced IL-1 β release via activation of ASC or AP-1, but not caspase-11**

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

DP1-05-02/P2-134**Detection of bacteria by immune activating receptor via plasma components**

○Yifan Li¹, Kouyuki Hirayasu¹, Gen Hasegawa¹, Yosei Tomita², Yuko Hashikawa³, Hisashi Arase^{4,5}, Rikinari Hanayama^{1,3} (¹Adv. Prev. Med. Sci. Res. Cen., Kanazawa Univ., ²Dept. Immunol., Med. Pharm., Kanazawa Univ., ³NanoLSI, Kanazawa Univ., ⁴Dept. Immunochem., RIMD, Osaka Univ., ⁵Lab. Immunochem., IFReC, Osaka Univ.)

DP1-05-03/P2-135**Growth of *S. pneumoniae* colonized in the nasopharynx associated with RSV infection**

○Saki Ishikawa¹, Nanami Okada², Yuzu Fukui², Shigeki Nakamura¹, Toshihiro Ito², Takehiko Shibata¹ (¹Dept. Microbiol., Sch. Med., Tokyo Med. Univ., ²Dept. Immunol., Sch. Med., Nara Med. Univ.)

DP1-05-04/P2-136**A balance of paired immune receptors and bacterial pathogenicity**

○Gen Hasegawa¹, Kouyuki Hirayasu¹, Yifan Li¹, Hisashi Arase^{2,3,4}, Masaya Yamaguchi^{4,5,6,7}, Shigetada Kawabata^{4,7}, Rikinari Hanayama¹ (¹Adv. Prev. Med. Sci. Res. Cen., Kanazawa Univ., ²Dept. Immunochem., RIMD, Osaka Univ., ³Lab. Immunochem., IFReC, Osaka Univ., ⁴CiDER, Osaka Univ., ⁵Bioinform. Res. Unit, Osaka Univ. Grad. Sch. Dent., ⁶Bioinform. Cent., RIMD, Osaka Univ., ⁷Dept. Microbiol., Osaka Univ. Grad. Sch. Dent.)

DP1-05-05/P2-138**Rab13 GTPase is involved in ubiquitin-mediated recognition of Group A *Streptococcus* in xenophagy**

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

DP1-05-06/P1-132***Tannerella forsythia* induces inflammasome activation by triggering both NLRP3 and Caspase-4**

○Chenwei Hsu, Tokuju Okano, Toshihiko Suzuki (Dept. Bact. Pathogenesis, TMDU)

DP1-05-07/P1-133**Two sub-families of NF- κ B are activated in macrophages infected with *M. bovis* BCG**

○Akari Shinohara¹, Yasuhiko Horiguchi², Mayuko Osada-Oka³ (¹Food Hyg. Health., Agric. Food. Sci., Kyoto Pref. Univ., ²Dept. Mol. Bact., RIMD, Osaka Univ., ³Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ.)

DP1-05-08/P1-134**Selection of a lactic acid bacterium that produces membrane vesicles under aerobic conditions**

○Hinako Inagaki¹, Mizuki Kanno², Hiroyuki Futamata^{1,2,3}, Yosuke Tashiro^{1,2} (¹Grad. Sch. Integr. Sci. Tech. Shizuoka Univ., ²Grad. Sch. Integr. Sci. Tech. Shizuoka Univ., ³Res. Inst. Green. Sci. Tech. Shizuoka Univ.)

DP1-05-09/P1-135**Modification of *E. coli* lipidA using palmitoyltransferase genes cloned in low-copy number plasmids**

○Yuki Nonaka, Sho Noguchi, Eri Tanaka, Sakura Onoue, Kazuyoshi Kawahara (Dept. Biosci., Col. Sci. Eng., Kanto Gakuin Univ.)

DP1-05-10/P1-136**Induction of antibody production by antigen proteins encapsulated in *E. coli* outer membrane vesicles**

○Ryunosuke Tominaga^{1,2}, Kimihiro Abe¹, Tomoyo Nakamura^{2,3}, Tomohiko Nishino^{2,3}, Takehiro Yamaguchi¹, Yukihiro Akeda¹, Ryoma Nakao¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Grad. Sch. Bionics., Tokyo Univ. Technol., ³Sch. Biosci. Biotechnol., Tokyo Univ. Technol.)

DP1-05-11/P1-137**Induction of Immune Priming in the silkworm, *Bombyx mori*, by chitin-derived oligosaccharide**

○Kazuhiro Mikami¹, Fumiaki Tabuchi², Masaki Ishii³, Atsushi Miyashita² (¹Dept. Med. Tech., Grad. Sch. Clinical Lab Sci., Teikyo Univ., ²Lab. Antifungal Immunobiol., Inst. Med. Mycol., Teikyo Univ., ³Lab. Mol. Cell Biol., Sch. Pharm., Musashino Univ.)

DP1-05-12/P1-138**Search for essential oils that confer infection resistance through the innate immune system**

○Naho Maruyama^{1,2}, Atsushi Miyashita¹ (¹Teikyo Univ. Inst. Medical Mycology, ²Dept. Health and Dietetics, Teikyo Heisei Univ.)

DP1-05-13/P1-139**Delivering of antibodies into neuron by chimeric-toxin: a follow-up study in rodent models**

○Shin-Ichiro Miyashita, Akane Kanazawa, Rintaro Ohno, Yoshimasa Sagane (Dept. Food Aroma Cosme. Chem., Fac. Bio-ind., Tokyo NODAI)

DP1-05-14/P1-140**Salmonella eliminating mechanism introduced by vaccination**

○Momoko Nakayama¹, Masahiro Eguchi¹, Yohsuke Ogawa² (¹National Inst. Animal Health, NARO, ²National Inst. Animal Health, NARO)

DP1-05-15/P1-141**Single cell RNA sequencing of necrotic granulomas in active tuberculosis mouse model**

○Shintaro Seto, Minako Hijikata, Naoto Keicho (Dept. Pathophysiol. Host Defense, RIT)

DP1-05-16/P1-142**Impact of lactoferrin on the interaction between vaginal *Lactobacillus crispatus* and vaginal mucosa**

○Masahiro Ito, Riho Tabata, Tsuyoshi Miki, Takeshi Haneda, Nobuhiko Okada (Dept. Microbiol., Sch. Pha., Kitasato Univ.)

DP1-05-17/P1-143**A standardized evaluation method for bacterial UV sensitivity using light-emitting diodes**

○Kai Ishida¹, Yushi Onoda^{1,3}, Yasuko Ishikawa¹, Toshihiko Aizawa³, Shigeharu Yamauchi³, Yasuo Fujikawa³, Tomotake Tanaka³, Takashi Uebanso^{1,2}, Kazuaki Mawatari^{1,2}, Akira Takahashi^{1,2} (¹Dept. Microbiol. Cont., Inst. Biomed Sci., Tokushima Univ., ²Dept. Prev Environ Nutr., Inst. Biomed Sci., Tokushima Univ., ³Nichia Corp.)

DP1-06 Antimicrobial agents and resistance 01

Wednesday, August 7 10:10–11:10
Digital Poster Group 3 (Main Hall)

Chair: Masato Akiba (Rakuno Gakuen University)

DP1-06-01/P2-152**Effects of β -caryophyllene on antimicrobial susceptibility of MRSA**

○Harue Nomura¹, Katsuya Sakuma², Yasunori Isshiki¹ (¹Dept. Microbiol., Sch. Pharm., Josai Univ., ²Ogawa & Co., Ltd.)

DP1-06-02/P2-153**Antibacterial effect of *Lonicera caerulea* fruit against vancomycin-resistant enterococci**

○Masaaki Minami¹, Mineo Nakamura² (¹Dept. Bacteriol. Nagoya City Univ. Grad. Sch. Med., ²Nakamura Pharm.)

DP1-06-03/P2-154**The development of inhibitors that regulate the function of a sugar-binding protein of *S. pyogenes***

○Tsukushi Yamawaki¹, Makoto Nakakido¹, Satoru Nagatoishi¹, Chihiro Aikawa², Jose Caaveiro³, Ichiro Nakagawa⁴, Kouhei Tsumoto^{1,5} (¹Sch. Eng., The Univ. of Tokyo, ²Sch. Agri., Obihiro Univ., ³Grad. Sch. Pharm. Sci., Kyusyu Univ., ⁴Sch. Med., Univ. of Kyoto, ⁵Inst. of Med. Sci., The Univ. of Tokyo)

DP1-06-04/P2-155**Lonidamine as an inactivator for the BvgAS system of *Bordetella pertussis***

○Natsuko Ota¹, Toshiya Ueno¹, Yukihiro Hiramatsu¹, Yasuhiko Horiguchi^{1,2} (¹Dept. Mol. Bacteriol., RIMD., Osaka Univ., ²CiDER., Osaka Univ.)

DP1-06-05/P2-156**Isolation and characterization of a useful broad-host-range prophage from *E. coli***

○Justin Edrian Revilla, Ho Thi My Duyen, Kanate Thitianapakorn, Ola Alessa, Yoshifumi Aiba, Shinya Watanabe, Kazuhiko Miyanaga, Srivani Veeranarayanan, XinEe Tan, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP1-06-06/P2-157**Analysis of the effect of β -glycyrrhetic acid on human supragingival biofilms**

○Shinya Kato^{1,2}, Xiangtao Ma¹, Kayo Satou³, Aya Okumura³, Kenji Yoshimura³, Nobuo Yoshinari^{1,2}, Akihiro Yoshida^{1,4} (¹Dept. Oral Health Sci., Grad. Sch. Matsumoto Dent. Univ., ²Dept. Periodontol., Matsumoto Dent. Univ., ³Human Health Care Products Research, Kao Corporation, ⁴Dept. Microbiol., Matsumoto Dent. Univ.)

DP1-06-07/P2-158**Photothermal Ablation of *Pseudomonas aeruginosa* biofilms by Phage Gold Nanorod Bioconjugates**

○Sarangi Jayathilake, Tomofumi Kawaguchi, Srivani Veeranarayanan, Kanate Thitianapakorn, Shinya Watanabe, XinEe Tan, Yoshifumi Aiba, Kazuhiko Miyanaga, Longzhu Cui (Dept. Bacteriol., Sch. Med., Jichi Med. Univ.)

DP1-06-08/P2-159**Antibacterial activity of fatty acids against *Staphylococcus aureus* and *Streptococcus pyogenes***

○Keijuro Ohdan^{1,2}, Yujin Suzuki¹, Miki Matsuo^{1,3}, Nguyen Tra Mi Le^{1,3}, Chika Arai^{3,4}, Junzo Hisatsune^{3,4}, Yo Sugawara^{3,4}, Tomonao Aikawa², Motoyuki Sugai^{3,4}, Hitoshi Komatsuzawa^{1,3} (¹Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ²Dept. Oral and Maxillofacial Surgery, Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ³Proj. Res. Ctr. for Nosocomial Infectious Diseases, Hiroshima Univ., ⁴Antimicrobial Resistance Res. Ctr., National Inst. Infectious Diseases)

DP1-06-09/P2-161**WQ-3810: A Novel Fluoroquinolone Exhibiting Potency Against Fluoroquinolone-Resistant *M. avium***

○Sasini Jayaweera¹, Jeewan Thapa¹, Chie Nakajima^{1,2}, Yasuhiko Suzuki^{1,2} (¹Div. Bioresources, International Inst. for Zoonosis Control, Hokkaido Univ., ²Inst. Vaccine Research and Development, Hokkaido Univ.)

DP1-06-10/P2-162**Development and Evaluation of Antibacterial Capsids Against Drug-Resistant *Pseudomonas aeruginosa***

○Tomofumi Kawaguchi¹, Shinya Watanabe¹, Yi Liu¹, Kotaro Kiga^{1,2}, XinEe Tan¹, Longzhu Cui¹ (¹Div. Bacteriol, Sch. Med., Jichi Med. Univ., ²Drug and Vaccine Development, NIID)

DP1-06-11/P2-163**Quorum-sensing inhibitor furanone C-30 increases nitrosative stress susceptibility of *P. aeruginosa***

○Shin Suzuki^{1,3}, Yuji Morita², Shota Ishige¹, Kiyohiro Kai¹, Kenji Kawasaki³, Kazuyuki Matsushita³, Kohei Ogura⁴, Tohru Miyoshi-Akiyama⁵, Takeshi Shimizu¹ (¹Dept. Molecular Infectiology, Grad. Sch. Medicine, Chiba Univ., ²Dept. Infection Control Science, Meiji Pharmaceutical Univ., ³Dept. Laboratory Medicine, Chiba Univ. Hospital, ⁴Div. Food Science and Biotechnology, Grad. Sch. Agriculture, Kyoto Univ., ⁵Dept. Infect. Dis, Nat. Center. Global Health Med.)

DP1-06-12/P2-164**Distribution and antibacterial activity of bacteriocin genes in clinical isolates of Enterococci**

○Ayumi Fujii^{1,2}, Miki Matsuo^{1,3}, Nguyen Tra Mi Le^{1,3}, Chika Arai^{3,4}, Junzo Hisatsune^{3,4}, Yo Sugawara⁴, Tomonao Aikawa², Motoyuki Sugai^{3,4}, Hitoshi Komatsuzawa^{1,3} (¹Dept. Bacteriol., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., ²Dept. Oral and Maxillofacial Surgery, Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., ³Project Research Center for Nosocomial Infectious Diseases, Hiroshima Univ., ⁴Antimicrobial Resistance Research Ctr., National Inst. Infectious Diseases)

DP1-06-13/P2-165**Optimizing Cas13 variants in engineered bacteriophages for potent bactericidal activity against MRSA**

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

DP1-06-14/P1-153**Isolation and Characterization of Broad-Host-Range Prophages Against MRSA**

○Tergel Nayanjin, XinEe Tan, Anujin Batbold, Shinya Watanabe, Yoshifumi Aiba, Kazuhiko Miyanaga, Teppei Sasahara, Srivani Veerananarayanan, Kanate Thitiananpakorn, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP1-06-15/P1-154**Regulation of *Staphylococcus aureus* growth by *Pseudomonas aeruginosa* extracellular vesicles**

○Phawinee Subsomwong¹, Takahito Ishiai¹, Kouji Narita², Akio Nakane^{3,4}, Krisana Asano^{1,3} (¹Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Inst. Anim. Exp., Hirosaki Univ. Grad. Sch. Med., ³Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med., ⁴Hirosaki Univ. Health Welf.)

DP1-06-16/P1-155**Antimicrobial Activity of Bahia Propolis and its Fractionation Effects on Oral Bacteria**

○Hiroki Takigawa¹, Chiho Mashimo¹, Shiho Ikegami², Ayanori Yamaki², Hugo Maruyama¹, Takayuki Nambu¹, Toshinori Okinaga¹ (¹Dept. Bact., Sch. Dent., Osaka Dent Univ., ²Yamada Bee Company Health Science Labo.)

DP1-06-17/P1-156**Antimycobacterial activities of tanshinones and speculations on their mechanism of action**

○Shigetaro Mori¹, Toshiki Tamura², Yumi Maeda², Yumiko Tsukamoto², Manabu Ato², Tsuyoshi Kenri¹ (¹Dept. Bacteriology II, NIID, ²Dept. Mycobacteriology, LRC, NIID)

DP1-07 Taxonomy / Epidemiology / Infectious diseases 02

Wednesday, August 7 13:00–14:00
Digital Poster Group 1 (Main Hall)

Chair: Akira Fukuda (Rakuno Gakuen University)

DP1-07-01/P1-012**Current trends in serotype distribution of *Streptococcus pneumoniae* isolated from children in 2023**

○Mitsuyo Kawaguchiya¹, Noriko Urushibara¹, Meiji Soe Aung¹, Nobuhide Ohashi¹, Yuuki Kimura², Yuuka Horino², Masahiko Ito², Nobumichi Kobayashi¹ (¹Dept. Hygiene, Sapporo Medical Univ. Sch. Med., ²Sapporo Clinical Laboratory Inc.)

DP1-07-02/P2-013**Genomic characteristics and drug susceptibility of *Helicobacter suis* from humans, monkeys, and pigs**

○Emiko Rimbara¹, Masato Suzuki², Sae Aoki¹, Hidenori Matsui¹, Keigo Shibayama³, Tsuyoshi Kenri¹ (¹Dept. Bacteriol. II, Nat. Inst. Infect. Dis., ²Antimicrob. Resist. Res. Cent., Nat. Inst. Infect. Dis., ³Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

DP1-07-03/P1-014**Molecular epidemiology of methicillin-resistant *Staphylococcus pseudintermedius* in canine pyoderma**

○Takashi Sasaki¹, Masahiro Yamasaki², Kazuki Harada³, Koji Nishifuji⁴ (¹Animal Research Center, Sch. Med., Sapporo Med. Univ., ²Lab. Vet. Small Animal Int. Med., Facult. Agr., Iwate Univ., ³Dept. Vet. Int. Med., Facult. Agr., Tottori Univ., ⁴Div. Animal Life Sci., Fac. Agr., Tokyo Univ. of Agriculture and Tech.)

DP1-07-04/P1-015**Whole genome sequence analysis of extensively drug-resistant *Acinetobacter baumannii* ST1050**

○Satoshi Nishida¹, Yasuo Ono^{1,2}, Yusuke Yoshino¹ (¹Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ., ²Fac. Health Med. Sci., Teikyo Heisei Univ.)

DP1-07-05/P1-016**Specific clonal types of MRSA associated with skin and soft tissue infections**

Hiroshi Kaneko, Hana Kobayashi, Shogo Otake, Yuka Yanagi, Takumi Saito, Miki Kanai, ○Hidemasa Nakaminami (Dept. Clin. Microbiol., Sch. Pharm., Tokyo Univ. Pharm. and Life Sci.)

DP1-07-06/P2-009**Comparative genomics of whole genome and Shiga toxin phage of EHEC from bovine and human**

○Ken-ichi Lee¹, Sunao Iyoda¹, Hidemasa Izumiya¹, Takehiro Nazuka², Masahiro Kusumoto³, Masato Akiba⁴, Yo Sugawara⁵, Motoyuki Sugai⁵, Yukihiro Akeda¹ (¹Dept. Bacteriol. 1, Natl. Inst. Infect. Dis., ²Meat Hygiene Inspect., Saitama City, ³Natl. Inst. Animal Health, NARO, ⁴Vet. Bacteriol., Rakuno Univ., ⁵AMR Center, Natl. Inst. Infect. Dis.)

DP1-07-07/P2-010**Epidemiological shifts in and impact of COVID-19 on streptococcal toxic shock syndrome**

○Tadayoshi Ikebe¹, Takahiro Yamaguchi², Rumi Okuno³, Hitoshi Otsuka⁴, Akito Mizokoshi⁵, Kaho Ikeda⁵, Nanako Watanabe⁵, Yoshimi Date⁵, Yukihiro Akeda¹ (¹Dept. Bacteriol. I, NIID, ²Div. Microbiol., Osaka Inst. Public Health, ³Dept. Microbiol., Tokyo Metr. Inst. Pub. Health, ⁴Dept. Pub. Health Sci., Yamaguchi Pref. Inst. Pub. Health & Env., ⁵The Working Group for Beta-Hemolytic Streptococci in Japan)

DP1-07-08/P2-011**Characterization of *Clostridium tetani* detected from the soil in Kagoshima prefecture**

○Tadasuke Ooka¹, Chie Shitada², Takatoshi Yamamoto², Chiyomi Sakamoto², Chihiro Horiba³, Makoto Kuroda³, Junichiro Nishi¹, Motohide Takahashi² (¹Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ., ²Tox. Biol. Res. Lab., Kumamoto Heal. Sci. Univ., ³Pathogen Genomics Center, NIID)

DP1-07-09/P2-012**Genetic analysis of coagulase-negative staphylococci colonizing healthy adults**

○Mina Hirose¹, Meiji Soe Aung², Nobumichi Kobayashi² (¹Dept. Ped. Dent., Div. Oral Growth and Development, Sch. Dent., Health Sciences Univ. Hokkaido, ²Dept. Hygiene. Sch. Med. Sapporo Med. Univ.)

DP1-07-10/P2-014**Characteristics of Staphylococcaceae in Retail Meat Products in Hokkaido: A One Health Perspective**

○Noriko Urushibara¹, Meiji Soe Aung¹, Mitsuyo Kawaguchiya¹, Nobuhide Ohashi^{1,2}, Nobumichi Kobayashi¹ (¹Dept. Hygiene, Sch. Med., Sapporo Med. Univ., ²Dept. Oral Surgery, Sch. Med., Sapporo Med. Univ.)

DP1-07-11/P2-015**Survey of ESBL-producing *Escherichia coli* and MRSA from wastewater in Saitama, Japan**

○Miyo Murai¹, Hiroki Murayama¹, Hikari Takino¹, Yo Sugawara², Liansheng Yu², Shizuo Kayama², Junzo Hisatsune², Kozue Kishii¹ (¹Dept. Health Soci. Serv., Grad. Sch. Saitama Pref. Univ., ²AMR-RC, NIID)

DP1-07-12/P2-017**Comparison of human- and bird-derived strains of *Escherichia albertii* in Hokkaido**

○Rin Satoh¹, Masahiko Ito², Takahiro Kinebuchi³, Yosie Sakurai⁴, Tetsuya Ikeda¹ (¹Div. Bacterial., Hokkaido Inst. Public Health, ²Sapporo Clinical Laboratory Inc., ³Furano Hosp., Hokkaido Institutional Society, ⁴Natl. Inst. of Animal Industry., Hokkaido Research Organization)

DP1-07-13**[Withdrawn]**

DP1-07-14/P1-019**Characterization of GN-ARB from nasal and oral cavities and their relationship to bacterial flora**

○Tomoki Kawayanagi^{1,2}, Miki Matsuo^{2,3}, Nguyen Tra Mi Le^{2,3}, Mikari Asakawa⁴, Yo Sugawara⁵, Chika Arai⁵, Toru Takeshita⁴, Hideki Shiba¹, Motoyuki Sugai⁵, Hitoshi Komatsuzawa^{2,3} (¹Dept. Biological Endodont., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., ²Dept. Bacteriol., Grad. Sch. Biomed., Hiroshima Univ., ³Project. Research Center for Oral Infectious Diseases., Hiroshima Univ., ⁴Sec. Preventive & Public Health Dentist., Div. Oral Health., Growth and Deve., Kyushu Univ., ⁵Antimicrobial Resistance Research Ctr., National Inst. Infectious Dis.)

DP1-07-15**[Withdrawn]****DP1-07-16/P2-016****Prevalence and characteristics of *Escherichia fergusonii* isolated from farm animals in Japan**

○Anna Momoki¹, Yukino Tamamura-Andoh¹, Nobuo Arai¹, Taketoshi Iwata¹, Ayako Watanabe-Yanai¹, Masahiro Kusumoto^{1,2} (¹Natl. Inst. Anim. Health, NARO., ²Grad. Sch. Vet. Sci., Osaka Metro. Univ.)

DP1-07-17/P2-018**Genetic Characteristics of ESBL-producing *Escherichia coli* isolated from bloodstream infections**

○Mayuko Tanaka¹, Tomoya Suda¹, Kohei Kondo², Aa Haeruman Azam³, Minh Le Nhat², Ryu Yashiro⁴, Yasunori Tanji⁵, Kotaro Kiga³, Takeaki Matsuda^{1,5}, Tomoko Hanawa¹ (¹Dept. Gen. Med., Kyorin Univ. Sch. Med., ²AMR Res. Cent., Natl. Inst. Infect. Dis., ³Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ⁴Leprosy Res. Cent., Natl. Inst. Infect. Dis., ⁵Dept. Traum. Crit. Care Med., Kyorin Univ. Sch. Med.)

DP1-07-18/P2-019**Pathogenicity of the novel *Helicobacter* spp. infecting the stomach of dogs and cats in Japan**

○Sae Aoki¹, Masato Suzuki², Hidenori Matsui¹, Shigetaru Mori¹, Keigo Shibayama³, Tsuyoshi Kenri¹, Emiko Rimbara¹ (¹Dept. Bacteriol. II, NIID, ²Antimicrobial. Resist. Res. Cent., NIID, ³Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

DP1-07-19/P2-020**Detection of M1UK from *emm1* type group A *Streptococcus pyogenes* isolated in Osaka**

○Takahiro Yamaguchi^{1,2}, Masaki Anraku¹, Kaori Yamamoto¹, Takeshi Doi¹, Tetsuya Harada¹, Ryuji Kawahara¹, Tadayoshi Ikebe², Takao Kawai¹ (¹Div. Microbiol., Osaka Inst. Public Health, ²Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

DP1-08 Physiology / Structural biology 02

Wednesday, August 7 13:00–14:00
Digital Poster Group 2 (Main Hall)

Chair: Hiroyuki Yamaguchi (Hokkaido University)

DP1-08-01/P1-059**A lipoprotein involved in membrane vesicle-mediated iron acquisition in *Corynebacterium glutamicum***

○Mao Fujita¹, Toshiki Nagakubo^{2,3}, Kayuki Kawashima¹, Nobuhiko Nomura^{2,3}, Masanori Toyofuku^{2,3} (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²Fac. Life and Environ. Sci., Univ. Tsukuba, ³MiCS (Microbiology research Center for Sustainability), Univ. Tsukuba)

DP1-08-02/P1-060**Chemotaxis and motilities of *Clostridium botulinum* and *Clostridium sporogenes***

○So-ichiro Nishiyama, Shohei Koike, Nao Iwahashi (Fac. App. Life Sci., Niigata Univ. Pharm. Med. Life Sci.)

DP1-08-03/P1-061**Exploration of target molecules involved in the MAPK and PI3K-AKT pathway used by *C. trachomatis***

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

DP1-08-04/P1-062**Distinct iron-responsive regulation by Fur1 and Fur2 in *Ralstonia pseudosolanacearum* strain OE1-1**

○Sora Tateda, Tatsuya Ueyama, Akinori Kiba, Kouhei Ohnishi, Yasufumi Hikichi, Masayuki Tsuzuki (Fac. Agric. and Mar. Sci., Kochi Univ.)

DP1-08-05/P2-057**Induction of the *Vibrio cholerae* taurine chemoreceptor gene in higher temperature**

○Sachika Sato¹, Natsu Yamauchi¹, Shiori Onogi¹, Hiroataka Tajima^{2,3}, Ikuro Kawagishi^{1,2,3} (¹Grad. Sch. Sci. Eng., Hosei Univ., ²Dept. Frontier Biosci., Hosei Univ., ³Res. Cen. Micro-Nano Tech., Hosei Univ.)

DP1-08-06/P2-058**Quorum sensing-independent virulence regulation pathway in *Ralstonia pseudosolanacearum* strain OE1-1**

○Tatsuya Ueyama¹, Sora Tateda¹, Akinori Kiba¹, Kouhei Ohnishi¹, Kanako Inoue², Yasufumi Hikichi¹, Masayuki Tsuzuki¹ (¹Fac. Agric. Marine Sci., Kochi Univ., ²Div. Bio. Sci., NAIST)

DP1-08-07/P2-059**The histidine kinase BaeS senses indole in its cytoplasmic domain**

○Hirota Tajima^{1,2}, Kentaro Yamamoto³, Tomoka Iseri¹, Riku Takei⁴, Ikuro Kawagishi^{1,2,4} (¹Dept. Frontier Biosci., Hosei Univ., ²Res. Cen. Micro-Nano Tech., Hosei Univ., ³Dept. Mycobacteriol., Lepr. Res. Ctr., NIID, ⁴Grad. Sch. Sci. Eng., Hosei Univ.)

DP1-08-08/P2-060**Screening for biofilm inhibitors from microorganisms isolated in Antarctica**

○Hiroyuki Azakami^{1,2}, Hayato Kinoshita², Ayesha Siddiq², Shohei Hayashi³ (¹Res. Cent. Thermotolerant Microb. Resources, Yamaguchi Univ., ²Dept. Biol. Chem., Fac. Agr., Yamaguchi Univ., ³Dept. Env. Sustain. Sci., Fac. Life Env. Sci., Shimane Univ.)

DP1-08-09/P2-061**RcsG, conserved connector transmitting a novel sugar stimulus from PTS to TCS**

○Kazunobu Yamaguchi, Naoko Hozan, Kei Hagihara, Tomoka Fukami, Kaito Kawabata, Akinori Kato (Dept. Adv. Biosci., Grad. Sch. Agr., Kindai Univ.)

DP1-08-10/P1-063**Phase variable regulation of surface structures by promoter inversions in *Bacteroides vulgatus***

○Emmanuel Munyeshyaka¹, Haruyuki Imaohji¹, Nafisa Tabassum¹, Ayano Tada¹, Hisashi Yamasaki², Tomomi Kuwahara¹ (¹Dept. Microbiol., Sch. Med., Kagawa Univ., ²Dept. Biology., Hyogo Med. Univ.)

DP1-08-11/P1-064**Cloning of *murE* of PG synthesis from lactic acid bacteria to *E. coli* and characters of transformants**

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

DP1-08-12/P1-066**Enterobacterial common antigen flippase wzxE is required for *E. coli* survival in plant environment**

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

DP1-08-13/P1-067**Characterization of novel actin-like protein Mad28 involved in magnetosome positioning**

○Rino Shimoshige¹, Azuma Taoka^{2,3} (¹Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., ²Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., ³NanoLSI, Kanazawa Univ.)

DP1-08-14/P1-068**Analysis of subcellular localization of FtsZ in bacteria with the minimum genome**

○Daiki Shimizu, Masafumi Hayashi, Daisuke Shiomi (Dept. Life Sci., Col. Sci., Rikkyo Univ.)

DP1-08-15/P2-062**MamJ regulates MamK polymerization to form a dynamic cytoskeleton for magnetosome positioning**

○Yuanyuan Pan¹, Yoshihiro Okuda², Takumi Saito¹, Azuma Taoka^{3,4} (¹Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., ²Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., ³Bioinf. DDBJ Ctr. Natl. Inst. Genet., ⁴NanoLSI, Kanazawa Univ.)

DP1-08-16/P2-063**Biochemical Analysis of Cell Division Protein FtsZ of *Haloplasma contractile***

○Hirooki Fujita, Taishi Kasai, Daisuke Shiomi (Dept. Life Sci., Col. Sci., Rikkyo Univ.)

DP1-08-17/P2-064**Visualization of periodontopathic bacteria and the outer membrane vesicles by freeze fracture/SEM**

○Aoi Takahashi^{1,2}, Hirotaka Kobayashi³, Katsutoshi Osada^{1,4}, Kimihiro Abe¹, Takehiro Yamaguchi¹, Yukihiro Akeda¹, Tomoyo Nakamura^{1,2,4}, Tomohiko Nishino^{2,4}, Ryoma Nakao¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Grad. Sch. Bionics, Tokyo Univ. Technol., ³Dept. Pathology. I, Natl. Inst. Infect. Dis., ⁴Sch. Biosci. Biotechnol, Tokyo Univ. Technol.)

DP1-08-18/P1-070**The route of intrabacterial nanotransportation system for VacA in *Helicobacter pylori***

○Hong Wu¹, Yoshihiko Fujioka¹, Noritaka Iwai², Shoichi Sakaguchi¹, Youichi Suzuki¹, Takashi Nakano¹ (¹Dept. Microbiol. & Infect. Cont., Fac. Med., Osaka Med. & Pharm. Univ., ²Grad. Sch. Biosci. & Biotechnol, Tokyo Inst. of Tech.)

DP1-09 Ecology 02

Wednesday, August 7 13:00–14:00

Digital Poster Group 3 (Main Hall)

Chair: Masaru Usui (Rakuno Gakuen University)

DP1-09-01/P1-043**Characterization of the sensitive skin microbiome of Japanese women**

○Nakako Shibagaki¹, Mako Yamamoto², Kosuke Fujimoto^{3,4}, Seiya Imoto², Satoshi Uematsu^{3,4} (¹Mirai Inst., Shiseido Co., Ltd., ²Div. Health Medical Intelligence, The Inst. Medical Science, The Univ. of Tokyo, ³Div. Metagenome Medicine, Human Genome Center, The Inst. Medical Science, The Univ. of Tokyo, ⁴Dept. Immunology and Genomics, Grad. Sch. Medicine, Osaka Met. Univ.)

DP1-09-02/P2-037**Lactobacillus play an important role in maintaining a healthy vaginal environment**

○Shihoko Aizawa¹, Kazuhide Takada¹, Shingo Hayashida², Satoshi Hayakawa¹ (¹Div. Microbiol., Dept. Pathol. and Midrobiol., Nihon Univ. Sch. Med., ²Div. Pediatrics, Nihon Univ. Sch. Med.)

DP1-09-03/P2-038**Identification of symbiote candidates for ileoanal pouch in ulcerative colitis in Japan**

○Aoi Son¹, Tamotsu Kato², Yoshiyuki Matsuo³, Soutaro Hanawa⁴, Yumiko Nakanishi², Hiroshi Ohno², Hideki Ogura¹, Satoshi Ishido¹, Hiroki Ikeuchi⁵, Motoi Uchino⁵ (¹Dept. Microbiol., Sch. Med., Hyogo Med. Univ., ²IMS, Riken, ³Dept. Human Stress Response Science, Inst. Bionedical Science, Kansai Med. Univ., ⁴Dept. Oral and Maxillofacial Surgery, Hyogo Med. Univ., ⁵Dept. IBD Surgery, Hyogo Med. Univ.)

DP1-09-04/P2-039**Biofilm formation by membrane vesicles released from *Streptococcus sobrinus***

○Hiroko Yoshida¹, Morito Hakamada², Shinichi Negishi¹, Hidenobu Senpuku² (¹Dept. Orthodontics., Sch. Dent., Nihon Univ., ²Dept. Microbiol. Immunol., Sch. Dent., Nihon Univ.)

DP1-09-05/P2-040**Isolation of colitis-suppressing bacteria from gut microbiota of rice bran-fed mice**

○Risako Oki¹, Kazuki Tanaka², Nobuhiko Nomura³, Nozomu Obana⁴, Shinji Fukuda^{2,4,5} (¹Biol. Resource Sci., Univ. Tsukuba, ²Inst. Adv. Biosci., Keio Univ., ³Fac. Life Environ. Sci., Univ. Tsukuba, ⁴TMRC, Fac. Medicine, Univ. Tsukuba, ⁵Metabologenomics, Inc.)

DP1-09-06/P2-041**Gene expression of gut bacterial polyamine metabolism based on salt excretion and blood pressure**

○Yasuo Ikagawa¹, Shigehiro Karashima², Ren Mizoguchi³, Aoi Koshida¹, Hiromasa Tsujiguchi⁴, Akinori Hara⁴, Hiroyuki Nakamura⁴, Shigefumi Okamoto⁵ (¹ILAS, Kanazawa Univ., ²IFSI, Kanazawa Univ., ³Dept. Health Prom. & Med. Fut., Kanazawa Univ., ⁴Dept. Hygiene & Pub. Health, Grad. Sch. Adv. Prev. Med. Sci., Kanazawa Univ., ⁵Div. Health Sci., Sch. Med., Osaka Univ.)

DP1-09-07/P2-042**Effect of ampicillin exposure in weaning period in diet-induced NASH model mice**

Ryuji Ishikawa¹, Hikari Ohnishi¹, Mayuko Shimizu², Akiko Sakurai¹, ○Keiko Kataoka¹ (¹Dept. Microbiol. Gen. Anal., Sch. Med., Tokushima Univ., ²Dept. Pathol. Lab. Med., Sch. Med., Tokushima Univ.)

DP1-09-08/P2-043**Identification of membrane vesicle-producing gut bacteria correlated with host aging**

○Miku Matsushita¹, Kaoru Kikuchi¹, Masakatsu Nohara², Nozomu Obana^{3,4}, Nobuhiko Nomura^{4,5} (¹Sch. Sci. Tech., Life Ear. Sci, Univ. Tsukuba, ²Fac. Vet., Okayama Univ. Science, ³TMRC, Inst. Med., Univ. Tsukuba, ⁴MiCS, Univ. Tsukuba, ⁵Inst. Life Environ., Sci. Univ. Tsukuba)

DP1-09-09/P1-045**Effect of long-term passage on the biofilm formation of *Fusobacterium nucleatum***

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

DP1-09-10/P1-046**Investigation of methods for inducing germination of spore-forming bacteria**

○Atsushi Hisatomi, Moriya Ohkuma, Mitsuo Sakamoto (RIKEN BRC-JCM)

DP1-09-11/P2-044**Adaptive Laboratory Evolution of Minimal Genome Bacterium to Low Temperature**

○Masaki Mizutani¹, Minoru Moriyama¹, Ryuichi Koga¹, Takema Fukatsu^{1,2,3}, Shigeyuki Kakizawa¹ (¹Bioprodu. Res. Inst., AIST., ²Dept. Bio. Sci., Univ. Tokyo, ³Grad. Sch. Life Environ. Sci., Univ. Tsukuba)

DP1-09-12/P2-045**Controlling the viability of bacteria on dry surfaces: the effectiveness of warmed toilet seats**

○Kotoka Kuriki^{1,2}, Torahiko Okubo¹, Hiroyuki Yamaguchi¹ (¹Fac. Health. Sci., Hokkaido Univ., ²Fac. Med., Hokkaido Univ.)

DP1-09-13/P2-046**Changes of Sensitivity to antibiotics against *Streptococcus mutans* under simulated microgravity**

○Chika Tokairin, Michiyo Honda (Dept. Appl. Chem., Grad. Sch. Sci. Tech., Meiji Univ.)

DP1-09-14/P2-047**Effects of *Campylobacter jejuni* infection in the VBNC state on the mouse intestinal tract**

Mizuki Tsuchida¹, Akihiro Hirata¹, Yasuo Inoshima^{1,2}, ○Ayaka Okada^{1,2} (¹Dept. Vet. Med., Gifu Univ., ²GeFAH., Gifu Univ.)

DP1-10 Pathogenicity 02

Wednesday, August 7 14:10–15:10

Digital Poster Group 1 (Main Hall)

Chair: Keitaro Yoshida (Sapporo Medical University)

DP1-10-01/P1-108**The analysis of N-terminal side domain of MARTX toxin produced by *Vibrio vulnificus***

○Mai Sasaki¹, Shoko Takeuchi¹, Takahiro Tsuchiya^{1,2}, Katsushiro Miyamoto¹, Jun Komano¹, Hiroshi Tsujibo¹ (¹Dept. Microbiol. Infect. Cont., Osaka Med. Pharm. Univ., ²Ctr. Advance. Pharm. Educ., Osaka Med. Pharm. Univ.)

DP1-10-02/P1-109**The analysis of functional domain of MARTX toxin produced by *Vibrio vulnificus***

○Yurina Noso¹, Hina Sugimura¹, Takahiro Tsuchiya^{1,2}, Katsushiro Miyamoto¹, Jun Komano¹, Hiroshi Tsujibo¹ (¹Dept. Microbiol. Infect. Cont., Osaka Med. Pharm. Univ., ²Ctr. Advance. Pharm. Educ., Osaka Med. Pharm. Univ.)

DP1-10-03/P1-110**Negative transcriptional regulator of *V. parahaemolyticus* type III secretion system 2**

○Sarunporn Tandhavanant^{1,2}, Hiroyuki Terashima¹, Dhira Saraswati Angramukti³, Hirotaka Hiyoshi¹, Narisara Chantratita², Tetsuya Iida³, Shigeaki Matsuda³, Toshio Kodama¹ (¹Dept. Bacteriology, Inst. Tropical Medicine, Nagasaki Univ., ²Dept. Microbiology and Immunology, Fac. Tropical Medicine, Mahidol Univ., ³Dept. Bacterial Infections, Research Inst. Microbial Diseases, Osaka Univ.)

DP1-10-04/P1-111**The influence of PLC-mediated intracellular calcium influx in periodontitis during *Pg* infection**

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

DP1-10-05/P1-112**Gingipain from *Porphyromonas gingivalis* promotes inflammation in human microglia cells**

○Mika Fujii¹, Yutaka Yamazaki¹, Akira Hasebe², Ji-Won Lee² (¹Gerodontology, Dept. Oral Health Science, Fac. Dental Medicine, Hokkaido Univ., ²Microbiology, Dept. Oral Pathobiological Science, Grad. Sch. Dental Medicine, Hokkaido Univ.)

DP1-10-06**[Withdrawn]****DP1-10-07/P1-114****Mechanism of host-cellular response to streptolysin S produced by *Streptococcus anginosus***

○Yugo Yamamori¹, Hideaki Nagamune^{1,2}, Toshifumi Tomoyasu^{1,2}, Atsushi Tabata^{1,2} (¹Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

DP1-10-08/P2-104***Bordetella bronchiseptica* produces pertussis toxin**

○Shymaa Ali¹, Yukihiko Hiramatsu¹, Takashi Nishida¹, Dendi Krisna Nugraha¹, Yasuhiko Horiguchi^{1,2} (¹Dept. Mol. Bact., RIMD., Osaka Univ., ²CiDER., Osaka Univ.)

DP1-10-09/P2-105**Analysis of the transcription of serine protease gene by *Aeromonas sobria***

○Eizo Takahashi¹, Sadayuki Ochi¹, Masaharu Tanaka¹, Toshiyuki Yui¹, Hidetomo Kobayashi², Soshi Seike², Hiroyasu Yamanaka², Keinosuke Okamoto³ (¹Fac. Pharm. Sci., Yokohama Univ. Pharm., ²Fac. Pharm. Sci., Hiroshima Int. Univ., ³Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ.)

DP1-10-10/P2-106**Structure and dynamics analysis of a clostridial collagenase**

○Osamu Matsushita¹, Takehiko Mima², Adjoa Bonsu³, Hiroya Oki⁶, Ryo Masuda⁷, Takaki Koide⁸, Hayato Yamashita⁴, Kazuki Kawahara⁵, Joshua Sakon³ (¹Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ²Dept. Med. Tech., Fac. Health Sci., Ehime Pref. Univ. Health Sci., ³Dept. Chem. Biochem., Univ. Arkansas, ⁴Ctr. Sci. Tech. Extr. Cond. Grad. Sch. Eng. Sci., Osaka Univ., ⁵Grad. Sch. Pharm. Sci., Osaka Univ., ⁶Dept. Infect. Metagenomics., Res. Inst. Micro. Dis., Osaka Univ., ⁷Waseda Res. Inst. Sci. Engineer., Waseda Univ., ⁸Dept. Chem. Biochem., Sch. Adv. Sci Eng., Waseda Univ.)

DP1-10-11/P2-107**Investigation of the cytotoxic mechanism of Discoidinolyisin produced by *S. mitis* strain Nm-76**

○Sayaka Tsukasaki¹, Kazuto Ohkura², Toshifumi Tomoyasu^{1,3}, Hideaki Nagamune³, Atsushi Tabata^{1,3} (¹Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. Innov., Tokushima Univ., ²Div. Pharm. Sci., Suzuka Univ. Med. Sci. Grad. Sch., ³Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

DP1-10-12/P2-108**Elucidation of mechanism of vacuolation induced by *Escherichia coli*-derived Outer Membrane Vesicles**

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

DP1-10-13/P2-109**Interaction analysis between BteA and BopN produced by *Bordetella***

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

DP1-10-14/P2-110**Functional analysis of *Bordetella* BcrH2**

○Maho Miyasugi, Akio Abe, Asaomi Kuwae (Grad. Sch. Infect. Contr. Sci., Kitasato Univ.)

DP1-10-15/P2-111**Functional analysis of the cell wall-anchored surface protein "Endo D" of *Streptococcus intermedius***

○Toshifumi Tomoyasu¹, Atsushi Tabata¹, Ayuko Takao², Hideaki Nagamune¹ (¹Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., ²Dept. Oral Bacteriol., Tsurumi Univ.)

DP1-10-16/P2-112**Investigation for growth and pathogenicity of *G. bergeri* isolate in the presence of serum components**

○Atsushi Tabata¹, Toshifumi Tomoyasu¹, Ken Kikuchi², Hideaki Nagamune¹ (¹Div. Biosci. & Bioind., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., ²Dept. Infect. Dis., Tokyo Women's Med. Univ.)

DP1-11 Host defense 02

Wednesday, August 7 14:10–15:10
Digital Poster Group 2 (Main Hall)

Chair: Noriko Ogasawara (Sapporo Medical University)

DP1-11-01/P1-144**Fungal UV sensitivity is characteristically wavelength dependent due to melanin accumulation**

○Yushi Onoda^{1,3}, Kai Ishida¹, Miharuru Nagahashi^{1,2}, Michiyo Yamashita^{1,2}, Toshihiko Aizawa³, Shigeharu Yamauchi³, Yasuo Fujikawa³, Tomotake Tanaka³, Kazuaki Mawatari^{1,2}, Akira Takahashi^{1,2} (¹Dept. Microbiol. Cont., Inst. Biomed. Sci., Tokushima Univ., ²Dept. Prev Environ Nutr., Inst. Biomed. Sci., Tokushima Univ., ³Nichia Corp.)

DP1-11-02/P1-145**Host immunomodulation using membrane vesicles derived from *Clostridioides difficile***

○Yotaro Isamu¹, Mayu Okuda¹, Nozomu Obana^{2,4}, Nobuhiko Nomura^{3,4} (¹Sch. Sci. Tech., Life Ear. Sci, Univ. Tsukuba, ²TMRC, Fac. Med., Univ. Tsukuba, ³Fac. Life Environ., Sci. Univ. Tsukuba, ⁴MiCS, Univ. Tsukuba)

DP1-11-03/P1-146**Designing New-Age Peptide Vaccines Using Bacteriophages**

○Srivani Veerananarayanan, Takashi Sugano, Liu Yi, Myat Thu, Kanate Thitiananpakorn, Yoshifumi Aiba, XinEe Tan, Kazuhiko Miyana, Shinya Watanabe, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

DP1-11-04/P1-147**Phage Capsid Vaccines for *Mycobacterium tuberculosis* (*Mtb*): Purification & Concentration Strategies**

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

DP1-11-05/P1-148**Nasal *Staphylococcus aureus* membrane vesicles induces mucosal IgA responses without adjuvant**

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

DP1-11-06/P2-139**Magnetic Nanoparticle Encapsulation of Membrane Vesicles to Enhance Cancer Therapy Effectiveness**

○Yushi Nagasaka¹, Chihiro Suzuki², Hiroyuki Futamata^{1,3}, Satoshi Ota¹, Yosuke Tashiro¹ (¹Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ²Dept. Appl. Chem. Biochem. Eng. Shizuoka Univ., ³Res. Inst. Green Sci. Tech. Shizuoka Univ.)

DP1-11-07/P2-140**Strategic Construction of DNA Vaccine Candidates with Bacteriophages for TB**

○Yi Liu, Srivani Veerananarayanan, Kanate Thitiananpakorn, Yoshifumi Aiba, XinEe Tan, Kazuhiko Miyana, Shinya Watanabe, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

DP1-11-08/P2-142**Molecular mechanism of the preventive effect of Ninjinyoeito on *Klebsiella pneumoniae* infection**

○Rika Tanaka¹, Shogo Tsubaki², Hitoshi Tsugawa² (¹Dept. Immunology, Div. Infect. Host Def., Sch. Med., Tokai Univ., ²Transkingdom Signaling Research Unit, Div. Infect. Host Def., Sch. Med., Tokai Univ.)

DP1-11-09/P2-143**Different prime-boost regimens via systemic or mucosal routes with a novel membrane vesicle vaccine**

○Hiroki Uchiyama^{1,2}, Takehiro Yamaguchi¹, Nozomu Obana³, Kimihiro Abe¹, Masanori Toyofuku⁴, Nobuhiko Nomura⁴, Yukihiro Akeda¹, Ryoma Nakao¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Dept. Surg., Tokyo Med. Dent. Univ. Grad Sch. Med., ³Tsukuba Transborder Medical Research Center, Fac. Medicine, Univ. of Tsukuba, ⁴Microbiology Research Center for Sustainability (MiCS), Univ. Tsukuba)

DP1-11-10/P2-144**Exploration of RNA signatures reflecting mycobacterial load in the lungs using active TB mouse model**

○Hajime Nakamura, Shintaro Seto, Minako Hijikata, Naoto Keicho (Dept. Pathophysiol. Host Defense, Research Inst. Tuberculosis)

DP1-11-11/P2-145**Evaluation of protective effect induced by intranasal vaccination of *Bordetella Pertussis***

○Sora Ishikawa^{1,3}, Akira Ainai¹, Rena Sakamoto¹, Ryoma Nakao², Tadaki Suzuki¹, Koji Tamura³ (¹Dept. Pathology, NIID, ²Dept. Bacteria 1, NIID, ³Dept. Bio Sci. and Tech., Grad. Sch. Indu. Sci. and Tech., Tokyo Univ. of Sci.)

DP1-11-12/P2-147**Enhanced immunity to pulmonary tuberculosis by vaccination with Zinc metalloprotease 1-deficient BCG**

○Masayuki Umemura^{1,2,3}, Giichi Takaesu^{1,2,3}, Goro Matsuzaki^{1,2,3} (¹Trop. Biosphere Res. Cent., Univ. Ryukyus, ²Drpt. Host Defense, Grad. Sch. Med., Univ. Ryukyus, ³Adv. Med. Res. Cent., Fac. Med., Univ. Ryukyus)

DP1-11-13/P2-148**Genetic engineering employing MPB70 enables efficient expression of foreign antigen in BCG Tokyo**

○Atsuki Takeishi, Amina Kaboso Shaban, Yuriko Ozeki, Yutaka Yoshida, Akihito Nishiyama, Yoshitaka Tateishi, Sohkiichi Matsumoto (Dept. Bacteriol., Sch. Med, Niigata Univ.)

DP1-11-14/P1-149**Identification of the intestinal bacteria that protect against Clostridium botulinum infection**

○Nobuhide Kobayashi¹, Hiroki Toriumi², Seiga Komiyama², Koji Hase², Yukako Fujinaga¹ (¹Dept. Bacteriol., Grad. Sch. Med., Kanazawa Univ., ²Divi. Biochem., Fac. Pharm., Keio Univ.)

DP1-11-15/P1-150**Neutralization mechanism of human monoclonal antibodies against type B botulinum neurotoxin**

○Takuhiro Matsumura, Mayu Kitamura, Sho Amatsu, Aki Yamaguchi, Nobuhide Kobayashi, Yukako Fujinaga (Dept. Bacteriol., Sch. Med. Sci., Kanazawa Univ.)

DP1-11-16/P1-151**RabGAP1L regulates exocytic and endocytic trafficking of the invading Group A Streptococcus**

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

DP1-11-17/P1-152**Analysis of OPN fragments reflecting the pathology in microbiological infection**

○Takashi Matsuba¹, Yui Uehara¹, Kana Sukizaki¹, Toshio Hattori² (¹Animal Pharm. Sc., Sch. Pharm., Univ. Kyushu Med. Sci., ²Inst. Health Welf., Kibi Int. Univ)

DP1-12 Antimicrobial agents and resistance 02

Wednesday, August 7 14:10–15:10
Digital Poster Group 3 (Main Hall)

Chair: Hajime Yamauchi (Asahikawa Medical University)

DP1-12-01/P1-157**Dermatophyte Cyp51 isozyme selectivity of azole antifungal agents**

○Masaki Ishii¹, Tsuyoshi Yamada², Shinya Ohata¹ (¹Research Inst. Pharmaceutical Sciences, Fac. Pharmacy, Musashino Univ., ²Inst. Med. Mycol., Teikyo Univ.)

DP1-12-02/P1-158**Optimized synthesis of CRISPR-Cas13a antimicrobial capsid against MRSA**

○Yuzuki Shimamori¹, XinEe Tan¹, Feng-Yu Li¹, Yutaro Nishikawa^{1,2}, Batbold Anujin¹, Nayanjin Tergel¹, Kotaro Kiga^{1,3}, Shinya Watanabe¹, Takayuki Shimojo², Longzhu Cui¹ (¹Div. Bacteriology, Dept. Inf. & Imm., Sch. Med., JMU., ²EIKEN CHEMICAL CO.,LTD., ³RCDVD, NIID)

DP1-12-03/P1-159**Development of chelator based novel MBL inhibitors to combat carbapenem resistance bacteria**

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

DP1-12-04/P1-160**Functional impact by linker region of a staphylococcal endolysin**

Sosuke Munetomo¹, ○Jumpei Uchiyama², Iyo Uchiyama², Wanganuttara Thamonwan², Toshihiro Tsukui³, Hideharu Hagiya⁴, Yumiko Yamamoto², Hideyuki Kanda¹, Osamu Matsushita² (¹Dept. Pub. Heal., Grad. Sch. Med. Dent. Pharm., Okayama Univ., ²Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm., Okayama Univ., ³Nippon Zenyaku Kogyo Co., Ltd., ⁴Dept. Infect. Dis., Okayama Univ. Hosp.)

DP1-12-05/P1-161**Antibacterial activity screening of Thai medicinal plant extracts using resazurin microtiter assay**

○Nitchatorn Sungsirin^{1,2}, Tanit Boonsiri², Saengthip Ngoenprong³, Faesah Ayohsae³, Oraya Dokkham³, Siriwan Sriuan³, Busaba Matrakool³, Tassanee Saovana³, Sudaluck Thunyaharn³ (¹Dept. Microbiology, Fac. Medicine, Shimane Univ., ²Dept. Microbiology, Phramongkutklao College of Medicine, ³Fac. Allied Health Sciences, Nakhonratchasima College)

DP1-12-06/P1-162**Development of antimicrobial peptide foldamers as therapeutics for multi-drug resistant bacteria**

○Takashi Misawa¹, Takahito Ito^{1,2}, Megumi Kurashima¹, Seiji Yamasaki³, Kunihiko Nishino³, Yosuke Demizu^{1,2} (¹National Inst. Health Sciences, ²Grad. Sch. Med. Life Sci., Yokohama City Univ., ³SANKEN, Osaka Univ.)

DP1-12-07/P1-163**Approaches for S. mutans by co-treatment with antimicrobial peptides and antimicrobial agents**

○Ryosuke Nakamura, Michiyo Honda (Dept. Appl. Chem., Grad. Sch. Sci. Tech., Meiji Univ.)

DP1-12-08/P1-164**Establishing phagemid packaging system to generate antimicrobials against MDR Staphylococcus aureus**

Feng-Yu Li¹, ○XinEe Tan¹, Yuzuki Shimamori¹, Kotaro Kiga^{1,2}, Shinya Watanabe¹, Yoshifumi Aiba¹, Kazuhiko Miyanaga¹, Kanate Thitianapakorn¹, Yutaro Nishikawa^{1,3}, Longzhu Cui¹ (¹Dept. Infect. Immun., Sch. Med., Jichi Med. Univ., ²Research Center for Drug and Vaccine Development, National Inst. Infectious Diseases, ³EIKEN CHEMICAL CO.,LTD.)

DP1-12-09/P1-165**Antifungal activity of bacteria isolated using a novel medium containing plant-derived components**

○Fumiaki Tabuchi¹, Kazuhiro Mikami², Masaki Ishii³, Atsushi Miyashita¹ (¹Lab. Antifungal Immunobiol., Inst. Med. Mycol., Teikyo Univ., ²Dept. Med. Tech., Grad. Sch. Clinical Lab. Sci., Teikyo Univ., ³Lab. Mol. Cell Biol., Sch. Pharm., Musashino Univ.)

DP1-12-10/P2-166**Mobile linezolid resistance genes in enterococci derived from livestock compost at Japanese farms**

○Akira Fukuda¹, Chie Nakajima², Yasuhiko Suzuki², Masaru Usui^{1,2} (¹Dept. Food Microbiol. and Food Safe., Sch. Vet. Med., Rakuno Gakuen Univ., ²Div. Bioresources, Inter. Inst. Zoonosis Contr., Hokkaido Univ.)

DP1-12-11/P2-168**Genetic and phenotypic analyses of *mcr*-harboring ESBL-producing *E. coli* from dogs and cats in Japan**

○Mayo Yasugi¹, Shingo Hatoya¹, Daisuke Motooka², Daisuke Kondo¹, Hideo Akiyoshi¹, Masayuki Horie¹, Shota Nakamura², Terumasa Shimada¹ (¹Grad. Sch. Vet. Sci., Osaka Metro. Univ., ²RIMD, Osaka Univ.)

DP1-12-12/P2-169**Resistance to Sulfamethoxazole-Trimethoprim and Its Horizontal Transfer in *Haemophilus influenzae***

○Tomokazu Ando, Takeaki Wajima, Emi Tanaka, Kei-ichi Uchiya (Dept. Microbiol., Fac. Pharm., Meijo Univ.)

DP1-12-13/P2-170**Mechanism of high-level quinolone resistance in *H. haemolyticus* revealed by gene transfer assay**

○Takeaki Wajima, Emi Tanaka, Kei-ichi Uchiya (Dept. Microbiol., Fac. Pharm., Meijo Univ.)

DP1-12-14/P2-172**Long-term cultivation triggers non-canonical susceptibilization of biofilm cells to antibiotics**

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

DP1-12-15/P2-173**Alanine-transporter *CycA* supports cationic antimicrobial resistance in *Staphylococcus aureus***

○Yujin Suzuki¹, Miki Matsuo^{1,2}, Nguyen Tra Mi Le^{1,2}, That Thuan Vy Ton¹, Hitoshi Komatsuzawa^{1,2} (¹Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ²Proj. Res. Ctr. for Nosocomial Infectious Diseases, Hiroshima Univ.)

DP1-12-16/P2-174**Increased prevalence of Kanamycin-resistant *Salmonella* Schwarzengrund from broilers in Kagoshima**

○George Sanga, Rika Miyajima, Vu Minh Duc, Takehisa Chuma (Joint Fac. Vet. Med. Kagoshima Univ.)

DP1-12-17/P2-178**Metabolic Remodeling by *rpoBC* Mutations is Associated with β -Lactam Resistance in OS-MRSA**

○Shinya Watanabe, Chijioke A Nsofor, Kanate Thitianapakorn, XinEe Tan, Yoshifumi Aiba, Kazuhiko Miyanaga, Srivani Veerananarayanan, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

DP2-13 Taxonomy / Epidemiology / Infectious diseases 03

Thursday, August 8 9:00–10:00
Digital Poster Group 1 (Main Hall)

Chair: Soh Yamamoto (Sapporo Medical University)

DP2-13-01/P1-021**Development of real-time PCR assay specific for *astA* of *Escherichia coli***

○Sakura Arai¹, Tadasuke Ooka², Nobuyo Ikeda³, Kaori Shimmen⁴, Koji Yokoyama⁵, Emi Arikawa⁶, Mayumi Kadoguchi⁷, Akito Mizokoshi⁸, Takayuki Konno⁹, Yuka Kojima¹⁰, Satomi Kando¹¹, Noriko Konishi¹², Shouhei Hirose¹, Yukiko Kudo¹ (¹Div. Microbiol., Natl. Inst. Health Sci., ²Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ., ³Hiroshima City Inst. Public Health, ⁴Himeji Inst. Env. Health, ⁵Fukui Inst. Health and Env. Sci., ⁶Kitakyushu Inst. Health and Environ. Sci., ⁷Kumamoto City Env. Res. Ctr., ⁸Oita Pref. Inst. Health. Environ., ⁹Akita Pref. Res. Ctr. Public Health and Env., ¹⁰Kawasaki City Inst. for Public Health, ¹¹Saitama Inst. Public Health, ¹²Tokyo Metropol. Inst. Public Health)

DP2-13-02/P1-022**Diagnosis of *Helicobacter suis* infection as a potential contributor to gastric malignancies**

○Hidenori Matsui^{1,2}, Emiko Rimbara¹, Sae Aoki¹, Keigo Shibayama², Masato Suzuki³ (¹Dept. Bacteriol. II, NIID, ²Dept. Bacteriol., Sch. Med., Nagoya Univ., ³AMR Res. Cent., NIID)

DP2-13-03/P1-023**Evaluation of MALDI Biotyper system in rapid identification of *Bacillus anthracis* spores**

○Yoshihito Fujinami, Hiroaki Nakahara, Junji Hosokawa-Muto, Akira Imamura (National Research Inst. Police Science)

DP2-13-04/P1-024**Optimization of tuberculosis diagnostics by detection of Ag85B antibody titer**

○Tomoya Yamazaki¹, Desak Nyoman Surya Suameitria Dewi², Satoshi Ishikawa^{1,3}, Yutaka Yoshida¹, Yuriko Ozeki¹, Akihito Nishiyama¹, Yoshitaka Tateishi¹, Sohkiichi Matsumoto¹ (1Dept. Bacteriol., Sch. Med., Niigata Univ., 2Dept. Microbiol., Sch. Med., Ciputra Univ., 3Fukuyama Zoo)

DP2-13-05/P1-025**Improved Accurate Quantitative Analysis of Microbiome Using DNA Standard for 16S rRNA NGS analysis**

○Honami Miyakura, Yoshitaka Kimura (TAKARA BIO INC.)

DP2-13-06/P1-026**Detection of MVOCs from Keratinase Mutant Strain of *Trichophyton benhamiae***

○Toha Mizutani¹, Tsuyoshi Yamada^{2,3}, Koichi Makimura², Shinichi Iwaguchi¹ (1Dept. Biol. Sci., Fac. Sci., Nara Women's Univ., 2Inst. Med Mycol., Teikyo Univ., 3Asia Intl. Inst. Infect. Dis. Ctrl., Teikyo Univ.)

DP2-13-07/P2-021**Analysis of the foodborne outbreak of *Clostridium perfringens* in Toyama prefecture, 2023**

○Kazuki Saito¹, Keiko Kimata¹, Junko Isobe¹, Jun-ichi Kanatani¹, Kaho Ikeda¹, Emi Maenishi¹, Takashi Takeuchi², Chiharu Matsuzaki³, Kazunori Oishi¹ (1Dept. Bacteriol., Toyama Inst. Health, 2Environmental Health Division in Toyama Prefecture, 3Public Health Center of Imizu, Toyama Prefecture)

DP2-13-08/P2-022**Breath omics analysis for infectious diseases**

○Seiryu Ogata¹, Tetsuro Matsunaga¹, Minkyung Jung¹, Masanobu Morita¹, Fan-Yan Wei², Hozumi Motohashi³, Takaaki Akaike¹ (1Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., 2Dept. Modomics Biol. Med., IDAC, Tohoku Univ., 3Dept. Gene Exp. Regul., IDAC, Tohoku Univ.)

DP2-13-09/P2-023**Mechanisms of excretion of bacterial-specific modified nucleosides in urine**

○Ryosuke Yamamura¹, Yu Nagayoshi^{1,2}, Kayo Nishiguchi^{1,2}, Kazuhito Tomizawa¹ (1Dept. Mol. Physiol., Fac. Lif. Sci., Kumamoto Univ., 2Dept. Nephrol., Fac. Lif. Sci., Kumamoto Univ.)

DP2-13-10/P2-024**Improvement of culture method for *Clostridioides difficile***

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

DP2-13-11/P2-025**Development of a novel *in vitro* detection method for botulinum neurotoxin**

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

DP2-13-12/P2-026**Evaluation of VBNC-*Helicobacter pylori* by PMA-PCR**

○Fuhito Hojo¹, Jiro Mitobe², Shigeru Kamiya³, Takako Osaki² (1Inst. Lab. Animals, Grad. Sch. Med, Kyorin Univ., 2Dept. Infect. Dis., Kyorin Univ. Sch. Med., 3Miyarisan Pharmaceutical Co., Ltd.)

DP2-13-13/P1-027***Anaplasma* spp. in Yaku-deer of Yaku-shima Island, Kagoshima prefecture**

○Masako Andoh^{1,2}, Mayu Goto¹, Takaki Nakamura¹ (1Vet. Med., Kagoshima Univ., 2Int. Ctr. Is. Stud., Kagoshima Univ.)

DP2-13-14/P1-028**Effect of oral resident bacteria on risk of ocular infections when wearing orthokeratology lenses**

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

DP2-13-15/P1-030**Prevalence of *Corynebacterium ulcerans* in cynomolgus monkeys in Japan: retrospective analysis**

○Miyuki Kimura¹, Kenzo Yonemitsu², Yasushi Ami², Asuka Hirai-Yuki², Mitsutoshi Senoh¹, Tsuyoshi Kenri¹, Ken-Ichi Hanaki², Masaaki Iwaki² (1Dept. Bacteriology II, NIID, 2Management Dept. Biosafety, Lab. Animal, and Pathogen Bank, NIID)

DP2-13-16/P2-027**Comparative analysis of *Leptotrichia* sp. isolated from human oral cavity**

○Noriko Shinozaki-Kuwahara¹, Masanori Saito², Tomomi Hashizume-Takizawa², Hidenobu Senpuku², Koichi Hiratsuka¹ (1Dept. Biochem. Mol. Biol., Nihon Univ. Sch. Dent. at Matsudo., 2Dept. Microbiol. Immunol., Nihon Univ. Sch. Dent. at Matsudo)

DP2-13-17/P2-028**Inhibition effect of oral moisturizing gel ingredients on the biofilm formation**

○Setsuhi Sei¹, Takafumi Miyazaki², Yoshiaki Kamikawa³, Hidenobu Senpuku¹ (1Dept. Microbiol. Immunol., Dent., Sch. at Matsudo, Nihon Univ., 2Pikasshu, 3Sch. Dent., Kagoshima Univ.)

DP2-13-18/P2-029**Prevalence of intestinal carriage of hemolytic streptococci in the nursing home residents**

○Kaho Ikeda¹, Junko Isobe¹, Emi Maenishi¹, Keiko Kimata¹, Jun-ichi Kanatani¹, Kazuki Saito¹, Tadayoshi Ikebe², Yukihiro Akeda², Kazunori Oishi¹ (1Dept. Bacteriol., Toyama Inst. Health, 2Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

DP2-13-19/P2-030***Bacillus cereus* foodborne outbreaks in Tokyo, 1977-2023**

○Chie Monma, Wakaba Okada, Natsumi Furuta, Chikako Asayama, Satomi Uehara, Hiroshi Koike, Maki Kanda, Hiromi Obata, Keiko Yokoyama, Kenji Sadamasu (Dept. Microbiol., Tokyo Metropolitan Inst.)

DP2-14 Genetics / Genomics / Biotechnology 01

Thursday, August 8 9:00–10:00
Digital Poster Group 2 (Main Hall)

Chair: Akira Hasebe (Hokkaido University)

DP2-14-01/P2-078**Diversity of the Japanese Gut Microbiome Analysis: Relative Approach Using Compositional Analysis**

○Tatsuki Itagaki, Keisuke Nakamura, Shintaro Nakano, Machiko Kasai, Ji-Won Lee, Akira Hasebe (Oral Molecular Microbiology, Fac. Dental Medicine, Grad. Sch. Dental Medicine, Hokkaido Univ.)

DP2-14-02/P2-079**Genomic Analysis of *Salmonella* Isolated from Canal Water in Bangkok, Thailand**

○Jirachaya Toyting¹, Narong Nuanmuang², Fuangfa Utrarachki³, Pimlapas Leekitcharoenphon², Frank Aarestrup², Toyotaka Sato⁴, Jeewan Thapa¹, Chie Nakajima¹, Yasuhiko Suzuki¹ (¹Div. Biores., Hokkaido Univ. Int. Inst. Zoonosi. Contr., ²Res. Gr. for Genom. Epi., Nat. Food Int., Tech. Univ. of Denmark, ³Dept. Microbiol., Fac. Publ. Healt. Mahidol Univ., ⁴Lab. Vet. Hyg., Fac. Vet. Med., Hokkaido Univ.)

DP2-14-03/P2-080**Quantification and visualization of the *Escherichia coli* genome based on phylogenetic trees**

○Masahiro Suzuki (Dept. Microbiology, Sch. Med., Fujita Health Univ.)

DP2-14-04/P2-081**Statistical-genetic investigation of the pathogenic factors in invasive pneumococcal diseases**

○Masayuki Ono^{1,2}, Masaya Yamaguchi^{1,2,3,4}, Shigetada Kawabata^{1,4} (¹Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Bioinfor. Res. Unit, Osaka Univ. Grad. Sch. Dent., ³Bioinfor. Center, Res. Inst. Microbial Dis., Osaka Univ., ⁴CiDER, Osaka Univ.)

DP2-14-05/P2-082**Phylogenetic analysis and cell adhesion of *astA*-positive *Escherichia coli* O166:H15**

Akiko Kubomura¹, Ken-ichi Lee¹, Kaori Shimmen², Kaori Kashima³, Nozomi Sakakida³, Mayumi Kadoguchi⁴, Yukiko Kudo⁵, Yukihiro Akeda¹, ○Sunao Iyoda¹ (¹National Inst. Infectious Diseases, ²Himeji Inst. Env. Health, ³Saitama Pref., ⁴Kumamoto City, ⁵National Inst. Health Sciences)

DP2-14-06/P2-083**Genomic characterization of STEC strains isolated from asymptomatic carriers**

○Yumi Imai¹, Hiroshi Kaneko², Miki Okuno¹, Yuki Hoshiko¹, Takeshi Yamamoto¹, Ken-ichi Lee³, Akio Noguchi², Sunao Iyoda³, Toshio Sato², Yoshitoshi Ogura¹ (¹Div. Microbiol. Dept. Infect. Med. Kurume Univ. Sch. Med., ²Japan Microbiological Laboratory Co., Ltd., ³Dept. Bacteriology I, National Inst. Infectious Diseases)

DP2-14-07/P2-084**Functional Genomic Characterization of Nontuberculous Mycobacteria from Bathroom Environments**

○Marie Ikai¹, Yukiko Nishiuchi², So Fujiyoshi², Fumito Maruyama², Yusuke Minato¹ (¹Dept. Microbiol., Sch. Med., Fujita Health Univ., ²Dept. Microbial Genomics and Ecology, Hiroshima Univ.)

DP2-14-08/P2-085**Genome analysis reveals mechanisms of resistance gene transfer in ESBL-producing *Aeromonas***

○Miki Okuno¹, Michiyo Sugiyama², Yuki Hoshiko¹, Takeshi Yamamoto¹, Tetsuo Asai², Yoshitoshi Ogura¹ (¹Dept. Infectious Med., Kurume Univ. Sch. Med., ²United Grad. Sch. Vet. Sci., Gifu Univ.)

DP2-14-09/P1-078**Acceptability of *Escherichia coli* for IncF plasmids encoding antimicrobial-resistance genes**

○Kengo Hayashi¹, Masahiro Suzuki¹, Yohei Doi^{1,2,3} (¹Dept. Microbiol., Sch. Med., Fujita Health Univ., ²Dept. Infect. Dis., Sch. Med., Fujita Health Univ., ³Div. Infect. Dis., Sch. Med., Pittsburgh Univ.)

DP2-14-10/P1-079**DNA transfer by *Pseudomonas aeruginosa* using membrane vesicles of Pf4 prophage**

○Haruki Okumura¹, Satoshi Takenawa², Soutaro Takano², Mizuki Kanno³, Hiroyuki Futamata^{1,3,4}, Akihiro Okamoto², Yosuke Tashiro^{1,3} (¹Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ²NIMS. MANA., ³Grad. Sch. Sci. Tech. Shizuoka Univ., ⁴Res. Inst. Green Sci. Tech. Shizuoka Univ.)

DP2-14-11/P1-080**Horizontal gene transfer through membrane vesicles facilitated by changes in cellular membrane state**

○Soichiro Eri¹, Mizuki Kanno², Hiroyuki Futamata^{1,2,3}, Yosuke Tashiro^{1,2} (¹Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ²Grad. Sch. Sci. Tech. Shizuoka Univ., ³Res. Inst. Green. Sci. Tech. Shizuoka Univ.)

DP2-14-12/P1-081**Evolutionary process of *Streptococcus dysgalactiae* genome, with host switching**

○Kazunori Murase, Ryosuke Tsuge, Atsuko Minowa-Nozawa, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sc. Med., Kyoto Univ)

DP2-14-13/P1-082**Predicting the bacteria acquired the plasmid by conjugative transfer based on nucleotide sequences**

○Maho Tokuda¹, Shunta Tsuruga², So Maeda³, Rin Yamazaki³, Chiho Minakuchi⁴, Hideaki Nojiri⁴, Kazuhide Kimbara^{1,2,3}, Masaki Shintani^{1,2,3,5} (¹Grad. Sch. Shizuoka Univ., ²Grad. Sch. Shizuoka Univ., ³Fac. Eng. Shizuoka Univ., ⁴Grad. Sch. Agric. Life Sci., UTokyo, ⁵Shizuoka Univ. RIGST)

DP2-14-14/P1-083**Upstream genetic structures of AMR genes and its utilization for presuming AMR plasmids**

○Itaru Hirai¹, Nobuyoshi Yagi² (¹Lab. Microbiol., Sch. Health Sci., Fac. Med., Univ. of the Ryukyus, ²Lab. Clin. Physiol., Sch. Health Sci., Fac. Med., Univ. of the Ryukyus)

DP2-14-15/P1-084**The Temporal Trends of Molecular Typing and Resistance Gene Dynamics in *Neisseria gonorrhoeae***

○Yuki Ohama¹, Ken Shimuta¹, Masatomo Morita¹, Ai Yoshida¹, Hideyuki Takahashi¹, Mitsuru Yasuda², Makoto Ohnishi³, Yukihiro Akeda¹ (¹Dept. Bact. 1., NIID, ²SMU Med, Dept. Infection Control & Clinical Lab Med., ³OPHE-IDRC)

DP2-14-16/P1-085**Comprehensive analysis of small RNAs that control the expression of the virulence regulator in EHEC**

○Naoki Sudo¹, Nobuhiko Okada², Jiro Mitobe¹ (¹Dept. Infect. Dis., Sch. Med., Kyorin Univ., ²Dept. Microbiol., Sch. Pharm., Kitasato Univ.)

DP2-14-17/P1-086**Appropriate transcription of *SPS1* of *Candida albicans* are necessary to normal growth**

○Miyabi Sugano, Shinichi Iwaguchi (Dept. Biol. Sci, Fac. Sci., Nara Women's Univ.)

DP2-14-18/P1-087**Virulence factors of hemolytic streptococci SDSE strains prevalent in Japan**

○Kohei Ogura^{1,2}, Koji Kinoshima³, Hitomi Kitamura³, Shigefumi Okamoto^{2,3}, Toru Akiyama⁴ (¹Div. Food Sci. Biotech., Grad. Sch. Agr., Kyoto Univ., ²Inst. Front. Sci. Init., Kanazawa Univ., ³Fac. Health Sci., Inst. Med. Pham. Health Sci., Kanazawa Univ., ⁴Res. Insit., NCGM)

DP2-14-19/P1-088**New regulatory network via ArcAB and quorum sensing system of *Vibrio cholerae* biofilm formation**

○JantCres Caigoy¹, Hirofumi Nariya², Toshi Shimamoto¹, Zhiqun Yan^{3,4}, Tadashi Shimamoto¹ (¹Grad. Sch. Int. Sci. Life, Hiroshima Univ., ²Grad. Sch. Human Life Sci. Jumonji Univ., ³Grad. Sch. Biosph. Sci. Hiroshima Univ., ⁴Res. Cent. Maruzen Pharm. Co. Ltd)

DP2-15 Antimicrobial agents and resistance 03

Thursday, August 8 9:00–10:00

Digital Poster Group 3 (Main Hall)

Chair: Hideki Hara (Asahikawa Medical University)

DP2-15-01/P2-179**Analysis of antimicrobial-resistant bacteria and drug-resistance genes from domestic chicken meat**

○Runa Nakashima¹, Reina Kuwano¹, Tomoka Matsuo¹, Momoka Kondo¹, Rei Wakimoto², Mitsuoki Kawano¹ (¹Dept. Nutritional Sciences., Nakamura Gakuen Univ., ²Div. Food and Nutrition., Nakamura Gakuen Univ. JC.)

DP2-15-02/P2-180**Identification of ESBL genes using intestinal mucus samples from intestinal disease patients**

○Rei Wakimoto¹, Riho Kashige², Momoko Shimai², Kakeru Teshima², Akiko Shiotani³, Tingting Gu³, Runa Nakashima², Mitsuoki Kawano² (¹Div. Food and Nutrition., Nakamura Gakuen Univ. Junior College, ²Dept. Nutritional Sciences, Nakamura Gakuen Univ., ³Dept. Gastroenterology and Hepatology, Sch. Med., Kawasaki Univ.)

DP2-15-03/P2-181**Analysis of the amikacin resistance factor of carbapenem-resistant *Escherichia coli* AUH-256**

○Hinako Yokoyama¹, Azuki Morishita¹, Shoichi Sakaguchi², Takashi Nakano², Yuji Nakada¹ (¹Fac. Healthcare Sci., Aino Univ., ²Dept. Microbiol. & Infect. Cont., Fac. Med., Osaka Med. & Pharm. Univ.)

DP2-15-04/P2-182**Antimicrobial resistance of *emm89 Streptococcus pyogenes* isolates from patients throughout Japan**

○Weichen Gong¹, Masayuki Ono^{1,2}, Masaya Yamaguchi^{1,2}, Daisuke Motooka³, Yujiro Hirose¹, Rumi Okuno⁴, Tadayoshi Ikebe⁵, Shigetada Kawabata¹ (¹Dept. Microbiol. Sch. Dent., Osaka Univ., ²Dept. Info., Sch. Dent., Osaka Univ., ³NGS Core Facility, RIMD., Osaka Univ., ⁴Dept. Microbiol., Tokyo Metropolitan Inst. of Public Health, ⁵Dept. Bacteriol. I., NIID)

DP2-15-05/P2-183**Mg²⁺ requirement in *VmeJK*, an RND multidrug efflux pump, in *Vibrio parahaemolyticus***

○Rino Murakami¹, Ayami Kunimitsu¹, Daichi Morita², Takanori Kumagai², Teruo Kuroda² (¹Sch. Pharm., Hiroshima Univ., ²Dept. Microbiol. Med., Sch. Med. Sci., Hiroshima Univ.)

DP2-15-06/P2-184**Isolation and Characterization of Bacteriophages Infecting Drug-Resistant *Acinetobacter* Species**

○Azumi Tamura^{1,2,3}, Tomohiro Nakamura¹, Aa Haeruman Azam¹, Kotaro Chihara¹, Shinjiro Ojima¹, Longzhu Cui⁴, Koichi Watashi¹, Yoshimasa Takahashi¹, Hiroshi Yotsuyanagi^{2,3}, Kotaro Kiga^{1,4} (¹Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ²Dept. Comp. Biol. Med. Sci., Grad. Sch. Front. Sci., Univ. of Tokyo, ³Div. Infect. Dis., Inst. Med. Sci., Univ. of Tokyo, ⁴Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP2-15-07/P2-186**Evaluation of the bactericidal effect of bacteriophages on food products**

○Mitsuoki Kawano¹, Akiho Ichino¹, Eri Kawaji¹, Nanoha Yoshida¹, Runa Nakashima¹, Rei Wakimoto² (¹Dept. Nutritional Sci., Nakamura Gakuen Univ., ²Div. Food and Nutrition, Junior College, Nakamura Gakuen Univ.)

DP2-15-08/P2-187**Isolation and application of *Klebsiella pneumoniae* prophage with a broad host range**

Junjie Li, ○Kazuhiko Miyanaga, Kanate Thitiananpakorn, Minh Huong Nguyen, XinEe Tan, Srivani Veeranarayanan, Yoshifumi Aiba, Teppei Sasahara, Shinya Watanabe, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

DP2-15-09/P2-188**Tailoring induce conditions for CRISPR-Cas13a loaded AB-Capsid and targeted killing of *S. aureus***

○Anujin Batbold, XinEe Tan, Tergel Nayanjin, Shinya Watanabe, Yoshifumi Aiba, Kazuhiko Miyanaga, Teppei Sasahara, Srivani Veeranarayanan, Kanate Thitiananpakorn, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

DP2-15-10/P1-166**Investigation of phage therapy against multidrug-resistant *Escherichia coli***

○Mana Tohyama¹, Haruka Ohashi¹, Tomohiro Nakamura^{1,2}, Jumpei Fujiki¹, Hidetomo Iwano¹ (¹Dept. Biochemistry, Sch. Veterinary, Rakuno Gakuen Univ., ²Reserach Center for Drug and Vaccine Development, National Inst. Infectious Diseases)

DP2-15-11/P1-167**Isolation and characterization of broad host range bacteriophages infecting *Acinetobacter baumannii***

○Maniruzzaman, Adeline Yeo SyinLian, Yoshifumi Aiba, Minh Huong Nguyen, Shinya Watanabe, Kazuhiko Miyanaga, XinEe Tan, Teppei Sasahara, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP2-15-12/P1-168**Prevalence of extended-spectrum beta-lactamase-producing *Escherichia coli* in the Ijira River**

○Tomoki Nakatsubo¹, Michiyo Sugiyama², Tetsuo Asai^{1,2} (¹Dept. Appl. Vet. Sci., Jnt. Grad. Sch. Vet. Sci., Gifu Univ., ²Dept. Appl. Vet. Sci., Unit. Grad. Sch. Vet. Sci., Gifu Univ.)

DP2-15-13/P1-169**Roles of RND multidrug efflux pumps on drug resistance of *Achromobacter xylosoxidans* type strain**

○Mizuki Sugano, Emiko Mizusawa, Ayami Mezaki, Go Kamoshida, Yuji Morita (Dept. Infection Control Science., Sch. Pharm. Sci., Meiji Pharmaceutical Univ.)

DP2-15-14/P1-170**Emergence of ciprofloxacin and penicillin resistant meningococcal isolates in Japan**

○Hideyuki Takahashi¹, Masatomo Morita¹, Hajime Kamiya², Munehisa Fukusumi³, Mitsuru Yasuda⁴, Yuki Ohama¹, Ken Shimuta^{1,2}, Makoto Ohnishi¹, Ryoichi Saitoh⁵, Yukihiko Akeda¹ (¹Dept. Bacteriol 1, Nat. Inst. Infect. Dis., ²Infect. Dis. Survei. Center, Nat. Inst. Infect. Dis., ³Center Field Epi. Intel. Res. Pro. Develop., Nat. Inst. Infect. Dis., ⁴Dept. Infect. Cont. Lob. Med., Sch. Med., Sapporo Univ., ⁵Dept. Mol. Microbiol., Sch. Med. & Dent. Sci., Tokyo Med. & Dent. Univ.)

DP2-15-15/P1-171**Phenotypic and genetic characteristics of *bla*_{IMP-6} harbouring Enterobacteriaceae**

○Koichi Yamaguchi^{1,2}, Ryuichi Nakano¹, Akiyo Nakano¹, Yuki Suzuki¹, Miho Ogawa², Ryuji Sakata², Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara Med. Univ., ²Dept. Bacteriol., BML Inc.)

DP2-15-16/P1-172**Genomic insights into an Enterohaemorrhagic *Escherichia coli* O4:H12 co-carrying *mcr-5* and *bla*_{SHV-12}**

○Christian Xedzro¹, Toshi Shimamoto¹, Liansheng Yu², Yo Sugawara², Motoyuki Sugai², Tadashi Shimamoto¹ (¹Lab. Food Microbiol. Hyg., Grad. Sch. Integ. Sci. Life., Hiroshima Univ., ²Antimicrob. Resist. Res. Cent., Nat. Inst. Infect. Dis.)

DP2-15-17/P1-173**Analysis of the antimicrobial resistance mechanism in Gram-positive mastitis-causing bacteria**

○Kazumi Yokoo¹, Toshi Shimamoto¹, Naoki Suzuki², Tadashi Shimamoto¹ (¹Dept. Microbiology for Food Safety., Sch. Integrated Sciences for Life., Hiroshima Univ., ²Dept. Terrestrial Field Science., Sch. Integrated Sciences for Life, Hiroshima Univ.)

DP2-16 Pathogenicity 03

Thursday, August 8 10:10–11:10
Digital Poster Group 1 (Main Hall)

Chair: Torahiko Okubo (Hokkaido University)

DP2-16-01/P2-113**The growth and toxin-production property of *S. infantis* in the presence of erythrocyte components**

○Yoshiki Itoh¹, Toshifumi Tomoyasu^{1,2}, Hideaki Nagamune^{1,2}, Ayuko Takao³, Atsushi Tabata^{1,2} (¹Div. Bioresour. Sci., Grad. Sch. Sci & Tech. Innov., Tokushima Univ., ²Div. Biosci. & Bioind., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., ³Dept. Oral Bacteriol., Tsurumi Univ.)

DP2-16-02/P2-114***Listeria monocytogenes* promotes inflammasome activation through Btk phosphorylation**

○Hajime Yamauchi, Yasuyuki Matsuda, Hideki Hara (Dept. Infect. Dis., Div. Microbiol. Immunochem., Asahikawa Med. Univ.)

DP2-16-03/P1-115**Functional analysis of Atg8 paralogs in pneumococci-induced hierarchical autophagy**

○Chisato Sakuma^{1,2}, Michinaga Ogawa¹, Sayaka Shizukuishi¹, Yukihiro Akeda¹ (¹Bacteriol. I, Nat. Inst. Infect. Dis., ²Nat. Inst. Agrobiol. Sci, NARO)

DP2-16-04/P1-116**Search for new target molecules used by *Chlamydia trachomatis* by screening approved drug libraries**

○Saicheng Zhang, Ruiyu Li, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci. Hokkaido Univ.)

DP2-16-05/P2-117**Analysis of protective function of mycobacterial biofilms for bacilli**

○Shota Torigoe^{1,2}, Kentaro Yamamoto¹, Manabu Ato¹ (¹Dept. Mycobacteriol. Lepr. Res. Ctr., NIID, ²Mgmt. Dept. Biosafety, Lab. Anim., and Pathog. Bank, NIID)

DP2-16-06/P2-120**Immunomodulatory Effect of Heat Shock Protein SSA1 Enriched in Hypoxic Secretome of *Candida albicans***

○Wei Teng¹, Phawinee Subsomsong¹, Kouji Narita², Akio Nakane³, Krisana Asano^{1,3} (¹Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Inst. Anim. Exp., Hirosaki Univ. Grad. Sch. Med., ³Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med.)

DP2-16-07/P2-121**Excess cation stress and tolerance mechanisms in *Salmonella***

○Yumi Iwadata, James Slauch (Dept. Microbiol, Sch. Mol. Cell Biol., Univ. Illinois.)

DP2-16-08/P1-117**Functional analysis of *ribD* involved in immune escape of *Francisella tularensis***

○Kensuke Shibata^{1,2,3}, Keishi Takagi¹, Takashi Shimizu⁴, Masahisa Watarai⁴ (¹Dept. Microbiol. Immunol., Sch. Med., Yamaguchi Univ., ²Dept. Ocular Pathology and Imaging Science, Sch. Med., Kyushu Univ., ³Dept. Mol. Immunol., Sch. Med., Research Inst. Microbial Diseases, Osaka Univ., ⁴Joint Fac. Veterinary Medicine, Yamaguchi Univ.)

DP2-16-09/P1-118**Surface antigen conversion at the early stages of infection in relapsing fever borreliae**

○Tomohi Takeuchi¹, Kozue Sato², Hiroki Kawabata², Ai Takano¹ (¹Dept. Vet. Med., Joint Fac. Vet. Med., Yamaguchi Univ., ²Dept. Bac-I, NIID)

DP2-16-10/P1-119**Pathogenic *Leptospira* induces lipolysis in the murine adipocytes in vitro and in vivo**

○Ryo Ozuru, Michinobu Yoshimura, Shotaro Fujiki, Kazunari Ishii, Akinori Shimizu, Yusuke Kurihara, Shuntaro Kuwahara, Kenji Hiromatsu (Dept. Microbiol. Immunol., Sch. Med., Fukuoka Univ.)

DP2-16-11/P1-120**Co-infection of *C. pneumoniae* and *P. gingivalis* exacerbates aspiration pneumonia**

○Yoshikazu Naiki¹, Shogo Nakanishi², Ayaka Kato³, Ryo Arai¹, Tomohiko Iwase¹, Masayuki Umemura⁴, Akio Mitani², Yoshiaki Hasegawa¹ (¹Dept. Microbiol. Sch. Dent. Aichi Gakuin Univ., ²Dept. Periodont. Sch. Dent. Aichi Gakuin Univ., ³Dept. Pediatric. Sch. Dent. Aichi Gakuin Univ., ⁴Trop. Biosphere Res. Cent., Univ. Ryukyus)

DP2-16-12/P1-121**Inflammatory responses in the intestinal mucosa of mice infected with *Helicobacter mastomyrinus***

○Riku Yasuki¹, Ayano Miyauchi¹, Takahiro Yoshizawa², Shin Shimada², Kazutaka Ohsawa³, Ritsuko Masuyama¹, Hitoki Yamanaka² (¹Grad. Sch. Gastron. Manag., Ritsumeikan Univ., ²Res. Ctr. Adv. Sci. Technol., Shinshu Univ., ³Grad. Sch. Biomed. Sci., Nagasaki Univ.)

DP2-16-13/P1-122**Plasminogen-binding proteins of *Streptococcus pneumoniae* expressed during infection**

○Satoru Hirayama¹, Takumi Hiyoshi^{1,2,3}, Yoshihito Yasui^{1,3}, Hisanori Doman^{1,2}, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., ²Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Div. Periodontol., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

DP2-16-14/P1-123**Pneumococcal protein SufC is released extracellularly by autolysis and binds to host plasminogen**

○Yoshihito Yasui^{1,2}, Satoru Hirayama¹, Toshihito Isono¹, Takumi Hiyoshi^{1,2,3}, Hisanori Doman^{1,3}, Yutaka Terao^{1,3} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., ²Div. Periodontol., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

DP2-16-15/P1-124**Effects of nitrate-reducing bacteria from the gastric cancer patients in *H. pylori* co-infected mice**

○Marina Komatsubara¹, Yumiko Yamamoto², Jumpei Uchiyama², Osamu Matsushita², Kazuyoshi Gotoh¹, Akari Watanabe³, Kenji Yokota¹ (¹Grad. Sch. Health Science, Okayama Univ., ²Dept. Path. Bacteriol., Grad. Sch. Med. Dent. Pharm., Okayama Univ., ³Oral Health Care and Rehabilitation, Inst. Biomed. Sci. Tokushima Univ.)

DP2-16-16/P1-125**Analysis of Vi capsular polysaccharide on an alternative *Salmonella* Typhi mouse infection model**

○T. Hoan Pham^{1,2}, Hirotaka Hiyoshi², Toshio Kodama² (¹Grad. Sch. Biomedical Sciences, Nagasaki Univ., ²Dept. Bacteriology, Inst. Tropical Medicine, Nagasaki Univ.)

DP2-17 Genetics / Genomics / Biotechnology 02

Thursday, August 8 10:10–11:10
Digital Poster Group 2 (Main Hall)

Chair: Mitsuyo Kawaguchiya (Sapporo Medical University)

DP2-17-01/P1-089**Regulation of motility by ArcB/ArcA two-component regulatory system in *Vibrio alginolyticus***

○Moe Fujii¹, Kenji Yokota², Takehiko Mima¹ (¹Microbiol., Dept. Med. Techn., Fac. Health Sci., Ehime Pref. Univ. Health Sci., ²Okayama Univ. Grad. Sch. Health Sci.)

DP2-17-02/P1-090**Identification of pneumococcal modulons based on transcriptome datasets**

Yujiro Hirose¹, ○Toshiki Tabuchi¹, Eri Ikeda¹, Masayuki Ono¹, Masaya Yamaguchi^{1,2,3,4}, Shigetada Kawabata^{1,3} (¹Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Bioinfo., Osaka Univ. Grad. Sch. Dent., ³CiDER, Osaka Univ., ⁴OUBIC, RIMD, Osaka Univ.)

DP2-17-03/P2-086**The role of responses against environmental stress on the pathogenicity of *Treponema denticola***

○Kazuyuki Ishihara¹, Yurie Kitamura², Yuichiro Kikuchi¹, Eitoyo Kokubu¹, Keiko Yamashita², Atsushi Saito² (¹Dept. Microbiol., Tokyo Dent. Coll., ²Dept. Periodontol., Tokyo Dent. Coll.)

DP2-17-04/P2-089**Effect of phased A-tracts on α -toxin gene expression in *Clostridium perfringens***

○Seiichi Katayama¹, Saya Matsui², Naoya Hashikawa¹, Hinata Sato², Kazuyoshi Aibara², Chiharu Tanaka², Hirofumi Nariya³, Nozomu Matsunaga¹ (¹Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., ²Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., ³Dept. Food Sci., Fac. Human Life, Jumonji Univ.)

DP2-17-05/P2-090**Salmonella *adiA* mRNA encoding acid resistance core releases sRNA in acidic and anaerobic environment**

○Takeshi Kanda¹, Fang Liu², Sarah Reichardt³, Hoda Kooshapour³, Alexander Westermann³, Yanjie Chao², Masatoshi Miyakoshi¹ (¹Inst. Med., Univ. Tsukuba, ²Shanghai Institute of Immunity and Infection, CAS, ³Univ. Würzburg)

DP2-17-06/P2-091**Analysis of translation arrest peptides in *Alteromonas* species**

○Naoko Tsuji, Keigo Fujiwara, Hiraku Takada, Shionobu Chiba (Fac. Life Sci., Kyoto Sangyo Univ.)

DP2-17-07/P2-092**Exploring Cold Shock Protein Variants Across Bacterial Lineages and Analyzing Genome Characteristics**

○Satoshi Hasegawa^{1,2}, Rerina Inose¹, Teppei Morita^{1,3} (¹Inst. Adv. Biosci., Keio Univ., ²Fac. Env. Info. Studies, Keio Univ., ³Grad. Sch. Media & Governance, Keio Univ.)

DP2-17-08/P2-094**Development of Bacteriophage Vectors for Targeted Gene Delivery to Cancer Cells**

○Takashi Sugano, Srivani Veerananarayanan, Yoshifumi Aiba, Kazuhiko Miyanaga, XinEe Tan, Kanate Thitiananpakorn, Shinya Watanabe, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP2-17-09/P2-095**Isolation of membrane vesicle-producing bacteria using probes sensing highly curved membranes**

○Itsuki Oono¹, Yusuke Sato², Maho Tokuda³, Masaki Shintani^{1,3,4,5}, Moriya Ohkuma⁴, Hiroyuki Futamata^{1,3,5}, Yosuke Tashiro^{1,3} (¹Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ²Grad. Sch. Sci. Tohoku Univ., ³Grad. Sch. Sci. Tech. Shizuoka Univ., ⁴BRC-JCM, RIKEN, ⁵Res. Inst. Green Sci. Tech. Shizuoka Univ.)

DP2-17-10/P1-091**Engineering a safety-enhanced synthetic phage capable of efficiently eliminating MRSA**

○Minh Huong Nguyen¹, Kotaro Kiga^{1,2}, Veeranarayanan Srivani¹, XinEe Tan¹, Justin Edrian Cocuangco Revilla¹, Shinya Watanabe¹, Kazuhiko Miyanaga¹, Yoshifumi Aiba¹, Teppei Sasahara¹, Longzhu Cui¹ (¹Div. Bacteriology, Dept. Infection and Immunity, Jichi Medical Univ., ²Research Center for Drug and Vaccine Development, National Inst. Infectious Diseases)

DP2-17-11/P1-092**Gene recombination system for *Bacillus subtilis* natto by conjugation**

○Wakana Suda¹, Mitsuhiro Itaya², Kei Asai¹ (¹Dept. Biosci., Tokyo Univ. Agricul., ²Dept. Materials Chem., Shinshu Univ.)

DP2-17-12/P1-093**Reconstitution of flagella biosynthesis of Segmented filamentous bacteria in *Bacillus subtilis***

○Kei Asai¹, Kouki Tanaka¹, Yoshitoshi Ogura², Tomomi Kuwahara³ (¹Dept. Biosci., Tokyo Univ. Agricul., ²Dept. Infect. Med., Kurume Univ. Sch. Med., ³Dept. Microbiol., Sch. Med., Kagawa Univ.)

DP2-17-13/P1-094**Constructions and evaluations of *Campylobacter jejuni* phase-locked variant libraries**

○Shouji Yamamoto¹, Ken-ichi Lee¹, Akiko Kubomura¹, Sunao Iyoda¹, Yukihiro Akeda¹, Chihiro Aikawa², Masashi Okamura², Fuhito Hojo³, Takako Osaki⁴, Jiro Mitobe⁴ (¹Dept. Bac. I., Natl. Inst. Infect. Dis., ²Dep. Vet. Med., Div. Vet. Sci., Obihiro Univ. Agr. Vet. Med., ³Inst. Laboratory Animals, Graduate Sch. Med., Kyorin Univ., ⁴Dept. Infect. Dis., Kyorin Univ. Sch. Med.)

DP2-17-14/P1-095**Zombie cells produced from the minimal synthetic bacterium JCVI-syn3B**

○Nanase Oda¹, Hana Kiyama¹, Makoto Miyata^{1,2} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²OCARINA, Osaka Metropolitan Univ.)

DP2-17-15/P1-096**Effect of *Escherichia coli* toxin-antitoxin systems on phage propagation**

○Ke Liu, Yuichi Otsuka (Grad. Sch. Science and Engineering, Saitama Univ.)

DP2-17-16/P1-097**Activation of the AbpA-AbpB phage defense system in *Escherichia coli***

○Saya Takita, Takaomi Sasaki, Yunosuke Shintani, Yuichi Otsuka (Grad. Sch. Science and Engineering, Saitama Univ.)

DP2-17-17/P2-096**Development of an antimicrobial phage-capsid targeting Colorectal cancer (CRC)-associated *E. coli***

○Ola Alessa¹, Kanate Thitianapakorn¹, Yuya Hidaka¹, Yoshifumi Aiba¹, Shinya Watanabe¹, Kazuhiko Miyanaga¹, Srivani Veeranarayanan¹, XinEe Tan¹, Kotaro Kiga², Longzhu Cui¹ (¹Div. Bacteriol, Sch. Med., Jichi Med. Univ., ²Research Center for Drug and Vaccine Development, NIID)

DP2-17-18/P2-097**Functional genomics reveals the mechanism of hypoxic adaptation in nontuberculous mycobacteria**

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

DP2-17-19/P2-098**Novel chromosomal markers for detecting *Bacillus anthracis***

○Tuvshinzaya Zorigt¹, Hideaki Higashi¹, Yoshikazu Furuta¹, Atmika Paudel¹, Harvey Kamboyi¹, Misheck Shawa¹, Mungunsar Chuluun¹, Misa Sugawara¹, Musso Munyeme², Bernard Hang'ombe³ (¹Div. Infection and Immunity, International Inst. for Zoonosis Control, Hokkaido Univ., ²Public Health Unit, Disease Control Studies, Sch. Veterinary Medicine, Univ. Zambia, ³Microbiology Unit, Paraclinical Studies, Sch. Veterinary Medicine, Univ. Zambia)

DP2-18 Antimicrobial agents and resistance 04

Thursday, August 8 10:10–11:10
Digital Poster Group 3 (Main Hall)

Chair: Yasuyuki Matsuda (Asahikawa Medical University)

DP2-18-01/P1-174**Draft genome sequencing of the imipenem-intermediate resistant *Bacteroides thetaiotaomicron***

○Takatsugu Goto, Masahiro Hayashi, Kaori Tanaka (Div. Anaerobe Res., Inst. for Glyco-core Res., Gifu Univ.)

DP2-18-02/P1-175**Adduct formation between cysteine and streptomycin in bacteria**

○Katsuhiko Ono¹, Takuro Niidome², Takaaki Akaike³, Tomohiro Sawa¹ (¹Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ²Facul. Adv. Sci. Tech., Kumamoto Univ., ³Dept. Envir. Health Sci. Mol. Toxicol., Grad. Sch. Med., Tohoku Univ.)

DP2-18-03/P1-176**Extracellular release of metallo-beta-lactamases from clinically isolated gram-negative bacteria**

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

DP2-18-04/P1-177**Characterization of Vancomycin-Resistant Enterococci (VRE) Isolated from Kure Medical Center**

○Hidetomo Kobayashi¹, Takeshi Sudo², Norimitsu Shimada², Mika Shingai², Hiroe Yoshino², Ryuto Maeda², Masahiro Takada², Soshi Seike¹, Akihiro Sawa³, Hiroyasu Yamanaka¹ (¹Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima Int. Univ., ²Nat. Hosp. Org. Kure Med. Cent. and Chugoku Cancer Cent., ³Res. Cent. for Pharm. Health Care and Sci., Fac. Pharm. Sci., Hiroshima Int. Univ.)

DP2-18-05/P1-178**Analysis of the antimicrobial resistance mechanism of coliform bacteria causing mastitis**

○Toshi Shimamoto¹, Naoki Suzuki², Tadashi Shimamoto¹ (¹Dept. Microbiol. Food Safety, Grad. Sch. Integrated Sci. Life, Hiroshima Univ., ²Dept. Terrestrial Field Sci., Grad. Sch. Integrated Sci. Life, Hiroshima Univ.)

DP2-18-06/P1-179**Genetic characteristics of drug-resistant *Escherichia coli* isolated from wild deer**

○Akiyo Nakano¹, Ryuichi Nakano¹, Yuki Suzuki¹, Saori Horiuchi¹, Koichi Yamaguchi¹, Ryuji Sakata², Miho Ogawa², Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara Med. Univ., ²Dept. Bacteriol., BML, Inc.)

DP2-18-07/P1-180**Analysis of disinfectant resistance mechanism via two-component system SarRS in *Serratia marcescens***

○Koshiro Hyakutome^{1,2}, Moyo Tanishige¹, Riho Yasuoka¹, Yuma Kondo², Daichi Morita², Wakano Ogawa³, Takanori Kumagai², Teruo Kuroda² (¹Sch. Pharm., Hiroshima Univ., ²Dept. Microbiol. Med., Sch. Med. Sci., Hiroshima Univ., ³Dept. Microbiol. & Bioche. Daiichi Univ. of Pharm.)

DP2-18-08/P1-181**AMR surveillance of human and food-derived *Escherichia coli* strains based on the one health approach**

○Hiroto Shinomiya, Yukiko Asano, Shintarou Hirai, Yuka Fukuguchi, Yuka Otsuka (Ehime Pref. Inst. Pub. Health Environ. Sci.)

DP2-18-09/P1-182**Characteristics of drug-resistant gram-positive cocci nasal carriage in livestock and farmers**

Ryusei Taniguchi¹, ○Ryuichi Nakano¹, Akiyo Nakano¹, Yuki Suzuki¹, Yasuo Ono², Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara. Med. Univ., ²Teikyo Heisei. Univ.)

DP2-18-10/P1-183**Molecular characteristics of drug resistant *Escherichia coli* isolated from hospital sewage in Japan**

○Yuki Suzuki¹, Ryuichi Nakano¹, Akiyo Nakano¹, Yasumitsu Nomura¹, Saori Horiuchi¹, Tomoko Asada¹, Koichi Yamaguchi¹, Kai Saito², Mako Watanabe³, Hisakazu Yano¹ (¹Dept. Microbiology and Infectious Diseases, Nara Medical Univ., ²Jichi Medical University Saitama Medical Center, ³Fukaya Red Cross Hospital)

DP2-18-11/P1-184**Viruses encode tRNA and harbor anti-retron to evade bacterial immunity**

○Aa Haeruman Azam¹, Kotaro Chihara¹, Kohei Kondo², Tomohiro Nakamura¹, Shinjiro Ojima¹, Wenhan Nie¹, Azumi Tamura¹, Wakana Yamashita¹, Longzhu Cui³, Kotaro Kiga^{1,3} (¹Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ²AMR Res. Cent., Natl. Inst. Infect. Dis., ³Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP2-18-12/P1-185**Direct interaction of xenobiotic efflux components MmpL5 and MmpS5 in *Mycobacterium tuberculosis***

○Mikiko Kawabata¹, Kentaro Yamamoto², Hiroataka Tajima^{3,4}, Manabu Ato², Ikuro Kawagishi^{1,3,4} (¹Grad. Sch. Sci. Eng., Hosei Univ., ²Dept. Mycobacteriol., Lepr. Res. Ctr., NIID, ³Dept. Frontier Biosci., Hosei Univ., ⁴Res. Cen. Micro-Nano Tech., Hosei Univ.)

DP2-18-13/P1-186**Genetic analysis of three carbapenemase-producing *Delftia tsuruhatensis* from hospital sewage**

○Hiroyuki Fujikura^{1,2,3}, Yuki Suzuki¹, Ryuichi Nakano¹, Akiyo Nakano¹, Yasumitsu Nomura¹, Saori Horiuchi¹, Koichi Yamaguchi¹, Kei Kasahara³, Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara Med. Univ., ²Dept. Infect. Dis., Amagasaki Gen. Med. Ctr., ³Dept. Infect. Dis., Nara Med. Univ.)

DP2-18-14/P1-187**Comparative analysis of AmpC/ESBL-producing and colistin-resistant *Escherichia coli* in chicken meat**

○Tatsuya Nakayama¹, Natsuki Ohata¹, Takahiro Yamaguchi², Michio Jinnai³, Yuko Kumeda⁴, Atsushi Hase⁵ (¹Grad. Sch. Int. Sci. Life, Hiroshima Univ., ²Dept. Microbio., Osaka Inst. Pub. Health, ³Div. Microbiol., Kanagawa Pref. Inst. Pub. Health, ⁴Res. Cent. Microorg. Cont., Osaka Met. Univ., ⁵Fac. Contemp. Human Life Sci., Tezukayama Univ.)

DP2-18-15/P1-188**Search for novel antimicrobial resistance genes by analyzing genetic structure of integrons**

○Yusuke Tsuda¹, Chihiro Norizuki², Yoshichika Arakawa³ (¹Div. Clinic. Labo., Kyoto Univ. Hosp., Kyoto Univ., ²Dept. Med. Tech., Med. Sci., Shubun Univ., ³Dept. Bacteriol., Med., Fujita Health Univ.)

DP2-18-16/P1-189**Role of the MexAB-OprM and its regulators in aztreonam resistance of *Pseudomonas aeruginosa***

○Kota Hayashi¹, Ruri Nozima¹, Anne Ohnishi¹, Go Kamoshida¹, Yoshiaki Kawamura², Yuji Morita¹ (¹Dept. Infection Control Science., Sch. Pharm. Meiji Pharmaceutical Univ., ²Dept. Microbiol., Sch. Med., Aichi Gakuin Univ.)

DP2-18-17/P1-190**Effects of dual therapy with betamethasone and josamycin in NC/Nga mouse model of atopic dermatitis**

○Katsuhiko Matsui, Madoka Muranaka, Tomoka Yamaguchi, Manami Maeda (Dept. Clin. Immunol., Meiji Pharmaceut. Univ.)

DP2-19 Pathogenicity 04

Thursday, August 8 15:10–16:10
Digital Poster Group 1 (Main Hall)

Chair: Keiji Nagano (Health Sciences University of Hokkaido)

DP2-19-01/P1-126**Catheter-associated biofilm infection of non-tuberculosis mycobacteria in mice**

○Kentaro Yamamoto¹, Yusuke Tsujimura¹, Shota Torigoe^{1,2}, Manabu Ato¹ (¹Dept. Mycobacteriol., Lepr. Res. Ctr., NIID, ²Mgmt. Dept. Biosafety, Lab. Anim., and Pathog. Bank, NIID)

DP2-19-02/P2-122***Salmonella enterica* serovar Gallinarum rAtA contributes to lethal systemic infection in chickens**

○Chihiro Aikawa, Masashi Okamura (Lab. Vet. Microbiol., Div. Vet. Sci., Obihiro Univ. Agric. Vet. Med.)

DP2-19-03/P2-123**Analysis of host response to *Clostridium perfringens* type A infection**

Tomoaki Ishihara¹, Yoshihiko Sakaguchi², Masahiro Nagahama², ○Masaya Takehara² (¹Fac. Pharm. Sci., Nagasaki International Univ., ²Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ.)

DP2-19-04/P2-124**Ability of *Paraclostridium bifermentans* subsp. *muricolitidis* to metabolize selenocysteine**

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

DP2-19-05/P2-125**Identification of virulence factors by comparative analysis of *Vibrio vulnificus* clinical isolates**

○Yuuka Tonosaki, Ai Saito, Kohei Yamazaki, Shunji Ueno, Takashige Kashimoto (Lab. Vet. Public Health. Sch. Vet. Med., Kitasato Univ.)

DP2-19-06/P2-126**Analysis of immune responses in oral infection of mice with *Candida albicans***

○Kenji Toyonaga^{1,2}, Jun-ichi Nagao^{1,2}, Sonoko Tasaki¹, Masayuki Umemura³, Sari Kishikawa^{1,2}, Emi Kaji¹, Aoba Iwanuma¹, Masanobu Nakagami¹, Satoru Iwai¹, Yoshihiko Tanaka^{1,2} (¹Div. Infect. Biol., Dept. Funct. Biosci., Fukuoka Dent. Coll., ²Oral Med. Res. Cent., Fukuoka Dent. Coll., ³Mol. Microbiol. Gr., TBRC, Univ. Ryukyus)

DP2-19-07/P2-128**Pathogenicity of *Paenibacillus* spp. from honey other than foulbrood pathogens to honeybee larvae**

○Daisuke Takamatsu^{1,2}, Keiko Nakamura³, Mariko Harada³, Mariko Okamoto¹, Takashi Mada¹ (¹Natl. Inst. Anim. Hlth., NARO, ²Gifu Univ., ³RIAS)

DP2-19-08/P2-129**Analysis of the effect of ozone ultrafine bubble water against various bacteria and bacterial toxins**

○Fumio Takizawa¹, Hisanori Domon^{1,2}, Satoru Hirayama¹, Toshihito Isono¹, Karin Sasagawa¹, Daisuke Yonezawa³, Akiomi Ushida⁴, Satomi Tsutsuura⁵, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., ²Cent. For. Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Div. Oral Sci. Health Prom, Niigata Univ. Grad. Sch. Med. Dent. Sci., ⁴Inst. Sci. Tech., Niigata Univ., ⁵Fac. Agric., Niigata Univ.)

DP2-19-09/P2-130**Analysis of the effect of tyramine on the pathogenesis of European foulbrood in honey bees**

○Mariko Okamoto¹, Daisuke Takamatsu^{1,2}, Ryuichi Uegaki¹, Keiko Nakamura³, Mariko Harada³ (¹NIAH, NARO, ²UGSVS, Gifu Univ., ³RIAS)

DP2-19-10/P2-131**Characteristics of nitrate-reducing bacteria from patients with gastritis and gastric cancer**

○Serika Kuwagi¹, Yumiko Yamamoto², Jumpei Uchiyama², Osamu Matsushita², Kazuyoshi Gotoh¹, Akari Watanabe³, Kenji Yokota¹ (¹Health Science, Okayama Univ., ²Dept. Path. Bacteriol., Grad. Sch. Med. Dent. Pham. Okayama Univ., ³Oral Health Care and Rehabilitation, Inst. Biomed. Sciences, Tokushima Univ.)

DP2-19-11/P2-132**Possibility of periodontal bacteria causing changes in liver drug metabolism**

○Toshitaka Miura¹, Shuu Suzuki², Takako Oikawa³, Taichi Ishikawa¹ (¹Div. Mol. Microbiol., Dept. Microbiol., Sch. Dent., Iwate Med. Univ., ²Div. Oral Maxillofac. Surg., Dep. Reconstructive Oral Maxillofac. Surg., Sch. Dent., Iwate Med. Univ., ³Div. Periodont., Dep. Conservative Dent., Sch. Dent., Iwate Med. Univ.)

DP2-19-12/P1-127**Hog1-mediated stress tolerance in the pathogenic fungus *Trichosporon asahii***

○Yasuhiko Matsumoto, Yu Sugiyama, Tae Nagamachi, Asami Yoshikawa, Takashi Sugita (Dept. Microbiol., Meiji Pharm Univ.)

DP2-19-13/P1-128**Mislocalization of the mechanosensor Piezo during leptospiral infection of epithelial cells**

○Isabel Sebastian, Tetsu Yamashiro, Claudia Toma (Dept. Bacteriol., Grad. Sch. Med., Univ. of the Ryukyus)

DP2-19-14/P1-129**The investigation of racemase involved in D-amino acid production by *Metamycoplasma hominis***

○Takeshi Yamamoto¹, Miki Okuno¹, Yuichi Tsuchiya², Yuki Hoshiko¹, Nanae Yamamoto², Yumi Imai¹, Yoshitoshi Ogura¹ (¹Dept. Infect. Med., Sch. Med., Kurume Univ., ²Dept. Pharmacy, Kyushu Univ. Hosp.)

DP2-19-15/P1-130**Analysis of host infection-related genes of bacteriophages encoding botulinum toxin types C and D**

○Yoshihiko Sakaguchi¹, Akira Take², Kazuyoshi Gotoh³, Yumiko Yamamoto³, Tomoko Kohda⁴, Masafumi Mukamoto⁴, Masaya Takehara¹, Tetsuya Hayashi⁵, Keiji Oguma³, Masahiro Nagahama¹ (¹Facul. Pharm. Sci., Tokushima Bunri Univ., ²Kitasato Univ. Sch. Med., ³Dept. Med., Lab. Sci., Grad. Sch. Heal. Sci., Okayama Univ., ⁴Grad. Sch. Vet. Sci., Osaka Metropolitan Univ., ⁵Facul. Med. Sci., Kyushu Univ.)

DP2-19-16/P1-131***Streptococcus pneumoniae* infection induced kidney specific depletion of sulfur metabolites in mice**

Rahman Azizur, Tianli Zhang, Hiroyasu Tsutsuki, Touya Toyomoto, ○Tomohiro Sawa (Dept. Microbiol., Grad. Sch. Med., Kumamoto Univ.)

DP2-19-17/P1-198**Involvement of the fungal flora in the colonic microbiota of the colorectal cancer**

○Yodai Hayashi¹, Yoshinori Uchino¹, Yuichi Goto¹, Sayaka Yuda¹, Hiroshi Hijioka¹, Tsuyoshi Sugiura², Tatsuo Okui¹ (¹Dept. Maxillofacial Diagnostic and Surgical Science, Field of Oral and Maxillofacial Rehabilitation, Kagoshima Univ., ²Div. Oral and Maxillofacial Oncology and Surgical Sciences, Div. Oral and Maxillofacial Reconstructive Surgery, Tohoku Univ.)

DP2-20 Physiology / Structural biology 03

Thursday, August 8 15:10–16:10
Digital Poster Group 2 (Main Hall)

Chair: Hiroshi Miyakawa (Health Sciences University of Hokkaido)

DP2-20-01/P2-065**The type VII secretion system's EsxA reveals a novel function in the sporulation of *Bacillus cereus***

○Harvey Kamboyi¹, Hideaki Higashi¹, Atmika Paudel¹, Misheck Shawa¹, Misa Sugawara¹, Tuvshinzaya Zorigt¹, Joseph Chizimu¹, Yoshikazu Furuta¹, Bernard Hang'ombe², Musso Munyeme³ (¹Div. Infection and Immunity, International Inst. for Zoonosis Control, Hokkaido Univ., ²Microbiology Unit, Paraclinical Studies, Sch. Veterinary Medicine, Univ. Zambia, ³Public Health Unit, Disease Control Studies, Sch. Veterinary Medicine, Univ. Zambia)

DP2-20-02/P2-066**Novel structure of lipoteichoic acid in *Apilactobacillus kosoii* and its IgA-inducing activity**

○Tsukasa Shiraishi¹, Chiaki Matsuzaki², Tai-Ying Chiou³, Hiroyuki Kumeta⁴, Manami Kawada², Kenji Yamamoto⁵, Tomoya Takahashi⁶, Shin-ichi Yokota¹ (¹Dept. Microbiol., Sch. Med., Sapporo Medical Univ., ²Research Inst. Bioresources and Biotechnology, Ishikawa Prefectural Univ., ³Dept. Biotechnol. Environ. Chem., Kitami Inst. Technology, ⁴Fac. Adv. Life Sci., Hokkaido Univ., ⁵Wakayama Univ., ⁶ARSOA Research & Development Center, Arsoa Keioh Group Corp.)

DP2-20-03/P2-067**The biosynthesis of glycopeptidolipid in nontuberculous bacteria**

○Nagatoshi Fujiwara¹, Yuji Miyamoto², Yoshihiko Hoshino², Naoto Keicho³, Makoto Nakaya⁴, Shinji Maeda⁵ (¹Dept. Food Nutrition, Facult. Contemp. Human Life Scie., Tezukayama Univ., ²Nat. Inst. Infec. Dis.: Lep. Res. Cent., ³The Res. Inst. TB, Jap. Anti-TB Assoc., ⁴Org. Res. Prom., Osaka Metrop. Univ., ⁵Fac. Pharm., Hokkaido Univ. Scie.)

DP2-20-04/P2-068***Vibrio* FlhK and FlhB catalyze export switching of the *Salmonella* flagellar type III secretion system**

○Tohru Minamino¹, Miki Kinoshita¹, Keiichi Namba^{1,2} (¹Grad. Sch. Frontier Biosci., Osaka Univ., ²JEOL YOKOGUSHI, Osaka Univ.)

DP2-20-05/P2-069**Functional analyses of a T9SS PorE protein**

Takashi Tominaga, ○Mikio Shoji, Hideharu Yukitake, Mariko Naito (Dept. Microbiol. Oral Infect. Sch. Biomed. Sci., Nagasaki Univ.)

DP2-20-06/P2-070**Genetic screening of genes involved in membrane vesicles delivery**

○Shion Komatsu¹, Yuki Usukura¹, Nobuhiko Nomura², Masanori Toyofuku² (¹Sch. Sci. Tech., Life Ear. Sci, Univ. Tsukuba, ²MiCS, Fac. Life and Environ. Sci., Univ. Tsukuba)

DP2-20-07/P2-071**Characterization of SusD regarding xylan uptake from the human gut bacterium *Phocaeicola plebeius***

○Yuki Chikaraishi¹, Hidenori Hayashi^{1,2}, Shogo Tsuji¹ (¹Dept. Biotech., Grad. Sch. Eng., Maebashi Inst. Technol., ²Dept. Biotech., Fac. Eng., Maebashi Inst. Technol.)

DP2-20-08/P1-073**Static cultivation induces avirulent phase conversion in *Bordetella bronchiseptica***

○Xingyan Ma¹, Nugraga Dendi Krisna¹, Yasuhiko Horiguchi^{1,2} (¹RIMD, Osaka Univ., ²CiDER, Osaka Univ.)

DP2-20-09/P1-074**Color tuning mechanism of the L/Q switch in Green- and Blue-absorbing proteorhodopsin**

○Tatsuro Nishikino¹, Teppei Sugimoto¹, Hideki Kandori^{1,2} (¹Grad. Sch. Eng., Nagoya Inst. Tech., ²OptoBio Tech. Res. Cent., Nagoya Inst. of Tech.)

DP2-20-10/P1-075**Analysis of essentiality of GrpE in the production of extracellular amyloids in *E. coli***

○Canon Fujita¹, Moeko Nara¹, Kotone Ohtaki¹, Rintaro Shigemori¹, Shinya Sugimoto^{1,2,3}, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Center for Biofilm Sci. Technol., Jikei Univ. Sch. Med., ³Lab. Amyloid Regulation, Jikei Univ. Sch. Med.)

DP2-20-11/P1-076**Screening for lethal elements in the GrpE gene deletion in the genome of *E. coli***

○Kotone Otaki¹, Moeko Nara¹, Rintaro Shigemori¹, Canon Fujita¹, Shinya Sugimoto^{1,2,3}, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Center for Biofilm Sci. Technol., Jikei Univ. Sch. Med., ³Lab. Amyloid Regulation, Jikei Univ. Sch. Med.)

DP2-20-12/P1-077**Elucidation of an essential cellular function of GrpE for survival of *E. coli***

○Rintaro Shigemori^{1,2}, Shinya Sugimoto^{1,2,3}, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Center for Biofilm Sci. Technol., Jikei Univ. Sch. Med., ³Lab. Amyloid Reg., Jikei Univ. Sch. Med.)

DP2-20-13/P2-072**Effect of coexistence on biofilm-forming potency of bacteria from used orthokeratology lens cases**

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

DP2-20-14/P2-073**Group B Streptococcus of Stress-responsive ribonuclease MazF**

○Takuma Okabe^{1,2}, Rie Aoi^{1,2}, Akiko Yokota², Hiroko Tamiya-Ishitsuka², Jiang Yunong^{2,3}, Satoshi Tsuneda¹, Naohiro Noda^{1,2,4} (¹Dept. Life Sci. & Med. Biosci., Waseda Univ., ²Biomed. Res. Inst., Natl. Inst. of Adv. Ind. Sci. & Tech. (AIST), ³Grad. Sch. of Compr. Hum. Sci., Univ. of Tsukuba, ⁴SIGMA, Univ. of Tsukuba)

DP2-20-15/P2-074**Overexpression of ribosomal proteins leads to zinc resistance in *Escherichia coli***

○Tomoki Kosaki, Riko Shirakawa, Kazuya Ishikawa, Kazuyuki Furuta, Chikara Kaito (Lab. Mol. Biol., Fac. Pharm., Okayama Univ.)

DP2-20-16/P2-075**Limited proteolysis of mycobacterial DNA-binding protein 1 to unveil posttranslational modifications**

○Akihito Nishiyama¹, Yutaka Yoshida¹, Desak NSS Dewi¹, Tomoya Yamazaki¹, Akira Yokoyama¹, Daiki Kobayashi², Hitoshi Kondo¹, Yuriko Ozeki¹, Yoshitaka Tateishi¹, Sohkichi Matsumoto¹ (¹Dept. Bacteriol., Niigata Univ. Sch. Med., ²Omic Unit, Niigata Univ. Sch. Med.)

DP2-20-17/P2-076**Characterization of *Staphylococcus aureus* toxin-antitoxin system composed of membrane proteins**

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

DP2-21 Antimicrobial agents and resistance 05

Thursday, August 8 15:10–16:10
Digital Poster Group 3 (Main Hall)

Chair: Mari Fujita (Health Sciences University of Hokkaido)

DP2-21-01/P1-191**Molecular Analysis of Immunomodulatory Effects of Non-antimicrobial Erythromycin Derivatives**

○Rui Saito^{1,2}, Hisanori Domon^{1,3}, Takumi Hiyoshi^{1,3}, Akari Ikeda^{4,5}, Tomoyasu Hirose^{4,5}, Toshiaki Sunazuka^{4,5}, Yutaka Terao^{1,3} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch., Med. Dent. Sci., ²Div. Cariol. Oper. Dent. Endo., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Cent. for Adv. Oral. Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., ⁴Omura Inst., Kitasato Univ., ⁵Grad. Sch. Infect. Cont. Sci., Kitasato Univ.)

DP2-21-02/P1-192**Analysis of lytic enzyme CD3380 of *Clostridioides difficile***

○Hiroshi Sekiya¹, Mizuki Takahashi¹, Rui Okazaki¹, Shigehiro Kamitori², Eiji Tamai¹ (¹Dept., Infect. Disease., Pharma., Matsuyama Univ., ²Res. Faci. Cent. Sci. & Tec. Facul. Med., Kagawa Univ.)

DP2-21-03/P1-193**Antimicrobial susceptibility survey and phylogenetic analysis of *Actinotignum* spp.**

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

DP2-21-04/P1-194**Interaction between the tip of long tail fiber of PP01 phage and a porin of *Escherichia coli***

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

DP2-21-05/P1-195**Isolation and characterization of lytic phages against colibactin-producing *Escherichia coli***

○Yuya Hidaka¹, Kanate Thitianapakorn¹, XinEe Tan¹,
Yoshifumi Aiba¹, Kazuhiko Miyanaga¹, Teppei Sasahara^{1,2},
Shinya Watanabe¹, Longzhu Cui¹ (¹Div. Bacteriol, Sch. Med.,
Jichi Med. Univ., ²Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

DP2-21-06/P2-189**Identification of Receptors for Multiple Phylogenetically Novel *Escherichia coli* Phages**

○Tomoyoshi Kaneko^{1,2}, Satoshi Tsuneda^{1,2} (¹Dept. Life Sci.
Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., ²Phage Therapy
Inst., Waseda Univ.)

DP2-21-07/P2-190**Exploring the Arsenal: A Comprehensive Study of *Staphylococcus aureus* Phages for Phage Therapy**

○Hiromasa Mizutani¹, Tomoyoshi Kaneko^{1,2}, Aa Haeruman
Azam³, Kazuki Kitaoka^{2,5}, Kotaro Kiga^{2,3,4}, Satoshi Tsuneda^{1,2}
(¹Dept. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ.,
²Phage Therapy Inst., Waseda Univ., ³Res. Ctr. Drug Vaccine
Dev., Natl. Inst. Infect. Dis., ⁴Div. Bacteriol, Sch. Med., Jichi Med.
Univ., ⁵Shinjuku Satellite Clinic)

DP2-21-08**[Withdrawn]****DP2-21-09/P2-193****Reactive oxygen species generated by 222 nm Far UV-C impair photorepair in *Escherichia coli***

○Kouji Narita^{1,2}, Krisana Asano^{1,3}, Risako Fukushi^{1,4}, Kyosuke
Yamane⁵, Yoshihiko Okumura⁵, Akio Nakane^{1,3,4} (¹Dept.
Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Inst.
Animal Exp., Hirosaki Univ. Grad. Sch. Med., ³Dept. Biopolym.
Health Sci., Hirosaki Univ. Grad. Sch. Med., ⁴Dept. Nursing, Sch.
Health Sci., Hirosaki Univ. Health Welfare, ⁵Ushio Inc.)

DP2-21-10/P2-194**Biochemical and structural analysis of the endolysin Ecd09610 catalytic domain from *C. difficile***

○Eiji Tamai¹, Hiroshi Sekiya¹, Yasuhiro Nonaka², Shigehiro
Kamitori³, Tomomi Miyaji¹ (¹Dept. Infec. Dis., Col. Pharm. Sci.,
Matsuyama Univ., ²Dept. Endocrinol., Fac. Med., Kagawa
Univ., ³Res. Faci. Cent. Sci. & Tec. Facul. Med., Kagawa Univ.)

DP2-21-11/P2-195**The effects of *Monascus* Fermented Rice Extract on the pathogenicity of toxigenic *Vibrio cholerae***

○Tetsu Yamashiro¹, Jun Xu¹, Rena Kinjo², Keiichiro Ishihara³,
Aino Kinjo², Shinjiro Tachibana³ (¹Dept. Bacteriol. Grad. Sch.
Med., Univ. Ryukyus, ²Grad. Sch. Agri., Univ. Ryukyus, ³Fac.
Agri., Univ. Ryukyus)

DP2-21-12/P2-197**Development of periodontal disease prevention using ultraviolet light-emitting diodes**

○Tae Matsumura¹, Misato Suzuki¹, Hiromichi Yumoto²,
Tamotsu Tanaka¹, Mutsumi Aihara¹ (¹Grad. Sch. Tech. Indust.
& Social Sci., Tokushima Univ., ²Grad. Sch. Inst. of Biomed Sci.,
Tokushima Univ.)

DP2-21-13/P2-198**Development of a water disinfection system by a combination of UV and chitosan**

○Misato Suzuki, Tae Matsumura, Ryushi Kawakami, Tamotsu
Tanaka, Mutsumi Aihara (Grad. Sch. Tech. Indust. & Social Sci.,
Tokushima Univ.)

DP2-21-14/P1-197**Antimicrobial activity of bacterial membrane vesicles-coated silver nanoparticles**

○Wei Xu, Ryosuke Yoshii, Sayo Maruyama, Takuro Niidome
(FAST, Kumamoto Univ.)

Poster

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

P1-001/DP1-01-01**New species belonging to the genus *Waltera***

○Mitsuo Sakamoto, Atsushi Hisatomi, Moriya Ohkuma (RIKEN BRC-JCM)

P1-002/DP1-01-02***Clostridium massiliodielmoense* from dead cattle suggests the need for improved PCR for *Clostridium***

○Takashi Mada¹, Asami Umeda², Akira Kodama², Daisuke Takamatsu^{1,3} (¹Anim. Infect. Res. Div., Natl. Inst. Anim. Hlth., NARO, ²Oita LHSC, Oita Pref., ³Utd. Grad. Sch. Vet. Sci., Gifu Univ.)

P1-003/DP1-01-03**Shallow-Seq; the method for presuming genetic lineage of bacteria with small amount of sequence data**

○Nobuyoshi Yagi¹, Nanase Miyagi², Itaru Hirai² (¹Lab. Clin. Physiol., Dept. Health Sci., Univ. Ryukyus, ²Lab. Microbiol., Dept. Health Sci., Univ. Ryukyus)

P1-004/DP1-01-04**Molecular epidemiological characterization of MRSA from bloodstream infections in Hokkaido**

○Meiji Soe Aung¹, Noriko Urushibara¹, Mitsuyo Kawaguchiya¹, Nobuhide Ohashi¹, Rou Araki², Kana Matsubara², Masahiko Ito², Nobumichi Kobayashi¹ (¹Dept. Hygiene, Sch. Med., Sapporo Med. Univ., ²Sapporo Clin. Lab. Inc.)

P1-005/DP1-01-05**Isolation of Oral Drug-Resistant Bacteria from Home-care Patient and Relation to Medical Information**

○Saki Nishihama¹, Miki Matsuo^{2,3}, Nguyen Tra Mi Le^{2,3}, Chika Arai^{3,4}, Toshiki Kajihara^{3,4}, Yo Sugawara⁴, Hiroki Ohge^{3,5}, Motoyuki Sugai^{3,4}, Hideki Shiba¹, Hitoshi Komatsuzawa^{2,3} (¹Dept. Biol Endod., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ²Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ³Proj. Res. Ctr. for Nosocomial Infectious Diseases, Hiroshima Univ., ⁴Res. Cent for AMR, NIID., ⁵Dept. Infectious Diseases., Hiroshima Univ. Hosp.)

P1-006/DP1-01-06**Phylogenetic analysis of *C. ulcerans* isolated from patients and protected cats in Kumamoto**

○Chie Shitada¹, Takatoshi Yamamoto¹, Mikoto Moriguchi², Hideyuki Hayashi³, Misato Mori⁴, Hideaki Tokuoka⁴, Kazutoshi Matsumoto⁴, Chihiro Horiba⁵, Makoto Kuroda⁵, Motohide Takahashi¹ (¹Dept. Toxin and Biologicals., Kumamoto Health Science Univ., ²Kumamotorousai Hospital Clinical Laboratory Center, ³Kumamoto Univ. Hospital Clinical Laboratory Center, ⁴Kumamoto Prefectural Inst. Public Health and Environmental Science, ⁵Pathogen Genomics Center Nat. Inst. Infect. Dis.)

P1-007/DP1-01-07**Comparative genomic analysis of *C. jejuni* isolates from Kolkata, India and Toyama**

○Daichi Morita¹, Junko Isobe², Emi Maenishi², Fumito Maruyama³, Yuki Yamamoto¹, Hidetoshi Tahara¹, Ayumi Ohno⁴, Kei Kitahara³, Shin-ichi Miyoshi^{4,5}, Teruo Kuroda¹ (¹Grad. Sch. Bio. Heal. Sci., Hiroshima Univ., ²Toyama Inst. Heal., ³The IDEC Inst., Hiroshima Univ., ⁴Collab. Res. Cent. of Okayama Univ. for Inf. Diseases. India, ⁵Grad. Sch. Med., Dent. & Pharm. Sci., Okayama Univ.)

P1-008/DP1-01-08**Whole-genome analysis of *Bordetella parapertussis* Isolated in Japan**

○Kentaro Koide¹, Azusa Onodera², Masahiro Kodana², Shintarou Ichimura², Nao Otsuka¹, Masataka Goto¹, Kazunari Kamachi¹, Tsuyoshi Kenri¹ (¹Dept. Bact. II, Nat. Inst. Infectious Diseases, ²Dept. Clin. Lab., Saitama Med. Univ. Hosp.)

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

P1-009/DP1-01-17**Drug Resistance and Molecular Typing of *Campylobacter* Associated with Food Poisoning in Saitama**

○Yuki Koyama, Shunsuke Kubokawa, Kotaro Yagi, Asami Arashima, Satomi Kando, Rie Doi, Kazumi Narisawa (Dept. Food Microbiol., Saitama Inst. Pub. Health)

P1-010/DP1-01-18**Molecular epidemiology of pathogenic *Leptospira* spp. in bats in Japan**

○Kazuki Kiuno¹, Miyuka Nishizato¹, Weuyin Hu¹, Saki Mitsunaga¹, Takashi Murakami², Daisuke Koyabu³, Ai Takano⁴, Nobuo Koizumi⁵, Hiroshi Shimoda¹, Daisuke Hayasaka¹ (¹Dept. Micro., Vet. Med., Yamaguchi Univ., ²Div. Cultural Properties Protection, Mine City, ³Dept. Precision Medicine., Res and Dev. Ctr., Tsukuba Univ., ⁴Dept. Epi., Vet. Med., Yamaguchi Univ., ⁵Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

P1-011/DP1-01-19**Molecular epidemiological analysis of Legionnaires' disease in Toyama Prefecture, Japan**

○Jun-ichi Kanatani, Junko Isobe, Keiko Kimata, Kaho Ikeda, Kazuki Saito, Emi Maenishi, Kazunori Oishi (Dept. Bacteriol., Toyama Inst. Health)

P1-012/DP1-07-01**Current trends in serotype distribution of *Streptococcus pneumoniae* isolated from children in 2023**

○Mitsuyo Kawaguchiya¹, Noriko Urushibara¹, Meiji Soe Aung¹, Nobuhide Ohashi¹, Yuuki Kimura², Yuuka Horino², Masahiko Ito², Nobumichi Kobayashi¹ (¹Dept. Hygiene, Sapporo Medical Univ. Sch. Med., ²Sapporo Clinical Laboratory Inc.)

P1-013/W2-7

Molecular epidemiology of *stx2f* EHEC strains isolated from asymptomatic carriers

○Ken Kikuchi¹, Yuko Arai¹, Ran Abe¹, Akio Noguchi², Ko-ichi Uno², Hiroshi Kaneko², Toshio Sato² (¹Dept. Infect. Dis., Tokyo Women's Med Univ, ²Japan Microbiological Institute)

P1-014/DP1-07-03

Molecular epidemiology of methicillin-resistant *Staphylococcus pseudintermedius* in canine pyoderma

○Takashi Sasaki¹, Masahiro Yamasaki², Kazuki Harada³, Koji Nishifuji⁴ (¹Animal Research Center, Sch. Med., Sapporo Med. Univ., ²Lab. Vet. Small Animal Int. Med., Facult. Agr., Iwate Univ., ³Dept. Vet. Int. Med., Facult. Agr., Tottori Univ., ⁴Div. Animal Life Sci., Fac. Agr., Tokyo Univ. of Agriculture and Tech.)

P1-015/DP1-07-04

Whole genome sequence analysis of extensively drug-resistant *Acinetobacter baumannii* ST1050

○Satoshi Nishida¹, Yasuo Ono^{1,2}, Yusuke Yoshino¹ (¹Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ., ²Fac. Health Med. Sci., Teikyo Heisei Univ.)

P1-016/DP1-07-05

Specific clonal types of MRSA associated with skin and soft tissue infections

Hiroshi Kaneko, Hana Kobayashi, Shogo Otake, Yuka Yanagi, Takumi Saito, Miki Kanai, ○Hidemasa Nakaminami (Dept. Clin. Microbiol., Sch. Pharm., Tokyo Univ. Pharm. and Life Sci.)

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

P1-017/W2-3

Novel *Streptococcus* species forming extremely long chains isolated from the human oral cavity

○Masanori Saito, Noriko Shinozaki-Kuwahara, Tomomi Hashizume-Takizawa, Hidenobu Senpuku (Dept. Microbiol. Immunol., Sch. Dent., Matsudo, Nihon Univ.)

P1-018

Microbiological profiling of the surfaces of used-masks: Effects of non-woven fabric mask sprays

○Takashi Abe, Anna Wakui, Misato Miyazawa, Aya Sato, Miho Kawachi, Mirai Sekiguchi, Manami Imai, Shingo Maruyama, Hiroto Sano, Takuichi Sato (Div. Clin. Chem., Niigata Univ. Grad. Sch. Health Sci.)

P1-019/DP1-07-14

Characterization of GN-ARB from nasal and oral cavities and their relationship to bacterial flora

○Tomoki Kawayanagi^{1,2}, Miki Matsuo^{2,3}, Nguyen Tra Mi Le^{2,3}, Mikari Asakawa⁴, Yo Sugawara⁵, Chika Arai⁵, Toru Takeshita⁴, Hideki Shiba¹, Motoyuki Sugai⁵, Hitoshi Komatsuzawa^{2,3} (¹Dept. Biological Endodont., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., ²Dept. Bacteriol., Grad. Sch. Biomed., Hiroshima Univ., ³Project. Research Center for Oral Infectious Diseases., Hiroshima Univ., ⁴Sec. Preventive & Public Health Dentist., Div. Oral Health., Growth and Deve., Kyushu Univ., ⁵Antimicrobial Resistance Research Ctr., National Inst. Infectious Dis.)

P1-020

Molecular microbiological profiling of green tea bottled beverages: A screening experiment

○Yuki Kato¹, Anna Wakui^{1,2}, Misato Miyazawa¹, Miho Kawachi¹, Takashi Abe¹, Aya Sato¹, Manami Imai¹, Haruna Sato¹, Rika Okabe¹, Takuichi Sato¹ (¹Div. Clin. Chem., Niigata Univ. Grad. Sch. Health Sci., ²Dept. Med. Technol., Niigata Univ. Health Welfare)

P1-021/DP2-13-01

Development of real-time PCR assay specific for *astA* of *Escherichia coli*

○Sakura Arai¹, Tadasuke Ooka², Nobuyo Ikeda³, Kaori Shimmen⁴, Koji Yokoyama⁵, Emi Arikawa⁶, Mayumi Kadoguchi⁷, Akito Mizokoshi⁸, Takayuki Konno⁹, Yuka Kojima¹⁰, Satomi Kando¹¹, Noriko Konishi¹², Shouhei Hirose¹, Yukiko Kudo¹ (¹Div. Microbiol., Natl. Inst. Health Sci., ²Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ., ³Hiroshima City Inst. Public Health, ⁴Himeji Inst. Env. Health, ⁵Fukui Inst. Health and Env. Sci., ⁶Kitakyushu Inst. Health and Environ. Sci., ⁷Kumamoto City Env. Res. Ctr., ⁸Oita Pref. Inst. Health. Environ., ⁹Akita Pref. Res. Ctr. Public Health and Env., ¹⁰Kawasaki City Inst. for Public Health, ¹¹Saitama Inst. Public Health, ¹²Tokyo Metropol. Inst. Public Health)

P1-022/DP2-13-02

Diagnosis of *Helicobacter suis* infection as a potential contributor to gastric malignancies

○Hidenori Matsui^{1,2}, Emiko Rimbara¹, Sae Aoki¹, Keigo Shibayama², Masato Suzuki³ (¹Dept. Bacteriol. II, NIID, ²Dept. Bacteriol., Sch. Med., Nagoya Univ., ³AMR Res. Cent., NIID)

P1-023/DP2-13-03

Evaluation of MALDI Biotyper system in rapid identification of *Bacillus anthracis* spores

○Yoshihito Fujinami, Hiroaki Nakahara, Junji Hosokawa-Muto, Akira Imamura (National Research Inst. Police Science)

P1-024/DP2-13-04**Optimization of tuberculosis diagnostics by detection of Ag85B antibody titer**

○Tomoya Yamazaki¹, Desak Nyoman Surya Suameitria Dewi², Satoshi Ishikawa^{1,3}, Yutaka Yoshida¹, Yuriko Ozeki¹, Akihito Nishiyama¹, Yoshitaka Tateishi¹, Sohkiichi Matsumoto¹ (¹Dept. Bacteriol., Sch. Med., Niigata Univ., ²Dept. Microbiol., Sch. Med., Ciputra Univ., ³Fukuyama Zoo)

P1-025/DP2-13-05**Improved Accurate Quantitative Analysis of Microbiome Using DNA Standard for 16S rRNA NGS analysis**

○Honami Miyakura, Yoshitaka Kimura (TAKARA BIO INC.)

P1-026/DP2-13-06**Detection of MVOCs from Keratinase Mutant Strain of *Trichophyton benhamiae***

○Toha Mizutani¹, Tsuyoshi Yamada^{2,3}, Koichi Makimura², Shinichi Iwaguchi¹ (¹Dept. Biol. Sci., Fac. Sci., Nara Women's Univ., ²Inst. Med Mycol., Teikyo Univ., ³Asia Intl. Inst. Infect. Dis. Ctrl., Teikyo Univ.)

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

P1-027/DP2-13-13***Anaplasma* spp. in Yaku-deer of Yaku-shima Island, Kagoshima prefecture**

○Masako Andoh^{1,2}, Mayu Goto¹, Takaki Nakamura¹ (¹Vet. Med., Kagoshima Univ., ²Int. Ctr. Is. Stud., Kagoshima Univ.)

P1-028/DP2-13-14**Effect of oral resident bacteria on risk of ocular infections when wearing orthokeratology lenses**

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

P1-029/W2-9**Efficiency of transmission of *Helicobacter pylori* in an animal model of mother-to-child infection**

○Takako Osaki¹, Fuhito Hojo², Kentaro Oka³, Satoshi Kurata⁴, Motomichi Takahashi¹, Jiro Mitobe¹, Shigeru Kamiya^{1,3} (¹Dept. Infect. Dis., Kyorin Univ. Sch. Med., ²Inst. Lab. Animals, Grad. Sch. Med, Kyorin Univ., ³R&D Division, Miyarisan Pharmaceutical Co., Ltd., ⁴Div. Microbial., Dept. Med Technol., Fac. Health Sci., Kyorin Univ.)

P1-030/DP2-13-15**Prevalence of *Corynebacterium ulcerans* in cynomolgus monkeys in Japan: retrospective analysis**

○Miyuki Kimura¹, Kenzo Yonemitsu², Yasushi Ami², Asuka Hirai-Yuki², Mitsutoshi Senoh¹, Tsuyoshi Kenri¹, Ken-Ichi Hanaki², Masaaki Iwaki² (¹Dept. Bacteriology II, NIID, ²Management Dept. Biosafety, Lab. Animal, and Pathogen Bank, NIID)

2. Ecology**-a. Ecology, symbiosis and environmental microbes****P1-031/DP1-03-01****Reactivity of autologous serum IgG to gut microbes in pediatric ulcerative colitis patients**

○Tabassum Nafisa¹, Haruyuki Imaohji¹, Takeo Kondo², Sonoko Kondo², Emmanuel Munyeshyaka¹, Ayano Tada¹, Takashi Kusaka², Tomomi Kuwahara¹ (¹Dept. Microbiol., Sch. Med., Kagawa Univ., ²Dept. Pediatr., Sch. Med., Kagawa Univ.)

P1-032/W2-5**Bile salt hydrolase degrades β -Lactam antibiotics and confers antibiotic resistance on *Lactobacillus***

○Hiroyuki Kusada, Hideyuki Tamaki (BPRL, Dept. Life Sci. Biotechnol., AIST)

P1-033/DP1-03-02**Comparative analysis of *Legionella* symbiosis mechanisms between different protist hosts**

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

P1-034/W2-4**Comparative genomic analysis of long-term colonization of *Bifidobacterium longum* in the human gut**

○Ayana Shinomiya^{1,2}, Tomoya Tsukimi¹, Tsubasa Watabe¹, Yuki Yoshida¹, Haruo Suzuki^{1,2}, Kumiko Kato³, Toshitaka Odamaki³, Mitsuhiko Sato⁴, Yoshitoshi Ogura⁵, Shinji Fukuda¹ (¹Inst. Adv. Biosci, Keio Univ., ²Fac. Environ. Info. Stud., Keio Univ., ³Innov. Res. Inst., Morinaga Milk Indust., ⁴Kazusa DNA Res. Inst., ⁵Kurume Univ. Sch. Med.)

P1-035/W2-1**Stomatal manipulation by leaf-inhabiting bacteria and its significance in plant health**

○Rikako Hirata¹, Utami Yuniar Devi², Kei Hiruma², Akira Mine¹ (¹Grad. Sch. Agr., Kyoto Univ., ²Grad. Sch. Arts and Sci., Univ. Tokyo)

P1-036/W2-6**Bacterial Olympics Achieved by Microfluidic Devices**

○Yoshiki Shimada¹, Aoba Yoshioka², Naoki Uemura², Daisuke Nakane², Tetsuo Kan¹ (¹Dept. Mech. and Int. Sys. Eng., UEC, ²Dept. Eng. Sci., UEC)

2. Ecology -b. Microbiota**P1-037/DP1-03-09****Dysbiosis of oral microbiome persists after treatment-induced remission of periodontal disease**

○Kazuma Yama, Takuya Inokuchi, Atsushi Sato, Kota Tsutsumi, Yasushi Kakizawa (R&D., Lion Corp.)

P1-038/DP1-03-10**An intestinal mucosa-associated bacterium which attenuates colitis**

○Jiayue Yang¹, Nozomu Obana^{2,3}, Gaku Nakato⁴, Nobuhiko Nomura³, Shinji Fukuda^{1,5} (¹Inst. Adv. Biosci., Keio Univ., ²TMRC, Inst. Med., Univ. of Tsukuba, ³Inst. Life Env. Sci., Univ. of Tsukuba, ⁴KISTEC, ⁵Metagen. Inc.)

P1-039/DP1-03-11**Gut microbiota controls the severity of dextran sulfate sodium-induced colitis in mice**

○Eri Ikeda¹, Masaya Yamaguchi^{1,2,3,4}, Shigetada Kawabata^{1,3} (¹Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Bioinfo., Osaka Univ. Grad. Sch. Dent., ³CiDER, Osaka Univ., ⁴Bioinfo, RIMD, Osaka Univ.)

P1-040/DP1-03-12**Subgingival Plaque-Specific Bacteria in Severe Periodontitis Identified by Long-Read Sequencing**

○Jiale Ma, Shinya Kageyama, Mikari Asakawa, Toru Takeshita (Sect. Prev. Public Health Dent., Grad. Sch. Dent., Kyushu Univ.)

P1-041/DP1-03-13**Relationship between the skin bacterial community and skin condition**

○Ryosuke Kadoya, Ayano Kondo, Ayaka Matsukawa (Dept. Food and Nutrition, Sch. Life Studies, Sugiyama Jogakuen Univ.)

P1-042/DP1-03-14**Characterization and application of lytic bacteriophage to control *T. ramosa* in microbial consortia**

○Priyanka Baranwal, Kazuhiko Miyana, Yuya Hidaka, XinEe Tan, Kanate Thititanapakorn, Yoshifumi Aiba, Shinya Watanabe, Longzhu Cui (Dept. Inf. Immunity., Sch. Med., Jichi Med. Univ.)

P1-043/DP1-09-01**Characterization of the sensitive skin microbiome of Japanese women**

○Nakako Shibagaki¹, Mako Yamamoto², Kosuke Fujimoto^{3,4}, Seiya Imoto², Satoshi Uematsu^{3,4} (¹Mirai Inst., Shiseido Co., Ltd., ²Div. Health Medical Intelligence, The Inst. Medical Science, The Univ. of Tokyo, ³Div. Metagenome Medicine, Human Genome Center, The Inst. Medical Science, The Univ. of Tokyo, ⁴Dept. Immunology and Genomics, Grad. Sch. Medicine, Osaka Met. Univ.)

P1-044/W2-2**Multiple metagenomic analysis for the oral microbiome at a high resolution**

○Masaya Yamaguchi^{1,2,3,4}, Toshihiro Uchihashi⁵, Shigetada Kawabata^{2,4} (¹Bioinform. Res. Unit, Osaka Univ. Grad. Sch. Dent., ²Dept. Microbiology, Osaka Univ. Grad. Sch. Dent., ³Bioinform. Cent., RIMD, Osaka Univ., ⁴CiDER, Osaka Univ., ⁵Dept. OMFS, Osaka Univ. Grad. Sch. Dent.)

2. Ecology -c. Growth and culture conditions**P1-045/DP1-09-09****Effect of long-term passage on the biofilm formation of *Fusobacterium nucleatum***

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

P1-046/DP1-09-10**Investigation of methods for inducing germination of spore-forming bacteria**

○Atsushi Hisatomi, Moriya Ohkuma, Mitsuo Sakamoto (RIKEN BRC-JCM)

P1-047/W3-8***Chlamydia trachomatis* favors hypoxia because it suppresses methionine-related metabolites**

○Hiroyuki Yamaguchi¹, Ruiyu Li¹, Saicheng Zhang¹, Sora Kuroiwa¹, Torahiko Okubo¹, Jeewan Thapa², Hideaki Higashi³ (¹Fac. Health Science, Hokkaido Univ., ²Div. Bioresources, Int. Inst. Zoonosis Ctr., Hokkaido Univ., ³Div. Infection and Immunity, Int. Inst. Zoonosis Ctr., Hokkaido Univ.)

P1-048/W3-6**Extended *Vibrio cholerae* cultivation induces flagella genes mutation with prolonged culturability**

○Kazuhiisa Okada, Amonrattana Roobthaisong, Shigeyuki Hamada (RCC-ERI, RIMD, Osaka Univ.)

3. Physiology / Structural biology**-a. Metabolism, biosynthesis and metabolome****P1-049/DP1-02-01****Serum albumin promotes reactivation of VBNC (viable but non-culturable) *Mycobacterium tuberculosis***

○Yuta Morishige¹, Yoshiro Murase¹, Kinuyo Chikamatsu¹, Hiroyuki Yamada¹, Akio Aono¹, Yuriko Igarashi¹, Akiko Takaki¹, Satoshi Mitarai^{1,2} (¹Dept. Mycobac. Ref. Res., Res. Inst. Tubercul., JATA, ²Dept. Basic Mycobacteriol., Grad. Sch. Biomed. Sci., Nagasaki Univ.)

P1-050/DP1-02-02**Malate dehydrogenase and malate: quinone oxidoreductase works as NADH oxidation system in *C. jejuni***

○Augustin Kabongo^{1,2}, Rajib Acharjee^{1,2}, Sakura Takaya^{1,2}, Ozan Gundogdu⁴, Tomoo Shiba³, Kiyoshi Kita⁵, Daniel Ken Inaoka^{1,2} (¹Dept. Glob. Health, Sch. Trop. Med. and Glob. Health, Nagasaki Univ., ²Dept. Mol. Infect. Dyn., Inst. Trop. Med., Nagasaki Univ., ³Grad. Sch. Sc. Tech., Kyoto Inst. Techn., ⁴London Sch. Hyg. Trop. Med., ⁵Dept. Host Defens. Biochem., Inst. Trop. Med., Nagasaki Univ.)

P1-051/DP1-02-03**Tolerance to oxidative stress by sulfide; quinone oxidoreductase in *Mycobacterium smegmatis***

○Yuichi Matsuo¹, Tomoo Shiba², Kenji Iyoda², Uta Nakai², Akina Ota², Kiyoshi Kita^{3,4}, Daniel Ken Inaoka^{3,5} (¹Dept. Health Sciences., Sch. Med., Kumamoto Univ., ²Dept. Appl. Biol., Grad. Sch. Sci. Technol., Kyoto Inst. Technol., ³Sch. Trop. Med. and Glob. Health, Nagasaki Univ., ⁴Dept. Host-Defense Biochem., Inst. of Trop. Med. (NEKKEN), Nagasaki Univ., ⁵Dept. Molecular Infection Dynamics, Inst. of Trop. Med. (NEKKEN), Nagasaki Univ.)

3. Physiology / Structural biology -b. Motility

P1-052/DP1-02-07**The Role of Morphological Adaptability in *Vibrio cholerae*'s Motility and Pathogenicity**

○Jun Xu¹, Keigo Abe², Toshio Kodama³, Marzia Sultana⁴, Erika Kuba¹, Shiyu Tsunoda¹, Shuichi Nakamura², Tetsu Yamashiro¹ (¹Dept. Bacteriol., Grad. Sch. Med., Univ. Ryukyus, ²Dept. Appl. Phys., Grad. Sch. Eng., Tohoku Univ., ³NEKKEN, Grad. Sch. Med., Nagasaki Univ., ⁴Infectious Diseases Division, ICDDR, B.)

P1-053/DP1-02-08**Distinct roles of sheath proteins in coiling and rigidity reinforcement of *Leptospira flagella***

○Nobuo Koizumi¹, Akihiro Kawamoto², Toshiki Kuribayashi³, Masatomo Morita¹, Shuichi Nakamura³ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²IPR, Osaka Univ., ³Dept. Appl. Phys., Tohoku Univ.)

P1-054/DP1-02-09**Water flow triggers adhesion of gliding bacteria to solid surfaces**

○Motomu Araki, Naoki Uemura, Daisuke Nakane (Dept. Eng. Sci., UEC)

P1-055/DP1-02-10**An outer membrane protein governs cell rigidity and swimming stability of *Leptospira interrogans***

○Shuichi Nakamura¹, Keigo Abe¹, Hiroko Takazaki², Mika Hirose², Kyosuke Takabe³, Takayuki Kato², Nobuo Koizumi³ (¹Grad. Sch. Eng., Tohoku Univ., ²IPR, Osaka Univ., ³Dept. Bacteriol. I, NIID)

P1-056/DP1-02-11**Correlation between morphological and motile traits indicated by artificial intelligence**

○Kyosuke Takabe¹, Souichi Ugawa², Nobuo Koizumi¹, Shuichi Nakamura² (¹Dept. Bacteriol. I, NIID, ²Dept. Appl. Phys., Grad. Sch. Eng., Tohoku Univ.)

P1-057/W3-3**Narrow space triggers flagellar wrapping of *Helicobacter pylori***

○Sarara Yokohama¹, Emiko Rimbara², Yoshiki Shimada³, Tetsuo Kan³, Tsuyoshi Kenri², Daisuke Nakane¹ (¹Dep. Eng. Sci., UEC, ²Dept. Bacteriol. II, NIID, ³Dep. Mech. Intell. Syst., UEC)

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

P1-058/W3-1**A Gram-positive bacterium induces Quorum Sensing in a Gram-negative bacterium**

○Sui Sugimoto¹, Chikaho Sano¹, Toshiki Nagakubo^{2,3}, Nobuhiko Nomura^{2,3}, Masanori Toyofuku^{2,3} (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²Fac. Life and Environ. Sci., Univ. Tsukuba, ³MiCS (Microbiology Research Center for Sustainability), Univ. Tsukuba)

P1-059/DP1-08-01**A lipoprotein involved in membrane vesicle-mediated iron acquisition in *Corynebacterium glutamicum***

○Mao Fujita¹, Toshiki Nagakubo^{2,3}, Kayuki Kawashima¹, Nobuhiko Nomura^{2,3}, Masanori Toyofuku^{2,3} (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²Fac. Life and Environ. Sci., Univ. Tsukuba, ³MiCS (Microbiology research Center for Sustainability), Univ. Tsukuba)

P1-060/DP1-08-02**Chemotaxis and motilities of *Clostridium botulinum* and *Clostridium sporogenes***

○So-ichiro Nishiyama, Shohei Koike, Nao Iwahashi (Fac. App. Life Sci., Niigata Univ. Pharm. Med. Life Sci.)

P1-061/DP1-08-03**Exploration of target molecules involved in the MAPK and PI3K-AKT pathway used by *C. trachomatis***

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

P1-062/DP1-08-04**Distinct iron-responsive regulation by Fur1 and Fur2 in *Ralstonia pseudosolanacearum* strain OE1-1**

○Sora Tateda, Tatsuya Ueyama, Akinori Kiba, Kouhei Ohnishi, Yasufumi Hikichi, Masayuki Tsuzuki (Fac. Agric. and Mar. Sci., Kochi Univ.)

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

P1-063/DP1-08-10

Phase variable regulation of surface structures by promoter inversions in *Bacteroides vulgatus*

○Emmanuel Munyeshyaka¹, Haruyuki Imaohji¹, Nafisa Tabassum¹, Ayano Tada¹, Hisashi Yamasaki², Tomomi Kuwahara¹ (¹Dept. Microbiol., Sch. Med., Kagawa Univ., ²Dept. Biology., Hyogo Med. Univ.)

P1-064/DP1-08-11

Cloning of *murE* of PG synthesis from lactic acid bacteria to *E. coli* and characters of transformants

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

P1-065/W3-2

Cell division defect in Group A Streptococcus caused by *E. coli*-derived extracellular vesicle

○Yu Kawagishi, Kazunori Murase, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

P1-066/DP1-08-12

Enterobacterial common antigen flippase *wzxE* is required for *E. coli* survival in plant environment

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

P1-067/DP1-08-13

Characterization of novel actin-like protein Mad28 involved in magnetosome positioning

○Rino Shimoshige¹, Azuma Taoka^{2,3} (¹Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., ²Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., ³NanoLSI, Kanazawa Univ.)

P1-068/DP1-08-14

Analysis of subcellular localization of FtsZ in bacteria with the minimum genome

○Daiki Shimizu, Masafumi Hayashi, Daisuke Shiomi (Dept. Life Sci., Col. Sci., Rikkyo Univ.)

P1-069/W3-5

Reconstitution of *Haloplasma contractile* cell wall in JCVI-syn3.0

○Taishi Kasai¹, Shingo Kato², Daisuke Shiomi¹ (¹Dept. Life Sci., Col. Sci., Rikkyo Univ., ²JCM. BRC. RIKEN)

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

P1-070/DP1-08-18

The route of intrabacterial nanotransportation system for VacA in *Helicobacter pylori*

○Hong Wu¹, Yoshihiko Fujioka¹, Noritaka Iwai², Shoichi Sakaguchi¹, Youichi Suzuki¹, Takashi Nakano¹ (¹Dept. Microbiol. & Infect. Cont., Fac. Med., Osaka Med. & Pharm. Univ., ²Grad. Sch. Biosci. & Biotechnol, Tokyo Inst. of Tech.)

P1-071/W3-4

Exploring Another Transition State of MFS-Type Drug Efflux Transporter MdfA in the Transport Cycle

Satomi Inaba-Inoue^{1,2}, Toshio Moriya¹, ○Mikio Tanabe¹ (¹SBRC., IMSS, KEK, ²Fac. Adv. Life. Sci., Hokkaido Univ.)

P1-072/W3-7

Characterization of a novel pneumococcal ABC transporter involved in antibiotic efflux

○Atsushi Taguchi^{1,4}, Junso Fujita², Mikio Tanabe³, Daisuke Takaya⁴, Kaori Fukuzawa⁴, Keiichi Namba², Kunihiko Nishino^{1,4} (¹SANKEN, Osaka Univ., ²Grad. Sch. Front. Biosci., Osaka Univ., ³SBRC, KEK, ⁴Grad. Sch. Pharm. Sci., Osaka Univ.)

3. Physiology / Structural biology -f. Others

P1-073/DP2-20-08

Static cultivation induces avirulent phase conversion in *Bordetella bronchiseptica*

○Xingyan Ma¹, Nugraga Dendi Krisna¹, Yasuhiko Horiguchi^{1,2} (¹RIMD, Osaka Univ., ²CiDER, Osaka Univ.)

P1-074/DP2-20-09

Color tuning mechanism of the L/Q switch in Green- and Blue-absorbing proteorhodopsin

○Tatsuro Nishikino¹, Teppei Sugimoto¹, Hideki Kandori^{1,2} (¹Grad. Sch. Eng., Nagoya Inst. Tech., ²OptoBio Tech. Res. Cent., Nagoya Inst. of Tech.)

P1-075/DP2-20-10

Analysis of essentiality of GrpE in the production of extracellular amyloids in *E. coli*

○Canon Fujita¹, Moeko Nara¹, Kotone Ohtaki¹, Rintaro Shigemori¹, Shinya Sugimoto^{1,2,3}, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Center for Biofilm Sci. Technol., Jikei Univ. Sch. Med., ³Lab. Amyloid Regulation, Jikei Univ. Sch. Med.)

P1-076/DP2-20-11**Screening for lethal elements in the GrpE gene deletion in the genome of *E. coli***

○Kotone Otaki¹, Moeko Nara¹, Rintaro Shigemori¹, Canon Fujita¹, Shinya Sugimoto^{1,2,3}, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Center for Biofilm Sci. Technol., Jikei Univ. Sch. Med., ³Lab. Amyloid Regulation, Jikei Univ. Sch. Med.)

P1-077/DP2-20-12**Elucidation of an essential cellular function of GrpE for survival of *E. coli***

○Rintaro Shigemori^{1,2}, Shinya Sugimoto^{1,2,3}, Yuki Kinjo^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Center for Biofilm Sci. Technol., Jikei Univ. Sch. Med., ³Lab. Amyloid Reg., Jikei Univ. Sch. Med.)

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

P1-078/DP2-14-09**Acceptability of *Escherichia coli* for IncF plasmids encoding antimicrobial-resistance genes**

○Kengo Hayashi¹, Masahiro Suzuki¹, Yohei Doi^{1,2,3} (¹Dept. Microbiol., Sch. Med., Fujita Health Univ., ²Dept. Infect. Dis., Sch. Med., Fujita Health Univ., ³Div. Infect. Dis., Sch. Med., Pittsburgh Univ.)

P1-079/DP2-14-10**DNA transfer by *Pseudomonas aeruginosa* using membrane vesicles of Pf4 prophage**

○Haruki Okumura¹, Satoshi Takenawa², Soutaro Takano², Mizuki Kanno³, Hiroyuki Futamata^{1,3,4}, Akihiro Okamoto², Yosuke Tashiro^{1,3} (¹Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ²NIMS. MANA., ³Grad. Sch. Sci. Tech. Shizuoka Univ., ⁴Res. Inst. Green Sci. Tech. Shizuoka Univ.)

P1-080/DP2-14-11**Horizontal gene transfer through membrane vesicles facilitated by changes in cellular membrane state**

○Soichiro Eri¹, Mizuki Kanno², Hiroyuki Futamata^{1,2,3}, Yosuke Tashiro^{1,2} (¹Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ²Grad. Sch. Sci. Tech. Shizuoka Univ., ³Res. Inst. Green. Sci. Tech. Shizuoka Univ.)

P1-081/DP2-14-12**Evolutionary process of *Streptococcus dysgalactiae* genome, with host switching**

○Kazunori Murase, Ryosuke Tsuge, Atsuko Minowa-Nozawa, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sc. Med., Kyoto Univ)

P1-082/DP2-14-13**Predicting the bacteria acquired the plasmid by conjugative transfer based on nucleotide sequences**

○Maho Tokuda¹, Shunta Tsuruga², So Maeda³, Rin Yamazaki³, Chiho Minakuchi⁴, Hideaki Nojiri⁴, Kazuhide Kimbara^{1,2,3}, Masaki Shintani^{1,2,3,5} (¹Grad. Sch. Shizuoka Univ., ²Grad. Sch. Shizuoka Univ., ³Fac. Eng. Shizuoka Univ., ⁴Grad. Sch. Agric. Life Sci., UTokyo, ⁵Shizuoka Univ. RIGST)

P1-083/DP2-14-14**Upstream genetic structures of AMR genes and its utilization for presuming AMR plasmids**

○Itaru Hirai¹, Nobuyoshi Yagi² (¹Lab. Microbiol., Sch. Health Sci., Fac. Med., Univ. of the Ryukyus, ²Lab. Clin. Physiol., Sch. Health Sci., Fac. Med., Univ. of the Ryukyus)

P1-084/DP2-14-15**The Temporal Trends of Molecular Typing and Resistance Gene Dynamics in *Neisseria gonorrhoeae***

○Yuki Ohama¹, Ken Shimuta¹, Masatomo Morita¹, Ai Yoshida¹, Hideyuki Takahashi¹, Mitsuru Yasuda², Makoto Ohnishi³, Yukihiro Akeda¹ (¹Dept. Bact. 1., NIID, ²SMU Med, Dept. Infection Control & Clinical Lab Med., ³OPHE-IDRC)

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

P1-085/DP2-14-16**Comprehensive analysis of small RNAs that control the expression of the virulence regulator in EHEC**

○Naoki Sudo¹, Nobuhiko Okada², Jiro Mitobe¹ (¹Dept. Infect. Dis., Sch. Med., Kyorin Univ., ²Dept. Microbiol., Sch. Pharm., Kitasato Univ.)

P1-086/DP2-14-17**Appropriate transcription of *SPS1* of *Candida albicans* are necessary to normal growth**

○Miyabi Sugano, Shinichi Iwaguchi (Dept. Biol. Sci, Fac. Sci., Nara Women's Univ.)

P1-087/DP2-14-18**Virulence factors of hemolytic streptococci SDSE strains prevalent in Japan**

○Kohei Ogura^{1,2}, Koji Kinoshima³, Hitomi Kitamura³, Shigefumi Okamoto^{2,3}, Toru Akiyama⁴ (¹Div. Food Sci. Biotech., Grad. Sch. Agr., Kyoto Univ., ²Inst. Front. Sci. Init., Kanazawa Univ., ³Fac. Health Sci., Inst. Med. Pham. Health Sci., Kanazawa Univ., ⁴Res. Insit., NCGM)

P1-088/DP2-14-19

New regulatory network via ArcAB and quorum sensing system of *Vibrio cholerae* biofilm formation

○JantCres Caigoy¹, Hirofumi Nariya², Toshi Shimamoto¹, Zhiqun Yan^{3,4}, Tadashi Shimamoto¹ (¹Grad. Sch. Int. Sci. Life, Hiroshima Univ., ²Grad. Sch. Human Life Sci. Jumonji Univ., ³Grad. Sch. Biosph. Sci. Hiroshima Univ., ⁴Res. Cent. Maruzen Pharm. Co. Ltd)

P1-089/DP2-17-01

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

○Moe Fujii¹, Kenji Yokota², Takehiko Mima¹ (¹Microbiol., Dept. Med. Techn., Fac. Health Sci., Ehime Pref. Univ. Health Sci., ²Okayama Univ. Grad. Sch. Health Sci.)

P1-090/DP2-17-02

Identification of pneumococcal modulons based on transcriptome datasets

Yujiro Hirose¹, ○Toshiki Tabuchi¹, Eri Ikeda¹, Masayuki Ono¹, Masaya Yamaguchi^{1,2,3,4}, Shigetada Kawabata^{1,3} (¹Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Bioinfo., Osaka Univ. Grad. Sch. Dent., ³CiDER. Osaka Univ., ⁴OUBIC, RIMD, Osaka Univ.)

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

P1-091/DP2-17-10

Engineering a safety-enhanced synthetic phage capable of efficiently eliminating MRSA

○Minh Huong Nguyen¹, Kotaro Kiga^{1,2}, Veerananarayanan Srivani¹, XinEe Tan¹, Justin Edrian Cocuangco Revilla¹, Shinya Watanabe¹, Kazuhiko Miyanaga¹, Yoshifumi Aiba¹, Tepei Sasahara¹, Longzhu Cui¹ (¹Div. Bacteriology, Dept. Infection and Immunity, Jichi Medical Univ., ²Research Center for Drug and Vaccine Development, National Inst. Infectious Diseases)

P1-092/DP2-17-11

Gene recombination system for *Bacillus subtilis* natto by conjugation

○Wakana Suda¹, Mitsuhiro Itaya², Kei Asai¹ (¹Dept. Biosci., Tokyo Univ. Agricul., ²Dept. Materials Chem., Shinshu Univ.)

P1-093/DP2-17-12

Reconstitution of flagella biosynthesis of Segmented filamentous bacteria in *Bacillus subtilis*

○Kei Asai¹, Kouki Tanaka¹, Yoshitoshi Ogura², Tomomi Kuwahara³ (¹Dept. Biosci., Tokyo Univ. Agricul., ²Dept. Infect. Med., Kurume Univ. Sch. Med., ³Dept. Microbiol., Sch. Med., Kagawa Univ.)

P1-094/DP2-17-13

Constructions and evaluations of *Campylobacter jejuni* phase-locked variant libraries

○Shouji Yamamoto¹, Ken-ichi Lee¹, Akiko Kubomura¹, Sunao Iyoda¹, Yukihiko Akeda¹, Chihiro Aikawa², Masashi Okamura², Fuhito Hojo³, Takako Osaki⁴, Jiro Mitobe⁴ (¹Dept. Bac. I., Natl. Inst. Infect. Dis., ²Dep. Vet. Med., Div. Vet. Sci., Obihiro Univ. Agr. Vet. Med., ³Inst. Laboratory Animals, Graduate Sch. Med., Kyorin Univ., ⁴Dept. Infect. Dis., Kyorin Univ. Sch. Med.)

P1-095/DP2-17-14

Zombie cells produced from the minimal synthetic bacterium JCVI-syn3B

○Nanase Oda¹, Hana Kiyama¹, Makoto Miyata^{1,2} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²OCARINA, Osaka Metropolitan Univ.)

4. Genetics / Genomics / Biotechnology -e. Others

P1-096/DP2-17-15

Effect of *Escherichia coli* toxin-antitoxin systems on phage propagation

○Ke Liu, Yuichi Otsuka (Grad. Sch. Science and Engineering, Saitama Univ.)

P1-097/DP2-17-16

Activation of the AbpA-AbpB phage defense system in *Escherichia coli*

○Saya Takita, Takaomi Sasaki, Yunosuke Shintani, Yuichi Otsuka (Grad. Sch. Science and Engineering, Saitama Univ.)

5. Pathogenicity -a. Adhesins and colonization factors

P1-098/DP1-04-06

Biofilm formation of *A. acitnomycetemcomitans* associates with genes expression regulated by Hfq

○Yuichi Oogai, Airi Matsumoto, Masanobu Nakata (Dept. Oral-Microbiol., Sch. Med. and Dent., Kagoshima Univ.)

P1-099/DP1-04-07

Identification of *Clostridium perfringens* FbpA binding site to dermatopontin

○Nozomu Matsunaga, Akiba Endo, Yasuo Hitsumoto, Seiichi Katayama (Dept. Life Sci., Fac. Sci., Okayama Univ. Sci.)

P1-100/DP1-04-08

Colocalization of GAPDH and autolysin on the *Clostridium perfringens* cell surface

○Riyo Aono^{1,2}, Nozomu Matsunaga¹, Yasuo Hitsumoto¹, Seiichi Katayama¹ (¹Dept. Life Sci., Fac. Sci., Okayama Univ. of Sci., ²Dept. Med. Tech., Kagawa Pref. Univ. of Health Sci.)

P1-101/DP1-04-09**ETEC colonization factor CS6 binds to β -actin and myosin-9 on epithelial cells**

○Alafate Ayibieke, Takaki Nishi, Takashi Hamabata (Dept. Infect. Dis., RI., NCGM)

P1-102/DP1-04-10**Clarification of the colonization mechanism of vaginal *Lactobacillus* on the vaginal Mucosa**

○Kirika Yoshioka, Masahiko Ito, Riho Tabata, Tsuyoshi Miki, Takeshi Haneda, Nobuhiko Okada (Dept. Microbiol., Sch. Pha., Kitasato Univ.)

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

P1-103/DP1-04-11**The role of lipoprotein signal peptidase in the innate immune stimulatory activity of pneumococci**

○Hisanori Domon^{1,2}, Satoru Hirayama¹, Toshihito Isono¹, Rui Saito¹, Katsunori Yanagihara³, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., ²Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Dept. Lab. Med., Nagasaki Univ. Grad. Sch. Biomed. Sci.)

P1-104/DP1-04-12**Alteration of gene expression in macrophages by D-amino acids from *Mycobacterium avium* complex**

○Yutaka Tatano¹, Tatsuo Munakata¹, Madoka Sawai¹, Hideki Yagi², Chiaki Sano³, Haruaki Tomioka⁴ (¹Dept. Pharm. Sci., Sch. Pharm. Fukuoka., IUHW., ²Dept. Pharm. Sci., Sch. Pharm., IUHW, ³Dept. Community. Med. Mgt., Fac. Med., Shimane Univ., ⁴Fac. Med., Shimane Univ.)

P1-105/DP1-04-13**Investigation of LCV-mitochondria communication machinery through Rab32 function**

○Hiromu Oide, Kohei Arasaki (Dept. Mol. Cell Biol., Sch. Life Sci., Tokyo Univ. Pharm and Life Sci.)

P1-106***Legionella pneumophila*-utilizes Rab33B function through the multiple bacterial proteins**

○Kohei Arasaki¹, Honoka Matsuo¹, Tomoko Kubori², Hiroki Nagai^{2,3} (¹Sch. Life Sci., Tokyo Univ. Pharm. Life Sci., ²Dept. Microbiol., Grad. Sch. Med., Gifu Univ., ³COMIT, Gifu Univ.)

P1-107/DP1-04-15**The analysis of C-terminal side domain of MARTX toxin produced by *Vibrio vulnificus***

○Nene Kurata¹, Shoko Takeuchi¹, Takahiro Tsuchiya^{1,2}, Katsushiro Miyamoto¹, Jun Komano¹, Hiroshi Tsujibo¹ (¹Dept. Microbiol. Infect. Cont., Osaka Med. Pharm. Univ., ²Ctr. Advance. Pharm. Educ., Osaka Med. Pharm. Univ.)

P1-108/DP1-10-01**The analysis of N-terminal side domain of MARTX toxin produced by *Vibrio vulnificus***

○Mai Sasaki¹, Shoko Takeuchi¹, Takahiro Tsuchiya^{1,2}, Katsushiro Miyamoto¹, Jun Komano¹, Hiroshi Tsujibo¹ (¹Dept. Microbiol. Infect. Cont., Osaka Med. Pharm. Univ., ²Ctr. Advance. Pharm. Educ., Osaka Med. Pharm. Univ.)

P1-109/DP1-10-02**The analysis of functional domain of MARTX toxin produced by *Vibrio vulnificus***

○Yurina Noso¹, Hina Sugimura¹, Takahiro Tsuchiya^{1,2}, Katsushiro Miyamoto¹, Jun Komano¹, Hiroshi Tsujibo¹ (¹Dept. Microbiol. Infect. Cont., Osaka Med. Pharm. Univ., ²Ctr. Advance. Pharm. Educ., Osaka Med. Pharm. Univ.)

P1-110/DP1-10-03**Negative transcriptional regulator of *V. parahaemolyticus* type III secretion system 2**

○Sarunporn Tandhavanant^{1,2}, Hiroyuki Terashima¹, Dhira Saraswati Anggramukti³, Hirotaka Hiyoshi¹, Narisara Chantratita², Tetsuya Iida³, Shigeaki Matsuda³, Toshio Kodama¹ (¹Dept. Bacteriology, Inst. Tropical Medicine, Nagasaki Univ., ²Dept. Microbiology and Immunology, Fac. Tropical Medicine, Mahidol Univ., ³Dept. Bacterial Infections, Research Inst. Microbial Diseases, Osaka Univ.)

P1-111/DP1-10-04**The influence of PLC-mediated intracellular calcium influx in periodontitis during *Pg* infection**

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

P1-112/DP1-10-05**Gingipain from *Porphyromonas gingivalis* promotes inflammation in human microglia cells**

○Mika Fujii¹, Yutaka Yamazaki¹, Akira Hasebe², Ji-Won Lee² (¹Gerodontology, Dept. Oral Health Science, Fac. Dental Medicine, Hokkaido Univ., ²Microbiology, Dept. Oral Pathobiological Science, Grad. Sch. Dental Medicine, Hokkaido Univ.)

P1-114/DP1-10-07**Mechanism of host-cellular response to streptolysin S produced by *Streptococcus anginosus***

○Yugo Yamamori¹, Hideaki Nagamune^{1,2}, Toshifumi Tomoyasu^{1,2}, Atsushi Tabata^{1,2} (¹Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

5. Pathogenicity

-c. Cell invasion and intracellular parasitism

P1-115/DP2-16-03

Functional analysis of Atg8 paralogs in pneumococci-induced hierarchical autophagy

○Chisato Sakuma^{1,2}, Michinaga Ogawa¹, Sayaka Shizukuishi¹, Yukihiro Akeda¹ (¹Bacteriol. I, Nat. Inst. Infect. Dis., ²Nat. Inst. Agrobiol. Sci, NARO)

P1-116/DP2-16-04

Search for new target molecules used by Chlamydia trachomatis by screening approved drug libraries

○Saicheng Zhang, Ruiyu Li, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci. Hokkaido Univ.)

5. Pathogenicity

-d. Immune escape and proliferation in hosts

P1-117/DP2-16-08

Functional analysis of ribD involved in immune escape of Francisella tularensis

○Kensuke Shibata^{1,2,3}, Keishi Takagi¹, Takashi Shimizu⁴, Masahisa Watarai⁴ (¹Dept. Microbiol. Immunol., Sch. Med., Yamaguchi Univ., ²Dept. Ocular Pathology and Imaging Science, Sch. Med., Kyushu Univ., ³Dept. Mol. Immunol., Sch. Med., Research Inst. Microbial Diseases, Osaka Univ., ⁴Joint Fac. Veterinary Medicine, Yamaguchi Univ.)

P1-118/DP2-16-09

Surface antigen conversion at the early stages of infection in relapsing fever borreliae

○Tomohi Takeuchi¹, Kozue Sato², Hiroki Kawabata², Ai Takano¹ (¹Dept. Vet. Med., Joint Fac. Vet. Med., Yamaguchi Univ., ²Dept. Bac-I, NIID)

P1-119/DP2-16-10

Pathogenic Leptospira induces lipolysis in the murine adipocytes in vitro and in vivo

○Ryo Ozuru, Michinobu Yoshimura, Shotaro Fujiki, Kazunari Ishii, Akinori Shimizu, Yusuke Kurihara, Shuntaro Kuwahara, Kenji Hiromatsu (Dept. Microbiol. Immunol., Sch. Med., Fukuoka Univ.)

P1-120/DP2-16-11

Co-infection of C. pneumoniae and P. gingivalis exacerbates aspiration pneumonia

○Yoshikazu Naiki¹, Shogo Nakanishi², Ayaka Kato³, Ryo Arai¹, Tomohiko Iwase¹, Masayuki Umemura⁴, Akio Mitani², Yoshiaki Hasegawa¹ (¹Dept. Microbiol. Sch. Dent. Aichi Gakuin Univ., ²Dept. Periodont. Sch. Dent. Aichi Gakuin Univ., ³Dept. Pediatric. Sch. Dent. Aichi Gakuin Univ., ⁴Trop. Biosphere Res. Cent., Univ. Ryukyus)

P1-121/DP2-16-12

Inflammatory responses in the intestinal mucosa of mice infected with Helicobacter mastomyrinus

○Riku Yasuki¹, Ayano Miyauchi¹, Takahiro Yoshizawa², Shin Shimada², Kazutaka Ohsawa³, Ritsuko Masuyama¹, Hitoki Yamanaka² (¹Grad. Sch. Gastron. Manag., Ritsumeikan Univ., ²Res. Ctr. Adv. Sci. Technol., Shinshu Univ., ³Grad. Sch. Biomed. Sci., Nagasaki Univ.)

5. Pathogenicity -e. Infection models

P1-122/DP2-16-13

Plasminogen-binding proteins of Streptococcus pneumoniae expressed during infection

○Satoru Hirayama¹, Takumi Hiyoshi^{1,2,3}, Yoshihito Yasui^{1,3}, Hisanori Domon^{1,2}, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., ²Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Div. Periodontol., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

P1-123/DP2-16-14

Pneumococcal protein SufC is released extracellularly by autolysis and binds to host plasminogen

○Yoshihito Yasui^{1,2}, Satoru Hirayama¹, Toshihito Isono¹, Takumi Hiyoshi^{1,2,3}, Hisanori Domon^{1,3}, Yutaka Terao^{1,3} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., ²Div. Periodontol., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

P1-124/DP2-16-15

Effects of nitrate-reducing bacteria from the gastric cancer patients in H. pylori co-infected mice

○Marina Komatsubara¹, Yumiko Yamamoto², Jumpei Uchiyama², Osamu Matsushita², Kazuyoshi Gotoh¹, Akari Watanabe³, Kenji Yokota¹ (¹Grad. Sch. Health Science, Okayama Univ., ²Dept. Path. Bacteriol., Grad. Sch. Med. Dent. Pharm., Okayama Univ., ³Oral Health Care and Rehabilitation, Inst. Biomed. Sci. Tokushima Univ.)

P1-125/DP2-16-16

Analysis of Vi capsular polysaccharide on an alternative Salmonella Typhi mouse infection model

○T. Hoan Pham^{1,2}, Hirotaka Hiyoshi², Toshio Kodama² (¹Grad. Sch. Biomedical Sciences, Nagasaki Univ., ²Dept. Bacteriology, Inst. Tropical Medicine, Nagasaki Univ.)

P1-126/DP2-19-01

Catheter-associated biofilm infection of non-tuberculosis mycobacteria in mice

○Kentaro Yamamoto¹, Yusuke Tsujimura¹, Shota Torigoe^{1,2}, Manabu Ato¹ (¹Dept. Mycobacteriol., Lepr. Res. Ctr., NIID, ²Mgmt. Dept. Biosafety, Lab. Anim., and Pathog. Bank, NIID)

5. Pathogenicity -f. Others

P1-127/DP2-19-12

Hog1-mediated stress tolerance in the pathogenic fungus *Trichosporon asahii*

○Yasuhiko Matsumoto, Yu Sugiyama, Tae Nagamachi, Asami Yoshikawa, Takashi Sugita (Dept. Microbiol., Meiji Pharm Univ.)

P1-128/DP2-19-13

Mislocalization of the mechanosensor Piezo during leptospiral infection of epithelial cells

○Isabel Sebastian, Tetsu Yamashiro, Claudia Toma (Dept. Bacteriol., Grad. Sch. Med., Univ. of the Ryukyus)

P1-129/DP2-19-14

The investigation of racemase involved in D-amino acid production by *Metamycoplasma hominis*

○Takeshi Yamamoto¹, Miki Okuno¹, Yuichi Tsuchiya², Yuki Hoshiko¹, Nanae Yamamoto², Yumi Imai¹, Yoshitoshi Ogura¹ (¹Dept. Infect. Med., Sch. Med., Kurume Univ., ²Dept. Pharmacy., Kyushu Univ. Hosp.)

P1-130/DP2-19-15

Analysis of host infection-related genes of bacteriophages encoding botulinum toxin types C and D

○Yoshihiko Sakaguchi¹, Akira Take², Kazuyoshi Gotoh³, Yumiko Yamamoto³, Tomoko Kohda⁴, Masafumi Mukamoto⁴, Masaya Takehara¹, Tetsuya Hayashi⁵, Keiji Oguma³, Masahiro Nagahama¹ (¹Facul. Pharm. Sci., Tokushima Bunri Univ., ²Kitasato Univ. Sch. Med., ³Dept. Med., Lab. Sci., Grad. Sch. Heal. Sci., Okayama Univ., ⁴Grad. Sch. Vet. Sci., Osaka Metropolitan Univ., ⁵Facul. Med. Sci., Kyushu Univ.)

P1-131/DP2-19-16

Streptococcus pneumoniae infection induced kidney specific depletion of sulfur metabolites in mice

Rahman Azizur, Tianli Zhang, Hiroyasu Tsutsuki, Touya Toyomoto, ○Tomohiro Sawa (Dept. Microbiol., Grad. Sch. Med., Kumamoto Univ.)

6. Host defense -a. Innate immunity

P1-132/DP1-05-06

Tannerella forsythia induces inflammasome activation by triggering both NLRP3 and Caspase-4

○Chenwei Hsu, Tokuju Okano, Toshihiko Suzuki (Dept. Bact. Pathogenesis, TMDU)

P1-133/DP1-05-07

Two sub-families of NF- κ B are activated in macrophages infected with *M. bovis* BCG

○Akari Shinohara¹, Yasuhiko Horiguchi², Mayuko Osada-Oka³ (¹Food Hyg. Health., Agric. Food. Sci., Kyoto Pref. Univ., ²Dept. Mol. Bact., RIMD, Osaka Univ., ³Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ.)

P1-134/DP1-05-08

Selection of a lactic acid bacterium that produces membrane vesicles under aerobic conditions

○Hinako Inagaki¹, Mizuki Kanno², Hiroyuki Futamata^{1,2,3}, Yosuke Tashiro^{1,2} (¹Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ²Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ³Res. Inst. Green. Sci. Tech. Shizuoka Univ.)

P1-135/DP1-05-09

Modification of *E. coli* lipidA using palmitoyltransferase genes cloned in low-copy number plasmids

○Yuki Nonaka, Sho Noguchi, Eri Tanaka, Sakura Onoue, Kazuyoshi Kawahara (Dept. Biosci., Col. Sci. Eng., Kanto Gakuin Univ.)

P1-136/DP1-05-10

Induction of antibody production by antigen proteins encapsulated in *E. coli* outer membrane vesicles

○Ryunosuke Tominaga^{1,2}, Kimihiro Abe¹, Tomoyo Nakamura^{2,3}, Tomohiko Nishino^{2,3}, Takehiro Yamaguchi¹, Yukihiro Akeda¹, Ryoma Nakao¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Grad. Sch. Bionics., Tokyo Univ. Technol., ³Sch. Biosci. Biotechnol., Tokyo Univ. Technol.)

P1-137/DP1-05-11

Induction of Immune Priming in the silkworm, *Bombyx mori*, by chitin-derived oligosaccharide

○Kazuhiro Mikami¹, Fumiaki Tabuchi², Masaki Ishii³, Atsushi Miyashita² (¹Dept. Med. Tech., Grad. Sch. Clinical Lab Sci., Teikyo Univ., ²Lab. Antifungal Immunobiol., Inst. Med. Mycol., Teikyo Univ., ³Lab. Mol. Cell Biol., Sch. Pharm., Musashino Univ.)

P1-138/DP1-05-12

Search for essential oils that confer infection resistance through the innate immune system

○Naho Maruyama^{1,2}, Atsushi Miyashita¹ (¹Teikyo Univ. Inst. Medical Mycology, ²Dept. Health and Dietetics, Teikyo Heisei Univ.)

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

P1-139/DP1-05-13

Delivering of antibodies into neuron by chimeric-toxin: a follow-up study in rodent models

○Shin-Ichiro Miyashita, Akane Kanazawa, Rintaro Ohno, Yoshimasa Sagane (Dept. Food Aroma Cosme. Chem., Fac. Bio-ind., Tokyo NODAI)

P1-140/DP1-05-14

Salmonella eliminating mechanism introduced by vaccination

○Momoko Nakayama¹, Masahiro Eguchi¹, Yohsuke Ogawa² (¹National Inst. Animal Health, NARO, ²National Inst. Animal Health, NARO)

P1-141/DP1-05-15

Single cell RNA sequencing of necrotic granulomas in active tuberculosis mouse model

○Shintaro Seto, Minako Hijikata, Naoto Keicho (Dept. Pathophysiol. Host Defense, RIT)

P1-142/DP1-05-16

Impact of lactoferrin on the interaction between vaginal *Lactobacillus crispatus* and vaginal mucosa

○Masahiro Ito, Riho Tabata, Tsuyoshi Miki, Takeshi Haneda, Nobuhiko Okada (Dept. Microbiol., Sch. Pha., Kitasato Univ.)

P1-143/DP1-05-17

A standardized evaluation method for bacterial UV sensitivity using light-emitting diodes

○Kai Ishida¹, Yushi Onoda^{1,3}, Yasuko Ishikawa¹, Toshihiko Aizawa³, Shigeharu Yamauchi³, Yasuo Fujikawa³, Tomotake Tanaka³, Takashi Uebanso^{1,2}, Kazuaki Mawatari^{1,2}, Akira Takahashi^{1,2} (¹Dept. Microbiol. Cont., Inst. Biomed Sci., Tokushima Univ., ²Dept. Prev Environ Nutr., Inst. Biomed Sci., Tokushima Univ., ³Nichia Corp.)

P1-144/DP1-11-01

Fungal UV sensitivity is characteristically wavelength dependent due to melanin accumulation

○Yushi Onoda^{1,3}, Kai Ishida¹, Miharu Nagahashi^{1,2}, Michiyo Yamashita^{1,2}, Toshihiko Aizawa³, Shigeharu Yamauchi³, Yasuo Fujikawa³, Tomotake Tanaka³, Kazuaki Mawatari^{1,2}, Akira Takahashi^{1,2} (¹Dept. Microbiol. Cont., Inst. Biomed Sci., Tokushima Univ., ²Dept. Prev Environ Nutr., Inst. Biomed Sci., Tokushima Univ., ³Nichia Corp.)

P1-145/DP1-11-02

Host immunomodulation using membrane vesicles derived from *Clostridioides difficile*

○Yotaro Isamu¹, Mayu Okuda¹, Nozomu Obana^{2,4}, Nobuhiko Nomura^{3,4} (¹Sch. Sci. Tech., Life Ear. Sci, Univ. Tsukuba, ²TMRC, Fac. Med., Univ. Tsukuba, ³Fac. Life Environ., Sci. Univ. Tsukuba, ⁴MiCS, Univ. Tsukuba)

P1-146/DP1-11-03

Designing New-Age Peptide Vaccines Using Bacteriophages

○Srivani Veerananarayanan, Takashi Sugano, Liu Yi, Myat Thu, Kanate Thitiananpakorn, Yoshifumi Aiba, XinEe Tan, Kazuhiko Miyanaga, Shinya Watanabe, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

P1-147/DP1-11-04

Phage Capsid Vaccines for *Mycobacterium tuberculosis* (*Mtb*): Purification & Concentration Strategies

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

P1-148/DP1-11-05

Nasal *Staphylococcus aureus* membrane vesicles induces mucosal IgA responses without adjuvant

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

6. Host defense -c. Others

P1-149/DP1-11-14

Identification of the intestinal bacteria that protect against *Clostridium botulinum* infection

○Nobuhide Kobayashi¹, Hiroki Toriumi², Seiga Komiyama², Koji Hase², Yukako Fujinaga¹ (¹Dept. Bacteriol., Grad. Sch. Med., Kanazawa Univ., ²Divi. Biochem., Fac. Pharm., Keio Univ.)

P1-150/DP1-11-15

Neutralization mechanism of human monoclonal antibodies against type B botulinum neurotoxin

○Takuhiro Matsumura, Mayu Kitamura, Sho Amatsu, Aki Yamaguchi, Nobuhide Kobayashi, Yukako Fujinaga (Dept. Bacteriol., Sch. Med. Sci., Kanazawa Univ.)

P1-151/DP1-11-16

RabGAP1L regulates exocytic and endocytic trafficking of the invading Group A *Streptococcus*

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

P1-152/DP1-11-17

Analysis of OPN fragments reflecting the pathology in microbiological infection

○Takashi Matsuba¹, Yui Uehara¹, Kana Sukizaki¹, Toshio Hattori² (¹Animal Pharm. Sc., Sch. Pharm., Univ. Kyushu Med. Sci., ²Inst. Health Welf., Kibi Int. Univ)

**7. Antimicrobial agents and resistance
-a. Antimicrobial agents**

P1-153/DP1-06-14

Isolation and Characterization of Broad-Host-Range Prophages Against MRSA

○Tergel Nayanjin, XinEe Tan, Anujin Batbold, Shinya Watanabe, Yoshifumi Aiba, Kazuhiko Miyanaga, Teppei Sasahara, Srivani Veerananarayanan, Kanate Thitiananpakorn, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-154/DP1-06-15

Regulation of *Staphylococcus aureus* growth by *Pseudomonas aeruginosa* extracellular vesicles

○Phawinee Subsomwong¹, Takahito Ishiai¹, Kouji Narita², Akio Nakane^{3,4}, Krisana Asano^{1,3} (¹Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Inst. Anim. Exp., Hirosaki Univ. Grad. Sch. Med., ³Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med., ⁴Hirosaki Univ. Health Welf.)

P1-155/DP1-06-16**Antimicrobial Activity of Bahia Propolis and its Fractionation Effects on Oral Bacteria**

○Hiroki Takigawa¹, Chiho Mashimo¹, Shiho Ikegami², Ayanori Yamaki², Hugo Maruyama¹, Takayuki Nambu¹, Toshinori Okinaga¹ (¹Dept. Bact., Sch. Dent., Osaka Dent Univ., ²Yamada Bee Company Health Science Labo.)

P1-156/DP1-06-17**Antimycobacterial activities of tanshinones and speculations on their mechanism of action**

○Shigetaru Mori¹, Toshiki Tamura², Yumi Maeda², Yumiko Tsukamoto², Manabu Ato², Tsuyoshi Kenri¹ (¹Dept. Bacteriology II, NIID, ²Dept. Mycobacteriology, LRC, NIID)

P1-157/DP1-12-01**Dermatophyte Cyp51 isozyme selectivity of azole antifungal agents**

○Masaki Ishii¹, Tsuyoshi Yamada², Shinya Ohata¹ (¹Research Inst. Pharmaceutical Sciences, Fac. Pharmacy, Musashino Univ., ²Inst. Med. Mycol., Teikyo Univ.)

P1-158/DP1-12-02**Optimized synthesis of CRISPR-Cas13a antimicrobial capsid against MRSA**

○Yuzuki Shimamori¹, XinEe Tan¹, Feng-Yu Li¹, Yutaro Nishikawa^{1,2}, Batbold Anujin¹, Nayanjin Tergel¹, Kotaro Kiga^{1,3}, Shinya Watanabe¹, Takayuki Shimojo², Longzhu Cui¹ (¹Div. Bacteriology, Dept. Inf. & Imm., Sch. Med., JMU., ²EIKEN CHEMICAL CO.,LTD., ³RCDVD, NIID)

P1-159/DP1-12-03**Development of chelator based novel MBL inhibitors to combat carbapenem resistance bacteria**

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

P1-160/DP1-12-04**Functional impact by linker region of a staphylococcal endolysin**

Sosuke Munetomo¹, ○Jumpei Uchiyama², Iyo Uchiyama², Wanganuttara Thamonwan², Toshihiro Tsukui³, Hideharu Hagiya⁴, Yumiko Yamamoto², Hideyuki Kanda¹, Osamu Matsushita² (¹Dept. Pub. Heal., Grad. Sch. Med. Dent. Pharm., Okayama Univ., ²Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm., Okayama Univ., ³Nippon Zenyaku Kogyo Co., Ltd., ⁴Dept. Infect. Dis., Okayama Univ. Hosp.)

P1-161/DP1-12-05**Antibacterial activity screening of Thai medicinal plant extracts using resazurin microtiter assay**

○Nitchatorn Sungsirin^{1,2}, Tanit Boonsiri², Saengthip Ngoenprong³, Faesah Ayohsae³, Oraya Dokkham³, Siriwan Sriuan³, Busaba Matrakool³, Tassanee Saovana³, Sudaluck Thunyaharn³ (¹Dept. Microbiology, Fac. Medicine, Shimane Univ., ²Dept. Microbiology, Phramongkutklao College of Medicine, ³Fac. Allied Health Sciences, Nakhonratchasima College)

P1-162/DP1-12-06**Development of antimicrobial peptide foldamers as therapeutics for multi-drug resistant bacteria**

○Takashi Misawa¹, Takahito Ito^{1,2}, Megumi Kurashima¹, Seiji Yamasaki³, Kunihiko Nishino³, Yosuke Demizu^{1,2} (¹National Inst. Health Sciences, ²Grad. Sch. Med. Life Sci., Yokohama City Univ., ³SANKEN, Osaka Univ.)

P1-163/DP1-12-07**Approaches for S. mutans by co-treatment with antimicrobial peptides and antimicrobial agents**

○Ryosuke Nakamura, Michiyo Honda (Dept. Appl. Chem., Grad. Sch. Sci. Tech., Meiji Univ.)

P1-164/DP1-12-08**Establishing phagemid packaging system to generate antimicrobials against MDR Staphylococcus aureus**

Feng-Yu Li¹, ○XinEe Tan¹, Yuzuki Shimamori¹, Kotaro Kiga^{1,2}, Shinya Watanabe¹, Yoshifumi Aiba¹, Kazuhiko Miyanaga¹, Kanate Thitianapakorn¹, Yutaro Nishikawa^{1,3}, Longzhu Cui¹ (¹Dept. Infect. Immun., Sch. Med., Jichi Med. Univ., ²Research Center for Drug and Vaccine Development, National Inst. Infectious Diseases, ³EIKEN CHEMICAL CO.,LTD.)

P1-165/DP1-12-09**Antifungal activity of bacteria isolated using a novel medium containing plant-derived components**

○Fumiaki Tabuchi¹, Kazuhiro Mikami², Masaki Ishii³, Atsushi Miyashita¹ (¹Lab. Antifungal Immunobiol., Inst. Med. Mycol., Teikyo Univ., ²Dept. Med. Tech., Grad. Sch. Clinical Lab. Sci., Teikyo Univ., ³Lab. Mol. Cell Biol., Sch. Pharm., Musashino Univ.)

7. Antimicrobial agents and resistance**-b. Antimicrobial resistance****P1-166/DP2-15-10****Investigation of phage therapy against multidrug-resistant Escherichia coli**

○Mana Tohyama¹, Haruka Ohashi¹, Tomohiro Nakamura^{1,2}, Jumpei Fujiki¹, Hidetomo Iwano¹ (¹Dept. Biochemistry, Sch. Veterinary, Rakuno Gakuen Univ., ²Reserach Center for Drug and Vaccine Development, National Inst. Infectious Diseases)

P1-167/DP2-15-11

Isolation and characterization of broad host range bacteriophages infecting *Acinetobacter baumannii*

○Maniruzzaman, Adeline Yeo SyinLian, Yoshifumi Aiba, Minh Huong Nguyen, Shinya Watanabe, Kazuhiko Miyanaga, XinEe Tan, Teppei Sasahara, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P1-168/DP2-15-12

Prevalence of extended-spectrum beta-lactamase-producing *Escherichia coli* in the Ijira River

○Tomoki Nakatsubo¹, Michiyo Sugiyama², Tetsuo Asai^{1,2}
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P1-169/DP2-15-13

Roles of RND multidrug efflux pumps on drug resistance of *Achromobacter xylosoxidans* type strain

○Mizuki Sugano, Emiko Mizusawa, Ayami Mezaki, Go Kamoshida, Yuji Morita (Dept. Infection Control Science., Sch. Pharm. Sci., Meiji Pharmaceutical Univ.)

P1-170/DP2-15-14

Emergence of ciprofloxacin and penicillin resistant meningococcal isolates in Japan

○Hideyuki Takahashi¹, Masatomo Morita¹, Hajime Kamiya², Munehisa Fukusumi³, Mitsuru Yasuda⁴, Yuki Ohama¹, Ken Shimuta^{1,2}, Makoto Ohnishi¹, Ryoichi Saitoh⁵, Yukihiko Akeda¹
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P1-171/DP2-15-15

Phenotypic and genetic characteristics of *bla*_{IMP-6} harbouring Enterobacteriaceae

○Koichi Yamaguchi^{1,2}, Ryuichi Nakano¹, Akiyo Nakano¹, Yuki Suzuki¹, Miho Ogawa², Ryuji Sakata², Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara Med. Univ., ²Dept. Bacteriol., BML Inc.)

P1-172/DP2-15-16

Genomic insights into an Enterohaemorrhagic *Escherichia coli* O4:H12 co-carrying *mer-5* and *bla*_{SHV-12}

○Christian Xedzro¹, Toshi Shimamoto¹, Liansheng Yu², Yo Sugawara², Motoyuki Sugai², Tadashi Shimamoto¹ (¹Lab. Food Microbiol. Hyg., Grad. Sch. Integ. Sci. Life., Hiroshima Univ., ²Antimicrob. Resist. Res. Cent., Nat. Inst. Infect. Dis.)

P1-173/DP2-15-17

Analysis of the antimicrobial resistance mechanism in Gram-positive mastitis-causing bacteria

○Kazumi Yokoo¹, Toshi Shimamoto¹, Naoki Suzuki², Tadashi Shimamoto¹ (¹Dept. Microbiology for Food Safety., Sch. Integrated Sciences for Life., Hiroshima Univ., ²Dept. Terrestrial Field Science., Sch. Integrated Sciences for Life, Hiroshima Univ.)

P1-174/DP2-18-01

Draft genome sequencing of the imipenem-intermediate resistant *Bacteroides thetaiotaomicron*

○Takatsugu Goto, Masahiro Hayashi, Kaori Tanaka (Div. Anaerobe Res., Inst. for Glyco-core Res., Gifu Univ.)

P1-175/DP2-18-02

Adduct formation between cysteine and streptomycin in bacteria

○Katsuhiko Ono¹, Takuro Niidome², Takaaki Akaike³, Tomohiro Sawa¹ (¹Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ²Facul. Adv. Sci. Tech., Kumamoto Univ., ³Dept. Envir. Health Sci. Mol. Toxicol., Grad. Sch. Med., Tohoku Univ.)

P1-176/DP2-18-03

Extracellular release of metallo-beta-lactamases from clinically isolated gram-negative bacteria

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

P1-177/DP2-18-04

Characterization of Vancomycin-Resistant Enterococci (VRE) Isolated from Kure Medical Center

○Hidetomo Kobayashi¹, Takeshi Sudo², Norimitsu Shimada², Mika Shingai², Hiroe Yoshino², Ryuto Maeda², Masahiro Takada², Soshi Seike¹, Akihiro Sawa³, Hiroyasu Yamanaka¹
(¹Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima Int. Univ., ²Nat. Hosp. Org. Kure Med. Cent. and Chugoku Cancer Cent., ³Res. Cent. for Pharm. Health Care and Sci., Fac. Pharm. Sci., Hiroshima Int. Univ.)

P1-178/DP2-18-05

Analysis of the antimicrobial resistance mechanism of coliform bacteria causing mastitis

○Toshi Shimamoto¹, Naoki Suzuki², Tadashi Shimamoto¹
(¹Dept. Microbiol. Food Safety, Grad. Sch. Integrated Sci. Life, Hiroshima Univ., ²Dept. Terrestrial Field Sci., Grad. Sch. Integrated Sci. Life, Hiroshima Univ.)

P1-179/DP2-18-06

Genetic characteristics of drug-resistant *Escherichia coli* isolated from wild deer

○Akiyo Nakano¹, Ryuichi Nakano¹, Yuki Suzuki¹, Saori Horiuchi¹, Koichi Yamaguchi¹, Ryuji Sakata², Miho Ogawa², Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara Med. Univ., ²Dept. Bacteriol., BML, Inc.)

P1-180/DP2-18-07**Analysis of disinfectant resistance mechanism via two-component system SarRS in *Serratia marcescens***

○Koshiro Hyakutome^{1,2}, Moyu Tanishige¹, Riho Yasuoka¹, Yuma Kondo², Daichi Morita², Wakano Ogawa³, Takanori Kumagai², Teruo Kuroda² (¹Sch. Pharm., Hiroshima Univ., ²Dept. Microbiol. Med., Sch. Med. Sci., Hiroshima Univ., ³Dept. Microbiol. & Bioche. Daiichi Univ. of Pharm.)

P1-181/DP2-18-08**AMR surveillance of human and food-derived *Escherichia coli* strains based on the one health approach**

○Hiroto Shinomiya, Yukiko Asano, Shintarou Hirai, Yuka Fukuguchi, Yuka Otsuka (Ehime Pref. Inst. Pub. Health Environ. Sci.)

P1-182/DP2-18-09**Characteristics of drug-resistant gram-positive cocci nasal carriage in livestock and farmers**

Ryusei Taniguchi¹, ○Ryuichi Nakano¹, Akiyo Nakano¹, Yuki Suzuki¹, Yasuo Ono², Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara. Med. Univ., ²Teikyo Heisei. Univ.)

P1-183/DP2-18-10**Molecular characteristics of drug resistant *Escherichia coli* isolated from hospital sewage in Japan**

○Yuki Suzuki¹, Ryuichi Nakano¹, Akiyo Nakano¹, Yasumitsu Nomura¹, Saori Horiuchi¹, Tomoko Asada¹, Koichi Yamaguchi¹, Kai Saito², Mako Watanabe³, Hisakazu Yano¹ (¹Dept. Microbiology and Infectious Diseases, Nara Medical Univ., ²Jichi Medical University Saitama Medical Center, ³Fukaya Red Cross Hospital)

P1-184/DP2-18-11**Viruses encode tRNA and harbor anti-retron to evade bacterial immunity**

○Aa Haeruman Azam¹, Kotaro Chihara¹, Kohei Kondo², Tomohiro Nakamura¹, Shinjiro Ojima¹, Wenhan Nie¹, Azumi Tamura¹, Wakana Yamashita¹, Longzhu Cui³, Kotaro Kiga^{1,3} (¹Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ²AMR Res. Cent., Natl. Inst. Infect. Dis., ³Div. Bacteriol. Sch. Med., Jichi Med. Univ.)

P1-185/DP2-18-12**Direct interaction of xenobiotic efflux components MmpL5 and MmpS5 in *Mycobacterium tuberculosis***

○Mikiko Kawabata¹, Kentaro Yamamoto², Hirotaka Tajima^{3,4}, Manabu Ato², Ikuro Kawagishi^{1,3,4} (¹Grad. Sch. Sci. Eng., Hosei Univ., ²Dept. Mycobacteriol., Lepr. Res. Ctr., NIID, ³Dept. Frontier Biosci., Hosei Univ., ⁴Res. Cen. Micro-Nano Tech., Hosei Univ.)

P1-186/DP2-18-13**Genetic analysis of three carbapenemase-producing *Delftia tsuruhatensis* from hospital sewage**

○Hiroyuki Fujikura^{1,2,3}, Yuki Suzuki¹, Ryuichi Nakano¹, Akiyo Nakano¹, Yasumitsu Nomura¹, Saori Horiuchi¹, Koichi Yamaguchi¹, Kei Kasahara³, Hisakazu Yano¹ (¹Dept. Microbiol. Infect. Dis., Nara Med. Univ., ²Dept. Infect. Dis., Amagasaki Gen. Med. Ctr., ³Dept. Infect. Dis., Nara Med. Univ.)

P1-187/DP2-18-14**Comparative analysis of AmpC/ESBL-producing and colistin-resistant *Escherichia coli* in chicken meat**

○Tatsuya Nakayama¹, Natsuki Ohata¹, Takahiro Yamaguchi², Michio Jinnai³, Yuko Kumeda⁴, Atsushi Hase⁵ (¹Grad. Sch. Int. Sci. Life, Hiroshima Univ., ²Dept. Microbio., Osaka Inst. Pub. Health, ³Div. Microbiol., Kanagawa Pref. Inst. Pub. Health, ⁴Res. Cent. Microorg. Cont., Osaka Met. Univ., ⁵Fac. Contemp. Human Life Sci., Tezukayama Univ.)

P1-188/DP2-18-15**Search for novel antimicrobial resistance genes by analyzing genetic structure of integrons**

○Yusuke Tsuda¹, Chihiro Norizuki², Yoshichika Arakawa³ (¹Div. Clinic. Labo., Kyoto Univ. Hosp., Kyoto Univ., ²Dept. Med. Tech., Med. Sci., Shubun Univ., ³Dept. Bacteriol., Med., Fujita Health Univ.)

P1-189/DP2-18-16**Role of the MexAB-OprM and its regulators in aztreonam resistance of *Pseudomonas aeruginosa***

○Kota Hayashi¹, Ruri Nozima¹, Anne Ohnishi¹, Go Kamoshida¹, Yoshiaki Kawamura², Yuji Morita¹ (¹Dept. Infection Control Science., Sch. Pharm. Meiji Pharmaceutical Univ., ²Dept. Microbiol., Sch. Med., Aichi Gakuin Univ.)

7. Antimicrobial agents and resistance -c. Others

P1-190/DP2-18-17**Effects of dual therapy with betamethasone and josamycin in NC/Nga mouse model of atopic dermatitis**

○Katsuhiko Matsui, Madoka Muranaka, Tomoka Yamaguchi, Manami Maeda (Dept. Clin. Immunol., Meiji Pharmaceut. Univ.)

P1-191/DP2-21-01**Molecular Analysis of Immunomodulatory Effects of Non-antimicrobial Erythromycin Derivatives**

○Rui Saito^{1,2}, Hisanori Domon^{1,3}, Takumi Hiyoshi^{1,3}, Akari Ikeda^{4,5}, Tomoyasu Hirose^{4,5}, Toshiaki Sunazuka^{4,5}, Yutaka Terao^{1,3} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch., Med. Dent. Sci., ²Div. Cariol. Oper. Dent. Endo., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Cent. for Adv. Oral. Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., ⁴Omura Inst., Kitasato Univ., ⁵Grad. Sch. Infect. Cont. Sci., Kitasato Univ.)

P1-192/DP2-21-02

Analysis of lytic enzyme CD33800 of *Clostridioides difficile*

○Hiroshi Sekiya¹, Mizuki Takahashi¹, Rui Okazaki¹, Shigehiro Kamitori², Eiji Tamai¹ (¹Dept., Infect. Disease., Pharma., Matsuyama Univ., ²Res. Faci. Cent. Sci. & Tec. Facul. Med., Kagawa Univ.)

P1-193/DP2-21-03

Antimicrobial susceptibility survey and phylogenetic analysis of *Actinotignum* spp.

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

P1-194/DP2-21-04

Interaction between the tip of long tail fiber of PP01 phage and a porin of *Escherichia coli*

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

P1-195/DP2-21-05

Isolation and characterization of lytic phages against colibactin-producing *Escherichia coli*

○Yuya Hidaka¹, Kanate Thitiananpakorn¹, XinEe Tan¹, Yoshifumi Aiba¹, Kazuhiko Miyanaga¹, Teppei Sasahara^{1,2}, Shinya Watanabe¹, Longzhu Cui¹ (¹Div. Bacteriol, Sch. Med., Jichi Med. Univ., ²Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

8. Others

P1-196/DP1-04-16

A water-in-oil droplet-based method for detecting and isolating infectious bacteriophage particles

○Miu Hoshino¹, Yuri Ota^{2,3}, Tetsushi Suyama², Yuji Morishita³, Satoshi Tsuneda⁴, Naohiro Noda^{1,2,4} (¹Dept. CBMS, Grad. Sch. Frontier Sci., Univ. Tokyo, ²Biomed. Res. Inst., Natl. Inst. of Adv. Sci. & Tech. (AIST), ³On-chip Biotechnologies Co., Ltd., ⁴Dept. Adv. Sci. & Eng., Grad. Sch. Adv. Sci. & Eng., Waseda Univ.)

P1-197/DP2-21-14

Antimicrobial activity of bacterial membrane vesicles-coated silver nanoparticles

○Wei Xu, Ryosuke Yoshii, Sayo Maruyama, Takuro Niidome (FAST, Kumamoto Univ.)

P1-198/DP2-19-17

Involvement of the fungal flora in the colonic microbiota of the colorectal cancer

○Yodai Hayashi¹, Yoshinori Uchino¹, Yuichi Goto¹, Sayaka Yuda¹, Hiroshi Hijioka¹, Tsuyoshi Sugiura², Tatsuo Okui¹ (¹Dept. Maxillofacial Diagnostic and Surgical Science, Field of Oral and Maxillofacial Rehabilitation, Kagoshima Univ., ²Div. Oral and Maxillofacial Oncology and Surgical Sciences, Div. Oral and Maxillofacial Reconstructive Surgery, Tohoku Univ.)

7. Antimicrobial agents and resistance

P1-199

Physalins suppress the expression of quorum sensing in *Staphylococcus aureus*

Junpei Yamaguchi¹, ○Akiko Takaya^{1,2} (¹Dep. Infect. Cont. Sci., Grad. Sch. Pharm. Sci., Chiba Univ., ²MMRC, Chiba Univ.)

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

P2-001/DP1-01-09

Prevalence of *Listeria monocytogenes* in retail foods in Japan

○Yumiko Okada¹, Akiko Tomaru¹, Tomoko Nishida¹, Shiori Yamamoto^{1,2}, Yukako Shimojima³ (¹Div. Biomed. Food Res., Nat. Inst. Health Sci., ²Dept. Nutr. Diet., Kamakura Women's Univ., ³Dept. Food Life Sci., F. Food Nutr. Sci., Toyo Univ.)

P2-002/DP1-01-10

Differential angiogenic properties and phylogenetic characteristics of *Bartonella henselae* strains

Yuka Kondo¹, Masahiro Suzuki¹, Shingo Sato², Soichi Maruyama², Yohei Doi^{1,3}, ○Kentarō Tsukamoto⁴ (¹Dept. Microbiol., Fujita Health Univ. Sch. Med., ²Dept. Vet. Med., Coll. Bioresource Sci., Nihon Univ., ³Dept. Infect. Dis., Fujita Health Univ. Sch. Med., ⁴Dept. Bact. Zoonoses, RIMD, Osaka Univ.)

P2-003/DP1-01-11

Development of PCR-based serotyping method for *Mannheimia haemolytica*

○Atsushi Iguchi¹, Miki Okuno², Yoshitoshi Ogura², Kaori Hoshino³, Yuichi Ueno³, Daisuke Takamatsu³ (¹Fac. Agr., Miyazaki Univ., ²Dept. Infect. Med., Kurume Univ. Sch. Med., ³Natl. Inst. Anim. Hlth., NARO)

P2-004/DP1-01-12

A novel *Filobacterium* sp. detected in deposited 16S rRNA metagenome data of rhesus macaque

○Fumio Ike (RIKEN BRC)

P2-005/DP1-01-13

Comparison of Tn1549/5382 containing vanB gene among VRE strains from different sources

○Takako Nakayama, Takashi Kikuchi, Yushi Hachisu, Naoshi Ando, Masaki Nakamura, Natsuki Ueda, Mitsuru Kishizawa (Div. Bact., Chiba Pref. Inst. Pub. Health)

P2-006/DP1-01-14**Phylogenetic analysis of drug-resistant *Escherichia coli* isolated from domestic meat and livestock**

○Ryuji Kawahara¹, Takahiro Yamaguchi¹, Yuki Wakabayashi¹, Yuki Matsumoto², Daisuke Motooka², Shota Nakamura², Tatsuya Nakayama³, Yoshimasa Yamamoto⁴, Kentaro Kawatsu¹ (¹Div. Microbiol., Osaka Inst. Pub. Health, ²Dept. Infect. Metagenomics, RIMD, Osaka Univ., ³Integ. Sci. Life, Hiroshima Univ., ⁴Drug Discov. Med. Info. Sci., Gifu Univ.)

P2-007/DP1-01-15**Genetic diversity and binding ability of *Streptococcus mutans* collagen binding adhesin Cnm**

○Hideo Yonezawa, Yuichiro Kikuchi, Eitoyo Kokubu, Kazuyuki Ishihara (Dept. Microbiol., Tokyo Dent. Col.)

P2-008/DP1-01-16**Development of multiplex PCR for virulence-associated genes in *Bacillus cereus sensu lato***

○Akira Okamoto (Sch. Health Sciences, Aichi Univ. Edu.)

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

P2-009/DP1-07-06**Comparative genomics of whole genome and Shiga toxin phage of EHEC from bovine and human**

○Ken-ichi Lee¹, Sunao Iyoda¹, Hidemasa Izumiya¹, Takehiro Nazuka², Masahiro Kusumoto³, Masato Akiba⁴, Yo Sugawara⁵, Motoyuki Sugai⁵, Yukihiko Akeda¹ (¹Dept. Bacteriol. 1, Natl. Inst. Infect. Dis., ²Meat Hygiene Inspect., Saitama City, ³Natl. Inst. Animal Health, NARO, ⁴Vet. Bacteriol., Rakuno Univ., ⁵AMR Center, Natl. Inst. Infect. Dis.)

P2-010/DP1-07-07**Epidemiological shifts in and impact of COVID-19 on streptococcal toxic shock syndrome**

○Tadayoshi Ikebe¹, Takahiro Yamaguchi², Rumi Okuno³, Hitoshi Otsuka⁴, Akito Mizokoshi⁵, Kaho Ikeda⁵, Nanako Watanabe⁵, Yoshimi Date⁵, Yukihiko Akeda¹ (¹Dept. Bacterol. I, NIID, ²Div. Microbiol., Osaka Inst. Public Health, ³Dept. Microbiol., Tokyo Metr. Inst. Pub. Health, ⁴Dept. Pub. Health Sci., Yamaguchi Pref. Inst. Pub. Health & Env., ⁵The Working Group for Beta-Hemolytic Streptococci in Japan)

P2-011/DP1-07-08**Characterization of *Clostridium tetani* detected from the soil in Kagoshima prefecture**

○Tadasuke Ooka¹, Chie Shitada², Takatoshi Yamamoto², Chiyomi Sakamoto², Chihiro Horiba³, Makoto Kuroda³, Junichiro Nishi¹, Motohide Takahashi² (¹Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ., ²Tox. Biol. Res. Lab., Kumamoto Heal. Sci. Univ., ³Pathogen Genomics Center, NIID)

P2-012/DP1-07-09**Genetic analysis of coagulase-negative staphylococci colonizing healthy adults**

○Mina Hirose¹, Meiji Soe Aung², Nobumichi Kobayashi² (¹Dept. Ped. Dent., Div. Oral Growth and Development, Sch. Dent., Health Sciences Univ. Hokkaido, ²Dept. Hygiene. Sch. Med. Sapporo Med. Univ.)

P2-013/DP1-07-02**Genomic characteristics and drug susceptibility of *Helicobacter suis* from humans, monkeys, and pigs**

○Emiko Rimbara¹, Masato Suzuki², Sae Aoki¹, Hidenori Matsui¹, Keigo Shibayama³, Tsuyoshi Kenri¹ (¹Dept. Bacteriol. II, Nat. Inst. Infect. Dis., ²Antimicrob. Resist. Res. Cent., Nat. Inst. Infect. Dis., ³Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

P2-014/DP1-07-10**Characteristics of Staphylococcaceae in Retail Meat Products in Hokkaido: A One Health Perspective**

○Noriko Urushibara¹, Meiji Soe Aung¹, Mitsuyo Kawaguchiya¹, Nobuhide Ohashi^{1,2}, Nobumichi Kobayashi¹ (¹Dept. Hygiene, Sch. Med., Sapporo Med. Univ., ²Dept. Oral Surgery, Sch. Med., Sapporo Med. Univ.)

P2-015/DP1-07-11**Survey of ESBL-producing *Escherichia coli* and MRSA from wastewater in Saitama, Japan**

○Miyo Murai¹, Hiroki Murayama¹, Hikari Takino¹, Yo Sugawara², Liansheng Yu², Shizuo Kayama², Junzo Hisatsune², Koze Kishii¹ (¹Dept. Health Soci. Serv., Grad. Sch. Saitama Pref. Univ., ²AMR-RC, NIID)

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

P2-016/DP1-07-16**Prevalence and characteristics of *Escherichia fergusonii* isolated from farm animals in Japan**

○Anna Momoki¹, Yukino Tamamura-Andoh¹, Nobuo Arai¹, Taketoshi Iwata¹, Ayako Watanabe-Yanai¹, Masahiro Kusumoto^{1,2} (¹Natl. Inst. Anim. Health, NARO., ²Grad. Sch. Vet. Sci., Osaka Metro. Univ.)

P2-017/DP1-07-12**Comparison of human- and bird-derived strains of *Escherichia albertii* in Hokkaido**

○Rin Satoh¹, Masahiko Ito², Takahiro Kinebuchi³, Yosie Sakurai⁴, Tetsuya Ikeda¹ (¹Div. Bacterial., Hokkaido Inst. Public Health, ²Sapporo Clinical Laboratory Inc., ³Furano Hosp., Hokkaido Institutional Society, ⁴Natl. Inst. of Animal Industry., Hokkaido Research Organization)

P2-018/DP1-07-17**Genetic Characteristics of ESBL-producing *Escherichia coli* isolated from bloodstream infections**

○Mayuko Tanaka¹, Tomoya Suda¹, Kohei Kondo², Aa Haeruman Azam³, Minh Le Nhat², Ryu Yashiro⁴, Yasunori Tanji⁵, Kotaro Kiga³, Takeaki Matsuda^{1,5}, Tomoko Hanawa¹ (¹Dept. Gen. Med., Kyorin Univ. Sch. Med., ²AMR Res. Cent., Natl. Inst. Infect. Dis., ³Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ⁴Leprosy Res. Cent., Natl. Inst. Infect. Dis., ⁵Dept. Traum. Crit. Care Med., Kyorin Univ. Sch. Med.)

P2-019/DP1-07-18**Pathogenicity of the novel *Helicobacter* spp. infecting the stomach of dogs and cats in Japan**

○Sae Aoki¹, Masato Suzuki², Hidenori Matsui¹, Shigetaro Mori¹, Keigo Shibayama³, Tsuyoshi Kenri¹, Emiko Rimbara¹ (¹Dept. Bacteriol. II, NIID, ²Antimicrobial. Resist. Res. Cent., NIID, ³Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

P2-020/DP1-07-19**Detection of M1UK from *emm1* type group A *Streptococcus pyogenes* isolated in Osaka**

○Takahiro Yamaguchi^{1,2}, Masaki Anraku¹, Kaori Yamamoto¹, Takeshi Doi¹, Tetsuya Harada¹, Ryuji Kawahara¹, Tadayoshi Ikebe², Takao Kawai¹ (¹Div. Microbiol., Osaka Inst. Public Health, ²Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

1. Taxonomy / Epidemiology / Infectious diseases**-d. Methods for detection, identification, and diagnosis****P2-021/DP2-13-07****Analysis of the foodborne outbreak of *Clostridium perfringens* in Toyama prefecture, 2023**

○Kazuki Saito¹, Keiko Kimata¹, Junko Isobe¹, Jun-ichi Kanatani¹, Kaho Ikeda¹, Emi Maenishi¹, Takashi Takeuchi², Chiharu Matsuzaki³, Kazunori Oishi¹ (¹Dept. Bacteriol., Toyama Inst. Health, ²Environmental Health Division in Toyama Prefecture, ³Public Health Center of Imizu, Toyama Prefecture)

P2-022/DP2-13-08**Breath omics analysis for infectious diseases**

○Seiryō Ogata¹, Tetsuro Matsunaga¹, Minkyung Jung¹, Masanobu Morita¹, Fan-Yan Wei², Hozumi Motohashi³, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Dept. Modomics Biol. Med., IDAC, Tohoku Univ., ³Dept. Gene Exp. Regul., IDAC, Tohoku Univ.)

P2-023/DP2-13-09**Mechanisms of excretion of bacterial-specific modified nucleosides in urine**

○Ryosuke Yamamura¹, Yu Nagayoshi^{1,2}, Kayo Nishiguchi^{1,2}, Kazuhito Tomizawa¹ (¹Dept. Mol. Physiol., Fac. Lif. Sci., Kumamoto Univ., ²Dept. Nephrol., Fac. Lif. Sci., Kumamoto Univ.)

P2-024/DP2-13-10**Improvement of culture method for *Clostridioides difficile***

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

P2-025/DP2-13-11**Development of a novel *in vitro* detection method for botulinum neurotoxin**

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

P2-026/DP2-13-12**Evaluation of VBNC-*Helicobacter pylori* by PMA-PCR**

○Fuhito Hojo¹, Jiro Mitobe², Shigeru Kamiya³, Takako Osaki² (¹Inst. Lab. Animals, Grad. Sch. Med, Kyorin Univ., ²Dept. Infect. Dis., Kyorin Univ. Sch. Med., ³Miyarisan Pharmaceutical Co., Ltd.)

**1. Taxonomy / Epidemiology / Infectious diseases
-e. Others****P2-027/DP2-13-16****Comparative analysis of *Leptotrichia* sp. isolated from human oral cavity**

○Noriko Shinozaki-Kuwahara¹, Masanori Saito², Tomomi Hashizume-Takizawa², Hidenobu Senpuku², Koichi Hiratsuka¹ (¹Dept. Biochem. Mol. Biol., Nihon Univ. Sch. Dent. at Matsudo., ²Dept. Microbiol. Immunol., Nihon Univ. Sch. Dent. at Matsudo)

P2-028/DP2-13-17**Inhibition effect of oral moisturizing gel ingredients on the biofilm formation**

○Setsuhi Sei¹, Takafumi Miyazaki², Yoshiaki Kamikawa³, Hidenobu Senpuku¹ (¹Dept. Microbiol. Immunol., Dent., Sch. at Matsudo, Nihon Univ., ²Pikasshu, ³Sch. Dent., Kagoshima Univ.)

P2-029/DP2-13-18**Prevalence of intestinal carriage of hemolytic streptococci in the nursing home residents**

○Kaho Ikeda¹, Junko Isobe¹, Emi Maenishi¹, Keiko Kimata¹, Jun-ichi Kanatani¹, Kazuki Saito¹, Tadayoshi Ikebe², Yukihiko Akeda², Kazunori Oishi¹ (¹Dept. Bacteriol., Toyama Inst. Health, ²Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

P2-030/DP2-13-19***Bacillus cereus* foodborne outbreaks in Tokyo, 1977-2023**

○Chie Monma, Wakaba Okada, Natsumi Furuta, Chikako Asayama, Satomi Uehara, Hiroshi Koike, Maki Kanda, Hiromi Obata, Keiko Yokoyama, Kenji Sadamasu (Dept. Microbial., Tokyo Metropolitan Inst.)

2. Ecology

-a. Ecology, symbiosis and environmental microbes

P2-031/DP1-03-03

The inhibition of *Staphylococcus aureus* by commensal bacterium via its metabolites

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

P2-032/DP1-03-04

Indoor Microbiome: Interactions with Occupants and Environmental Factors in Residential Settings

○Jianjian Hou¹, Makiko Nakajima^{2,3}, So Fujiyoshi^{1,2}, Yukiko Nishiuchi¹, Daisuke Ogura^{2,4}, Fumito Maruyama^{1,2} (¹IDEC Inst., Hiroshima Univ., ²CHOBE, Hiroshima Univ., ³Fac. Engineer., Hiroshima Inst. Tech., ⁴Grad. Sch. Engineer., Kyoto Univ.)

P2-033/DP1-03-05

Ingestion of *Campylobacter jejuni* by *Acanthamoeba polyphaga*

Mako Kitade¹, ○Takaaki Shimohata^{1,2} (¹Marine-Bio, Fukui Prefectural Univ., ²Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch.)

P2-034/DP1-03-06

Symbiotic bacteria break through narrow passage by flagellar wrapping

Aoba Yoshioka¹, Tetsuo Kan², Kazutaka Takeshita³, Hirofumi Wada⁴, Yoshitomo Kikuchi⁵, ○Daisuke Nakane¹ (¹Dept. Eng. Sci., UEC, ²Dept. Mech. Int. Sys. Eng., UEC, ³Fac. Bioresour. Sci., Akita Pref. Univ., ⁴Dept. Phys., Ritsumeikan Univ., ⁵Biopro. Res. Inst, AIST)

P2-035/DP1-03-07

Induction of antibiotic tolerance of *Escherichia coli* by microbial volatile organic compounds

○Takehiko Kenzaka^{1,2}, Kaho Nishizawa², Natsumi Doi² (¹Fac. Sci. Eng., Setsunan Univ., ²Fac. Pharm., Osaka Ohtani Univ.)

P2-036/DP1-03-08

A challenge toward discover of symbiotic mechanism over Insects-Plants

○Hiroyuki Morimura¹, Kazutaka Takeshita², Kota Ishigami^{1,3}, Yu Matsuura⁴, Peter Mergaert⁵, Yoshitomo Kikuchi^{1,3} (¹Bioprod. Res. Inst., AIST, ²Dept. Biotech., Appl. Biol. Sci., Akita Pref. Univ., ³Grad. Sch. Ag., Hokkaido Univ., ⁴TBRC, Univ. Ryukyus, ⁵I2BC, CNRS, Paris-Saclay Univ.)

2. Ecology -b. Microbiota

P2-037/DP1-09-02

Lactobacillus play an important role in maintaining a healthy vaginal environment

○Shihoko Aizawa¹, Kazuhide Takada¹, Shingo Hayashida², Satoshi Hayakawa¹ (¹Div. Microbiol., Dept. Pathol. and Midrobiol., Nihon Univ. Sch. Med., ²Div. Pediatrics, Nihon Univ. Sch. Med.)

P2-038/DP1-09-03

Identification of symbiote candidates for ileoanal pouch in ulcerative colitis in Japan

○Aoi Son¹, Tamotsu Kato², Yoshiyuki Matsuo³, Soutaro Hanawa⁴, Yumiko Nakanishi², Hiroshi Ohno², Hideki Ogura¹, Satoshi Ishido¹, Hiroki Ikeuchi⁵, Motoi Uchino⁵ (¹Dept. Microbiol., Sch. Med., Hyogo Med. Univ., ²IMS, Riken, ³Dept. Human Stress Response Science, Inst. Bionical Science, Kansai Med. Univ., ⁴Dept. Oral and Maxillofacial Surgery, Hyogo Med. Univ., ⁵Dept. IBD Surgery, Hyogo Med. Univ.)

P2-039/DP1-09-04

Biofilm formation by membrane vesicles released from *Streptococcus sobrinus*

○Hiroko Yoshida¹, Morito Hakamada², Shinichi Negishi¹, Hidenobu Senpuku² (¹Dept. Orthodontics., Sch. Dent., Nihon Univ., ²Dept. Microbiol. Immunol., Sch. Dent., Nihon Univ.)

P2-040/DP1-09-05

Isolation of colitis-suppressing bacteria from gut microbiota of rice bran-fed mice

○Risako Oki¹, Kazuki Tanaka², Nobuhiko Nomura³, Nozomu Obana⁴, Shinji Fukuda^{2,4,5} (¹Biol. Resource Sci., Univ. Tsukuba, ²Inst. Adv. Biosci., Keio Univ., ³Fac. Life Environ. Sci., Univ. Tsukuba, ⁴TMRC, Fac. Medicine, Univ. Tsukuba, ⁵Metabologenomics, Inc.)

P2-041/DP1-09-06

Gene expression of gut bacterial polyamine metabolism based on salt excretion and blood pressure

○Yasuo Ikagawa¹, Shigehiro Karashima², Ren Mizoguchi³, Aoi Koshida¹, Hiromasa Tsujiguchi⁴, Akinori Hara⁴, Hiroyuki Nakamura⁴, Shigefumi Okamoto⁵ (¹ILAS, Kanazawa Univ., ²IFSI, Kanazawa Univ., ³Dept. Health Prom. & Med. Fut., Kanazawa Univ., ⁴Dept. Hygiene & Pub. Health, Grad. Sch. Adv. Prev. Med. Sci., Kanazawa Univ., ⁵Div. Health Sci., Sch. Med., Osaka Univ.)

P2-042/DP1-09-07

Effect of ampicillin exposure in weaning period in diet-induced NASH model mice

Ryuji Ishikawa¹, Hikari Ohnishi¹, Mayuko Shimizu², Akiko Sakurai¹, ○Keiko Kataoka¹ (¹Dept. Microbiol. Gen. Anal., Sch. Med., Tokushima Univ., ²Dept. Pathol. Lab. Med., Sch. Med., Tokushima Univ.)

P2-043/DP1-09-08**Identification of membrane vesicle-producing gut bacteria correlated with host aging**

○Miku Matsushita¹, Kaoru Kikuchi¹, Masakatsu Nohara², Nozomu Obana^{3,4}, Nobuhiko Nomura^{4,5} (¹Sch. Sci. Tech., Life Ear. Sci, Univ. Tsukuba, ²Fac. Vet., Okayama Univ. Science, ³TMRC, Inst. Med., Univ. Tsukuba, ⁴MiCS, Univ. Tsukuba, ⁵Inst. Life Environ., Sci. Univ. Tsukuba)

2. Ecology -c. Growth and culture conditions**P2-044/DP1-09-11****Adaptive Laboratory Evolution of Minimal Genome Bacterium to Low Temperature**

○Masaki Mizutani¹, Minoru Moriyama¹, Ryuichi Koga¹, Takema Fukatsu^{1,2,3}, Shigeyuki Kakizawa¹ (¹Bioprodu. Res. Inst., AIST, ²Dept. Bio. Sci., Univ. Tokyo, ³Grad. Sch. Life Environ. Sci., Univ. Tsukuba)

P2-045/DP1-09-12**Controlling the viability of bacteria on dry surfaces: the effectiveness of warmed toilet seats**

○Kotoka Kuriki^{1,2}, Torahiko Okubo¹, Hiroyuki Yamaguchi¹ (¹Fac. Health. Sci., Hokkaido Univ., ²Fac. Med., Hokkaido Univ.)

P2-046/DP1-09-13**Changes of Sensitivity to antibiotics against *Streptococcus mutans* under simulated microgravity**

○Chika Tokairin, Michiyo Honda (Dept. Appl. Chem., Grad. Sch. Sci. Tech., Meiji Univ.)

P2-047/DP1-09-14**Effects of *Campylobacter jejuni* infection in the VBNC state on the mouse intestinal tract**

Mizuki Tsuchida¹, Akihiro Hirata¹, Yasuo Inoshima^{1,2}, ○Ayaka Okada^{1,2} (¹Dept. Vet. Med., Gifu Univ., ²GeFAH., Gifu Univ.)

3. Physiology / Structural biology**-a. Metabolism, biosynthesis and metabolome****P2-048/DP1-02-04****Exploring novel metabolism of modified nucleosides in bacteria**

○Kayo Nishiguchi^{1,2}, Yu Nagayoshi^{1,2}, Ryosuke Yamamura^{1,2}, Kazuhito Tomizawa¹ (¹Dept. Mol. Physiol., Fac. Life. Sci., Kumamoto Univ., ²Dept. Nephrol., Fac. Life. Sci., Kumamoto Univ.)

P2-049/DP1-02-05**Generation and physiological functions of cyclo-octasulfur conserved from bacteria to mammals**

○Tetsuro Matsunaga¹, Uladzimir Barayeu¹, Takayuki Shimizu², Masanobu Morita¹, Seiryu Ogata¹, Minkyung Jung¹, Shinji Masuda³, Michito Yoshizawa⁴, Hozumi Motohashi⁵, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Fac. Div. Nat. Sci., Biol. Sci. Res. Group, Nara Women's Univ., ³Sch. Life Sci. & Tech., Tokyo Tech, ⁴Lab. Chem. Life Sci., Inst. Innov. Res., Tokyo Inst. Tech., ⁵Dept. Med. Biochem., Tohoku Univ. Grad. Sch. Med.)

P2-050/DP1-02-06**Supersulfide activation and host defense through NADPH oxidase and NO synthase**

○Masanobu Morita¹, Tsuyoshi Takata¹, Tetsuro Matsunaga¹, Tomoaki Ida¹, Minkyung Jung¹, Yukihiko Tsuchiya², Yasuo Watanabe², Hozumi Motohashi³, Hideki Sumimoto⁴, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Dept. Pharm., Showa Pharm. Univ., ³Dept. Gene Exp. Reg., IDAC, Tohoku Univ., ⁴Dept. Biochem., Kyushu Univ., Grad. Sch. Med. Sci.)

3. Physiology / Structural biology -b. Motility**P2-051/DP1-02-12****Investigation of cell motility mechanism of *Spiroplasma* using a minimal synthetic bacterium**

○Hana Kiyama¹, Shigeyuki Kakizawa², Daichi Takahashi^{1,3}, Makoto Miyata^{1,4} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²Bioproduction Res. Inst., AIST, ³Res. Inst. Interdisciplinary Sci., Okayama Univ., ⁴OCARINA, Osaka Metropolitan Univ.)

P2-052/DP1-02-13**Sheet-like structure of bacterial actin MreBs driving helicity switching by cryo electron tomography**

○Haruka Yuasa¹, Yuya Sasajima¹, Hana Kiyama¹, Daichi Takahashi^{1,2}, Takuma Toyonaga^{1,3}, Tomoko Miyata^{4,5}, Fumiaki Makino^{4,5,6}, Keiichi Namba^{4,5}, Makoto Miyata^{1,3} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²RIIS, Okayama Univ., ³OCARINA, Osaka Metropolitan Univ., ⁴Grad. Sch. Frontier Biosci., Osaka Univ., ⁵JEOL YOKOGUSHI Res. Alliance Lab., Osaka Univ., ⁶JEOL Ltd.)

P2-053/DP1-02-14***Haloplasma* motility reconstituted in minimal synthetic bacterium, JCVI-syn3B**

○Mone Mimura¹, Hana Kiyama¹, Shingo Kato², Yuya Sasajima¹, Atsuko Uenoyama¹, Shigeyuki Kakizawa³, Tomoko Miyata⁴, Fumiaki Makino⁴, Keiichi Namba⁴, Makoto Miyata^{1,5} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²RIKEN BRC., JCM, ³Bioproduction Res. Inst., AIST, ⁴Grad. Sch. Frontier Biosci., Osaka Univ., ⁵OCARINA, Osaka Metropolitan Univ.)

P2-054/DP1-02-15**Stator dynamics of hybrid-fuel *E. coli* flagellar motor observed by fluorescence microscopy**

○Tomoya Shoji¹, Naoki Hidaka², Yong-Suk Che³, Yoshiyuki Sowa^{1,2} (¹Dep. Front. Biosci., Hosei Univ., ²Micro-Nano Tech., Hosei Univ., ³Grad. Sch. Front. Biosci., Osaka Univ.)

P2-055/DP1-02-16**Inner cellular structure of *Mycoplasma mobile* gliding machinery observed by electron cryotomography**

○Minoru Fukushima¹, Tomoko Miyata^{2,3}, Keiichi Namba^{2,3}, Takuma Toyonaga¹, Makoto Miyata^{1,4} (¹Grad. Sch. Sci., Osaka Metropolitan Univ., ²Grad. Sch. Frontier Biosci., Osaka Univ., ³JEOL YOKOGUSHI Res. Alliance Lab., Osaka Univ., ⁴OCARINA, Osaka Metropolitan Univ.)

P2-056/DP1-02-17**Visualization and analysis of MreBs driving *Spiroplasma* motility in minimal synthetic bacterium**

○Yoshiki Tanaka¹, Hana Kiyama¹, Takuma Toyonaga^{1,2}, Makoto Miyata^{1,2} (¹Grad. Sch. Sci., Osaka Metro Univ., ²OCARINA, Osaka Metro Univ.)

3. Physiology / Structural biology**-c. Signal transduction (intracellular and intercellular)****P2-057/DP1-08-05****Induction of the *Vibrio cholerae* taurine chemoreceptor gene in higher temperature**

○Sachika Sato¹, Natsu Yamauchi¹, Shiori Onogi¹, Hirotaka Tajima^{2,3}, Ikuro Kawagishi^{1,2,3} (¹Grad. Sch. Sci. Eng., Hosei Univ., ²Dept. Frontier Biosci., Hosei Univ., ³Res. Cen. Micro-Nano Tech., Hosei Univ.)

P2-058/DP1-08-06**Quorum sensing-independent virulence regulation pathway in *Ralstonia pseudosolanacearum* strain OE1-1**

○Tatsuya Ueyama¹, Sora Tateda¹, Akinori Kiba¹, Kouhei Ohnishi¹, Kanako Inoue², Yasufumi Hikichi¹, Masayuki Tsuzuki¹ (¹Fac. Agric. Marine Sci., Kochi Univ., ²Div. Bio. Sci., NAIST)

P2-059/DP1-08-07**The histidine kinase BaeS senses indole in its cytoplasmic domain**

○Hirotaka Tajima^{1,2}, Kentaro Yamamoto³, Tomoka Iseri¹, Riku Takei⁴, Ikuro Kawagishi^{1,2,4} (¹Dept. Frontier Biosci., Hosei Univ., ²Res. Cen. Micro-Nano Tech., Hosei Univ., ³Dept. Mycobacteriol., Lepr. Res. Ctr., NIID, ⁴Grad. Sch. Sci. Eng., Hosei Univ.)

P2-060/DP1-08-08**Screening for biofilm inhibitors from microorganisms isolated in Antarctica**

○Hiroyuki Azakami^{1,2}, Hayato Kinoshita², Ayesha Siddiq², Shohei Hayashi³ (¹Res. Cent. Thermotolerant Microb. Resources, Yamaguchi Univ., ²Dept. Biol. Chem., Fac. Agr., Yamaguchi Univ., ³Dept. Env. Sustain. Sci., Fac. Life Env. Sci., Shimane Univ.)

P2-061/DP1-08-09**RcsG, conserved connector transmitting a novel sugar stimulus from PTS to TCS**

○Kazunobu Yamaguchi, Naoko Hozan, Kei Hagihara, Tomoka Fukami, Kaito Kawabata, Akinori Kato (Dept. Adv. Biosci., Grad. Sch. Agr., Kindai Univ.)

3. Physiology / Structural biology**-d. Cell surface structure, membrane structures and cytoskeleton****P2-062/DP1-08-15****MamJ regulates MamK polymerization to form a dynamic cytoskeleton for magnetosome positioning**

○Yuanyuan Pan¹, Yoshihiro Okuda², Takumi Saito¹, Azuma Taoka^{3,4} (¹Grad. Sch., Nat. Sci. Tech., Kanazawa Univ., ²Fac. Biol. Sci. Tech., Inst. Sci. Eng., Kanazawa Univ., ³Bioinf. DDBJ Ctr. Natl. Inst. Genet., ⁴NanoLSI, Kanazawa Univ.)

P2-063/DP1-08-16**Biochemical Analysis of Cell Division Protein FtsZ of *Haloplasma contractile***

○Hirooki Fujita, Taishi Kasai, Daisuke Shiomi (Dept. Life Sci., Col. Sci., Rikkyo Univ.)

P2-064/DP1-08-17**Visualization of periodontopathic bacteria and the outer membrane vesicles by freeze fracture/SEM**

○Aoi Takahashi^{1,2}, Hirotaka Kobayashi³, Katsutoshi Osada^{1,4}, Kimihiro Abe¹, Takehiro Yamaguchi¹, Yukihiro Akeda¹, Tomoyo Nakamura^{1,2,4}, Tomohiko Nishino^{2,4}, Ryoma Nakao¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Grad. Sch. Bionics, Tokyo Univ. Technol., ³Dept. Pathology. I, Natl. Inst. Infect. Dis., ⁴Sch. Biosci. Biotechnol, Tokyo Univ. Technol.)

P2-065/DP2-20-01**The type VII secretion system's EsxA reveals a novel function in the sporulation of *Bacillus cereus***

○Harvey Kamboyi¹, Hideaki Higashi¹, Atmika Paudel¹, Misheck Shawa¹, Misa Sugawara¹, Tuvshinzaya Zorig¹, Joseph Chizimu¹, Yoshikazu Furuta¹, Bernard Hang'ombe², Musso Munyeme³ (¹Div. Infection and Immunity, International Inst. for Zoonosis Control, Hokkaido Univ., ²Microbiology Unit, Paraclinical Studies, Sch. Veterinary Medicine, Univ. Zambia, ³Public Health Unit, Disease Control Studies, Sch. Veterinary Medicine, Univ. Zambia)

P2-066/DP2-20-02

Novel structure of lipoteichoic acid in *Apilactobacillus kosoii* and its IgA-inducing activity

○Tsukasa Shiraishi¹, Chiaki Matsuzaki², Tai-Ying Chiou³, Hiroyuki Kumeta⁴, Manami Kawada², Kenji Yamamoto⁵, Tomoya Takahashi⁶, Shin-ichi Yokota¹ (¹Dept. Microbiol., Sch. Med., Sapporo Medical Univ., ²Research Inst. Bioresources and Biotechnology, Ishikawa Prefectural Univ., ³Dept. Biotechnol. Environ. Chem., Kitami Inst. Technology, ⁴Fac. Adv. Life Sci., Hokkaido Univ., ⁵Wakayama Univ., ⁶ARSOA Research & Development Center, Arsoa Keioh Group Corp.)

P2-067/DP2-20-03

The biosynthesis of glycopeptidolipid in nontuberculous bacteria

○Nagatoshi Fujiwara¹, Yuji Miyamoto², Yoshihiko Hoshino², Naoto Keicho³, Makoto Nakaya⁴, Shinji Maeda⁵ (¹Dept. Food Nutrition, Facult. Contemp. Human Life Scie., Tezukayama Univ., ²Nat. Inst. Infect. Dis.: Lep. Res. Cent., ³The Res. Inst. TB, Jap. Anti-TB Assoc., ⁴Org. Res. Prom., Osaka Metropol. Univ., ⁵Fac. Pharm., Hokkaido Univ. Scie.)

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

P2-068/DP2-20-04

Vibrio FliK and FlhB catalyze export switching of the *Salmonella* flagellar type III secretion system

○Tohru Minamino¹, Miki Kinoshita¹, Keiichi Namba^{1,2} (¹Grad. Sch. Frontier Biosci., Osaka Univ., ²JEOL YOKOGUSHI, Osaka Univ.)

P2-069/DP2-20-05

Functional analyses of a T9SS PorE protein

Takashi Tominaga, ○Mikio Shoji, Hideharu Yukitake, Mariko Naito (Dept. Microbiol. Oral Infect. Sch. Biomed. Sci., Nagasaki Univ.)

P2-070/DP2-20-06

Genetic screening of genes involved in membrane vesicles delivery

○Shion Komatsu¹, Yuki Usukura¹, Nobuhiko Nomura², Masanori Toyofuku² (¹Sch. Sci. Tech., Life Ear. Sci, Univ. Tsukuba, ²MiCS, Fac. Life and Environ. Sci., Univ. Tsukuba)

P2-071/DP2-20-07

Characterization of SusD regarding xylan uptake from the human gut bacterium *Phocaeicola plebeius*

○Yuki Chikaraishi¹, Hidenori Hayashi^{1,2}, Shogo Tsuji¹ (¹Dept. Biotech., Grad. Sch. Eng., Maebashi Inst. Technol., ²Dept. Biotech., Fac. Eng., Maebashi Inst. Technol.)

3. Physiology / Structural biology -f. Others

P2-072/DP2-20-13

Effect of coexistence on biofilm-forming potency of bacteria from used orthokeratology lens cases

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

P2-073/DP2-20-14

Group B Streptococcus of Stress-responsive ribonuclease MazF

○Takuma Okabe^{1,2}, Rie Aoi^{1,2}, Akiko Yokota², Hiroko Tamiya-Ishitsuka², Jiang Yunong^{2,3}, Satoshi Tsuneda¹, Naohiro Noda^{1,2,4} (¹Dept. Life Sci. & Med. Biosci., Waseda Univ., ²Biomed. Res. Inst., Natl. Inst. of Adv. Ind. Sci. & Tech. (AIST), ³Grad. Sch. of Compr. Hum. Sci., Univ. of Tsukuba, ⁴SIGMA, Univ. of Tsukuba)

P2-074/DP2-20-15

Overexpression of ribosomal proteins leads to zinc resistance in *Escherichia coli*

○Tomoki Kosaki, Riko Shirakawa, Kazuya Ishikawa, Kazuyuki Furuta, Chikara Kaito (Lab. Mol. Biol., Fac. Pharm., Okayama Univ.)

P2-075/DP2-20-16

Limited proteolysis of mycobacterial DNA-binding protein 1 to unveil posttranslational modifications

○Akihito Nishiyama¹, Yutaka Yoshida¹, Desak NSS Dewi¹, Tomoya Yamazaki¹, Akira Yokoyama¹, Daiki Kobayashi², Hitoshi Kondo¹, Yuriko Ozeki¹, Yoshitaka Tateishi¹, Sohkichi Matsumoto¹ (¹Dept. Bacteriol., Niigata Univ. Sch. Med., ²Omics Unit, Niigata Univ. Sch. Med.)

P2-076/DP2-20-17

Characterization of *Staphylococcus aureus* toxin-antitoxin system composed of membrane proteins

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

4. Genetics / Genomics / Biotechnology

-a. Genomics, bioinformatics and systems biology

P2-077/W6-2

Population genomics of the pathogenic fungus *Aspergillus fumigatus*

○Hiroki Takahashi¹, Xiaohui He¹, Yoko Kusuya², Daisuke Hagiwara^{1,3}, Takahito Toyotome^{1,4}, Teppei Arai¹, Cai Bian⁵, Masaki Nagayama¹, Saho Shibata¹, Akira Watanabe¹ (¹Med. Mycol. Res. Cent., Chiba Univ., ²NBRC, NITE, ³Life Env. Sci., Univ. of Tsukuba, ⁴Dept. Vet. Med., Obihiro Univ. A.V.M., ⁵BGI)

P2-078/DP2-14-01**Diversity of the Japanese Gut Microbiome Analysis: Relative Approach Using Compositional Analysis**

○Tatsuki Itagaki, Keisuke Nakamura, Shintaro Nakano, Machiko Kasai, Ji-Won Lee, Akira Hasebe (Oral Molecular Microbiology, Fac. Dental Medicine, Grad. Sch. Dental Medicine, Hokkaido Univ.)

P2-079/DP2-14-02**Genomic Analysis of *Salmonella* Isolated from Canal Water in Bangkok, Thailand**

○Jirachaya Toyting¹, Narong Nuanmuang², Fuangfa Utrarachki³, Pimlapas Leekitcharoenphon², Frank Aarestrup², Toyotaka Sato⁴, Jeewan Thapa¹, Chie Nakajima¹, Yasuhiko Suzuki¹ (¹Div. Biores., Hokkaido Univ. Int. Inst. Zoonosi. Contr., ²Res. Gr. for Genom. Epi., Nat. Food Int., Tech. Univ. of Denmark, ³Dept. Microbiol., Fac. Publ. Healt. Mahidol Univ., ⁴Lab. Vet. Hyg., Fac. Vet. Med., Hokkaido Univ.)

P2-080/DP2-14-03**Quantification and visualization of the *Escherichia coli* genome based on phylogenetic trees**

○Masahiro Suzuki (Dept. Microbiology, Sch. Med., Fujita Health Univ.)

P2-081/DP2-14-04**Statistical-genetic investigation of the pathogenic factors in invasive pneumococcal diseases**

○Masayuki Ono^{1,2}, Masaya Yamaguchi^{1,2,3,4}, Shigetada Kawabata^{1,4} (¹Dept. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Bioinfor. Res. Unit, Osaka Univ. Grad. Sch. Dent., ³Bioinfor. Center, Res. Inst. Microbial Dis., Osaka Univ., ⁴CiDER, Osaka Univ.)

P2-082/DP2-14-05**Phylogenetic analysis and cell adhesion of *astA*-positive *Escherichia coli* O166:H15**

Akiko Kubomura¹, Ken-ichi Lee¹, Kaori Shimmen², Kaori Kashima³, Nozomi Sakakida³, Mayumi Kadoguchi⁴, Yukiko Kudo⁵, Yukihiko Akeda¹, ○Sunao Iyoda¹ (¹National Inst. Infectious Diseases, ²Himeji Inst. Env. Health, ³Saitama Pref., ⁴Kumamoto City, ⁵National Inst. Health Sciences)

P2-083/DP2-14-06**Genomic characterization of STEC strains isolated from asymptomatic carriers**

○Yumi Imai¹, Hiroshi Kaneko², Miki Okuno¹, Yuki Hoshiko¹, Takeshi Yamamoto¹, Ken-ichi Lee³, Akio Noguchi², Sunao Iyoda³, Toshio Sato², Yoshitoshi Ogura¹ (¹Div. Microbiol. Dept. Infect. Med. Kurume Univ. Sch. Med., ²Japan Microbiological Laboratory Co., Ltd., ³Dept. Bacteriology I, National Inst. Infectious Diseases)

P2-084/DP2-14-07**Functional Genomic Characterization of Nontuberculous Mycobacteria from Bathroom Environments**

○Marie Ikai¹, Yukiko Nishiuchi², So Fujiyoshi², Fumito Maruyama², Yusuke Minato¹ (¹Dept. Microbiol., Sch. Med., Fujita Health Univ., ²Dept. Microbial Genomics and Ecology, Hiroshima Univ.)

4. Genetics / Genomics / Biotechnology**-b. Horizontal gene transfer, mobile genetic element and evolution****P2-085/DP2-14-08****Genome analysis reveals mechanisms of resistance gene transfer in ESBL-producing *Aeromonas***

○Miki Okuno¹, Michiyo Sugiyama², Yuki Hoshiko¹, Takeshi Yamamoto¹, Tetsuo Asai², Yoshitoshi Ogura¹ (¹Dept. Infectious Med., Kurume Univ. Sch. Med., ²United Grad. Sch. Vet. Sci., Gifu Univ.)

4. Genetics / Genomics / Biotechnology**-c. Gene regulation and transcriptome analysis****P2-086/DP2-17-03****The role of responses against environmental stress on the pathogenicity of *Treponema denticola***

○Kazuyuki Ishihara¹, Yurie Kitamura², Yuichiro Kikuchi¹, Eitoyo Kokubu¹, Keiko Yamashita², Atsushi Saito² (¹Dept. Microbiol., Tokyo Dent. Coll., ²Dept. Periodontol., Tokyo Dent. Coll.)

P2-087/W6-4**The ABCF proteins in *Escherichia coli* alleviate "hard-to-translate" amino acid sequences**

○Yuhei Chadani¹, Eri Uemura², Hideki Taguchi² (¹Fac. Env., Life., Nat. Sci., and Tech., Okayama Univ., ²IIR, Tokyo Inst. of Tech.)

P2-088/W6-1**The regulatory circuit for pathogenicity by read-through transcription in *Vibrio parahaemolyticus***

○Eiji Ishii^{1,2}, Dhira Saraswati Anggramukti¹, Andre Pratama¹, Mohamad Al Kadi³, Tetsuya Iida^{1,2}, Toshio Kodama⁴, Shigeaki Matsuda^{1,2} (¹Dept. Bac. Infect., RIMD, Osaka Univ., ²Cent. for Infect. Dis. Edu. Res., Osaka Univ., ³Hum. Immunol., IFREC, Osaka Univ., ⁴Dept. Bac., Inst. Trop. Med., Nagasaki Univ.)

P2-089/DP2-17-04**Effect of phased A-tracts on α -toxin gene expression in *Clostridium perfringens***

○Seiichi Katayama¹, Saya Matsui², Naoya Hashikawa¹, Hinata Sato², Kazuyoshi Aibara², Chiharu Tanaka², Hirofumi Nariya³, Nozomu Matsunaga¹ (¹Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., ²Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., ³Dept. Food Sci., Fac. Human Life, Jumonji Univ.)

P2-090/DP2-17-05

Salmonella adiA mRNA encoding acid resistance core releases sRNA in acidic and anaerobic environment

○Takeshi Kanda¹, Fang Liu², Sarah Reichardt³, Hoda Kooshapour³, Alexander Westermann³, Yanjie Chao², Masatoshi Miyakoshi¹ (¹Inst. Med., Univ. Tsukuba, ²Shanghai Institute of Immunity and Infection, CAS, ³Univ. Würzburg)

P2-091/DP2-17-06

Analysis of translation arrest peptides in *Alteromonas* species

○Naoko Tsuji, Keigo Fujiwara, Hiraku Takada, Shionobu Chiba (Fac. Life Sci., Kyoto Sangyo Univ.)

4. Genetics / Genomics / Biotechnology

-d. Genetic manipulation and analysis, biotechnology and synthetic biology

P2-092/DP2-17-07

Exploring Cold Shock Protein Variants Across Bacterial Lineages and Analyzing Genome Characteristics

○Satoshi Hasegawa^{1,2}, Rerina Inose¹, Teppei Morita^{1,3} (¹Inst. Adv. Biosci., Keio Univ., ²Fac. Env. Info. Studies, Keio Univ., ³Grad. Sch. Media & Governance, Keio Univ.)

P2-093/W6-5

Systemic discovery of phage genes that inactivate bacterial immune systems

○Shinjiro Ojima¹, Aa Haeruman Azam¹, Kohei Kondo², Kotaro Chihara¹, Azumi Tamura¹, Wakana Yamashita¹, Tomohiro Nakamura^{1,3}, Yoshimasa Takahashi¹, Koichi Watashi¹, Kotaro Kiga¹ (¹Res. Ctr. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ²AMR Res. Ctr., Natl. Inst. Infect. Dis., ³Lab. Vet. Biochem. Dept. Vet. Med., Rakuno Gakuen Univ.)

P2-094/DP2-17-08

Development of Bacteriophage Vectors for Targeted Gene Delivery to Cancer Cells

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

P2-095/DP2-17-09

Isolation of membrane vesicle-producing bacteria using probes sensing highly curved membranes

○Itsuki Oono¹, Yusuke Sato², Maho Tokuda³, Masaki Shintani^{1,3,4,5}, Moriya Ohkuma⁴, Hiroyuki Futamata^{1,3,5}, Yosuke Tashiro^{1,3} (¹Grad. Sch. Intgr. Sci. Tech. Shizuoka Univ., ²Grad. Sch. Sci. Tohoku Univ., ³Grad. Sch. Sci. Tech. Shizuoka Univ., ⁴BRC-JCM, RIKEN, ⁵Res. Inst. Green Sci. Tech. Shizuoka Univ.)

4. Genetics / Genomics / Biotechnology -e. Others

P2-096/DP2-17-17

Development of an antimicrobial phage-capsid targeting Colorectal cancer (CRC)-associated *E. coli*

○Ola Alessa¹, Kanate Thitiananpakorn¹, Yuya Hidaka¹, Yoshifumi Aiba¹, Shinya Watanabe¹, Kazuhiko Miyanaga¹, Srivani Veeranarayanan¹, XinEe Tan¹, Kotaro Kiga², Longzhu Cui¹ (¹Div. Bacteriol, Sch. Med., Jichi Med. Univ., ²Research Center for Drug and Vaccine Development, NIID)

P2-097/DP2-17-18

Functional genomics reveals the mechanism of hypoxic adaptation in nontuberculous mycobacteria

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

P2-098/DP2-17-19

Novel chromosomal markers for detecting *Bacillus anthracis*

○Tuvshinzaya Zorigt¹, Hideaki Higashi¹, Yoshikazu Furuta¹, Atmika Paudel¹, Harvey Kamboyi¹, Misheck Shawa¹, Mungunsar Chulun¹, Misa Sugawara¹, Musso Munyeme², Bernard Hang'ombe³ (¹Div. Infection and Immunity, International Inst. for Zoonosis Control, Hokkaido Univ., ²Public Health Unit, Disease Control Studies, Sch. Veterinary Medicine, Univ. Zambia, ³Microbiology Unit, Paraclinical Studies, Sch. Veterinary Medicine, Univ. Zambia)

5. Pathogenicity -a. Adhesins and colonization factors

P2-099

Analysis to identify factors of the severity in LEE-negative enterohemorrhagic *Escherichia coli*

○Akiko Kubomura¹, Ken-ichi Lee¹, Sunao Iyoda¹, Yukihiro Akeda¹, EHEC Working Group² (¹National Inst. Infectious Diseases, ²Local Health Research Inst.)

P2-100/DP1-04-02

The role of TusDCB, a sulfur transferase complex on pathogenesis and microcolony formation in UPEC

○Yumika Sato¹, Ayako Takita¹, Kazutomo Suzue², Yusuke Hashimoto¹, Suguru Hiramoto³, Masami Murakami³, Haruyoshi Tomita¹, Hidetada Hirakawa¹ (¹Dept. Bacteriol., Sch. Med., Gunma Univ., ²Dept. Host Def., Sch. Med., Gunma Univ., ³Dept. Clin. Lab. Med., Sch. Med., Gunma Univ.)

P2-101/DP1-04-03

In silico analysis of genetic diversity in chaperone-usher fimbria of *E. coli* from human samples

○Hiharu Inoue¹, Takayuki Wada^{1,2} (¹Dept. Microbiol., Grad. Sch. Hum. Life Ecol., Osaka Metropolitan Univ., ²Osaka Intl. Res. Ctr. Infect. Dis.)

P2-102/DP1-04-04**Assembly mechanism and structural insights into the Mfa1 minor pilus from *Porphyromonas gingivalis***

○Satoshi Shibata^{1,2}, Hideyuki Matsunami², Kazuhisa Ouhara⁴, Yuri Taniguchi⁴, Mikio Shoji³, Matthias Wolf² (¹Div. Bacteriol, Dept. Microbiol. Immunol., Med., Tottori Univ., ²Molecular Cryo-Electron Microscopy Unit, OIST, ³Dept. Microbiol. Oral Infect., Grad. Sch. Bio. Sci., Nagasaki Univ., ⁴Dept. Periodontal Medicine, Grad. Sch. Biomed. and Health Sci., Hiroshima Univ.)

P2-103/DP1-04-05**Identification of diffusely adherent *Escherichia albertii* from raccoon**

○Atsushi Hinenoya¹, Sharda Awasthi^{1,2,3}, Noritoshi Hatanaka^{1,2,3}, Shinji Yamasaki^{1,2,3} (¹Grad. Sch. Vet. Sci., Osaka Metro. Univ., ²Asian Health Sci. Res. Inst., Osaka Metro. Univ., ³Osaka Int. Res. Cent. Infect. Dis., Osaka Metro. Univ.)

5. Pathogenicity**-b. Toxins, effectors and physically active substances****P2-104/DP1-10-08*****Bordetella bronchiseptica* produces pertussis toxin**

○Shymaa Ali¹, Yukihiko Hiramatsu¹, Takashi Nishida¹, Dendi Krisna Nugraha¹, Yasuhiko Horiguchi^{1,2} (¹Dept. Mol. Bact., RIMD., Osaka Univ., ²CiDER., Osaka Univ.)

P2-105/DP1-10-09**Analysis of the transcription of serine protease gene by *Aeromonas sobria***

○Eizo Takahashi¹, Sadayuki Ochi¹, Masaharu Tanaka¹, Toshiyuki Yui¹, Hidetomo Kobayashi², Soshi Seike², Hiroyasu Yamanaka², Keinosuke Okamoto³ (¹Fac. Pharm. Sci., Yokohama Univ. Pharm., ²Fac. Pharm. Sci., Hiroshima Int. Univ., ³Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ.)

P2-106/DP1-10-10**Structure and dynamics analysis of a clostridial collagenase**

○Osamu Matsushita¹, Takehiko Mima², Adjoa Bonsu³, Hiroya Oki⁶, Ryo Masuda⁷, Takaki Koide⁸, Hayato Yamashita⁴, Kazuki Kawahara⁵, Joshua Sakon³ (¹Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., ²Dept. Med. Tech., Fac. Health Sci., Ehime Pref. Univ. Health Sci., ³Dept. Chem. Biochem., Univ. Arkansas, ⁴Ctr. Sci. Tech. Extr. Cond, Grad. Sch. Eng. Sci., Osaka Univ., ⁵Grad. Sch. Pharm. Sci., Osaka Univ., ⁶Dept. Infect. Metagenomics., Res. Inst. Micro. Dis., Osaka Univ., ⁷Waseda Res. Inst. Sci. Engineer., Waseda Univ., ⁸Dept. Chem. Biochem., Sch. Adv. Sci Eng., Waseda Univ.)

P2-107/DP1-10-11**Investigation of the cytotoxic mechanism of Discoidinolyisin produced by *S. mitis* strain Nm-76**

○Sayaka Tsukasaki¹, Kazuto Ohkura², Toshifumi Tomoyasu^{1,3}, Hideaki Nagamune³, Atsushi Tabata^{1,3} (¹Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. Innov., Tokushima Univ., ²Div. Pharm. Sci., Suzuka Univ. Med. Sci. Grad. Sch., ³Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

P2-108/DP1-10-12**Elucidation of mechanism of vacuolation induced by *Escherichia coli*-derived Outer Membrane Vesicles**

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

P2-109/DP1-10-13**Interaction analysis between BteA and BopN produced by *Bordetella***

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

P2-110/DP1-10-14**Functional analysis of *Bordetella* BcrH2**

○Maho Miyasugi, Akio Abe, Asaomi Kuwae (Grad. Sch. Infect. Contr. Sci., Kitasato Univ.)

P2-111/DP1-10-15**Functional analysis of the cell wall-anchored surface protein "Endo D" of *Streptococcus intermedius***

○Toshifumi Tomoyasu¹, Atsushi Tabata¹, Ayuko Takao², Hideaki Nagamune¹ (¹Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., ²Dept. Oral Bacteriol., Tsurumi Univ.)

P2-112/DP1-10-16**Investigation for growth and pathogenicity of *G. bergeri* isolate in the presence of serum components**

○Atsushi Tabata¹, Toshifumi Tomoyasu¹, Ken Kikuchi², Hideaki Nagamune¹ (¹Div. Biosci. & Bioind., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., ²Dept. Infect. Dis., Tokyo Women's Med. Univ.)

P2-113/DP2-16-01**The growth and toxin-production property of *S. infantis* in the presence of erythrocyte components**

○Yoshiki Itoh¹, Toshifumi Tomoyasu^{1,2}, Hideaki Nagamune^{1,2}, Ayuko Takao³, Atsushi Tabata^{1,2} (¹Div. Bioresour. Sci., Grad. Sch. Sci & Tech. Innov., Tokushima Univ., ²Div. Biosci. & Bioind., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., ³Dept. Oral Bacteriol., Tsurumi Univ.)

P2-114/DP2-16-02

***Listeria monocytogenes* promotes inflammasome activation through Btk phosphorylation**

○Hajime Yamauchi, Yasuyuki Matsuda, Hideki Hara (Dept. Infect. Dis., Div. Microbiol. Immunochem., Asahikawa Med. Univ.)

5. Pathogenicity

-c. Cell invasion and intracellular parasitism

P2-115/W6-7

Exploring genes necessary for *Bordetella bronchiseptica* survival in *Acanthamoeba castellanii*

○Dendi Krisna Nugraha¹, Xingyan Ma¹, Hiroyuki Yamaguchi², Yasuhiko Horiguchi^{1,3} (¹Dept. Mol. Bact. RIMD, Osaka Univ., ²Fac. Health Sci. Hokkaido Univ., ³CiDER, Osaka Univ.)

P2-116/W6-8

Spatiotemporal microscopic analysis of the *Salmonella* Typhimurium invasion

○Hiroaki Kubota¹, Togo Shimozaawa², Kai Kobayashi¹, Morika Mitobe¹, Yasunori Suzuki³, Jun Suzuki¹, Kenji Sadamasu¹ (¹Dept. Microbiol., Tokyo Metr. Inst. Pub. Health, ²Sch. Sci., The Univ. Tokyo, ³Sch. Vet. Med., Kitasato Univ.)

5. Pathogenicity

-d. Immune escape and proliferation in hosts

P2-117/DP2-16-05

Analysis of protective function of mycobacterial biofilms for bacilli

○Shota Torigoe^{1,2}, Kentaro Yamamoto¹, Manabu Ato¹ (¹Dept. Mycobacteriol. Lepr. Res. Ctr., NIID, ²Mgmt. Dept. Biosafety, Lab. Anim., and Pathog. Bank, NIID)

P2-118/W8-1

A role of *Aeromonas hydrophila* RtxA during necrotizing soft tissue infection

○Kohei Yamazaki, Kei Shiraishi, Saeko Takizawa, Takashige Kashimoto (Vet. Public Health, Kitasato Univ.)

P2-119/W8-2

Rop in enterohemorrhagic *Escherichia coli* enhances the general stress response via small RNAs

○Takeshi Shimizu¹, Shin Suzuki¹, Takashi Hamabata² (¹Dept. Mol. Infectiol., Grad. Sch. Med., Chiba Univ., ²Bacterial Infection, Reserach Inst., NCGHM)

P2-120/DP2-16-06

Immunomodulatory Effect of Heat Shock Protein SSA1 Enriched in Hypoxic Secretome of *Candida albicans*

○Wei Teng¹, Phawinee Subsomwong¹, Kouji Narita², Akio Nakane³, Krisana Asano^{1,3} (¹Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Inst. Anim. Exp., Hirosaki Univ. Grad. Sch. Med., ³Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med.)

P2-121/DP2-16-07

Excess cation stress and tolerance mechanisms in *Salmonella*

○Yumi Iwadata, James Slauch (Dept. Microbiol, Sch. Mol. Cell Biol., Univ. Illinois.)

5. Pathogenicity -e. Infection models

P2-122/DP2-19-02

***Salmonella enterica* serovar Gallinarum *ratA* contributes to lethal systemic infection in chickens**

○Chihiro Aikawa, Masashi Okamura (Lab. Vet. Microbiol., Div. Vet. Sci., Obihiro Univ. Agric. Vet. Med.)

P2-123/DP2-19-03

Analysis of host response to *Clostridium perfringens* type A infection

Tomoaki Ishihara¹, Yoshihiko Sakaguchi², Masahiro Nagahama², Masaya Takehara² (¹Fac. Pharm. Sci., Nagasaki International Univ., ²Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ.)

P2-124/DP2-19-04

Ability of *Paraclostridium bifermentans* subsp. *muricolitidis* to metabolize selenocysteine

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

P2-125/DP2-19-05

Identification of virulence factors by comparative analysis of *Vibrio vulnificus* clinical isolates

○Yuuka Tonosaki, Ai Saito, Kohei Yamazaki, Shunji Ueno, Takashige Kashimoto (Lab. Vet. Public Health. Sch. Vet. Med., Kitasato Univ.)

P2-126/DP2-19-06

Analysis of immune responses in oral infection of mice with *Candida albicans*

○Kenji Toyonaga^{1,2}, Jun-ichi Nagao^{1,2}, Sonoko Tasaki¹, Masayuki Umemura³, Sari Kishikawa^{1,2}, Emi Kaji¹, Aoba Iwanuma¹, Masanobu Nakagami¹, Satoru Iwai¹, Yoshihiko Tanaka^{1,2} (¹Div. Infect. Biol., Dept. Funct. Biosci., Fukuoka Dent. Coll., ²Oral Med. Res. Cent., Fukuoka Dent. Coll., ³Mol. Microbiol. Gr., TBRC, Univ. Ryukyus)

5. Pathogenicity -f. Others

P2-127/W6-6

Coordination of prophage and global regulator lead to high SEA production

○Yusuke Sato¹, Junzo Hisatsune², Aziz Fatkhanuddin³, Nobuyuki Tatsukawa³, Mari Nakagawa-Shibata⁴, K. Hisaya Ono⁵, Ikunori Naito⁴, Katsuhiko Omoe⁴, Motoyuki Sugai² (¹Lab. Infect. Cont. and Immun., Sch. Vet. Med. Azabu Univ., ²Antimicro. Resist. Res. Center, NIID, ³Bacteriol., Hiroshima Grad. Univ., ⁴Lab. Food Safety, Sch. Vet. Med, Iwate Univ., ⁵Lab. Zoonosis, Sch. Vet. Med, Kitasato Univ.)

P2-128/DP2-19-07

Pathogenicity of *Paenibacillus* spp. from honey other than foulbrood pathogens to honeybee larvae

○Daisuke Takamatsu^{1,2}, Keiko Nakamura³, Mariko Harada³, Mariko Okamoto¹, Takashi Mada¹ (¹Natl. Inst. Anim. Hlth., NARO, ²Gifu Univ., ³RIAS)

P2-129/DP2-19-08

Analysis of the effect of ozone ultrafine bubble water against various bacteria and bacterial toxins

○Fumio Takizawa¹, Hisanori Doman^{1,2}, Satoru Hirayama¹, Toshihito Isono¹, Karin Sasagawa¹, Daisuke Yonezawa³, Akiomi Ushida⁴, Satomi Tsutsuura⁵, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., ²Cent. For. Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., ³Div. Oral Sci. Health Prom, Niigata Univ. Grad. Sch. Med. Dent. Sci., ⁴Inst. Sci. Tech., Niigata Univ., ⁵Fac. Agric., Niigata Univ.)

P2-130/DP2-19-09

Analysis of the effect of tyramine on the pathogenesis of European foulbrood in honey bees

○Mariko Okamoto¹, Daisuke Takamatsu^{1,2}, Ryuichi Uegaki¹, Keiko Nakamura³, Mariko Harada³ (¹NIAH, NARO, ²UGSVS, Gifu Univ., ³RIAS)

P2-131/DP2-19-10

Characteristics of nitrate-reducing bacteria from patients with gastritis and gastric cancer

○Serika Kuwagi¹, Yumiko Yamamoto², Jumpei Uchiyama², Osamu Matsushita², Kazuyoshi Gotoh¹, Akari Watanabe³, Kenji Yokota¹ (¹Health Science, Okayama Univ., ²Dept. Path. Bacteriol., Grad. Sch. Med. Dent. Pham. Okayama Univ., ³Oral Health Care and Rehabilitation, Inst. Biomed. Sciences, Tokushima Univ.)

P2-132/DP2-19-11

Possibility of periodontal bacteria causing changes in liver drug metabolism

○Toshitaka Miura¹, Shuu Suzuki², Takako Oikawa³, Taichi Ishikawa¹ (¹Div. Mol. Microbiol., Dept. Microbiol., Sch. Dent., Iwate Med. Univ., ²Div. Oral Maxillofac. Surg., Dep. Reconstructive Oral Maxillofac. Surg., Sch. Dent., Iwate Med. Univ., ³Div. Periodont., Dep. Conservative Dent., Sch. Dent., Iwate Med. Univ.)

6. Host defense -a. Innate immunity

P2-133/DP1-05-01

Alendronate augments lipid A-induced IL-1 β release via activation of ASC or AP-1, but not caspase-11

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

P2-134/DP1-05-02

Detection of bacteria by immune activating receptor via plasma components

○Yifan Li¹, Kouyuki Hirayasu¹, Gen Hasegawa¹, Yosei Tomita², Yuko Hashikawa³, Hisashi Arase^{4,5}, Rikinari Hanayama^{1,3} (¹Adv. Prev. Med. Sci. Res. Cen., Kanazawa Univ., ²Dept. Immunol., Med. Pharm., Kanazawa Univ., ³NanoLSI, Kanazawa Univ., ⁴Dept. Immunochem., RIMD, Osaka Univ., ⁵Lab. Immunochem., IFReC, Osaka Univ.)

P2-135/DP1-05-03

Growth of *S. pneumoniae* colonized in the nasopharynx associated with RSV infection

○Saki Ishikawa¹, Nanami Okada², Yuzu Fukui², Shigeki Nakamura¹, Toshihiro Ito², Takehiko Shibata¹ (¹Dept. Microbiol., Sch. Med., Tokyo Med. Univ., ²Dept. Immunol., Sch. Med., Nara Med. Univ.)

P2-136/DP1-05-04

A balance of paired immune receptors and bacterial pathogenicity

○Gen Hasegawa¹, Kouyuki Hirayasu¹, Yifan Li¹, Hisashi Arase^{2,3,4}, Masaya Yamaguchi^{4,5,6,7}, Shigetada Kawabata^{4,7}, Rikinari Hanayama¹ (¹Adv. Prev. Med. Sci. Res. Cen., Kanazawa Univ., ²Dept. Immunochem., RIMD, Osaka Univ., ³Lab. Immunochem., IFReC, Osaka Univ., ⁴CiDER, Osaka Univ., ⁵Bioinform. Res. Unit, Osaka Univ. Grad. Sch. Dent., ⁶Bioinform. Cent., RIMD, Osaka Univ., ⁷Dept. Microbiol., Osaka Univ. Grad. Sch. Dent.)

P2-137/W8-3

E3 ligase SIAH1 mediates Streptolysin O ubiquitination for xenophagy against Group A Streptococcus

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

P2-138/DP1-05-05

Rab13 GTPase is involved in ubiquitin-mediated recognition of Group A Streptococcus in xenophagy

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

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

P2-139/DP1-11-06

Magnetic Nanoparticle Encapsulation of Membrane Vesicles to Enhance Cancer Therapy Effectiveness

○Yushi Nagasaka¹, Chihiro Suzuki², Hiroyuki Futamata^{1,3}, Satoshi Ota¹, Yosuke Tashiro¹ (¹Grad. Sch. Integr. Sci. Tech. Shizuoka Univ., ²Dept. Appl. Chem. Biochem. Eng. Shizuoka Univ., ³Res. Inst. Green Sci. Tech. Shizuoka Univ.)

P2-140/DP1-11-07

Strategic Construction of DNA Vaccine Candidates with Bacteriophages for TB

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

P2-141/W8-4

Periodontitis vaccine using three different bacterial outer membrane vesicles in canine model

○Ryoma Nakao¹, Takehiro Yamaguchi¹, Jun Saeki², Kimihiro Abe¹, Yukihiko Akeda¹, Tomoyo Nakamura³, Tomohiko Nishino³, Kazuyuki Ishihara⁴, Atsushi Jinno-Oue⁵, Satoshi Inoue¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Dept. Ani. Sci., Teikyo Univ. Technol., ³Sch. Biosci. Biotechnol., Tokyo Univ. Technol., ⁴Dept. Microbiol., Tokyo Dent. Coll., ⁵Biores. Center, Gunma Univ.)

P2-142/DP1-11-08

Molecular mechanism of the preventive effect of Ninjinyoeito on *Klebsiella pneumoniae* infection

○Rika Tanaka¹, Shogo Tsubaki², Hitoshi Tsugawa² (¹Dept. Immunology, Div. Infect. Host Def., Sch. Med., Tokai Univ., ²Transkingdom Signaling Research Unit, Div. Infect. Host Def., Sch. Med., Tokai Univ.)

P2-143/DP1-11-09

Different prime-boost regimens via systemic or mucosal routes with a novel membrane vesicle vaccine

○Hiroki Uchiyama^{1,2}, Takehiro Yamaguchi¹, Nozomu Obana³, Kimihiro Abe¹, Masanori Toyofuku⁴, Nobuhiko Nomura⁴, Yukihiko Akeda¹, Ryoma Nakao¹ (¹Dept. Bacteriol. I, Natl. Inst. Infect. Dis., ²Dept. Surg., Tokyo Med. Dent. Univ. Grad Sch. Med., ³Tsukuba Transborder Medical Research Center, Fac. Medicine, Univ. of Tsukuba, ⁴Microbiology Research Center for Sustainability (MiCS), Univ. Tsukuba)

P2-144/DP1-11-10

Exploration of RNA signatures reflecting mycobacterial load in the lungs using active TB mouse model

○Hajime Nakamura, Shintaro Seto, Minako Hijikata, Naoto Keicho (Dept. Pathophysiol. Host Defense, Research Inst. Tuberculosis)

P2-145/DP1-11-11

Evaluation of protective effect induced by intranasal vaccination of *Bordetella Pertussis*

○Sora Ishikawa^{1,3}, Akira Ainai¹, Rena Sakamoto¹, Ryoma Nakao², Tadaki Suzuki¹, Koji Tamura³ (¹Dept. Pathology, NIID, ²Dept. Bacteria 1, NIID, ³Dept. Bio Sci. and Tech., Grad. Sch. Indu. Sci. and Tech., Tokyo Univ. of Sci.)

P2-146/W8-5

Recombinant MDP1 with post-translational modifications enhances IFN-gamma production by blood cells

○Yuriko Ozeki¹, Akihito Nishiyama¹, Yoshitaka Tateishi¹, Jun-ichi Maeyama², Sumiko Iho³, Toshiko Yamamoto², Daisuke Hayashi⁴, Saburo Yamamoto^{2,4}, Amina Kaboso Shaban¹, Sohkiichi Matsumoto¹ (¹Dept. Bact. Sch. Med., Niigata Univ., ²NIID, ³Pasteur Center, ⁴Japan BCG)

P2-147/DP1-11-12

Enhanced immunity to pulmonary tuberculosis by vaccination with Zinc metalloprotease 1-deficient BCG

○Masayuki Umemura^{1,2,3}, Giichi Takaesu^{1,2,3}, Goro Matsuzaki^{1,2,3} (¹Trop. Biosphere Res. Cent., Univ. Ryukyus, ²Drpt. Host Defense, Grad. Sch. Med., Univ. Ryukyus, ³Adv. Med. Res. Cent., Fac. Med., Univ. Ryukyus)

P2-148/DP1-11-13

Genetic engineering employing MPB70 enables efficient expression of foreign antigen in BCG Tokyo

○Atsuki Takeishi, Amina Kaboso Shaban, Yuriko Ozeki, Yutaka Yoshida, Akihito Nishiyama, Yoshitaka Tateishi, Sohkiichi Matsumoto (Dept. Bacteriol., Sch. Med, Niigata Univ.)

6. Host defense -c. Others

P2-149/W8-6

Metabolites from microbiota provide colonization resistance against *Candida albicans* in the gut

○Yoshiyuki Goto, Bonita McCuaig (Div. Mol. Immunol., MMRC., Chiba Univ.)

P2-150/W8-7

Diversity of Septu anti-phage defense system triggered by distinct phage components

○Kotaro Chihara¹, Kohei Kondo², Aa Haeruman Azam¹, Shinjiro Ojima¹, Yo Sugawara², Motoyuki Sugai², Yoshimasa Takahashi¹, Koichi Watashi¹, Kotaro Kiga¹ (¹Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ²AMR Res. Cent., Natl. Inst. Infect. Dis.)

P2-151/W8-8**Transcription factor MafB regulates Mycobacterial infection in mice**

○Haruka Hikichi^{1,2}, Hajime Nakamura¹, Shiho Omori¹, Shintaro Seto¹, Minako Hijikata¹, Naoto Keicho³ (¹Dept. Pathophysiology and Host Defense, RIT, JATA, ²Dept. Infection Research, Nagasaki Univ. Grad. Sch. Biomedical Sciences, ³The Research Inst. Tuberculosis, Japan Anti-Tuberculosis Association)

7. Antimicrobial agents and resistance**-a. Antimicrobial agents****P2-152/DP1-06-01****Effects of β -caryophyllene on antimicrobial susceptibility of MRSA**

○Harue Nomura¹, Katsuya Sakuma², Yasunori Isshiki¹ (¹Dept. Microbiol., Sch. Pharm., Josai Univ., ²Ogawa & Co., Ltd.)

P2-153/DP1-06-02**Antibacterial effect of *Lonicera caerulea* fruit against vancomycin-resistant enterococci**

○Masaaki Minami¹, Mineo Nakamura² (¹Dept. Bacteriol. Nagoya City Univ. Grad. Sch. Med., ²Nakamura Pharm.)

P2-154/DP1-06-03**The development of inhibitors that regulate the function of a sugar-binding protein of *S. pyogenes***

○Tsukushi Yamawaki¹, Makoto Nakakido¹, Satoru Nagatoishi¹, Chihiro Aikawa², Jose Caaveiro³, Ichiro Nakagawa⁴, Kouhei Tsumoto^{1,5} (¹Sch. Eng., The Univ. of Tokyo, ²Sch. Agri., Obihiro Univ., ³Grad. Sch. Pharm. Sci., Kyusyu Univ., ⁴Sch. Med., Univ. of Kyoto, ⁵Inst. of Med. Sci., The Univ. of Tokyo)

P2-155/DP1-06-04**Lonidamine as an inactivator for the BvgAS system of *Bordetella pertussis***

○Natsuko Ota¹, Toshiya Ueno¹, Yukihiro Hiramatsu¹, Yasuhiko Horiguchi^{1,2} (¹Dept. Mol. Bacteriol., RIMD., Osaka Univ., ²CiDER., Osaka Univ.)

P2-156/DP1-06-05**Isolation and characterization of a useful broad-host-range prophage from *E. coli***

○Justin Edrian Revilleza, Ho Thi My Duyen, Kanate Thitiananpakorn, Ola Alessa, Yoshifumi Aiba, Shinya Watanabe, Kazuhiko Miyanaga, Srivani Veerananarayanan, XinEe Tan, Longzhu Cui (Div. Bacteriol. Sch. Med., Jichi Med. Univ.)

P2-157/DP1-06-06**Analysis of the effect of β -glycyrrhetic acid on human supragingival biofilms**

○Shinya Kato^{1,2}, Xiangtao Ma¹, Kayo Satou³, Aya Okumura³, Kenji Yoshimura³, Nobuo Yoshinari^{1,2}, Akihiro Yoshida^{1,4} (¹Dept. Oral Health Sci., Grad. Sch. Matsumoto Dent. Univ., ²Dept. Periodontol., Matsumoto Dent. Univ., ³Human Health Care Products Research, Kao Corporation, ⁴Dept. Microbiol., Matsumoto Dent. Univ.)

P2-158/DP1-06-07**Photothermal Ablation of *Pseudomonas aeruginosa* biofilms by Phage Gold Nanorod Bioconjugates**

○Sarangi Jayathilake, Tomofumi Kawaguchi, Srivani Veerananarayanan, Kanate Thitiananpakorn, Shinya Watanabe, XinEe Tan, Yoshifumi Aiba, Kazuhiko Miyanaga, Longzhu Cui (Dept. Bacteriol., Sch. Med., Jichi Med. Univ.)

P2-159/DP1-06-08**Antibacterial activity of fatty acids against *Staphylococcus aureus* and *Streptococcus pyogenes***

○Keijuro Ohdan^{1,2}, Yujin Suzuki¹, Miki Matsuo^{1,3}, Nguyen Tra Mi Le^{1,3}, Chika Arai^{3,4}, Junzo Hisatsune^{3,4}, Yo Sugawara^{3,4}, Tomonao Aikawa², Motoyuki Sugai^{3,4}, Hitoshi Komatsuzawa^{1,3} (¹Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ²Dept. Oral and Maxillofacial Surgery, Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ³Proj. Res. Ctr. for Nosocomial Infectious Diseases, Hiroshima Univ., ⁴Antimicrobial Resistance Res. Ctr., National Inst. Infectious Diseases)

P2-160/W10-7**Construction of CRISPR-Cas13a antibacterial capsid for targeting Enterotoxigenic *Bacteroides fragilis***

○Mahmoud Arbaah, Thuy Nguyen, Yoshifumi Aiba, Shinya Watanabe, Kazuhiko Miyanaga, XinEe Tan, Kanate Thitiananpakorn, Teppei Sasahara, Longzhu Cui (Div. Bacteriol. Sch. Med., Jichi Med. Univ.)

P2-161/DP1-06-09**WQ-3810: A Novel Fluoroquinolone Exhibiting Potency Against Fluoroquinolone-Resistant *M. avium***

○Sasini Jayaweera¹, Jeewan Thapa¹, Chie Nakajima^{1,2}, Yasuhiko Suzuki^{1,2} (¹Div. Bioresources, International Inst. for Zoonosis Control, Hokkaido Univ., ²Inst. Vaccine Research and Development, Hokkaido Univ.)

P2-162/DP1-06-10**Development and Evaluation of Antibacterial Capsids Against Drug-Resistant *Pseudomonas aeruginosa***

○Tomofumi Kawaguchi¹, Shinya Watanabe¹, Yi Liu¹, Kotaro Kiga^{1,2}, XinEe Tan¹, Longzhu Cui¹ (¹Div. Bacteriol. Sch. Med., Jichi Med. Univ., ²Drug and Vaccine Development, NIID)

P2-163/DP1-06-11

Quorum-sensing inhibitor furanone C-30 increases nitrosative stress susceptibility of *P. aeruginosa*

○Shin Suzuki^{1,3}, Yuji Morita², Shota Ishige¹, Kiyohiro Kai¹, Kenji Kawasaki³, Kazuyuki Matsushita³, Kohei Ogura⁴, Tohru Miyoshi-Akiyama⁵, Takeshi Shimizu¹ (¹Dept. Molecular Infectiology, Grad. Sch. Medicine, Chiba Univ., ²Dept. Infection Control Science, Meiji Pharmaceutical Univ., ³Dept. Laboratory Medicine, Chiba Univ. Hospital, ⁴Div. Food Science and Biotechnology, Grad. Sch. Agriculture, Kyoto Univ., ⁵Dept. Infect. Dis, Nat. Center. Global Health Med.)

P2-164/DP1-06-12

Distribution and antibacterial activity of bacteriocin genes in clinical isolates of Enterococci

○Ayumi Fujii^{1,2}, Miki Matsuo^{1,3}, Nguyen Tra Mi Le^{1,3}, Chika Arai^{3,4}, Junzo Hisatsune^{3,4}, Yo Sugawara⁴, Tomonao Aikawa², Motoyuki Sugai^{3,4}, Hitoshi Komatsuzawa^{1,3} (¹Dept. Bacteriol., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., ²Dept. Oral and Maxillofacial Surgery, Grad. Sch. Biomed. & Health Sci., Hiroshima Univ., ³Project Research Center for Nosocomial Infectious Diseases, Hiroshima Univ., ⁴Antimicrobial Resistance Research Ctr., National Inst. Infectious Diseases)

P2-165/DP1-06-13

Optimizing Cas13 variants in engineered bacteriophages for potent bactericidal activity against MRSA

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

7. Antimicrobial agents and resistance

-b. Antimicrobial resistance

P2-166/DP1-12-10

Mobile linezolid resistance genes in enterococci derived from livestock compost at Japanese farms

○Akira Fukuda¹, Chie Nakajima², Yasuhiko Suzuki², Masaru Usui^{1,2} (¹Dept. Food Microbiol. and Food Safe., Sch. Vet. Med., Rakuno Gakuen Univ., ²Div. Bioresources, Inter. Inst. Zoonosis Contr., Hokkaido Univ.)

P2-167/W10-3

Bioinformatic analysis of morphologies of antibiotic-resistant *Escherichia coli* cells

○Miki Ikebe^{1,2}, Kota Aoki¹, Mitsuko Hayashi-Nishino^{1,2,3}, Kunihiko Nishino^{1,2,4} (¹SANKEN, Osaka Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ., ³AIRC-ISIR, Osaka Univ., ⁴CiDER, Osaka Univ.)

P2-168/DP1-12-11

Genetic and phenotypic analyses of *mcr*-harboring ESBL-producing *E. coli* from dogs and cats in Japan

○Mayo Yasugi¹, Shingo Hatoya¹, Daisuke Motoooka², Daisuke Kondo¹, Hideo Akiyoshi¹, Masayuki Horie¹, Shota Nakamura², Terumasa Shimada¹ (¹Grad. Sch. Vet. Sci., Osaka Metro. Univ., ²RIMD, Osaka Univ.)

P2-169/DP1-12-12

Resistance to Sulfamethoxazole-Trimethoprim and Its Horizontal Transfer in *Haemophilus influenzae*

○Tomokazu Ando, Takeaki Wajima, Emi Tanaka, Kei-ichi Uchiya (Dept. Microbiol., Fac. Pharm., Meijo Univ.)

P2-170/DP1-12-13

Mechanism of high-level quinolone resistance in *H. haemolyticus* revealed by gene transfer assay

○Takeaki Wajima, Emi Tanaka, Kei-ichi Uchiya (Dept. Microbiol., Fac. Pharm., Meijo Univ.)

P2-171/W2-8

National genomic surveillance of antimicrobial resistance in Japan: 1st phase of JARBS-GNR project

Shizuo Kayama, ○Koji Yahara, Yo Sugawara, Sayoko Kawakami, Kohei Kondo, Hui Zuo, Shoko Kutsuno, Norikazu Kitamura, Aki Hirabayashi, Motoyuki Sugai (AMR Research Center, NIID)

P2-172/DP1-12-14

Long-term cultivation triggers non-canonical susceptibilization of biofilm cells to antibiotics

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

P2-173/DP1-12-15

Alanine-transporter *CycA* supports cationic antimicrobial resistance in *Staphylococcus aureus*

○Yujin Suzuki¹, Miki Matsuo^{1,2}, Nguyen Tra Mi Le^{1,2}, That Thuan Vy Ton¹, Hitoshi Komatsuzawa^{1,2} (¹Dept. Bacteriol., Grad. Sch. Biomed. and Health Sci., Hiroshima Univ., ²Proj. Res. Ctr. for Nosocomial Infectious Diseases, Hiroshima Univ.)

P2-174/DP1-12-16

Increased prevalence of Kanamycin-resistant *Salmonella* Schwarzengrund from broilers in Kagoshima

○George Sanga, Rika Miyajima, Vu Minh Duc, Takehisa Chuma (Joint Fac. Vet. Med. Kagoshima Univ.)

P2-175/W10-4**Fosfomycin resistance in *Escherichia coli* caused by functional deletion of AckA and Pta, Fis**

○Hidetada Hirakawa¹, Ayako Takita¹, Yumika Sato¹, Yusuke Hashimoto¹, Suguru Hiramoto², Noriyasu Ohshima³, Yoji Minamishima³, Masami Murakami², Haruyoshi Tomita¹ (¹Dept. Bacteriol., Sch. Med., Gunma Univ., ²Dept. Clin. Lab. Med., Sch. Med., Gunma Univ., ³Dept. Biochem., Sch. Med., Gunma Univ.)

P2-176/W10-2**Glyceroglycolipid synthase overexpression leads to daptomycin resistance in Gram-positive bacteria**

○Ryogo Yamamoto¹, Kazuya Ishikawa², Kazuyuki Furuta², Shin-ichi Miyoshi^{3,4}, Chikara Kaito² (¹Lab. Mol. Biol., Fac. Pharm., Okayama Univ., ²Lab. Mol. Biol., Grad. Sch. Med. Dent. Pharm., Okayama Univ., ³Grad. Sch. Med. Dent. Pharm., Okayama Univ., ⁴Collab. Res. Cent. Okayama Univ. Infect. Diseases. India)

P2-177/W10-5**Phage Engineering for Overcoming Tmn Defense System**

○Wakana Yamashita^{1,2}, Kotaro Chihara¹, Aa Haeruman Azam¹, Shinjiro Ojima¹, Azumi Tamura¹, Satoshi Tsuneda², Kotaro Kiga¹ (¹Res. Ctr. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ²Dept. Life Sci. Med. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ.)

P2-178/DP1-12-17**Metabolic Remodeling by *rpoBC* Mutations is Associated with β -Lactam Resistance in OS-MRSA**

○Shinya Watanabe, Chijioke A Nsofor, Kanate Thitiananpakorn, XinEe Tan, Yoshifumi Aiba, Kazuhiko Miyanaga, Srivani Veerananarayanan, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

P2-179/DP2-15-01**Analysis of antimicrobial-resistant bacteria and drug-resistance genes from domestic chicken meat**

○Runa Nakashima¹, Reina Kuwano¹, Tomoka Matsuo¹, Momoka Kondo¹, Rei Wakimoto², Mitsuoki Kawano¹ (¹Dept. Nutritional Sciences., Nakamura Gakuen Univ., ²Div. Food and Nutrition., Nakamura Gakuen Univ. JC.)

P2-180/DP2-15-02**Identification of ESBL genes using intestinal mucus samples from intestinal disease patients**

○Rei Wakimoto¹, Riho Kashige², Momoko Shimai², Kakeru Teshima², Akiko Shiotani³, Tingting Gu³, Runa Nakashima², Mitsuoki Kawano² (¹Div. Food and Nutrition., Nakamura Gakuen Univ. Junior College, ²Dept. Nutritional Sciences, Nakamura Gakuen Univ., ³Dept. Gastroenterology and Hepatology, Sch. Med., Kawasaki Univ.)

P2-181/DP2-15-03**Analysis of the amikacin resistance factor of carbapenem-resistant *Escherichia coli* AUH-256**

○Hinako Yokoyama¹, Azuki Morishita¹, Shoichi Sakaguchi², Takashi Nakano², Yuji Nakada¹ (¹Fac. Healthcare Sci., Aino Univ., ²Dept. Microbiol. & Infect. Cont., Fac. Med., Osaka Med. & Pharm. Univ.)

P2-182/DP2-15-04**Antimicrobial resistance of *emm89 Streptococcus pyogenes* isolates from patients throughout Japan**

○Weichen Gong¹, Masayuki Ono^{1,2}, Masaya Yamaguchi^{1,2}, Daisuke Motooka³, Yujiro Hirose¹, Rumi Okuno⁴, Tadayoshi Ikebe⁵, Shigetada Kawabata¹ (¹Dept. Microbiol. Sch. Dent., Osaka Univ., ²Dept. Info., Sch. Dent., Osaka Univ., ³NGS Core Facility, RIMD., Osaka Univ., ⁴Dept. Microbiol., Tokyo Metropolitan Inst. of Public Health, ⁵Dept. Bacteriol. I., NIID)

P2-183/DP2-15-05**Mg²⁺ requirement in VmeJK, an RND multidrug efflux pump, in *Vibrio parahaemolyticus***

○Rino Murakami¹, Ayami Kunimitsu¹, Daichi Morita², Takanori Kumagai², Teruo Kuroda² (¹Sch. Pharm., Hiroshima Univ., ²Dept. Microbiol. Med., Sch. Med. Sci., Hiroshima Univ.)

P2-184/DP2-15-06**Isolation and Characterization of Bacteriophages Infecting Drug-Resistant *Acinetobacter* Species**

○Azumi Tamura^{1,2,3}, Tomohiro Nakamura¹, Aa Haeruman Azam¹, Kotaro Chihara¹, Shinjiro Ojima¹, Longzhu Cui⁴, Koichi Watashi¹, Yoshimasa Takahashi¹, Hiroshi Yotsuyanagi^{2,3}, Kotaro Kiga^{1,4} (¹Res. Cent. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ²Dept. Comp. Biol. Med. Sci., Grad. Sch. Front. Sci., Univ. of Tokyo, ³Div. Infect. Dis., Inst. Med. Sci., Univ. of Tokyo, ⁴Div. Bacteriol. Sch. Med., Jichi Med. Univ.)

P2-185/W10-1**Detection and genetic analysis of ESBL-producing *Escherichia coli* in retail chicken meat in Japan**

○Shiori Yamamoto^{1,2}, Tatsuya Nakayama³, Yoshikazu Ishii⁴, Shizunobu Igimi⁵, Yumiko Okada² (¹Dept. Nutr. Diet., Kamakura Women's Univ., ²Div. Biomedical Food Res., Nat. Inst. Health Sci., ³Grad. Sch. Int. Sci. for Life, Hiroshima Univ., ⁴IDEC Inst., Hiroshima Univ., ⁵Res. Inst., Tokyo Univ. Agr.)

P2-186/DP2-15-07**Evaluation of the bactericidal effect of bacteriophages on food products**

○Mitsuoki Kawano¹, Akiho Ichino¹, Eri Kawaji¹, Nanoha Yoshida¹, Runa Nakashima¹, Rei Wakimoto² (¹Dept. Nutritional Sci., Nakamura Gakuen Univ., ²Div. Food and Nutrition, Junior College, Nakamura Gakuen Univ.)

P2-187/DP2-15-08**Isolation and application of *Klebsiella pneumoniae* prophage with a broad host range**

Junjie Li, Kazuhiko Miyanaga, Kanate Thitiananpakorn, Minh Huong Nguyen, XinEe Tan, Srivani Veerananarayanan, Yoshifumi Aiba, Tepei Sasahara, Shinya Watanabe, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

P2-188/DP2-15-09**Tailoring induce conditions for CRISPR-Cas13a loaded AB-Capsid and targeted killing of *S. aureus***

Anujin Batbold, XinEe Tan, Tergel Nayanjin, Shinya Watanabe, Yoshifumi Aiba, Kazuhiko Miyanaga, Tepei Sasahara, Srivani Veerananarayanan, Kanate Thitiananpakorn, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

7. Antimicrobial agents and resistance -c. Others

P2-189/DP2-21-06**Identification of Receptors for Multiple Phylogenetically Novel *Escherichia coli* Phages**

Tomoyoshi Kaneko^{1,2}, Satoshi Tsuneda^{1,2} (¹Dept. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., ²Phage Therapy Inst., Waseda Univ.)

P2-190/DP2-21-07**Exploring the Arsenal: A Comprehensive Study of *Staphylococcus aureus* Phages for Phage Therapy**

Hiromasa Mizutani¹, Tomoyoshi Kaneko^{1,2}, Aa Haeruman Azam³, Kazuki Kitaoka^{2,5}, Kotaro Kiga^{2,3,4}, Satoshi Tsuneda^{1,2} (¹Dept. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., ²Phage Therapy Inst., Waseda Univ., ³Res. Ctr. Drug Vaccine Dev., Natl. Inst. Infect. Dis., ⁴Div. Bacteriol, Sch. Med., Jichi Med. Univ., ⁵Shinjuku Satellite Clinic)

P2-191/W10-6**Proposal of Phage Therapy Based on Amino Acid Sequences of *Escherichia coli* Outer Membrane Protein C**

Kanata Nakatsuka¹, Riho Morikawa¹, Tomoyoshi Kaneko^{1,2}, Yoshifumi Aiba³, Kazuhiko Miyanaga^{2,3}, Longzhu Cui³, Yasunori Tanji², Satoshi Tsuneda^{1,2} (¹Dept. Life Sci. Med. Biosci., Sch. Adv. Sci. Eng., Waseda Univ., ²Phage Therapy Inst., Waseda Univ., ³Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

P2-193/DP2-21-09**Reactive oxygen species generated by 222 nm Far UV-C impair photorepair in *Escherichia coli***

Kouji Narita^{1,2}, Krisana Asano^{1,3}, Risako Fukushi^{1,4}, Kyosuke Yamane⁵, Yoshihiko Okumura⁵, Akio Nakane^{1,3,4} (¹Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Inst. Animal Exp., Hirosaki Univ. Grad. Sch. Med., ³Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med., ⁴Dept. Nursing, Sch. Health Sci., Hirosaki Univ. Health Welfare, ⁵Ushio Inc.)

P2-194/DP2-21-10**Biochemical and structural analysis of the endolysin Ecd09610 catalytic domain from *C. difficile***

Eiji Tamai¹, Hiroshi Sekiya¹, Yasuhiro Nonaka², Shigehiro Kamitori³, Tomomi Miyaji¹ (¹Dept. Infect. Dis., Col. Pharm. Sci., Matsuyama Univ., ²Dept. Endocrinol., Fac. Med., Kagawa Univ., ³Res. Faci. Cent. Sci. & Tec. Facul. Med., Kagawa Univ.)

P2-195/DP2-21-11**The effects of *Monascus* Fermented Rice Extract on the pathogenicity of toxigenic *Vibrio cholerae***

Tetsu Yamashiro¹, Jun Xu¹, Rena Kinjo², Keiichiro Ishihara³, Aino Kinjo², Shinjiro Tachibana³ (¹Dept. Bacteriol. Grad. Sch. Med., Univ. Ryukyus, ²Grad. Sch. Agri., Univ. Ryukyus, ³Fac. Agri., Univ. Ryukyus)

8. Others

P2-196/W6-3**Novel Bacterial Production System: Achieving Endotoxin-Free Recombinant Bioactive Proteins**

Go Kamoshida^{1,2}, Daiki Yamaguchi², Noriteru Yamada², Norihiko Takemoto³, Kinnosuke Yahiro², Yuji Morita¹ (¹Dept. Infect. Cont. Sci. Meiji Pharm. Univ., ²Lab. Microbiol. and Infect. Cont. Kyoto Pharm. Univ., ³Pathogenic Microbe Lab., Dept. Infect. Dis., NCGM)

P2-197/DP2-21-12**Development of periodontal disease prevention using ultraviolet light-emitting diodes**

Tae Matsumura¹, Misato Suzuki¹, Hiromichi Yumoto², Tamotsu Tanaka¹, Mutsumi Aihara¹ (¹Grad. Sch. Tech. Indust. & Social Sci., Tokushima Univ., ²Grad. Sch. Inst. of Biomed Sci., Tokushima Univ.)

P2-198/DP2-21-13**Development of a water disinfection system by a combination of UV and chitosan**

Misato Suzuki, Tae Matsumura, Ryushi Kawakami, Tamotsu Tanaka, Mutsumi Aihara (Grad. Sch. Tech. Indust. & Social Sci., Tokushima Univ.)

5. Pathogenicity

P2-199**The effect of exosome pathway on Cholix-induced hepatocytes death**

Kazuya Ozaki¹, Asaka Kawamura¹, Hiyo Nagahara¹, Atsushi Yokotani², Kinnosuke Yahiro¹ (¹Dept. Microbiol. Infect. Cont., Sch. Pharm., Kyoto Pharm. Univ., ²Kyoto Biken Lab.)