## Poster (P)

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

**P1-001 (WS03-2)**
**Microevolution of an epidemic monophasic variant of *Salmonella* Typhimurium in Japan**
○Nobuo Arai[1,2], Tsuyoshi Sekizuka[3], Yukino Tamamura[2], Masahiro Kusumoto[2], Atsushi Hinenoya[1], Shinji Yamasaki[1], Taketoshi Iwata[2], Ayako Watanabe-Yanai[2], Makoto Kuroda[3], Masato Akiba[1,2] ([1]Grad. Sch. Life and Environ. Sci., Osaka Pref. Univ., [2]Natl. Inst. Anim. Health, [3]Natl. Inst. Infect. Dis.)

**P1-002**
**Multilocus sequence typing of Ehrlichia species detected from ticks in Japan**
○Hongru Su[1], Eri Onoda[1], Shigetoshi Sakabe[2], Shigehiro Akachi[3], Hiromi Fujita[4], Saori Oishi[5], Fuyuki Abe[5], Takashi Kanda[5], Norio Ohashi[1] ([1]Lab. Microbiol., Sch. Food Nutr. Sci., Univ. Shizuoka, [2]Dept. Medic Infect Dis., Ise Red Cross Hosp., [3]Mie Pref. Inst. Health Environ., [4]Mahara Inst. Med. Acari, [5]Dept. Microbiol Shizuoka Inst. Environ. Hygiene)

**P1-003**
**Molecular characterization and antimicrobial resistance of MRSA from pigs and pork in Thailand**
○Wimonrat Tanomsridachchai[1], Chie Nakajima[1,2], Kanjana Changkaew[3], Ruchirada Changkwanyeun[3], Watsawan Prapasawat[4], Apiradee Intarapuk[4], Nattapong Yamasamit[3], Orasa Suthienkul[3], Yasuhiko Suzuki[1,2] ([1]Div. Biores, Hokkaido Univ. Res Center Zoonosis Ctl, Japan, [2]GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ., Japan, [3]Fac. Public Health, Thammasat Univ., Thailand, [4]Dept. Clinic, Fac. Vet. Med., Mahanakorn Univ. of Tech., Thailand)

**P1-004**
**Molecular epidemiology of MRSA among Japanese inpatient isolates from the 1980s**
○Hui Zuo[1], Yuki Uehara[1,2,3,4], Yujie Lu[4], Naokatsu Fukukawa[5], Keiichi Hiramatsu[1,4] ([1]Dept. Microbiology., Sch. Med., Juntendo Univ. Faculty of Medicine, [2]Dept. Clinical Laboratory., St Luke International Hospital, [3]Dept. Infectious Diseases., St Luke International Hospital, [4]Dept. Infection Control Science Research., Juntendo Univ. Grad. Sch. Medicine, [5]Dept. of Nursing., Kyorin Univ. Hospital)

**P1-005**
**New species belonging to the family Sutterellaceae**
○Mitsuo Sakamoto[1,2], Nao Ikeyama[1], Tadao Kunihiro[3], Takao Iino[1], Masahiro Yuki[1], Moriya Ohkuma[1] ([1]Microbe Division/ Japan Collection of Microorganisms (JCM), RIKEN BioResource Research Center, [2]PRIME, Japan Agency for Medical Research and Development (AMED), [3]TechnoSuruga Laboratory)

**P1-006**
**Reclassified of *Fusobacterium nucleatum* 5 subsp to species status & proposal of *F watanabei* sp. nov.**
Junko Tomida[1], Tohru Miyoshi-Akiyama[2], Kaori Tanaka[3], Masahiro Hayashi[3], Ryo Kutsuna[1], ○Yoshiaki Kawamura[1] ([1]Dept. Microbiol, Sch. Pharm. AichiGakuiin Univ., [2]Pthogenic Microbe Lab, Dept. Infect. Dis. NCGM, [3]Div. Anaerobe Res., Life Sci. Res. Ctr., Gifu Univ.)

**P1-007**
**Analysis of the relationship between the microbiome in the sebaceous glands and acne vulgaris**
○Naoki Hayashi[1], Ichiro Kurokawa[2], Masato Suzuki[3], Yuichi Muraki[4], Masataka Oda[1] ([1]Dept. Microbiol. Infect. Control Sci., Kyoto Pharm. Univ., [2]Dept. Dermatol., Meiwa Hosp., [3]Antimicrobial Resistance Res. Ctr., Natl. Inst. Infect. Dis., [4]Dept Clin. Pharmacoepidemiol., Kyoto Pharm. Univ.)

**P1-008**
**The concept of OSNAp, a Novel Approach to Core Gene-Independent Plasmid Phylogeny**
○Masahiro Suzuki[1], Yohei Doi[1], Yoshichika Arakawa[2] ([1]Dept. Microbiol., Sch. Med., Fujita Health Univ., [2]Dept. Bacteriol., Sch. Med. Nagoya Univ.)

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

**P1-009 (WS03-6)**
**Investigation of factors contributing to the invasiveness of *Streptococcus pyogenes emm* 89**
○Yujiro Hirose[1], Masaya Yamaguchi[1], Tohru Miyoshi-Akiyama[2], Norihiko Takemoto[2], Rumi Okuno[3], Takahiro Yamaguchi[4], Hitoshi Otsuka[5], Tomoko Sumitomo[1], Masanobu Nakata[1], Shigetada Kawabata[1] ([1]Dept. Oral Mol. Microbiol., Osaka Univ. Grad. Sch. Dent., [2]Pathogenic Microbe Lab., Dept. Infectious Diseases, NCGM., [3]Dept. Microbiol., Tokyo Inst. Pub. Heal., [4]Dept. Bacteriol., Osaka. Inst. Pub. Heal., [5]Yamaguchi. Pref. Inst. Pub. Heal. Env.)

**P1-010 (WS03-5)**
**Epidemiology of carbapenem-resistant *Enterobacteriaceae* in one university hospital (2014-2019).**
○Tatsuki Mura[1], Miyako Asou[1], Emi Morita[1], Kazumi Kanaya[1], Kae Kawamura[1], Yoshitsugu Iinuma[1,2] ([1]Dept. Clin. Lab., Kanazawa Med. Univ. Hosp., [2]Dept. Clin. Infect. Dis., Kanazawa Med. Univ.)

**P1-011 (WS03-4)**
**Genomic analysis of a pandrug-resistant *Klebsiella pneumoniae* sequence type 11**
○Satoshi Nishida, Takane Kikuchi-Ueda, Tsuneyuki Ubagai, Yoshinori Sato, Shigeru Tansho-Nagakawa, Yasuo Ono (Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ.)

**P1-012 (WS03-3)**
**Molecular epidemiological characteristics of Enterobacter cloacae complex blood isolates**
○Sarangi Jayathilake[1], Nao Matsuo[2], Rina Nonogaki[2], Michiko Hayashi[2], Masahiro Suzuki[3], Jin Wanchun[1], Jun-ichi Wachino[1], Kouji Kimura[1], Yoshichika Arakawa[1] ([1]Dept. Bacteriol., Nagoya Univ. Grad. Sch. Med., [2]Dept. Pathophysiol. Lab. Sci., Nagoya Univ. Grad. Sch. Med., [3]Dept. Microbiol. Fujita Health Univ.)

**P1-013**
**Genetically diverse strains of *Chlamydia trachomatis* are circulated in Sapporo**
○Jeewan Thapa, Takanori Watanabe, Mana Isoba, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

**P1-014**
**Characterization and prevalence *Vibrio parahaemolyticus* infection before the global pandemic**
○Manae Higashi[1], Mina Sakuta[1], Yuria Kobayashi[1], Ahmad Yaman Kayali[2], Mitsuaki Nishibuchi[2], Yoshitsugu Nakaguchi[1,2] ([1]Dept. Food Sci., Fac. Bioresources and Env. Sci., Ishikawa Pref. Univ., [2]Ctr. Southeast Asian Studies, Kyoto Univ.)

**P1-015**
**Emergence of carbapenem-resistant and colistin-non-resistant *Enterobacter cloacae* harboring *mcr-9***
○Pegah Kananizadeh, Satoshi Oshiro, Shu Iwata, Teruo Kirikae (Dept. Microbiol, Sch. Med., Juntendo Univ.)

**P1-016**
**Mutational changes in plasmid genome with *vanA* in enterococci causing hospital outbreak in Osaka**
○Yoshihiro Fujiya[1,2], Tetsuya Harada[3], Yo Sugawara[1], Yukihiro Akeda[1,2], Kazunori Tomono[2], Shigeyuki Hamada[1] ([1]RCC-ERI, RIMD, Osaka Univ., [2]Dept. Infect. prevent. control, Sch. Med., Osaka Univ., [3]Div. Bicteriol., Osaka Inst. Public Health)

**P1-017**
**Isolation of *Bartonella* spp. in masked palm civet captured in Kyoto City, Japan**
○Mire Kin[1], Aya Muraoka[1], Yukie Koga[1], Masami Okumura[2], Mieko Kawamichi[3], Keiichi Miyake[4], Akihiko Maeda[1], Azusa Someya[1] ([1]Dept. Anim. Med. Sci., Kyoto Sangyo Univ., [2]Dept. Bioresour. Sci., Ryukoku Univ., [3]Kansai Wildlife Res. Assoc., [4]Miyake Vet. Clinic)

**P1-018**
**First isolation of carbapenemase-producing *Enterobacteriaceae* in Malawi, Africa**
○Geoffrey Kumwenda[1,2,3], Yo Sugawara[1], Ryuichiro Abe[2], Yukihiro Akeda[1,2], Watipaso Kasambara[3], Kenneth Chizani[3], Dan Takeuchi[1], Noriko Sakamoto[1], Kazunori Tomono[2], Shigeyuki Hamada[1] ([1]RCC-ERI, RIMD, Osaka Univ., [2]Dept. Infect. Cont. Prevent., Med. Hosp., Osaka Univ., [3]Natl. Ref. Lab., MOH, Lilongwe, Malawi)

**P1-019**
**Unique features of ST8/SCC*mec*IVl community-associated methicillin-resistant *Staphylococcus aureus***
○Tsai-Wen Wan[2], Lee-Jene Teng[2], Tatsuo Yamamoto[1] ([1]Dept. Epidemiol. Genomics Evol., Intl. Med. Edu. Res. Center, [2]Dept. Clin. Lab. Sci. Med. Biotechnol., National Taiwan Univ.)

**P1-020**
**Detection of quinolone resistance determinants in *E. coli* from food animals in the Philippines**
○Lawrence Belotindos[1,2], Claro Mingala[1], Marvin Villanueva[1], Chie Nakajima[2,3], Yasuhiko Suzuki[2,3] ([1]Biosafety and Environ Section, Philippine Carabao Center, the Philippines, [2]Div. Biores, Hokkaido Univ. Res Center Zoonosis Ctl, [3]GS Zoonosis Ctl, GI-CoRE, Hokkaido Univ.)

**P1-021**
**Characterization of ESBL-producing Escherichia coli in Surabaya, Indonesia**
○Fikri Widyatama[1], Rosantia Sarassari[1,2], Takuya Higa[1], Kouta Hamamoto[1], Kuntaman Kuntaman[2], Itaru Hirai[1] ([1]Lab. Microb., Sch. Health Sci, The Ryukyus. Univ., [2]Dept. Clin. Microb., Fac. Med., Airlangga Univ.)

**P1-022**
**Characterization of CTX-M type ESBL-producing *E. coli* from ICU and non-ICU ward in Indonesia**
○Rosantia Sarassari[1], Takuya Higa[1], Nobuyoshi Yagi[1], Kuntaman Kuntaman[2], Itaru Hirai[1] ([1]Lab. Microb., Sch. Health Sci., The Ryukyus. Univ., [2]Dept. Clin. Microb., Fac. Med., Airlangga Univ.)

**P1-023**
**【Withdrawn】**

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

**P1-024**
**【Withdrawn】**

**P1-025**
**Relation between PlcR transcriptional regulation system and SMase production in Bacillus cereus**
○Atsushi Yokotani[1], Fumi Takahashi[1], Ryoko Aoyama[1], Naoki Hayashi[1], Tadashi Kosaka[2], Masaki Nakanishi[3], Naohisa Fujita[3], Masataka Oda[1] ([1]Dept. Microbiol. Infect. Cont. Sci., Kyoto Pharm. Univ., [2]Dept. Pharm., Univ. Hosp., Kyoto Pref. Univ. Med., [3]Dept. Infect. Cont. Lab. Med. Univ. Hosp., Kyoto Pref. Univ. Med.)

**P1-026**
**Identification of Candida auris by biochemical assay**
○Mengqian Du[1,2], Takashi Tamura[2], Koichi Makimura[2] ([1]Dept. Gen. Med., Sch. Juntendo Univ., [2]Gen. Med. Educ. Rec. Center, Teikyo Univ.)

**P1-027**

**Development of a culture method and a PCR-based method for detection of *Lautropia mirabilis*.**

○Ayame Sato[1,2], Masaaki Nakayama[1,3], Mio Nakagawa[4], Hirotaka Kosaki[2], Misato Muro[4], Yoshihiko Soga[4], Naoya Ohara[1,3] ([1]Dept. Oral Microbiol., Okayama Univ. Grad. Sch. Med. Dent. Pharm., Sci., [2]Perio., Mgmt. Cent., Okayama Univ. Hosp., [3]ARCOCUS, Dent. Sch., Okayama Univ., [4]Div. Hosp. Dent., Cent. Clin. Dept., Okayama Univ. Hosp.)

**P1-028**

**Effect of plant-derived extract , Phellodendron bark, against cariogenic bacteria**

○Toshiya Tsujii[1,2], Miki Matsuo[1], Hitoshi Komatsuzawa[3], Youichi Yamasaki[2] ([1]Dept. Oral Microbiol. Grad. Sch. Med. and Dent. Kagoshima Univ., [2]Dept. Pediatric dentistry. Grad. Sch. Med. and Dent. Kagoshima Univ., [3]Dept. Bact. Grad. Sch. Bio. Med. and Health. Sci. Hiroshima Univ.)

**P1-029**

***Brucella ceti* isolated from a bottlenose dolphin for the first time in the western Pacific**

○Yuichi Ueno[1], Makio Yanagisawa[2], Sayuri Kino[2], Satoru Shigeno[3], Makoto Osaki[1], Daisuke Takamatsu[1], Ken Katsuda[1], Tadashi Maruyama[4], Kazue Ohishi[5] ([1]Div. Bact. Paras., NIAH, NARO, [2]Okinawa Churashima Found, [3]Okinawa Pref. Inst. Anim. Health, [4]Sch. Mar. Sci., Kitasato Univ., [5]Sch. Engin., Tokyo Polytec. Univ.)

**P1-030**

**Etiology of Enteric Pathogens among Diarrheal Patients at the Infectious Diseases Hospital, Kolkata**

○Goutam Chowdhury[1,2], Alok Deb[2], Eizo Takahashi[1], Keinosuke Okamoto[1], Shanta Dutta[2], Asish K. Mukhopadhyay[2] ([1]Coolabo. Res. Cen. Okayama Univ. Infect. Dis. India, [2]Dept. Bacteriol., NICED. India)

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

**P1-031 (WS03-8)**

**Distinguished identification of Rickettsia japonica and non-pathogenic Rickettsia in ticks**

○Eri Onoda[1], Hongru Su[1], Shigetoshi Sakabe[2], Shigehiro Akachi[3], Hiromi Fujita[4], Saori Oishi[5], Fuyuki Abe[5], Takashi Kanda[5], Norio Ohashi[1] ([1]Lab. Microbiol., Sch. Food Nutr. Sci., Univ. Shizuoka, [2]Dept. Medic Infect Dis., Ise Red Cross Hosp., [3]Mie Pref. Health Environ. Res. Inst., [4]Mahara Inst. Med. Acari, [5]Dept. Microbiol Shizuoka Inst. Environ. Hygiene)

**P1-032 (WS03-1)**

**Genome analyses of E. coli strains isolated as suspected causative agents in diarrhea outbreaks**

○Yoshitoshi Ogura[1], Mari Sasaki[2], Hiroshi Narimatsu[2], Kai Ishimaru[3], Yoko Arimizu[1], Yasuhiro Gotoh[1], Keiji Nakamura[1], Tetsuya Hayashi[1] ([1]Dept. Bact., Facul. Med. Sci., Kyushu Univ., [2]Lab. Micro., Oita Pref. Inst. Health Environ., [3]Facul. Med., Sci. Kyushu Univ.)

**P1-033**

**Development of a reagent to increase accuracy of GBS screening test for pregnant women**

○Masaya Ogata[1], Jumpei Uchiyama[1], Hidehito Matui[2], Iyo Uchiyama[1], Tadahiro Nasukawa[1], Shigenobu Matsuzaki[3], Hideaki Hanaki[2], Masahiro Sakaguchi[1] ([1]Dept. Microbiol, Sch. Vet, Azabu Univ., [2]Dept. Microbiol, Sch. Vet, Kitasato Univ., [3]Dept. Ophthalmol. Visual Sci., Sch. Med., Kochi Univ.)

**P1-034**

**An appropriate PCR conditions to detect *Escherichia albertii* from chicken meat samples**

○Sakura Arai[1], Kenji Ohya[1], Kayoko Ohtsuka[2], Noriko Konishi[3], Yukiko Hara-Kudo[1] ([1]Div. Microbiol., Natl. Inst. Health Sci., [2]Saitama Inst. Public Health, [3]Tokyo Metropol. Inst. Public Health)

**P1-035**

**Development of external quality control assuarance and training systems for public health Institutes**

○Masakado Matsumoto[1], Hidemasa Izumiya[2], Hirohito Shinomiya[3], Junko Isobe[4], Noriko Konishi[5], Maho Kawamura[5], Kazuko Seto[5], Hiroko Minagawa[1], Makoto Ohnishi[2] ([1]Dept. Microbiol., Aichi Pref. Inst. Pub. Healt., [2]Dept. Microbiol.1, Nat. Insit. Infect. Dis., [3]Ehime Pref. Inst. Pub. Healt. Environ., [4]Toyama Pref. Inst. Pub. Healt., [5]Inst. Pub. Healt., Tokyo, Osaka)

**P1-036**

**Rapid detection of Stx2e in culture supernatant of swine clinical samples**

○Hideyuki Arimitsu[1,2], Tomoko Kohda[3], Masafumi Mukamoto[3], Masahiro Kusumoto[4] ([1]Dept. Microbiol. Sch. Human Sci. Environ., Univ. of Hyogo, [2]Res. Inst. Food and Nutr. Sci., Univ. of Hyogo, [3]Dept. Vet. Sci., Osaka Pref. Univ., [4]Nat. Agr. Food Res. Org.)

**P1-037**

**Rapid profiling of drug-resistant bacteria using propidium monoazide and a nanopore DNA sequencer**

○Ayumu Ohno[1], Kazuo Umezawa[2], Satomi Asai[3], Kirill Kryukov[1], So Nakagawa[1], Hayato Miyachi[3], Tadashi Imanishi[1] ([1]Dept. Molecular Life Science., Sch. Med., Tokai Univ., [2]Dept. Emergency and Critical Care Medicine., Sch. Med., Tokai Univ., [3]Dept. Laboratory Medicine, Sch. Med., Tokai Univ.)

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

**P1-038 (WS03-7)**
**The relationship between infant botulism and sudden infant death syndrome (SIDS)**
◯Takuhiro Matsumura, Sho Amatsu, Masahiro Yutani, Yukako Fujinaga (Dept. Bacteriol., Sch. Med. Sci., Kanazawa Univ.)

**P1-039**
**Reactive cysteine polysulfide inhibit NLRP3 inflammasome activity in macrophages**
◯Tianli Zhang[1], Hiroyasu Tsutsuki[1], Katsuhiko Ono[1], Takaaki Akaike[2], Tomohiro Sawa[1] ([1]Dept. Microbiology, Grad. Sch. Medical Science, Kumamoto Univ., [2]Dept. Environmental Medicine and Molecular Toxicology, Tohoku Univ. Grad. Sch. Medicine)

**P1-040**
**Effect of Oral Indole-Supplemented Water on Chemotherapy-Induced Bacterial Translocation**
◯Yuki Yamasaki[1], Kazuki Kitaoka[2], Satoshi Tsuneda[1,2] ([1]Dept. Life Sci. Med. Biosci., Waseda Univ., [2]Dept. Nano Life Innov., Waseda Univ.)

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

**P1-041**
**Reactive CysSSH via cysteinyl-tRNA synthetase expression depending on energy metabolism in yeast**
◯Sunghyeon Yoon[1], Akira Nishimura[2], Tomoaki Ida[1], Minkyung Jung[1], Masanobu Morita[1], Tetsuro Matsunaga[1], Hiroshi Takagi[2], Hozumi Motohashi[3], Takaaki Akaike[1] ([1]Dept. Environ Med. Mol. Toxicol, Tohoku Univ. Grad. Sch. Med., [2]Grad. Sch. Biol. Sci., Nara Inst. Sci. and Technol., [3]Dept. Gene Exp. Reg., IDAC, Tohoku Univ.)

**P1-042**
**Sulfide: quinone oxidoreductase-dependent energy metabolism in fission yeast**
◯Qamarul Hafiz Zainol Abidin[1], Akira Nishimura[2], Tomoaki Ida[1], Masanobu Morita[1], Minkyung Jung[1], Tetsuro Matsunaga[1], Hozumi Motohashi[3], Takaaki Akaike[1] ([1]Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., [2]Grad. Sch. Biol. Sci., Nara Inst. Sci. and Technol., [3]Dept. Gene Exp. Reg., IDAC, Tohoku Univ.)

**P1-043**
**Associations of gut microbiota, dietary intake, and serum SCFAs with fecal SCFAs**
◯Ryodai Yamamura[1], Koshi Nakamura[2,5], Naoya Kitada[3], Tomoyasu Aizawa[3], Yu Shimizu[4], Kiminori Nakamura[4], Tokiyoshi Ayabe[4], Takashi Kimura[5], Akiko Tamakoshi[5] ([1]Dept. Public Health., Grad. Sch. Med., Hokkaido Univ., [2]Dept. Public Health & Hygiene, Grad. Sch. Med., Univ. the Ryukyus, [3]Lab. Protein Sci., Fac. Adv. Sci., Hokkaido Univ., [4]Innate Immun. Lab., Fac. Adv. Sci., Hokkaido Univ., [5]Dept. Public Health., Fac. Med., Hokkaido Univ.)

**P1-044**
**Analysis of the uptake mechanism of serine in *Campylobacter jejuni***
◯Ayako Watanabe-Yanai[1], Taketoshi Iwata[1], Yukino Tamamura[1], Nobuo Arai[2], Masato Akiba[1,2], Masahiro Kusumoto[1] ([1]NARO, NIAH, [2]Dept. Vet. Sci., Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)

## 3. Physiology / Structural biology -b. Motility

**P1-045**
**Structural change of PomAB stator complex induced by $Na^+$ flux in *Vibrio* flagellar motor**
◯Tatsuro Nishikino, Hiroto Iwatsuki, Taira Mino, Seiji Kojima, Michio Homma (Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

**P1-046**
**Comparison of gliding motility between type I and type II strains of *Mycoplasma pneumoniae***
◯Masaki Mizutani[1], Makoto Miyata[1,2] ([1]Grad. Sch. Sci., Osaka City Univ., [2]OCARINA, Osaka City Univ.)

**P1-047**
**Structure of MMOB1620, an unknown protein that constitutes the motor of *Mycoplasma mobile*.**
◯Hiroki Sato[1], Hisashi Kudo[2], Aya Kodama[1], Koji Ooka[3], Shunji Suetaka[2], Yuuki Hayashi[2], Munehito Arai[2,3], Makoto Miyata[1,4] ([1]Grad. Sch. Osaka City Univ., [2]Dept. Life Sci., Univ. Tokyo, [3]Dept. Phys., Univ. Tokyo, [4]OCARINA Osaka City Univ.)

**P1-048**
**Rheotaxis in *Mycoplasma pneumoniae***
◯Yoshiki Kabata, Daisuke Nakane, Takayuki Nishizaka (Dept. Phys., Gakushuin Univ.)

**P1-049**
**Directional switching mechanism of the bacterial flagellar motor**
◯Tohru Minamino[1], Miki Kinoshita[1], Keiichi Namba[1,2,3] ([1]Grad. Sch. Frontier Biosci, Osaka Univ., [2]RIKEN BDR, [3]RIKEN SPring-8)

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

**P1-050**
**_Prophyromonas levii_ acts as a growth-promotor of _Treponema phagedenis_ in a polymicrobial infection**
◯Rathanon Khemgaew[1], Takako Taniguchi[2], Satomi Sasaki[2], Naoaki Misawa[1,2] ([1]Dept. Vet. Sci., Fac. Agri., Univ. Miyazaki, [2]Center for Animal Disease Control, Univ. Miyazaki)

**P1-051**
**Analysis of extracellular DNA production in biofilm of _Streptococcus mutans_.**
◯Ryo Nagasawa[1], Nozomu Obana[2,3], Andrew S. Utada[3,4], Nobuhiko Nomura[3,4] ([1]Grad. Sch. Life. Environ. Sci., Univ. Tsukuba, [2]Fac. Med., TMRC, Univ. Tsukuba, [3]MiCS, Univ. Tsukuba, [4]Fac. Life Environ. Sci., Univ. Tsukuba)

**P1-052**
**Heterogeneity and morphology control mechanism in biofilm by quorum sensing of pathogenic bacteria**
◯Yoshihiko Tabushi[1], Nozomu Obana[2,3], Nobuhiko Nomura[3,4] ([1]Grad. Sch. Life Environ. Sci., Tsukuba Univ., [2]TRMC, Fac. Med., Tsukuba Univ., [3]MiCS, Tsukuba Univ., [4]Fac. Life Environ. Sci., Tsukuba Univ.)

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

**P1-053**
**Examination of the purification method of the membrane vesicles produced by Gram-positive bacteria**
◯Tadahiro Nasukawa[1], Ryosuke Sugimoto[1], Hidekatsu Shimakura[1], Masaya Ogata[1], Ken Fukuda[2], Shigenobu Matsuzaki[2], Jumpei Uchiyama[1] ([1]Lab. Vet. Microbiol. I., Sch. Vet. Med., Azabu Univ., [2]Dept. Ophthalmol. Visual Sci., Sch. Med., Kochi Univ.)

**P1-054**
**Effect of initial pH on production and virulence of Membrane vesicles in _Streptococcus mutans_**
◯Yusuke Iwabuchi[1,2], Tomoyo Nakamura[3], Yasuka Kusumoto[1], Osamu Shinozuka[1], Ryoma Nakao[1], Hidenobu Senpuku[1] ([1]Dentistry for Persons with Disabilities, Grad. Sch. Med. Dent. Sci., Tokyo Med. Dent. Univ., [2]Dept. Bacteriol. I, Nat. Inst. Infect. Des., [3]Grad. Sch. Bioresour. Sci., Nihon Univ.)

**P1-055**
**Detail Structure of _Spiroplasma_ Fibril Protein Driving Helicity-Switching Swimming**
◯Yuya Sasajima[1], Takayuki Kato[2], Tomoko Miyata[2], Keiichi Namba[2,3,4], Makoto Miyata[1,5] ([1]Grad. Sch. Sci., Osaka City Univ., [2]Grad. Sch. Frontier Biosci., Osaka Univ., [3]RIKEN BDR & SPring-8 Center, [4]JEOL Yokogushi Res. Alliance. Lab., [5]OCARINA, Osaka City Univ.)

**P1-056**
**$Na^+$ dependent structural change of PomA cytoplasmic region in $Na^+$-driven _Vibrio_ flagellar motor**
◯Michio Homma, Taira Mino, Tatsuro Nishikino, Hiroto Iwatsuki, Seiji Kojima (Dev. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

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

**P1-057 (WS07-3)**
**Production of membrane vesicles and induction of anti-Gtfs antibody by _S. mutans_ depending on Gtfs**
◯Tomoyo Nakamura[1,2], Yusuke Iwabuchi[2], Naoki Narisawa[2], Fumio Takenaga[2], Ryoma Nakao[1], Hidenobu Senpuku[1] ([1]Grad. Sch. Bioresour. Sci., Nihon Univ., [2]Dept. Bacteriol. 1, Nati. Inst. Infect. Dis.)

**P1-058**
**Route of intrabacterial nanotransportation system for urease in _Helicobacter pylori_**
◯Hong Wu[1], Noritaka Iwai[2], Youichi Suzuki[1], Takashi Nakano[1] ([1]Dept. Microbiology and Infection Control, Osaka Medical College, [2]Grad. Sch. Bioscience and Biotechnology, Tokyo Institute of Technology)

## 3. Physiology / Structural biology -f. Others

**P1-059**
**Characterization of mycobacteria-specific drug targets for development medical agents.**
◯Yukiko Oohara[1], Haruka Kobayashi[1], Yuriko Ozeki[1], Akihito Nishiyama[1], Yoshitaka Tateishi[1], Shujiro Okuda[2], Shigeki Kamitani[3], Kengo Kitadokoro[4], Sohkichi Matsumoto[1] ([1]Dept. Bacteriology. Niigata. Med. Univ., [2]Bioinformatics. Lab. Niigata. Med. Univ., [3]Grad. Sch. Comprehensive. Osaka Prefe. Univ., [4]Dept. Biomolecular. Engineering. Sch. Kyoto. Technology)

**P1-060**

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

◯Aleksandr Ilinov[1,2], Amina Shaban[1], Mariko Hakamata[1], Akihito Nishiyama[1], Yuriko Ozeki[1], Yukari Fukushima[3], Chie Nakajima[3], Yoshitaka Tateishi[1], Yasuhiko Suzuki[3], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]Depr. General Surgery., Krasnoyarsk Univ., [3]Division of Bioresources, Hokkaido Univ. Research Center for Zoonosis Control)

**P1-061**

**Construction of a conditional gene expression system in *Porphyromonas gingivalis***

◯Mikio Shoji, Takayuki Sueyoshi, Mariko Naito (Dept. Microbiol. Oral Infect., Sch. Bio. Sci., Nagasaki Univ.)

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

**P1-062**

**Prevalence of Campylobacter in broiler farms and wild animals**

◯Nachiko Takeshita[1], Mikuni Tokuyoshi[1], Kazuo Suzuki[2], Yoshihiro Nitta[1], Ai Takano[3], Hiroshi Shimoda[3], Ken Maeda[3,4], Takehisa Chuma[5], Tadashi Miyashita[1], Tsutomu Sekizaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. of Tokyo., [2]Hikiiwa Park Center., [3]Joint Fac. Vet. Med., Yamaguchi Univ., [4]Natl. Inst. Infect. Dis., [5]Joint Fac. Vet. Med., Kagoshima Univ.)

**P1-063**

**Studies on Survival of Vibrio cholerae in Environment Water in Kolkata, India**

◯Keinosuke Okamoto[1], Paul S Subha[1], Shin-ichi Miyoshi[2], Asish K. Mukhopadhyay[3], Kanungo Suman[3], Shanta Dutta[3], Eizo Takahashi[1] ([1]Collaborative Research Center of Okayama Univ. for Infectious Diseases in India, [2]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., [3]NICED, Kolkata, India)

**P1-064**

**Complete genome assembly of a symbiont Rickettsia from sandfly, *Sergentomyia squamirostris***

◯Kentaro Itokawa[1], Akihiro Kuroki[2], Chizu Sanjoba[2], Tsuyoshi Sekizuka[1], Rina Tanaka[1], Daisuke Kobayashi[3], Haruhiko Isawa[3], Shinji Kasai[3], Kyoko Sawabe[3], Makoto Kuroda[1] ([1]Pathogen Genomics Center, Nat. Inst. Infect. Dis., [2]Dept. Agri., Tokyo Univ., [3]Dept. Med. Entomol., Nat. Inst. Infect. Dis.)

**P1-065**

**Survival of Legionella pneumophila into co-cultures with wild ciliates**

◯Torahiko Okubo[1], Airi Kawashiro[1], Shinji Nakamura[2], Jeewan Thapa[1], Hiroyuki Yamaguchi[1] ([1]Fac. Health Sci., Hokkaido Univ., [2]Div. Biomed. Imag. Res., Juntendo Univ. Grad. Sch. Med.)

## 2. Ecology -b. Microbiota

**P1-066**

**Comprehensive bacterial microbiota analysis of the nasal discharge in children**

◯Kaoru Haro[1,2], Kazumasa Fukuda[1], Midori Ogawa[1], Mitsumasa Saito[1] ([1]Dept. Microbiol., Sch. Med., UOEH., [2]Dept. Pediatrics, Sch. Med., UOEH.)

**P1-067**

**Analysis of oral and gut microbiome associated with atopic dermatitis, using purebred dog colony**

◯Asaka Unno[1], Ichiro Imanishi[2], Keijiro Mizukami[3], Takefumi Osumi[2], Hirotaka Igarashi[1], Hironobu Murakami[1], Ayaka Shima[4], Yumi Une[5], Masahiro Sakaguchi[1], Jumpei Uchiyama[1] ([1]Vet., Azabu Univ., [2]Tokyo Univ. of Agriculture and Technology., [3]RIKEN, [4]Anicom Specialty Medical Institute Inc., [5]Vet., Okayama Univ. of Science)

**P1-068**

**Identification of spore forming bacteria in intestine tract using germination activity of bile acids**

◯Masaru Tanaka, Sakura Onizuka, Yui Funatsu, Jiro Nakayama (Faculty of Agri., Kyushu Univ.)

**P1-069**

**Comparison of skin microbiome profiles in healthy Cameroonian and Japanese people**

◯Ayaka Matsuoka[1], Kazuhiro Ogai[2], Takayuki Kuraishi[3], Shigefumi Okamoto[1] ([1]Dept. Clin. Lab. Sci., Kanazawa Univ. Grad. Sch. Med, Pharm, and Health Sci., [2]Dept. Clin. Nurs., Kanazawa Univ. Grad. Sch. Med., Pharm. And Health Sci., [3]Host Defense Responses Lab., Kanazawa Univ. Grad. Sch. Med., Pharm, and Health Sci.)

**P1-070**

**Skin microbiome in bedridden patients, and association with the post pressure injuries infection.**

◯Satoshi Nagase[1], Kazuhiro Ogai[2], Tamae Urai[3], Kana Shibata[3], Kanae Mukai[2], Miki Matsue[1], Miku Aoki[2], Defa Alsandi[2], Junko Sugama[3], Shigefumi Okamoto[1] ([1]Dept. Clin Lab. Sci., Kanazawa Univ. Grad. Sch. Med., Pharm., and Health Sci., [2]Dept. Clin. Nurs., Kanazawa Univ. Grad. Sch. Med., Pharm. And Health Sci., [3]Inst. Front. Sci. Initiative, Kanazawa Univ.)

**P1-071**

**The impact of gut microbiota in lung lesions by experimental infection with Mycoplasma hyopneumoniae**

◯Hiroki Matsumoto, Hideaki Toda, Ekitetsu In, Takanori Namimatsu (JA Zennoh Institute of Animal Health)

**P1-072**
**The validity of fecal microbiota transplantation (FMT) in type 1 diabetic mice**
◯Yoichiro Oka, Makoto Shimizu, Chihiro Tanaka (Dept. Res., Inst. Clin., FMT Co., Ltd.)

## 2. Ecology -c. Growth and culture conditions

**P1-073**
**Heat resistance of spores formed by *Clostridium perfringens* and *Bacillus cereus***
◯Masaya Ito[1], Masami Miyake[2], Mayo Yasugi[2], Akinobu Kajikawa[3], Kenji Yokota[3], Shizunobu Igimi[3] ([1]Dept. Agri. Chem., Grad. Sch. Agri., Tokyo Univ. Agri., [2]Dept. Vet., Fac. Life. Environ. Sci., Osakafu Univ., [3]Dept. Agri. Chem., Fac. Appl. Biosci., Tokyo Univ. Agri.)

**P1-074**
**Investigation to determine the factors responsible for desiccation tolerance on Escherichia coli**
◯Yoshiaki Enoeda, Ryota Ogura, Torahiko Okubo, Jeewan Thapa, Hiroyuki Yamaguchi (Fac. Health Science, Hokkaido Univ.)

**P1-075**
**Expression of virulence factors in Aggregatibacter actinomycetemcomitans under various conditions**
◯Ayumi Fujita[1,2], Yuichi Oogai[2], Hitoshi Komatsuzawa[3], Kazuyuki Noguchi[1] ([1]Dept. Periodontol., Kagoshima Univ., Grad. Sch. Med. and Dent. Sciences, [2]Dept. Oral Microbiol., Kagoshima Univ., Grad. Sch. Med. and Dent. Sciences, [3]Dept. Bacteriol., Hiroshima Univ. Inst. Biomed Health Sci.)

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

**P1-076**
**WGS-based phylogenetic analysis of M. avium/ intracellulare complex isolated in Fukuoka**
◯Jingushi Yujiro[1,2], Yasuhiro Gotoh[1], Keiji Nakamura[1], Katsuyuki Katahira[1,3], Yoshitoshi Ogura[1], Tetsuya Hayashi[1] ([1]Dept. Bacteriology., Sch. Med., Kyushu Univ., [2]Dept. Respiratory., Sch. Med., Kyushu Univ., [3]Omuta Hosp)

**P1-077**
**Genomic analysis of Yersinia pseudotuberculosis strains isolated from patients with Kawasaki disease**
◯Kazuaki Yasuoka[1], Yumi Mizuno[3], Keiji Nakamura[2], Yasuhiro Gotoh[2], Yoshitoshi Ogura[2], Shouichi Ohga[1], Toshiro Hara[3], Tetsuya Hayashi[2] ([1]Dept. Pediatrics, Grad. Sch. Medical Sciences, Kyushu Univ., [2]Dept. Bacteriology, Grad. Sch. Medical Sciences, Kyushu Univ., [3]Dept. Pediatrics, Fukuoka Child Hospital)

**P1-078**
**Development of *Spiroplasma* swimming motor from bacterial actin, MreB**
◯Daichi Takahashi[1], Makoto Miyata[1,2] ([1]Grad. Sch. Sci., Osaka City Univ., [2]OCARINA, Osaka City Univ.)

**P1-079**
**Phylogenetic classifier of bacterial genomes based on nucleotide pentamer profiles**
◯Yoshio Nakano[1], Yusaku Domon[2], Kenji Yamagishi[2], Takayasu Watanabe[1] ([1]Sch. Dent., Nihon Univ., [2]Chem. Biol. and Appl. Chem. Course, Grad. Sch. Eng., Nihon Univ.)

**P1-080**
**Compositional change of peri-implant microbiota after the implant placement**
◯Masahiro Shimogishi[1], Takayasu Watanabe[2], Masaki Shibasaki[1], Yoshio Nakano[2], Shohei Kasugai[1], Ichiro Nakagawa[3] ([1]Dept. Oral Implantol. Regen. Med., Grad. Sch. Med. Dent. Sci., Tokyo Med. Dent. Univ., [2]Dept. Chem., Sch. Dent., Nihon Univ., [3]Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

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

**P1-081**
**Influence of temperature on cell-to-cell transformation in solid-air biofilms of *Escherichia coli***
◯Mayuko Hashimoto, Haruka Hasegawa, Sumio Maeda (Dept. food Sci., Grad. Sch. Humanities and Sci., Nara Women's Univ.)

**P1-082**
**Comprehensive detection of insertion sequences in bacterial genomes**
◯Jun Hattori[1], Dai Yoshimura[1], Itsuki Taniguchi[2], Tetsuya Hayashi[2], Takehiko Itoh[1] ([1]Sch. Life. Sci. Tech., Tokyo Tech., [2]Dept. Bacteriol. Grad. Sch. Med., Kyushu Univ.)

**P1-083**
**Comparison of FHL gene structure of hydrogen producing marine vibrio**
◯Sayo Nishikawa[1], Mami Tanaka[1], Sayaka Mino[1], Tomoo Sawabe[1], Yoshitoshi Ogura[2], Tetsuya Hayashi[2] ([1]Hokkaido Univ., [2]Kyushu Univ.)

**P1-084**
**Genomic features of Rickettsia heilongjiangensis isolated in Japan revealed by comparative analysis**
◯Kentaro Kasama[1], Hiromi Fujita[2], Seigo Yamamoto[3], Tadasuke Ooka[4], Yasuhiro Gotoh[1], Yoshitoshi Ogura[1], Shuji Ando[5], Tetsuya Hayashi[1] ([1]Dept. Bacteriol., Sch. Med. Sci., Kyushu Univ., [2]Mahara Akari Med. Lab., [3]Frontier Sci. Res. Center, Miyazaki Univ., [4]Dept. Infection Immunity, Sch. Med. Den. Sci., Kagoshima Univ., [5]NIID)

**P1-085**

**IS*Ecp1*-mediated transposition of AMR genes by usage of various right terminal sequence.**

◯Kouta Hamamoto[1,2], Toshiro Tokunaga[1], Nobuyoshi Yagi[1], Itaru Hirai[1] ([1]Lab, Microbiol., Sch. Health. Sci., Univ. The Ryukyus, [2]Research Fellow of Japan Society for the Promotion of Science DC1)

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

**P1-086**

**Identification of novel Hfq binding small non-coding RNA in *Pseudomonas aeruginosa***

◯Kenichi Takasugi[1,2], Kotaro Chihara[1,2], Naohiro Noda[1,2], Satoshi Tsuneda[1] ([1]Dept. Life Sci. Med. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ., [2]Biomed. Res. Inst., Natl. Inst. Adv. Ind. Sci. Tech. (AIST))

**P1-087**

**Feedback regulation of sRNA by RNA binding protein CsrA**

◯Naoya Isomura, Takehiko Mima, Kazuyoshi Gotoh, Yumiko Yamamoto, Osamu Matsushita (Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pham. Sci.)

**P1-088**

**Characterization of an OxyR-deficient mutant of *Capnocytophaga ochracea***

◯Yuichiro Kikuchi, Kazuko Shibayama, Eitoyo Kokubu, Kazuyuki Ishihara (Dept. Microbiol., Tokyo Dent Coll.)

**P1-089**

**Posttranscriptional regulation of chitinase genes by small RNA ChiX in *Serratia***

◯Kazushi Suzuki[1], Yujo Kojima[1], Naoki Munakata[1], Tomoya Kumaki[2], Kyoko Horii[1], Takuya Yamagisi[1], Hayuki Sugimoto[1,2] ([1]Grad. Sch. Sci. & Tech., Niigata Univ., [2]Dept. Appl. Biol. Chem., Fac. Agric., Niigata Univ.)

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

**P1-090**

**Transposon mutagenesis as an approach to detect a novel immune molecule of L. casei IGM394**

◯Mizuho Wakayama[1], Kazuya Masuda[2], Akinobu Kajikawa[3], Kenji Yokota[3], Shizunobu Igimi[3] ([1]Dept. Agri. Chem., Grad. Sch. Agri., Tokyo Univ. Agri., [2]Dept. Food Sci. Nutr., Fac. Life. Environ. Sci., Showa Womens Univ., [3]Dept. Agri. Chem., Fac. Appl. Biosci., Tokyo Univ. Agri.)

**P1-091**

**Development of gene recombination method for *Candida utilis* by CRISPR-CAS9**

◯Yuta Yamauchi, Susumu Kajiwara, Xinyue Chen (Dept. Life Engineering., Sch. Life Science., TIT.)

**P1-092**

**Metabolic engineering for lipid utilization in *Clostridium perfringens***

◯Miki Kato[1], Chinami Yano[2], Toshio Wada[2], Shigeru Miyata[1,2] ([1]Grad. Sch. Biosci. Biotech., Chubu Univ., [2]Dept. Food Nutr. Sci., College Biosci. Biotech., Chubu Univ.)

**P1-093**

**Construction of T7 expression vectors with signal sequence for Clostridial expression system**

◯Riyuki Arakawa, Miki Kato, Shunya Sawairi, Shigeru Miyata (Dept. Food Nutr. Sci., College Biosci. Biotech., Chubu Univ.)

**P1-094**

**Analysis of cellulase-related genes from *C. acetobutylicum* by *C. perfringens* expression system**

◯Hiroki Kawahata[1], Hirofumi Nariya[2], Ryuichi Moriyama[1], Shigeru Miyata[1] ([1]Coll. Biosci. Biotech., Chubu Univ., [2]Grad. Sch. Biosphere Sci., Hiroshima Univ.)

**P1-095**

**Expanding the genetic code of Neisseria meningitidis with unnatural amino acids**

◯Hideyuki Takahashi[1], Makoto Ohnishi[1], Shigeyuki Yokoyama[2], Tatsuo Yanagisawa[2] ([1]Dept. Microbiol I, Nat. Inst. Infect. Dis., [2]Structural Lab., RIKEN)

## 4. Genetics / Genomics / Biotechnology -e. Others

**P1-096**

**Large-scale and high-resolution comparative genomic analyses of the Serratia marcescens complex**

◯Tomoyuki Ono[1,2], Keiji Nakamura[1], Yasuhiro Gotoh[1], Ruriko Nishida[1], Atsushi Iguchi[3], Naomasa Gotoh[4], Takehiko Itoh[5], Yoshitoshi Ogura[1], Akira Shiose[2], Tetsuya Hayashi[1] ([1]Dept. Bact., Fac. Med. Sci., Kyushu Univ., [2]Dept. Cardiovasc. Sur., Fac. Med. Sci., Kyushu Univ., [3]Dept. Hyg. Microbiol., Fac. Agr., Univ. Miyazaki, [4]Dept. Microbiol. Infect. Control Sci., Kyoto Pharm. Univ., [5]Grad. Sch. Biosci. Biotech., Tokyo Tech.)

**P1-097**

**Genome-Wide Screening for Toxin-Antitoxin Systems in *Staphylococcus aureus***

◯Fuminori Kato[1], Yoshihiro Yamaguchi[2], Masayori Inouye[3] ([1]Grad. Sch. Biomed. Heal. Sci., Hiroshima Univ., [2]Grad. Sch. Sci., Osaka City Univ., [3]CABM-Rutgers Univ.)

## 5. Pathogenicity -a. Adhesins and colonization factors

**P1-098**
**Study of novel genotypes of Mfa1 fimbriae in *Porphyromonas gingivalis***
○Kotaro Sakae[1,3], Keiji Nagano[2], Naoya Higuchi[1], Kazuhiko Nakata[1], Yoshiaki Hasegawa[3] ([1]Dept. Endod., Sch. Dent., Aichi-Gakuin Univ., [2]Dept. Microbiol., Sch. Dent., Health Sciences Univ. Hokkaido, [3]Dept. Microbiol., Sch. Dent., Aichi-Gakuin Univ.)

**P1-099**
**The ability of binding to type IV collagen by clinical isolates of cnm positive *Streptococcus mutans***
○Yuri Taniguchi[1], Kazuhisa Ouhara[1], Masae Kitagawa[2], Hitoshi Komatsuzawa[3], Hidemi Kurihara[1] ([1]Dept. Periodontal Medicine, Hiroshima Univ., [2]Cent. Oral Clinical Examination, Hiroshima Univ. Hospital, [3]Dept. Microbiol., Hiroshima Univ.)

**P1-100**
**Matcha green tea enhances FimA fimbriae-dependent autoaggregation of *Porphyromonas gingivalis***
○Ayami Takatsuka[1,2], Naoki Narisawa[2], Tsuyoshi Ikeda[3], Fumio Takenaga[2], Ryoma Nakao[1] ([1]Dept. Bacteriol. 1, Natl. Inst. Infect. Dis., [2]Grad. Sch. Bioresour. Sci., Nihon Univ., [3]Pharm. Sci., Sojo Univ.)

**P1-101**
**Seroepidemiology on novel colonization factor of enterotoxigenic *E. coli* O169 in pigs and cattle**
○Miyoko Inoue[1,2,3,4], Donaming Zheng[1], Yuko Omori[1], Kana Komatsu[1], Yoshihiro Yamaguchi[2], Makoto Miyata[2], Takayuki Wada[3], Hisashi Aso[4], Eriko Kage-Nakadai[1], Yoshikazu Nishikawa[1] ([1]Grad. Sch. Human Life Sci., Osaka City Univ., [2]Grad. Schl. Sci., Osaka City Univ., [3]Inst. Trop. Med., Nagasaki Univ., [4]Grad. Schl. Agri. Sci., Tohoku Univ.)

**P1-102**
**Sensing systems of cell attachment in enterohemorrhagic *Escherichia coli* (EHEC)**
○Fumika Nakagawa, Tomomi Yamada, Hilo Yen, Toru Tobe (Osaka Univ., Grad. Sch. Med.)

**P1-103**
**Cholesterol-dependent cytolysin-like adhesion molecule of Mitis group streptococci**
○Airi Matsumoto[1], Atsushi Tabata[1,2], Ayuko Takao[3], Ken Kikuchi[4], Toshifumi Tomoyasu[1,2], Nobuko Maeda[3], Hideaki Nagamune[1,2] ([1]Dept. Biol. Sci. & Tech., Life Syst., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., [2]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch., [3]Dept. Oral. Microbiol., Sch. Dept. Med., Tsurumi Univ., [4]Dept. Infect. Dis. Tokyo Women's Med. Univ.)

**P1-104**
**Function of fibronectin-binding proteins, FbpC and FbpD, and autolysin of *Clostridium perfringens***
○Seiichi Katayama[1], Shogo Emi[2], Riyo Aono[2], Tomomi Kawai[2], Nozomu Matsunaga[1], Eiji Tamai[3], Hirofumi Nariya[4], Tadashi Shimamoto[4], Yasuo Hitsumoto[1] ([1]Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., [2]Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., [3]Dept. Infect. Dis., Coll. Pharm., Matsuyama Univ., [4]Lab. Food Microbiol. Hyg., Grad. Sch. Integrated Sci. for Life., Hiroshima Univ.)

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

**P1-105**
**Optimization of culture conditions for the T3SS protein production in Bordetella pertussis**
○Masataka Goto, Asaomi Kuwae, Akio Abe (Grad. Sch. Infection Control Sciences, Kitasato Univ.)

**P1-106**
***Clostridium perfringens* α-toxin-induces cytotoxic effect on endothelial cells**
○Hiroto Bandou, Masaya Takehara, Keiko Kobayashi, Masahiro Nagahama (Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ.)

**P1-107**
**Identification of secreted hemolysin from Malassezia globosa**
○Konomi Yamagiwa, Takashi Kanamori, Xinyue Chen, Hideya Yuasa, Susumu Kajiwara (Dept. Life Science. Technology., Tokyo Tech.)

**P1-108**
**The mechanisms of pathogenicity by *Vibrio vulnificus***
○Natsumi Tokuyama, Mahoro Miyazaki, Megu Morita, Takahiro Tsuchiya, Katsushiro Miyamoto, Atsushi Komano (Dept. Microbiol. Infect. Cont., Osaka Univ. Pharm. Sci.)

**P1-109**
**Characterization of infantilysin, a cholesterol-dependent cytolysin produced by *S. infantis***
○Chihiro Kodama[1], Atsushi Tabata[1,2], Toshifumi Tomoyasu[1,2], Ayuko Takao[3], Nobuko Maeda[3], Hideaki Nagamune[1,2] ([1]Dept. Biol. Sci. & Tech., Inst. Tech. & Sci., Tokushima Univ., [2]Div. Biosci. & Bioindust. Grad. Sch. Tech. Indust. & Social Sci., Tokushima Univ. Grad. Sch., [3]Dept. Oral. Bacteriol., Tsurumi Univ.)

**P1-110**
**Localization mechanism of Legionella effector Lpg1137**
○Misaki Murata, Mitsuo Tagaya, Kohei Arasaki (Sch. Life Sci., Tokyo Univ. Pharm. and Life Sci.)

**P1-111**

**Group A streptococcus toxin NAD-glycohydrolase binds host phosphoinositide**

○Hirotaka Toh[1], Takashi Nozawa[1], Ichiro Nakagawa[1] ([1]Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., [2]Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

**P1-112**

**Analysis of the interaction between host and Clostridium botulinum derived membrane vesicles.**

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

**P1-113**

**MDP1 regulates metabolism and replication ensuring the survival of M. tuberculosis var BCG**

○Amina Shaban[1], Akihito Nishiyama[1], Yoshitaka Tateishi[1], Takehiro Yamaguchi[1], Yukiko Nishiuchi[2], Hayato Takihara[3], Shujiro Okuda[3], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]Toneyama Tuberculosis Research Institute., Osaka City Univ., [3]Dept. Bioinformatics., Sch. Med., Niigata Univ.)

**P1-114**

**Regulatory mechanism of toxic shock syndrome toxin-1 in clinically isolated Staphylococcus aureus**

○Yusuke Taki[1,2], Shinya Watanabe[1], Yusuke Sato'o[1], Feng-Yu Li[1], Kanate Thitiananpakorn[1], Tanit Boonsiri[1], Yoshifumi Aiba[1], Kotaro Kiga[1], Teppei Sasahara[1], Longzhu Cui[1] ([1]Div. Bacteriology, Sch. of Med., Jichi Med. Univ., [2]Dept. Gastroenterological Surg. Shizuoka Gereral Hosp.)

**P1-115**

**The involvement of calcium inflax on *P. gingivalis* gingipains-induced COX-2 expression**

○Masaaki Nakayama[1,2], Mariko Naito[3], Koji Nakayama[3], Naoya Ohara[1,2] ([1]Dept. Oral Microbiol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., [2]ARCOCS, Okayama Univ. Dent. Sch., [3]Dept. Microbiol. Oral Infect., Nagasaki Univ. Grad. Sch. Biomed. Sci.)

**P1-116**

**Characterization of bacterial proteases from *Porphyromonas gulae* strains**

○Urmi Alam[2], Hiroaki Inaba[1], Sho Yoshida[1], Ryota Nomura[2], Kazuhiko Nakano[2], Michiyo Matsumoto-Nakano[1] ([1]Dept. Pediatr Dent., Okayama Univ., Grad. Sch. Med. Dent. Pharm. Sci., [2]Dept. Pediatr Dent., Grad. Sch. Dent., Osaka Univ.)

**P1-117**

**Characterization of the T7SS-dependent cytotoxicity in *Streptococcus intermedius* pathogenicity.**

○Masanori Hashino, Tsuyoshi Sekizuka, Makoto Kuroda (Pathogen Genomics Center, Nat. Inst. Infect. Dis.)

**P1-118**

**Redox regulation in pathogenicity of Subtilase cytotoxin**

○Hiroyasu Tsutsuki[1], Tianli Zhang[1], Katsuhiko Ono[1], Kinnosuke Yahiro[2], Sunao Iyoda[3], Makoto Ohnishi[3], Takaaki Akaike[4], Tomohiro Sawa[1] ([1]Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., [2]Dept. Mol. Infectiol., Grad. Sch. Med., Chiba Univ., [3]Dept. Bacteriol. I, Natl. Inst. Infect. Dis., [4]Dept. Environ. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch. Med.)

**P1-119**

**Microvesicles released from *Staphylococcus aureus* induce inflammatory response and pyroptosis**

○Krisana Asano[1,2], Shouhei Hirose[1,2], Kouji Narita[1,3], Akio Nakane[2] ([1]Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., [2]Depart. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med., [3]Inst. Anim. Exp., Hirosaki Univ. Grad. Sch. Med.)

## 5. Pathogenicity -c. Cell invasion and intracellular parsitism

**P1-120**

**Hypoxia prompts Chlamydia trachomatis L2 growth in epithelial cells via activating PI3K-AKT pathway**

○Riyoya Tujikawa, Jeewan Thapa, Kento Hashimoto, Torahiko Okubo, Hiroyuki Yamaguchi (Dept. Med. Lab. Sci., Fac. of Health Sci., Hokkaido Univ.)

**P1-121**

***Bordetella bronchiseptica* utilizes *Acanthamoeba castellanii* as a temporal niche**

○Dendi Krisna Nugraha[1], Hiroyuki Yamaguchi[2], Yasuhiko Horiguchi[1] ([1]Dept. Mol. Bact., RIMD, Osaka Univ., [2]Fac. Health Sci., Hokkaido Univ.)

**P1-122**

**Evaluation of adhesion and invasion of *L. monocytogenes* to human intestinal epithelial cells**

○Hiroyuki Chiba[1], Kazuya Masuda[2], Satoshi Futo[3], Yuzuru Nakaso[3], Kazuto Takasaki[3], Akinobu Kajikawa[4], Kenji Yokota[4], Shizunobu Igimi[4] ([1]Dept. Agri. Chem., Grad. Sch. Agri., Tokyo Univ. Agri., [2]Dept. Food Sci. Nutr., Fac. Life. Environ. Sci., Showa Womens Univ., [3]Fasmac Co., Ltd., [4]Dept. Agri. Chem., Fac. Appl. Biosci., Tokyo Univ. Agri.)

**P1-123**

***A. actinomycetemcomitans* induces inflammasome activation via lysosomal degradation**

○Tokuju Okano, Toshihiko Suzuki (Dept. Bact. Patho. Infect. Host Resp. Grad. Sch. Med. and Dent. Sci. Tokyo Med. Dent. Univ. (TMDU))

**P1-124**
**The mechanism and regulation system of invasion of *Mycoplasma bovis* into bovine synovial tissue**
○Koji Nishi[1], Satoshi Gondaira[1], Tomohito Iwasaki[2], Takahumi Watanabe[3], Jumpei Fujiki[4], Hidetomo Iwano[4], Hidetoshi Higuchi[1] ([1]Anim. Health, Rakuno Gakuen Univ., [2]Appl. Biochem., Rakuno Gakuen Univ., [3]Vet. Anat., Rakuno Gakuen Univ., [4]Vet. Biochem., Rakuno Gakuen Univ.)

**P1-125**
**Multidrug-resistant *A. baumannii* resists reactive oxygen species and survives in macrophages**
○Yoshinori Sato, Satoshi Nishida, Takane Kikuchi-Ueda, Shigeru Tansho-Nagakawa, Tsuneyuki Ubagai, Yasuo Ono (Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ.)

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

**P1-126**
**Role of pneumococcal surface protein BgaA in the pathogenesis**
○Moe Takemura, Masaya Yamaguchi, Yujiro Hirose, Tomoko Sumitomo, Masanobu Nakata, Shigetada Kawabata (Dept. Oral Mol. Microbiol., Grad. Sch. Dent., Osaka Univ.)

**P1-127**
**Genes implicated in the suppression of IL-8 secretion by diffusely adherent Escherichia coli**
○Ayana Takaura[1], Yoshihiko Tanimoto[1], Atsuyuki Odani[1], Sae Shinya[1], Tomonori Kamiya[2], Naoko Ohtani[2], Yoshihiro Yamaguchi[3], Tomomi Komura[4], Eriko Kage-Nakadai[1], Yoshikazu Nishikawa[1] ([1]Grad. Schl. Human Life Sci., Osaka City Univ., [2]Grad. Schl. Med., Osaka City Univ., [3]Grad. Schl. Sci., Osaka City Univ., [4]Fac. Human Life Env., Nara Women's Univ.)

**P1-128**
***Elizabethkingia anophelis* OKUH1 resist to phagocytosis of J774 macrophage**
○Bayu Mayura I Putu[1], Kazuyoshi Gotoh[1], Takehiko Mima[1], Yumiko Yamamoto[1], Kenji Yokota[2], Osamu Matsushita[1] ([1]Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm Sci., Okayama Univ., [2]Grad. Sch. Health Sci., Okayama Univ.)

## 5. Pathogenicity -e. Infection models

**P1-129**
**The effect of *Ureaplasma parvum* infection on the function and morphology of mouse sperm**
○Kazutoshi Ito, Michinobu Yoshimura, Heng Ning Wu, Itaru Yanagihara (Dept. Dev. Med., Res. Inst., Osaka Women's and Children's Hospital)

**P1-130**
**Mechanisms of suppressed swimming motility by quorum sensing of *Ralstonia solanacearum***
○Wakana Senuma[1], Chika Takemura[1], Akinori Kiba[1], Kouhei Ohnishi[1], Kenji Kai[2], Yasufumi Hikichi[1] ([1]Fac. Agric and Marine Sci., Kochi, [2]Sch. Life and Environment. Sci., Osaka Pref. Univ.)

**P1-131**
**Construction of in vitro model for investigating the immune response in human gut**
○Ryohei Matsuura, Shun Iwatani, Susumu Kajiwara (Sch. Life Science and Technology, Tokyo Institute of Technology)

**P1-132**
**Occurrence of hyper-virulent mutation in *S. pyogens* during mouse infection**
○Mei Horino[1,2], Ayae Nishiyama[3], Norihiko Takemoto[1], Shinya Watanabe[4], Tohru Miyoshi-Akiyama[1] ([1]Pathogenic Microbe Lab., Dept. Infectious Diseases, NCGM, [2]Tokyo College Of Biotechnology, [3]Bacterial Infection Lab., Dept. Infectious Diseases, NCGM, [4]Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

**P1-133**
**Investigation for pathogenesis of *P. bifermentans* subsp. *muricolitidis* on colitis model**
○Ryo Kutsuna, Junko Tomida, Yoshiaki Kawamura (Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ.)

**P1-134**
**Involvement of adhesion and motility in pathogenicity of *Leptospira***
○Jun Xu[1], Nobuo Koizumi[2], Shuichi Nakamura[3] ([1]Grad. Sch. Agric. Sci., Tohoku Univ., [2]Dept. Bacteriol. I, NIID, [3]Grad. Sch. Eng., Tohoku Univ.)

**P1-135**
**Investigation of the domain of *Escherichia coli* FliC developing type 1 autoimmune pancreatitis**
○Satoko Omachi[1], Toshifumi Osaka[1,2], Hidehiro Ueshiba[2], Satoshi Tsuneda[1], Naoko Yanagisawa[2] ([1]Dept. Life Sci. Med. Biosci., Waseda Univ., [2]Dept. Microbiol. Immunol., Tokyo Women's Med. Univ.)

**P1-136**
**Biological effects of *Fusobacterium nucleatum* strains with different autoinducer-2 productivities**
○Arisa Shiozaki[1], Toshifumi Osaka[1,2], Hidehiro Ueshiba[2], Satoshi Tsuneda[1], Junji Yagi[2], Naoko Yanagisawa[2] ([1]Dept. Life Sci. Med. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ., [2]Dept. Microbiol. Immunol., Tokyo Wom. Med. Univ.)

**P1-137**

**The valancing selection of *phcBSRQ* operon on the quorum sensing of *Ralstonia solanacearum***

◯Chika Takemura[1], Wakana Senuma[1], Akinori Kiba[1], Kouhei Ohnishi[1], Kenji Kai[2], Yasufumi Hikichi[1] ([1]Fac. Agric and Marine Sci., Kochi Univ., [2]Sch. Life and Environment. Sci., Osaka Pref. Univ.)

## 5. Pathogenicity -f. Others

**P1-138**

**Regulation of cell division by DnaK chaperone system in Salmonella pathogenesis**

◯Tatsunari Yokoi[1], Hiroto Kawashima[1], Tomoko Yamamoto[2], Akiko Takaya[1] ([1]Dept. Microbiol. Immunol., Grad. Sch. Pharm. Sci., Chiba Univ., [2]MMRC, Chiba Univ.)

**P1-139**

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

◯Yumi Matsumoto, Rina Katayama, Yukina Higashi, Simo Sun, Yoshikazu Nishikawa, Eriko Nakadai (Sch. Human Life Science., Osaka City Univ.)

**P1-140**

**Toxin-antitoxin systems preferentially repress virulence gene expression in EHEC O157:H7**

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

**P1-141**

**Identification and characterization of skin bacteria involved in skin carcinogenesis in mice**

◯Ken Uemura, Shimpei Kawamoto, Masahiro Wakita, Olivia Koyama, Chihaya Hara, Eiji Hara (Dept. Mol. Microbiol., RIMD, Osaka Univ.)

**P1-142**

**Hydrophobicity in the conidiospore of human pathogenic fungi as the possible pathogenic factor.**

◯Nodoka Koide[1], Chiharu Kawasaki[1], Maya Oshima[1], Takashi Tamura[2], Mohamed Mahdi Alshahni[3], Koichi Makimura[2,3] ([1]Sch. Med., Teikyo Univ., [2]Gen. Med. Educ. Rec. Center, Teikyo Univ., [3]Lab. Med. Mycol., Grad. Sch. Teikyo Univ.)

**P1-143**

**Role of the gastric commensal bacteria progressing gastric cancer in cooperation with H. pylori**

◯Hitoshi Tsugawa[1], Makoto Suematsu[1], Hidekazu Suzuki[2] ([1]Dept. Biochem., Keio Univ., Sch. Med., [2]Dept. Gastroenterol. Hepatol., Tokai Univ., Sch. Med.)

**P1-144**

**Evasion of neutrophil phagocytosis via polysaccharide expression in biofilm dispersed bacteria**

◯Akiko Tajima[1], Yuki Kinjo[1,2] ([1]Dept. Bacteriol., The Jikei Univ. Sch. Med, [2]Jikei Ctr. Biofilm Sci. & Tech.)

## 6. Host defense -a. Innate immunity

**P1-145**

**A molecular mechanism of IL-1b inhibition by mycobacterial effector protein**

◯Tomomi Kurane[1], Kazuko Sawada[2], Giichi Takaesu[1,2], Masayuki Umemura[1,2], Goro Matsuzaki[1,2] ([1]Dept. Host Defense, Grad. Sch. Med., Univ. of the Ryukyus, [2]Mol. Microbiol. Group, Tropical Biosphere Research Center, Univ. of the Ryukyus)

**P1-146**

**Effect of LL-37, a human antimicrobial peptide, on autophagy and cell death of endothelial cells**

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

**P1-147**

**Inhibition of LPS-induced inflammatory reactions by Sasa veitchii constituents and derivatives**

◯Yinzhi Lin[1], Hitomi Fukatsu[2], Shiori Kojima[2], Kazuo Umezawa[3], Naoki Koide[1] ([1]Dept. Microbiol. Immunol., Sch. Med., Aichi Med. Univ., [2]Fukuyu Med. Instu., [3]Dept. Mol. Target, Sch. Med., Aichi Med. Univ.)

**P1-148**

**Reactive sulfur remodeling by by NADPH oxidase and host defense mechanism**

◯Tomoaki Ida[1], Tetsuro Matsunaga[1], Masanobu Morita[1], Tsuyoshi Takata[1], Hozumi Motohashi[2], Hideki Sumimoto[3], Takaaki Akaike[1] ([1]Dept. Environ. Med. and Mol. Toxi., Grad. Sch. Med., Tohoku Univ., [2]Tohoku Univ., IDAC., [3]Kyusyu Univ., Med., Mol. and Cell. Biol.)

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

**P1-149**

**Immunological analysis of a protein-based pneumococcal vaccine mediated by NKT cell activation**

◯Shun Kawakubo[1,2], Shogo Takatsuka[1], Koji Hayashizaki[1,3,4], Haruko Takeyama[2], Kazunori Oishi[5], Yoshitsugu Miyazaki[2], Yuki Kinjo[3,4] ([1]Nat. Inst. Infect. Dis., [2]Waseda Univ., [3]Jikei Univ. Sch. Med., [4]Jikei Cent. Biofilm Sci. Tech., Jikei Univ. Sch. Med., [5]Toyama Pref. Inst. Publ. Health)

**P1-150**
**Examination of adverse reaction risk to vaccine in atopic dermatitis dogs.**
◯Ryosuke Sugimoto[1], Hidekatsu Shimakura[1], Jumpei Uchiyama[1], Toshihiro Tsukui[2], Masato Fujimura[3], Masahiro Sakaguchi[1] ([1]Dept. Microbiol., Sch. Vet., Azabu Univ., [2]Nippon Zenyaku Kogyo Co. Ltd., [3]Fujimura Animal Hospital)

**P1-151**
**Antigenicity of a tuberculosis booster vaccine for BCG-vaccinated healthy individuals.**
◯Yuriko Ozeki[1], Akira Yokoyama[1], Daisuke Hayashi[2], Toshiko Yamamoto[2], Shinji Ohishi[2], Sumiko Iho[1], Junichi Maeyama[3], Akihito Nishiyama[1], Yoshitaka Tateishi[1], Saburo Yamamoto[2], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol. Grad. Sch. Med., Niigata Univ., [2]Japan BCG Lab, [3]NIID)

**P1-152**
**Therapeutic potential of an endolysin derived from bacteriophage S25-3 for Staphylococcal impetigo**
◯Ichiro Imanishi[1], Jumpei Uchiyama[2], Toshihiro Tsukui[3], Junzo Hisatsune[4], Kaori Ide[1], Shigenobu Matsuzaki[5], Motoyuki Sugai[4], Koji Nishifuji[1] ([1]Tokyo Univ. Agric. Technol., [2]Azabu Univ., [3]Zenyaku Kogyo Co., [4]Natl. Int. Infect. Dis., [5]Kochi Univ.)

**P1-153**
**Eosinophils are the main cellular target for DNA delivery from orally administrated L. lactis**
◯Daiki Yanagisawa, Nozomi Orito, Keita Takahashi, Nagisa Tokunoh, Naoki Inoue (Dept. Microbiol. Immunol., Gifu Pharmaceutical Univ.)

**P1-154**
**Evaluation of the mucosal vaccine system using bacterium-like particles prepared from *L. lactis***
◯Nagisa Tokunoh, Keita Takahashi, Nozomi Orito, Daiki Yanagisawa, Naoki Inoue (Dept. Microbiol. Immunol., Gifu. Pharmaceutical Univ.)

**P1-155**
**Doxycycline inhibits Th2 cell development and exerts a therapeutic effect on atopic dermatitis**
◯Katsuhiko Matsui, Yuki Nojima, Yuka Kajiwara, Kana Busujima, Yuki Mori (Dept. Clin. Immunol., Meiji Pharm. Univ.)

**P1-156**
**Production and adjuvant effect of recombinant botulinum hemagglutinin**
◯Hiroki Shinohara[1], Hidekazu Nagai[1], Yukako Fujinaga[2], Tomoko Kobayashi[1], Yasushi Torii[1] ([1]Dept. Animal Sci., Tokyo Univ. Agri., [2]Dept. Microbiol., Sch. Med., Sci., Kanazawa Univ.)

## 6. Host defense -c. Others

**P1-157**
**NDM-1-producing *Acinetobacter pittii* ST220 presumably originated from hospital environment**
◯Wataru Hayashi[1], Hayato Tanaka[2], Eriko Arai[3], Tatsuya Natori[3], Kazuki Horiuchi[3], Go Matsumoto[3], Masaki Iimura[2], Eiji Soga[2], Yukiko Nagano[4], Noriyuki Nagano[1,2] ([1]Dept. Med. Sci., Grad. Sch. Med. Sci. and Technol., Shishu Univ., [2]Dept. Med. Sci., Grad. Sch. Med., Shishu Univ., [3]Dept. Clin. Lab., Shishu Univ. Hosp., [4]Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

**P1-158**
**Effect of S-PRG filler on *Candida albicans* adhesion and possible improvement of QOL in the elderly**
◯Yu Kono[1,2], Muneai Tamura[3,4], Keiko Nodomi[3], Noriaki Kamio[3,4], Kenichi Imai[3,4] ([1]Div. Oral Struct. Funct. Sci., Nihon Univ. Sch. Dent. Grad. Sch. Dent., [2]Dept. Oral Surg., Nihon Univ. Sch. Dent., [3]Dept. Microbiol., Nihon Univ. Sch. Dent., [4]Div. Immunol. Pathobiol., Dent. Res. Cent., Nihon Univ. Sch. Dent.)

**P1-159**
**Effects of membrane damage and efflux system on bisphenol A resistance in opportunistic bacteria**
◯Tsunemoto Kaga[1], Manabu Mochizuki[2], Toshiyuki Nikata[1], Yasuzo Sakai[1] ([1]Dept. Material and Environ. Chem., Grad. Sch. Eng., Utsunomiya Univ., [2]Dept. Appl. Chem., Fac. Eng., Utsunomiya Univ.)

**P1-160**
**Drug resistant patterns of Salmonella spps. isolated from poultry yards in western Japan.**
◯Tomoya Yamamoto[1], Hajime Toyofuku[2], Tomoko Mizote[1] ([1]Dept. Food Hygiene, Yamaguchi Pref. Univ., [2]Dept. Veter. Med. Yamaguchi Univ.)

**P1-161 *Presentation date is changed to Feb 20.**
**Application of Effective Bacteriophage Therapy to *Staphylococcus aureus***
◯Junya Kitana[1], Tomohiro Nakamura[1], Monby Montgomery[1], Jumpei Fujiki[1], Hidetoshi Higuchi[2], Masaru Usui[3], Yutaka Tamura[4], Hidetomo Iwano[1] ([1]Lab. of Vet. Biochem., Dept. Vet. Med., RGU, [2]Lab. of Vet. Hygiene., Dept. Vet. Med., RGU, [3]Lab. of Vet. Food Hygiene., Dept. Vet. Med., RGU, [4]Cent. for Vet. Drug Development., RGU)

**P1-162**

**Resistant mechanisms of aminoglycosides & newquinolones in clinical isolated *Pseudomonas aeruginosa***

○Masaya Endou[1], Kenshou Torimaru[1], Daichi Morita[1,2], Shizuo Kayama[3,4,5], Takanori Kumagai[1,2], Motoyuki Sugai[3,4,5], Teruo Kuroda[1,2] ([1]Sch. Phar., Hiroshima Univ., [2]Dept. Microbiol., Grad. Sch. Biomed. Heal. Sci., Hiroshima Univ., [3]Anti. Resis. Res. Cent., Nat. Inst. Infect. Dis., [4]Proj. Res. Cent. Noso. Infect. Dis., Hiroshima Univ., [5]Dept. Anti. Res., Grad. Sch. Biomed. Heal. Sci., Hiroshima Univ.)

**P1-163**

**Oxidative stress by the addition of antibiotics in *Pseudomonas aeruginosa***

○Rina Murata (Dept. Oral Microbiolo., Biomed. Sci., Tokushima Univ., Dept. Mol., Microbiolo., Biomed. Sci., Tokushima Univ.)

**P1-164**

**Emergence of *vanD5*-type vancomycin-resistant *Enterococcus faecium* via horizontal genomic transfer**

○Toyotaka Sato[1], Takayuki Wada[2], Yukari Fukushima[3], Chie Nakajima[3], Yasuhiko Suzuki[3], Satoshi Takahashi[4,5], Shin-ichi Yokota[1] ([1]Dept. Microbiol., Sch. Med., Sapporo Med. Univ., [2]Dept. Int. Health., Ins. Tropic. Med., Nagasaki Univ., [3]Div. Biores., Hokkaido Univ. Res. Cent. Zoo. Cont., [4]Div. Lab. Med., Sapporo Med. Univ. Hospital, [5]Dept. Infect. Cont. Lab. Med., Sch. Med., Sapporo Med. Univ.)

**P1-165**

**Antimycobacterial Activities of Lysocin E Against Mycobacterial Species In Vitro**

○Gebremichal Gebretsadik[1], Akane Inaizumi[1], Akihito Nishiyama[1], Takehiro Yamaguchi[3], Yuriko Ozeki[1], Yoshitaka Tateishi[1], Hiroshi Hamamoto[4], Kazuhisa Sekimizu[4], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]Dept. Biomedical science., Assossa Univ., [3]Dept. Phamacol., Sch. Med., Osaka City Univ., [4]Institute Medical Mycology., Teikyo Univ.)

**P1-166**

**Transferability of carbapenemase in *Acinetobacter* sp. and *Pseudomonas* sp. isolated from environment**

○Yuki Suzuki[1], Ryuichi Nakano[1], Pearl Joy Nazareno[2], Akiyo Nakano[1], Yuki Minamoto[1], Naoki Kakuta[1], Saori Horiuchi[1], Risako Kakuta[1,3], Kazutoshi Nakashima[4], Hisakazu Yano[1] ([1]Dept. Microbiology and Infectious Diseases, Nara Medical Univ., [2]Dept. Microbiology, Research Institute for Tropical Medicine, [3]Dept. Otolaryngology-Head and Neck Surgery, Tohoku Univ. Grad. Sch. Medicine, [4]Faculty of Sports and Health Science, Daito Bunka Univ.)

**P1-167**

**Na+ V-ATPase is a new target for drug development against Vancomycin-resistant Enterococcus (VRE)**

○Kouki Shimizu[1], Fabiana Lica Yakushiji[1], Katsuhiko Moriyama[1], Yoshiyuki Goto[2,3], Takeshi Murata[1] ([1]Grad. Sch. Sci., Chiba Univ., [2]MMRC, Chiba Univ., [3]IMS, Univ. Tokyo)

**P1-168**

**Screening azole resistance of *Candida auris* by replica method**

○Takashi Tamura[1,2], Koichi Makimura[1,2] ([1]Gen. Med. Educ. Rec. Center, Teikyo Univ., [2]Lab. Med. Mycol., Grad. Sch. Teikyo Univ.)

**P1-169**

**mprF mutation confers dual resistance to daptomycin and vancomycin in MRSA**

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

**P1-170**

**Antibiotic susceptibility and genotype of *Mycobacterium avium* subsp. *hominissuis***

○Keiichi Uchiya[1], Taku Nakagawa[2], Kenji Ogawa[2], Toshiaki Nikai[1] ([1]Dept. Microbiol., Fac. Pharm., Meijo Univ., [2]Dept. Respir. Med., NHO Higashinagoya Hosp.)

**P1-171**

**Crystal structure of AmpC β-lactamase isolated from *Enterobacter cloacae* clinical strain Ent385**

○Akito Kawai[1], Christi L. McElheny[2], Alina Iovlva[2], Vaughn S. Cooper[3,4], Ryan K. Shields[2,4], Yohei Doi[1,2,4,5] ([1]Dept. Microbiol., Fujita Health Univ. Sch. Med., [2]Div. of Infect. Dis., Univ. of Pittsburgh Sch. Med., [3]Dept. Microbiol. and Mol. Genet., Univ. of Pittsburgh Sch. Med., [4]CIAT, Univ. of Pittsburgh Sch. Med., [5]Dept. Infect. Dis., Fujita Health Univ. Sch. Med.)

**P1-172**

**Effect of Ethylenediaminetetraacetic Acid on *Haemophilus influenzae* Colony Biofilms**

○Kazuki Kitaoka[1], Satoshi Tsuneda[1,2] ([1]Dept. Nano Life Innov., Waseda Univ., [2]Dept. Life Sci. Med. Biosci., Waseda Univ.)

**P1-173**

**Antimicrobial resistance and antimicrobial production of bacteria derived from Japanese honey**

○Mariko Okamoto[1], Daisuke Takamatsu[1,2] ([1]Natl. Inst. Anim. Hlth., NARO, [2]Utd. Grad. Sch. Vet. Sci., Gifu Univ.)

## 7. Antimicrobial agents and resistance -a. Antimicrobial agents

**P1-174**
**Examination of bactericidal effect of ozone water on biofilm. -Effectiveness against oral bacteria-**
○Masahiro Murakami[1,2,3], Keiji Nagano[2], Yoshiaki Hasegawa[3], Daisuke Kato[1], Hiroshi Murakami[1] ([1]Dept. Gerodontol., Sch. Dent., Aichi-Gakuin Univ., [2]Dept. Microbiol., Sch. Dent., Health Sciences Univ. Hokkaido, [3]Dept. Microbiol., Sch. Dent., Aichi-Gakuin Univ.)

**P1-175**
**A new measuring method for antimicrobial activity of lauric acid against various human gut microbes**
○Miki Matsue[1], Yumiko Mori[1], Satoshi Nagase[1], Kohei Ogura[2], Kazuhiro Ogai[3], Yuta Sugiyama[4], Rika Hirano[4], Shin Kurihara[4], Shigefumi Okamoto[1] ([1]Dept. Clin. Lab. Sci., Kanazawa Univ., Grad. Sch. Med., Pharm., and Health Sci., [2]Inst. Front. Sci., Kanazawa Univ., [3]Dept. Nurse, Kanazawa Univ., Grad. Sch. Med., Pharm., and Health Sci., [4]Inst. Bioresources, Biotech., Ishikawa Pref. Univ.)

**P1-176**
**Peptide-inspired artificial antimicrobial oligosaccharide against drug-resistant bacteria**
○Hatsuo Yamamura[1], Hisato Kato[2], Takashi Katsu[2], Kazufumi Masuda[2], Kayo Osawa[3], Atsushi Miyagawa[1] ([1]Grad. Sch. Eng., Nagoya Inst. Tech., [2]Sch. Pharmacy, Shujitsu Univ., [3]Grad. Sch., Health Sci., Kobe Univ.)

**P1-177**
**Comparison of sensitivity to chlorhexidine between genus Bacillus species**
○Akira Okamoto (Sch. Health Sciences, Aichi Univ. Edu.)

**P1-178**
**Anti-microbial effects of Disulfiram to Helicobacter pylori**
○Kenji Yokota[1], Tomomi Kobatake[1], Aina Ichihara[1], Takehiko Mima[2], Yumiko Yamamoto[2], Kazuyoshi Gotoh[2], Osamu Matsushita[2] ([1]Grad. Sch. Health Science, Okayama Univ., [2]Dept. Bacteriology, Grad. Sch. Medicine, Dentistry and Pharmaceutical Sciences, Okayama Univ.)

## 7. Antimicrobial agents and resistance -b. Antimicrobial resistance

**P1-179**
**Detection, isolation, and analysis of carbapenemase genes on the surface of retail spices**
○Minako Mochizuki[1], Mariya Ueda[2], Shiori Nakaoka[2], Miyuki Nakatani[2], Sumio Maeda[1,2] ([1]Dept. food Sci., Grad. Sch. Humanities and Sci., Nara Women's Univ., [2]Faculty. of Hun. Life and Environ., Nara Women's Univ.)

**P1-180**
**Analysis of persister cell formation in bacterial biofilms: its memory effect and mutant analysis**
○Tomoka Urushidani[1], Yoko Komiyama[1], Saki Miyaue[1], Erika Suzuki[1], Yu Kondo[2], Miki Morikawa[2], Sumio Maeda[1,2] ([1]Dept. food Sci., Grad. Sch. Humanities and Sci., Nara Women's Univ., [2]Faculty. of Hun. Life and Environ., Nara Women's Univ.)

**P1-181**
**Enhanced antibiotic resistance due to multiplied blaIMP-6 genes in a plasmid**
○Ryuichiro Abe[1], Yukihiro Akeda[1,2], Yo Sugawara[1], Ryuji Kawahara[3], Norihisa Yamamoto[1], Kazunori Tomono[2], Shigeyuki Hamada[1] ([1]RCC-ERI, RIMD, Osaka Univ., [2]Dept. Infect. Cont. Prevent., Med. Hosp., Osaka Univ., [3]Div. Microbiol., Osaka Inst. Public Health)

**P1-182**
**Analysis of *mcr-1* plasmid-mediated colistin resistant *E. coli* isolated from livestock in Japan**
○Akiyo Nakano, Ryuichi Nakano, Yuki Suzuki, Risako Kakuta, Saori Horiuchi, Naoki Kakuta, Mako Watanabe, Kai Saito, Hisakazu Yano (Dept. Microbiol. Infect. Dis., Nara Med. Univ.)

**P1-183**
**Cocarriage of *mcr-1* and APEC-associated virulence genes in *E. coli* isolates from wastewater influent**
○Wataru Hayashi[1], Hayato Tanaka[2], Masaki Iimura[2], Eiji Soga[2], Ryoichi Kubo[3], Kumiko Kawamura[4], Yoshichika Arakawa[5], Yukiko Nagano[5], Noriyuki Nagano[1,2] ([1]Dept. Med. Sci., Grad. Sch. Med. Sci. and Technol., Shishu Univ., [2]Dept. Med. Sci., Grad. Sch. Med., Shishu Univ., [3]Kanto Chemical Co., Inc., [4]Dept. Pathophysiol. Sci., Grad. Sch. Med., Nagoya Univ., [5]Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

**P1-184**
**Whole genome sequencing for the molecular characterization of *Klebsiella pneumoniae* isolates**
○Rina Nonogaki[1], Masahiro Suzuki[2], Yoshichika Arakawa[3], Kumiko Kawamura[1] ([1]Dept. Pathophysiological Laboratory Science, Nagoya Univ. Grad. Sch. Med., [2]Dept. Microbiol. Fujita Health Univ., [3]Dept. Bacteriology, Nagoya Univ. Grad. Sch. Med.)

**P1-185**
**Study on β-lactamase genes in Prevotella -their relation to antibiogram-**
◯Sodai Yokoyama, Masahiro Hayashi, Kaori Tanaka (Division of Anaerobe Research Life Science Research Center, Gifu Univ.)

**P1-186**
**Emergence of CTX-M-64, CTX-M-123 chimeric ESBL-producing *Escherichia coli* in wastewater environment**
◯Hayato Tanaka[1], Wataru Hayashi[2], Masaki Iimura[1], Eiji Soga[1], Kumiko Kawamura[3], Yoshichika Arakawa[4], Yukiko Nagano[4], Noriyuki Nagano[1,2] ([1]Dept. Med. Sci., Grad. Sch. Med., Shinshu Univ., [2]Dept. Med. Sci., Grad. Sch. Med. Sci. and Technol., Shinshu Univ., [3]Dept. Pathophysiol. Sci., Gra. Sch. Med., Nagoya Univ., [4]Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

**P1-187**
**Analysis of low level linezolid resistant enterococci isolated from chicken**
◯Takahiro Nomura[1], Koichi Tanimoto[2], Haruo Watanabe[3], Haruyoshi Tomita[1,2] ([1]Dept. Bacteriol., Grad. Sch. Med. Gunma Univ., [2]Lab. Bacterial Drug Res., Grad. Sch. Med., Gunma Univ., [3]IUHW Sch. Medicine, Public Health)

**P1-188**
**Genetic analysis of a novel *optrA*-harboring plasmid in an *Enterococcus faecalis* clinical isolate**
◯Masaki Iimura[1], Wataru Hayashi[2], Eriko Arai[3], Tatsuya Natori[3], Kazuki Horiuchi[3], Go Matsumoto[3], Hayato Tanaka[1], Yukiko Nagano[4], Yoshichika Arakawa[4], Noriyuki Nagano[1,2] ([1]Dept. Health. Med. Grad. Sci., Sch. Med., Shinshu Univ., [2]Dept. Med. Grad. Sci., Sch. Med. Sci. Tech., Shinshu Univ., [3]Dept. Lab., Med., Shinshu Hosp., [4]Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

**P1-189**
**Characteristics of CTX-M β-lactamase-producing *E. coli* isolated from deer inhabiting tourist sites**
◯Mako Watanabe, Akiyo Nakano, Ryuichi Nakano, Kai Saito, Yuki Suzuki, Naoki Kakuta, Risako Kakuta, Saori Horiuchi, Hisakazu Yano (Dept. Microbiol. Infect. Dis., Nara Med. Univ.)

## 7. Antimicrobial agents and resistance -c. Others

**P1-190**
**Interferon-induced guanylate binding protein-1 regulates xenophagy through TBK1 activation**
◯Miyako Hikichi, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

**P1-191**
**Carbohydrate-binding E3 ligase complex recognizes Group A Streptococcus for xenophagy**
◯Akihiro Yamada, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

**P1-192**
**Effect of gut microbes on butyrate-induced differentiation and apoptosis of human colon cancer cell**
◯Ayano Tada, Haruyuki Imaohji, Tomomi Kuwahara (Dept. Microbiol., Med., Kagawa Univ.)

**P1-193**
**Antifungal susceptibility of fungal strains isolated from Japanese Experiment Module "KIBO", ISS**
◯Kazuo Satoh[1], Takashi Tamura[1], Takashi Yamazaki[1,2], Koichi Makimura[1] ([1]G-MEC, Teikyo Univ., [2]JAXA)

**P1-194**
**Characterization of Toxicarin, a novel elastase inhibitor produced by *Aspergillus toxicarius***
Yumiko Komori, ◯Mio Matsumoto, Miho Ohnishi, Toshiaki Nikai (Dept. Microbiol., Fac. Pharm., Meijo Univ.)

**P1-195**
**Biofilm formation on the surface of dental materials using a new flow system**
◯Hiroaki Katsuragi[1], Yusuke Tanaka[2], Leelanarathiwat Kanda[3] ([1]Dept. Microbiol., NDU, Niigata, [2]NDU, Niigata, [3]Functional Occlusal Treatment, Grad. Sch., NiDU, Niigata)

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

**P2-001**
**Analysis of the IS insertion site variation in EHEC O121:H19 to develop the O121 IS-printing system**
◯Itsuki Taniguchi[1], Keiji Nakamura[1], Ruriko Nishida[1], Sunao Iyoda[2], Makoto Ohnishi[2], Tadasuke Ooka[3], Yoshitoshi Ogura[1], Tetsuya Hayashi[1] ([1]Dept. Bacteriol., Sch. Med., Kyushu Univ., [2]Dept. Bacteriol. I, NIID, [3]Dept. Microbiol., Grad. Sch. Med & Dent. Sci., Kagoshima Univ.)

**P2-002**
**Molecular epidemiology and phylogeny of *Staphylococcus argenteus* in Hokkaido, Japan**
◯Meiji Soe Aung, Noriko Urushibara, Mitsuyo Kawaguchiya, Nobumichi Kobayashi (Dept. Hygiene, Sapporo Med. Univ.)

**P2-003**
**Prevalence of vaccine candidate proteins and novel fusion proteins PhtA/B and PhtA/D in pneumococci**
◯Mitsuyo Kawaguchiya, Noriko Urushibara, Meiji Soe Aung, Nobumichi Kobayashi (Dept. Hygiene, Sapporo Med. Univ., Sch. Med.)

**P2-004**
**Change in Molecular Epidemiological Features of MRSA in Japan**
○Hidemasa Nakaminami, Shunsuke Takadama, Norihisa Noguchi (Dept. Microbiol., Sch. Pharm., Tokyo Univ. Pharm. Life Sci.)

**P2-005**
**Cutibacterium acnes IB and II isolated from non-acne patients exhibit high-level biofilm formation**
○Keisuke Nakase, Ren Midorikawa, Kento Yamasaki, Norihisa Noguchi (Depart. Microb., Sch. Pharm., Tokyo Univ. Pharm. Life Sci.)

**P2-006**
**Drug repositioning for new sepsis treatment**
○Seung Jun Lee, Yuh Morimoto, Tadashi Baba, Keiichi Hiramatsu (Dept. Infection Control Science Research, Sch. Med., Juntendo Univ.)

**P2-007**
**Comparative genomics and phylogenetic analysis of *Bacillus anthracis* strains isolated in Japan**
○Akiko Okutani[1], Satoshi Inoue[1], Shigeru Morikawa[1,2] ([1]Dept. Vet. Sci., NIID, [2]Dept. Microbiol., Okayama Univ. Sci.)

**P2-008**
**Analysis of $bla_{\text{NDM-7}}$ and $bla_{\text{KPC-2}}$ producing bacteria from Philippines isolated in Hiroshima**
○Shizuo Kayama[1,2,3], Saburo Mori[2,4], Mitsuyasu Ikeda[2,3], Masato Suzuki[1], Kouji Yahara[1], Hiroki Ohge[2,5], Motoyuki Sugai[1,2,3] ([1]National Institute of Infectious Diseases, [2]RCNID, Hiroshima Univ., [3]Dept. Antimicrobial Resistance, Hiroshima Univ., [4]Onomichi Municipal Hospital, [5]Dept. Infectious Diseases, Hiroshima Univ.)

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

**P2-009**
**【Withdrawn】**

**P2-010**
**Relationship of porin mutations to ST and carbapenemase type in carbapenem-resistant K. pneumoniae**
○Dan Takeuchi, Yukihiro Akeda, Yo Sugawara, Noriko Sakamoto, Shigeyuki Hamada (Japan-Thailand Research Collaboration Center, RIMD, Osaka Univ.)

**P2-011**
**Analysis of ESBL producing *Enterobacter cloacae* complex in Nagoya University Hospital**
○Kazumitsu Kawamura[1], Nobuyuki Tetsuka[2], Yukari Osada[1], Nami Shimaoka[1], Teruko Ohkura[1], Mayumi Ito[1], Rie Ikai[1], Kengo Hayashi[1], Tetsuya Yagi[2] ([1]Dept. Medical Technique. Clinical Laboratory., Nagoya Univ. Hospital, [2]Dept. Infectious Diseases., Nagoya Univ. Hospital)

**P2-012**
**Isolation of Serratia fonticola producing FONA from improted chicken meats**
○Koichi Tanimoto[1], Takahiro Nomura[2], Yusuke Hashimoto[2], Hidetada Hirakawa[2], Haruyoshi Tomita[1,2] ([1]Lab. Bacterial Drug Resistance, Gunma Univ. Grad. Sch. Med., [2]Dept. Bacteriol., Gunma Univ. Grad. Sch. Med.)

**P2-013**
**Characterization of CRE isolates in Toyama prefecture**
○Kaoru Uchida, Masanori Watahiki, Jun-ichi Kanatani, Tomoko Kato, Keiko Kimata, Junko Isobe, Kazunori Oishi (Dept. Bacteriol., Toyama Institute of Health)

**P2-014**
**Comparison of discriminatory power of EHEC-POT and MLVA**
○Kazuhiro Yamada[1], Masahiro Suzuki[2], Masakado Matsumoto[1] ([1]Dept. Microbiol. Med. Zool., Aichi Pref. Inst. Pub. Health, [2]Dept. Microbiol. Fujita Health Univ.)

**P2-015**
**Variety of MRSA clones provided by the carriage survey by young healthy persons**
○Miyo Murai[1], Kozue Kishii[1], Junko Maekawa[2] ([1]Div. Lab. Sci., Dept. Health Sci., Saitama Pref. Univ., [2]Dept. Bacteriol. I, Nat. Inst. Infect. Dis.)

**P2-016**
**Molecular epidemiology of multidrug-resistant Acinetobacter baumannii clinical isolates in Myanmar**
○Tatsuya Tada[1], Tomomi Hishinuma[2], Mari Tohya[1], Mya San[3], Tin Htay Htay[3], Teruo Kirikae[1] ([1]Dept. Microbiol., Grad. Sch. Med., Juntendo Univ., [2]Dept. Microbiol., Sch. Med., Juntendo Univ., [3]National Health Laboratory)

**P2-017**
**Molecular epidemiology of VIM producing *Pseudomonas aeruginosa* clinical isolates in Japan**
○Tomomi Hishinuma[1], Tatsuya Tada[1], Masahiro Shimojima[2], Teruo Kirikae[1] ([1]Dept. Microbiology, Juntendo Univ., [2]BML, Inc)

**P2-018**

**Carbapenem-resistant Enterobacter cloacae complex isolated at medical settings in Myanmar.**

◯Satoshi Oshiro[1], Tatsuya Tada[1], Hiroki Uchida[1], Tomomi Hishinuma[1], Mya San[2], Tin Htay Htay[2], Teruo Kirikae[1] ([1]Dept. Microbiol. Juntendo Univ., [2]National Health Lab, MMR)

**P2-019**

**Molecular prevalence of Fim3-highly producible sequence in *Bordetella pertussis***

◯Nao Otsuka[1], Rei Fumimoto[1,2], Kazunari Kamachi[1], Keigo Shibayama[1] ([1]Dept. Bacteriol. II, Nat. Inst. Infect. Dis., [2]Dept. Pediatrics, St Marianna Med. Univ.)

**P2-020**

**Epidemiological characteristics of bloodstream S. epidermidis isolates from two hospitals in Tokyo**

◯Alafate Ayibieke[1], Kageto Yamada[2], Yoshibumi Aiso[3], Yoshiro Hadano[3], Yoko Nukui[3], Ryuji Koike[3], Shuji Tohda[4], Ryoichi Saito[1] ([1]Dept. Mol. Microbiol., Grad. Sch. Med. & Dent. Sci., Tokyo Med. Dent. Univ., [2]Dept. Clin. Lab., Toshima Hospital, [3]Dept. Infect. Contrl., Med. Hosp., Tokyo Med. Dent. Univ., [4]Dept. Clin. Lab., Med. Hosp., Tokyo Med. Dent. Univ.)

**P2-021**

**Carbapenem-resistant *Enterobacteriaceae* spread to communities in Yangon, Myanmar**

◯Yo Sugawara[1], Hideharu Hagiya[2], Yukihiro Akeda[1,2], Noriko Sakamoto[1], Dan Takeuchi[1], Kazunori Tomono[2], Shigeyuki Hamada[1] ([1]RCC-ERI, RIMD, Osaka Univ., [2]Dept. Infect. Cont. Prevent., Med. Hosp., Osaka Univ.)

**P2-022**

**Changes of molecular characterization of community-associated MRSA in Japan over the past decade**

◯Tetsuo Yamaguchi[1], Takahiro Sato[1], Daisuke Ono[1], Ayami Sato[1], Yuri Miura[2], Shinobu Koyama[3], Kiyoko Tamai[3], Tetsuya Matsumoto[4], Yoshikazu Ishii[1], Kazuhiro Tateda[1] ([1]Dept. Microbiol. Infect. Dis., Sch. Med, Toho Univ., [2]Dept. Microbiol. Lab., Tokyo Med. Univ. Hosp., [3]Miroku Med. Lab. Co., Ltd., [4]Dept. Infect. Dis., Int. Univ. Health and Welfare)

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

**P2-023**

**Whole genome sequence of *Pantoea ananatis* isolated from human bacteremia**

◯Michinobu Yoshimura, Heng Ning Wu, Kazutoshi Ito, Itaru Yanagihara (Dept. Dev. Med., Res. Inst., Osaka Women's and Children's Hospital)

**P2-024**

**Pathogenic potential of *Francisella hispaniensis* KUMA-UJP1 strain isolated in Japan**

◯Akitoyo Hotta (Dept. Veterinary Science, National Institute of Infectious Diseases)

**P2-025**

**Characterization of bacteriocin-KO mutans in *S. mutans***

Atsuko Watanabe[1,2], ◯Miki Kawada-Matsuo[2], Hitoshi Komatsuzawa[3] ([1]Dept. Orthodont., Kagoshima Univ. Grad. Sch. Med. Dent., [2]Dept. Oral Microbiol., Kagoshima Univ. Grad. Sch. Med. Dent. Sci., [3]Dept Bacteriol., Hiroshima Univ. Inst. Biomed Health Sci.)

**P2-026**

**Carbapenem-highly-resistant *Pseudomonas alcaligenes* that obtained from stool sample**

◯Emi Ono, Kyoko Kuwahara, Tomomi Hishinuma, Satoshi Oshiro, Tatsuya Tada, Mari Tohya, Teruo Kirikae (Dept. Microbiol. Juntendo Univ. Sch. Med.)

**P2-027**

**Development of triple multiplex PCR, and characterization of E.coli isolates from blood and feces**

◯Mari Hoshino[1], Yuki Miyaki[2], Shigeko Yashima[3] ([1]Sch. Health Sci., Gifu Univ. Med. Sci., [2]Dept. Clin. Lab., Komaki City Hosp., [3]Clin. Lab., Gifu Pref. Tajimi Hosp.)

**P2-028**

**Draft genome sequences of two strains of Streptococcus pneumoniae from AIPF patients**

◯Takane Kikuchi-Ueda[1], Ryuichi Fujisaki[2], Tsuneyuki Ubagai[1], Satoshi Nishida[1], Shigeru Tansho-Nagakawa[1], Yoshinori Sato[1], Yasuo Ono[1] ([1]Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ., [2]Emergency Med. Tech. Course, Dept. Sport Med. Sci., Faculty Med. Technol., Teikyo Univ.)

**P2-029**

**Isolation of Leptospira from Nutria in Osaka, Japan**

◯Ryo Murata[1], Hiroki Morimoto[1], Ikuo Uchida[1], Mitsuhiko Asakawa[1], Harumi Torii[2], Ayako Takano[2] ([1]Dept. Pathobiol., Sch. Vet. Med., Rakuno Gakuen Univ., [2]Cent. for Nat. Environ. Educ., Nara Univ. of Educ.)

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

**P2-030**

**Detection of bacterial genome mutation using CRISPR-Cas13a-loaded chimericphage**

◯Yoshifumi Aiba, Kanate Thitiananpakorn, Kotaro Kiga, Shinya Watanabe, Yusuke Sato'o, XinEe Tan, Tanit Boonsiri, Feng-Yu Li, Longzhu Cui (Div. Bacteriol., Jichi Med Univ.)

**P2-031**
**Determination of antigens for diagnosis of genus *Helicobacter* infection in cancer patients.**
○Takako Osaki[1], Hideo Yonezawa[1], Fuhito Hojo[2], Satoshi Kurata[1], Tomoko Hanawa[1], Shigeru Kamiya[1,3] ([1]Dept. Infect. Dis., Kyorin Univ. Sch. Med., [2]Inst. Lab. Anim., Grad. Sch. Med., Kyorin Univ., [3]Facult. Health. Sci., Kyorin Univ.)

**P2-032**
**On-site monitoring of Legionella pneumophila in cooling tower using a portable microfluidic system**
○Nobuyasu Yamaguchi[1], Yusuke Tokunaga[1], Satoko Goto[2], Yudai Fujii[2], Fumiya Banno[2], Akiko Edagawa[1] ([1]Osaka Inst. Pub. Health, [2]Grad. Sch. Pharm. Sci., Osaka Univ.)

**P2-033**
**Proposal of a periodic medical examination for the diagnosis of *Helicobacter suis* infection**
○Hidenori Matsui[1], Emiko Rimbara[2], Masato Suzuki[2], Keigo Shibayama[2] ([1]Kitasato Inst Life Sci, Kitasato Univ., [2]National Inst. Infect. Dis.)

**P2-034**
**Validity as diagnostic marker of MVOCs emitted from *Trichophyton* species**
○Shin-Ichi Iwaguchi (Dept. Biol. Sci., Fac. Sci., Nara Women's Univ.)

**P2-035**
**Digital microscopic technology inaugurates a new era in the field of medical mycology**
○Koichi Makimura (Med. Mycol., Grad. Sch. Med, Teikyo Univ.)

**P2-036**
**Biomarker research by urine proteomics in pulmonary MAC disease**
○Akira Yokoyama[1], Yoshitoshi Hirao[2], Yuriko Ozeki[1], Akihito Nishiyama[1], Yoshitaka Tateishi[1], Tadashi Yamamoto[2], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Med., Niigata Univ., [2]Biofluid Biomarker Cent., Niigata Univ.)

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

**P2-037**
**Identification of CRISPR sequences from *Mycoplasma salivarium* strains**
○Yu Shimoyama[1], Taichi Ishikawa[1], Yoshitoyo Kodama[1], Shigenobu Kimura[2], Minoru Sasaki[1] ([1]Div. Mol. Microbiol., Iwate Med. Univ., [2]Dept. Dent. Hygene, Kansai Women's College)

**P2-038**
**Virulence Profile of Diarrheagenic E. coli from the Western region of Ghana**
○Isaac Prah[1], Alafate Ayibieke[1], Atsushi Iguchi[2], Samiratu Mahazu[1], Wakana Sato[1], Toshihiko Suzuki[1], Shoji Yamaoka[1], Shiroh Iwanaga[1], Anthony Ablordey[3], Ryoichi Saito[1] ([1]Grad. Sch. Med & Dent. Sci., Tokyo Med. Dent. Univ., [2]Faculty of Agr., Univ. of Miyazaki, [3]Dept. Bacteriology, Noguchi Memorial Institute for Medical Research, Univ. of Ghana)

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

**P2-039 (WS07-2)**
**Metabolism Changing of *Vibrio vulnificus* Infected Tissue in Wound Infection Model Mouse**
○Kai Ishida[1], Takaaki Shimohata[1], Yuna Kanda[1], Rumiko Masuda[1], Takashi Uebanso[1], Kazuaki Mawatari[1], Takashige Kashimoto[2], Akira Takahashi[1] ([1]Dept. Preventive Environmental Nutrition, Ins. Biomed Sci., Tokushima Univ. Grad. Sch., [2]Lab. Vet. Public Health, Sch. Vet. Med., Kitasato Univ.)

**P2-040**
**Mechanism of protein translation-coupled cysteine persulfide biosynthesis in bacteria**
○Tetsuro Matsunaga[1], Tomoaki Ida[1], Akira Nishimura[1], Minkyung Jung[1], Masanobu Morita[1], Tomohiro Sawa[2], Hideshi Ihara[3], Hozumi Motohashi[1,2], Takaaki Akaike[1] ([1]Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., [2]Dept. Microbiol., Kumamoto Univ. Grad. Sch. Med. Sci., [3]Dept. Biol. Sci., Grad. Sch. Sci., Osaka Pref. Univ., [4]Dept. Gene Exp. Regulation, IDAC, Tohoku Univ.)

**P2-041**
**Crystal structure of a diadenosine tetraphosphate phosphorylase from *Mycobacterium avium***
○Shigetarou Mori[1], Naoko Honda[2], Hyun Kim[1], Emiko Rimbara[1], Keigo Shibayama[1] ([1]Dept. Bacteriology II, NIID, [2]Dept. Qual. Assur. Radiol. Prot., NIID)

**P2-042**
**Expression of Glycolysis in *Veillonella* spp. by substrates control**
○Izumi Mashima[1,2], Yu-Chieh Liao[3], Futoshi Nakazawa[4], Yoshiaki Kawamura[2], Riyoko Tamai[1], Yusuke Kiyoura[1], Elaine Haase[5], Frank Scannapieco[5] ([1]Dept. Oral. Med. Sci., Sch. Dent., Ohu Univ., [2]Dept. Microbiol., Sch. Phar. Aichi Gakuin Univ., [3]Div. Biostat. Bioinfo., Inst. Population Heal. Sci., Nat. Heal. Res. Inst., [4]Dept. Oral Biol., Fac. Dent., Univ. Indonesia, [5]Dept. Oral Biol., Sch. Dent. Med., Univ. Buffalo, SUNY)

## 3. Physiology / Structural biology -b. Motility

**P2-043 (WS07-8)**
**Reconstitution of *Spiroplasma* swimming and search for its origin in synthetic bacterium, syn3.0**
◯Hana Kiyama[1], Shigeyuki Kakizawa[2], Makoto Miyata[1,3] ([1]Grad. Sch. Sci., Osaka City Univ., [2]Bioprocess, AIST, [3]OCARINA, Osaka City Univ.)

**P2-044 (WS07-7)**
**Collective motion of gliding *Flavobacteria* exhibits unforeseen vortices with dynamic rotation**
◯Daisuke Nakane, Takayuki Nishizaka (Dept. Phys., Gakushuin Univ.)

**P2-045**
**Functional characterization of FlaK, a master regulator for the polar flagellar genes in Vibrio**
◯Tomoya Kobayakawa[1], Seiji Kojima[2], Michio Homma[2] ([1]Dept. Biol. Sci., Sch. Sci., Nagoya Univ., [2]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

**P2-046**
**Detection of stator-rotor interaction essential for flagellar rotation by site-directed crosslink.**
◯Hiroyuki Terashima, Seiji Kojima, Michio Homma (Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

**P2-047**
**Effects of MFXF motif in FliG on the rotational direction of the flagellar motor in marine *Vibrio***
◯Akihiro Hatano[1], Tatsuro Nishikino[2], Michio Homma[2] ([1]Div. Biol. Sci., Sch. Sci., Nagoya Univ., [2]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

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

**P2-048**
**RcsG, a connector of PTS to TCS in *Salmonella enterica***
◯Akinori Kato, Tomoka Fukami, Kei Hagihara (Dept. Adv. Biosci., Grad. Sch. Agr., Kindai Univ.)

**P2-049 (WS07-4)**
**Live-cell imaging of physical properties in bacterial cell surface by phase mode of high-speed AFM**
◯Yousuke Kikuchi[1], Yuuki Ichinaka[1], Masanori Toyofuku[2,3], Nozomu Obana[3,4], Nobuhiko Nomura[2,3], Azuma Taoka[1,5] ([1]Inst. Sci. Eng., Kanazawa Univ., [2]Fac. Life Env. Sci., Univ. Tsukuba, [3]Micro. Res. Cen. Sust., Univ. Tsukuba, [4]Tran. Me. Res. Cen., Fac. Med., Univ. Tsukuba, [5]WPI Nano Life Sci. Inst., Kanazawa Univ.)

**P2-050 (WS07-1)**
**Macrophage-derived exosomes up-regulate the pro-inflammatory factors E. coli vesicle-dependently**
◯Risa Imamiya[1], Mayuko Osada-Oka[1], Yukiko Minamiyama[1], Yasuhiko Horiguchi[2] ([1]Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., [2]Dept. Mol. Bact., RIMD, Osaka Univ.)

**P2-051**
**Inhibition of small G protein Rac GEF suppresses hyphal growth in *Trichophyton rubrum***
◯Masaki Ishii[1], Shinya Ohata[1], Tsuyoshi Yamada[2], Hideko Uga[1], Toshiaki Katada[1] ([1]Mol. Cell. Biol., Fac. Pharm., Musashino Univ., [2]TIMM)

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

**P2-052**
**Structural modification of *Escherichia coli* lipid A using palmitoyltransferase genes**
◯Kazuyoshi Kawahara, Takehiro Sugawara, Sakura Onoue (Dept. Biosciences, Coll. Sci. Engin. Kanto Gakuin Univ.)

**P2-053**
**Analysis of biosynthesis gene cluster from clinical *Mycobacterium intracellulare* strain**
◯Nagatoshi Fujiwara[1], Yuji Miyamoto[2], Minoru Ayata[3], Takashi Naka[1], Hirotaka Kuwata[4], Shinji Maeda[5] ([1]Dept. Food and Nutrition, Tezukayama Univ., [2]Leprosy Res. Cent., National Institute of Infectious Diseases, [3]Dept. Virology, Osaka City Univ. Grad. Sch. Med., [4]Dept. Oral Microbiol. and Immunol., Sch. Dent., Showa Univ., [5]Fac. Pharm. Hokkaido Univ. Science)

**P2-054**
**Regulation of the flagellar MS ring formation in Vibrio species**
◯Hiroki Kajino[1], Keiichi Hirano[2], Hiroyuki Terashima[2], Michio Homma[2] ([1]Div. Biol. Sci., Sch. Sci., Nagoya Univ., [2]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

**P2-055**
**Characterization of *E. coli* membrane vesicles induced by glycine**
◯Satoru Hirayama, Ryoma Nakao (Dept. Bac. I, Natl. Inst. Infect. Dis.)

**P2-056**
**Analyzing cell division protein of cell wall-less bacteria**
◯Taishi Kasai, Daisuke Shiomi (Dept. Life Sci., Coll. Sci., Rikkyo Univ.)

**P2-057**
**β-lactam binding and permeation mechanism in Neiserria meningitidis outer membrane porin PorB**
○Mikio Tanabe[1], Christof Kattner[2] ([1]Struct. Biol. Res. Centre. IMSS, KEK, [2]HALOmem, Inst. Biochem. Biotech., Martin-Luther-Univ. Halle-Wittenberg)

### 3. Physiology / Structural biology -f. Others

**P2-058**
**Bacterial supernatant inhibits or disperse biofilm of oral bacteria**
○Ryota Yamasaki, Aki Kawano, Yoshie Yoshioka, Wataru Ariyoshi (Dept. Health Promo., Infect. Molecul. Bio., Kyushu Dental Univ.)

**P2-059**
**Bacterial stress factors related to biofilm formation in *Staphylococcus aureus***
○Yuko Ohno, Yuta Honjo, Kana Yoshizumi, Mako Kawai (Fac. Phar. Sci., Himeji Dokkyo Univ.)

**P2-060**
**Analysis of pH regulation in magnetotactic bacteria using pH-sensitive fluorescent protein**
○Yukako Eguchi[1], Azuma Taoka[1,2], Yoshihiro Fukumori[2,3] ([1]Fac. Biol. Sci. & Tech., Inst. Sci. & Eng., Kanazawa Univ., [2]NanoLSI, Inst. Front. Sci. Init., Kanazawa Univ., [3]Vice President, Kanazawa Univ.)

**P2-061**
**Comparison of cryo-TEM cell morphology data between species in 5 genera in family *Mycobacteriaceae*.**
○Hiroyuki Yamada[1], Kinuyo Chikamatsu[1], Akio Aono[1], Kazuyoshi Murata[2], Naoyuki Miyazaki[2], Yoko Kayama[2,3], Nagatoshi Fujiwara[4], Shinji Maeda[5], Satoshi Mitarai[1] ([1]Dept. Mycobacterium Ref. Res. RIT, JATA., [2]Nat. Inst. Physiol., [3]Terabase. Inc., [4]Tezukayama Univ., [5]Hokkaido Univ. Sci.)

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

**P2-062 (WS07-5)**
**Spatio-temporal analysis of complex biofilm formed by skin microorganisms**
○Kaori Tsuryu[1], Nobuhiko Nomura[2,3], Andrew S. Utada[2,3], Nozomu Obana[3,4] ([1]Grad. Sch. Life Environ. Sci., Univ. Tsukuba, [2]Fac. Life Environ. Sci., Univ. Tsukuba, [3]MiCS, Univ. Tsukuba, [4]TMRC, Fac. Med., Univ. Tsukuba)

**P2-063**
**Amoeba carrying human pathogenic bacteria in a symbiotic bacteria-dependent manner**
○Nana Tanaka[1], Saki Maehana[1], Torahiko Okubo[1], Junji Matsuo[2], Shinji Nakamura[3], Jeewan Thapa[1], Hiroyuki Yamaguchi[1] ([1]Fac. Health Sci., Hokkaido Univ., [2]Hokkaido Med. Univ., [3]Div. Biomed. Imag. Res., Juntendo Univ. Grad. Sch. Med.)

**P2-064**
**Survival of *Helicobacter pylori* and other pathogenic bacteria in environmental soi**
○Fuhito Hojo[1], Takako Osaki[2], Hideo Yonezawa[2], Tomoko Hanawa[2], Satoshi Kurata[2], Shigeru Kamiya[3] ([1]Inst. Lab. Anim., Grad. Sch. Med., Kyorin Univ., [2]Dept. Infect. Dis., Kyorin Univ., Sch. Med., [3]Fac. Health Sci.)

**P2-065**
**The correlation between nontuberculous mycobacteria and free living amoeba in the river water**
○Yukiko Nishiuchi[1], Tomotada Iwamoto[2], Kentaro Arikawa[2], Shiomi Yoshida[3], Fumito Maruyama[4] ([1]Inst. Toneyama Tuberculosis Res., Sch. Med., Osaka City Univ., [2]Dept. Infectious Dis., Kobe Inst. Health., [3]Clin. Res. Cent., NHO Kinki-chuo Chest Med. Cent., [4]Microb. Genom. Ecol. Hiroshima Univ.)

**P2-066**
**Exploitation of obligate intracellular bacteria diversity in *Leptotrombidium* mites**
○Motohiko Ogawa[1], Mamoru Takahashi[2], Minenosuke Matsutani[3], Shinichi Noda[4], Nobuhiro Takada[5], Masayuki Saijo[1] ([1]Dept. Virology1, NIID, [2]Dept. Anesthesiol., Saitama Med. Univ., [3]NODAI Genome Res. Center, Tokyo Agri. Univ., [4]Fac. Med. Sci., Fukui Univ., [5]Pacific Islands Res. Center, Kagoshima Univ.)

### 2. Ecology -b. Microbiota

**P2-067 (WS07-6)**
**The lantibiotics produced by the oral habitant trigger dysbiosis of intestinal microbiota**
○Hideo Yonezawa[1], Mizuho Motegi[2], Fuhito Hojo[4], Yasutoshi Kuroki[3], Kentaro Oka[3], Motomichi Takahashi[3], Takako Osaki[1], Shigeru Kamiya[1] ([1]Dept. Infect. Dis., Kyorin Univ. Sch. Med., [2]Dept. Pediatric Dent, Tokyo Med. and Dent. Univ., [3]Miyarisan Pharm. Co. Ltd, [4]Inst. Lab. Anim., Grad. Sch. Med., Kyorin Univ.)

**P2-068**

**Omics analysis in fecal transplantation therapy for *Clostridioides difficile* infection**

○Yoshihiko Sakaguchi[1], Kazuyoshi Gotoh[2], Mitsutoshi Senoh[3], Akira Take[1], Jumpei Uchiyama[4], Hayato Osaki[5], Yasutaka Jodai[5], Shunji Hayashi[1], Naoki Ohmiya[5], Haru Kato[3] ([1]Dept. Microbiol. Kitasato Univ. Sch. Med., [2]Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., [3]Dept. Bacteriol. II, Natl. Inst. Infect. Dis., [4]Lab. Vet. Microbiol. I, Sch. Vet. Med., Azabu Univ., [5]Dept. Gastro., Fujita Heal. Univ.)

**P2-069**

**Alteration of infant gut microbiota metabolic function after exposure to antibiotics**

○Haruyuki Imaohji[1], Aya Tanaka[2], Ryu-ichi Shimono[2], Atsushi Toyoda[3], Hideto Takami[4], Tomomi Kuwahara[1] ([1]Dept. Microbiol., Sch. Med., Kagawa Univ., [2]Dept. Pediatr. Surg., Sch. Med., Kagawa Univ., [3]Center Inform. Biol., Natl. Inst. Genetics, [4]Yokohama Inst., JAMSTEC)

**P2-070**

**Effect of periodontal therapy combined with lactic acid bacteria on oral and intestinal flora**

○Nao Taniguchi[1], Yoshio Nakano[2], Yoshiaki Ota[3], Takashi Hanioka[1] ([1]Dept. Prev. & Public Health Dent., Fukuoka Dent. Col., [2]Dept. Chem., Nihon Univ. Sch. Dent., [3]Ota Dent. Clin.)

**P2-071**

**An analysis of associations between gut microbiota and lifestyle characteristics in healthy Japanese**

○Taihei Banno, Yoshimi Benno, Mutsumi Nakamura, Yoshiko Fukuda (Benno Lab, RIKEN)

**P2-072**

**Analysis of gut microbiome in dairy cows infected with bovine leukemia virus**

○Jumpei Uchiyama[1], Hironobu Murakami[1], Reiichiro Sato[1], Keijiro Mizukami[1], Suzuki Takehito[1], Ayaka Shima[2], Genki Ishihara[2], Yoshihiko Sakaguchi[1,3], Kazuyuki Sogawa[1], Masahiro Sakaguchi[1] ([1]Azabu Univ., [2]Anicom Specialty Medical Institute Inc., [3]Kitasato Univ.)

**P2-073**

**Investigation of the contamination with *Streptococcus suis* in the pork food chain in Japan**

○Kasumi Kuroki[1], Yoshihiro Nitta[1], Ryosuke Kadoya[2], Tsutomu Sekizaki[1] ([1]Res. Center for Food Safety, Grad. Sch. Agr. Life Sci., Univ. of Tokyo, [2]Dept. Human Nutr., Sch. Life Stud., Sugiyama Jogakuen Univ.)

**P2-074**

**Comparative analysis of skin microbiome in patients with facial inflammatory skin diseases**

○Toshifumi Osaka[1], Naoko Yanagisawa[1], Ayane Mizuno[2], Akiko Mochizuki[2], Yasuko Fukuya[2], Naoko Ishiguro[2] ([1]Dept. Microbiol. Immunol., Tokyo Women's Med. Univ., [2]Dept. Dermatol., Tokyo Women's Med. Univ.)

## 2. Ecology -c. Growth and culture conditions

**P2-075**

**Modification of Bordet-Gengou agar medium for cultivation of bordetellae**

○Yukihiro Hiramatsu[1], Mayuko Osada-Oka[2], Yasuhiko Horiguchi[1] ([1]Dept. Mol. Bact., RIMD, Osaka Univ., [2]Food Hyg. Env. Health, Grad. Sch. Life Env. Sci., Kyoto Pref. Univ.)

**P2-076**

**Effects of pyruvate and its analogues on the VBNC *Mycobacterium tuberculosis* complex**

○Yuta Morishige[1], Yoshiko Shimomura[1], Yuriko Igarashi[1], Kinuyo Chikamatsu[1], Akio Aono[1], Hiroyuki Yamada[1], Akiko Takaki[1], Yoshiro Murase[1], Satoshi Mitarai[1,2] ([1]Dept. Mycobac. Ref. Res., RIT, JATA, [2]Dept. Basic Mycobacteriol., Grad. Sch. Biomed. Sci., Nagasaki Univ.)

**P2-077**

**Elongation and septal formation of Mycobacterium leprae**

○Yasuo Fukutomi, Kentaro Yamamoto, Manabu Ato (Leprosy Research Center, NIID)

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

**P2-078 (WS05-5)**

**Bird's-eye mapping of antimicrobial resistance plasmids in an Excel file by Python**

○Yusuke Tsuda, Yoshichika Arakawa (Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

**P2-079 (WS05-1)**

**Global Genome Epidemiology Database (gGENEPID)**

Tsuyoshi Sekizuka, Koji Yatsu, Kentaro Itokawa, ○Makoto Kuroda (Pathogen Genomics Center, Nat. Inst. Infect. Dis.)

**P2-080**

**Applying strain-resolved metagenomic analysis using PacBio Sequel**

○Takeru Nakabayashi[1], Yuma Oka[2], Satoshi Yuhara[2], Morie Nishiwaki[1] ([1]Bussiness Dept., Miraca Research Institute G. K., [2]Research Dept., Miraca Research Institute G. K.)

**P2-081**

**Development of primer design system using genome and metagenome data**

○Satoshi Yuhara[1], Yuma Oka[1], Takeru Nakabayashi[2], Morie Nishiwaki[2] ([1]Research Dept., Miraca Research Institute G. K., [2]Business Dept., Miraca Research Institute G. K.)

**P2-082**
**Higher Genome Mutation Rates of a Beijing lineage of M. tuberculosis during LTBI**
○Mariko Hakamata[1,2], Hayato Takihara[3], Tomotada Iwamoto[4], Aki Tamaru[5], Yuriko Ozeki[1], Akihito Nishiyama[1], Yoshitaka Tateishi[1], Toshiaki Kikuchi[2], Shujiro Okuda[3], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]Dept. Respiratory medicine and infectious disease., Sch. Med., Niigata Univ., [3]Dept. Bioinformatics., Sch. Med., Niigata Univ., [4]Osaka Institute of Public Health, [5]Kobeshi Kankyohoken Research Institute)

**P2-083**
**Complete genome sequences of 5 mouse opportunistic bacterial species by targeting their type strains**
○Fumio Ike[1], Ayako Kajita[1], Hiraku Sasaki[2], Hitoki Yamanaka[3], Atsushi Toyoda[4] ([1]Exp. Anim. Div., RIKEN BRC, [2]Juntendo Univ., [3]Res. Ctr. Sprt. Adv. Sci., Shinshu Univ., [4]Nat. Inst. Genetics)

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

**P2-084 (WS05-2)**
**The mechanism responsible for the change in lactose hydrolysis during EHEC O121:19 cultivation**
○Keiji Nakamura, Itsuki Taniguchi, Ruriko Nishida, Yasuhiro Gotoh, Yoshitoshi Ogura, Tetsuya Hayashi (Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ.)

**P2-085**
**Genomic and phenotypic analyses of a Vibrio cholerae strain with single chromosome**
○Shouji Yamamoto (Dept. Bac. I., Natl. Inst. Infect. Dis.)

**P2-086**
**Global transfer of epidemic-related Shiga toxin 2a phage among enteroaggregative *Escherichia coli***
Keiko Kimata[1], ○Kenichi Lee[2], Masanori Watahiki[1], Junko Isobe[1], Makoto Ohnishi[2], Sunao Iyoda[2] ([1]Dept. Bacteriol., Toyama Inst. Health, [2]Dept. Bacteriol. 1, Natl. Inst. Infect. Dis.)

**P2-087**
**Genomic and phylogenetic analysis of the *Helicobacter cinaedi/canicola* complex**
○Yasuhiro Gotoh[1], Takako Taniguchi[2], Keiji Nakamura[1], Yoshitoshi Ogura[1], Naoaki Misawa[2], Tetsuya Hayashi[1] ([1]Dept. Bacteril., Fact. Med. Sci., Kyushu Univ., [2]Dept. Vet Med Sci., Fact. Agric., Miyazaki Univ.)

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

**P2-088 (WS05-3)**
**Analysis of sporulation control mechanism by a novel protein complex conserved in Clostridium**
○Naoki Muto[1], Nozomu Obana[2,3], Nobuhiko Nomura[3,4] ([1]Grad. Sch. Life Environ. Sci., Univ. Tsukuba, [2]TMRC, Fac. Medicine. Sci., Univ. Tsukuba, [3]MRCS, Univ. Tsukuba, [4]Fac. Life Environ. Sci., Univ. Tsukuba)

**P2-089**
**Post-transcriptional regulation by RodZ protein essential for rod shape of bacilli**
○Jiro Mitobe, Makoto Ohnishi (Dept. Bacteriology I, NIID)

**P2-090**
**Regulation of sRNA1 expression by ArcA in *Vibrio alginolyticus***
○Takehiko Mima[1], Eka Darwinata Agus[2], Kazuyoshi Gotoh[1], Yumiko Yamamoto[1], Osamu Matsushita[1] ([1]Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pham. Sci., [2]Dept. Clin. Microbiol., Fac. Med., Udayana Univ., Indonesia)

**P2-091**
**RNA processing regulating Type IV pili gene in *Clostridium perfringens***
○Nozomu Obana[1], Nobuhiko Nomura[2] ([1]TMRC, Fac. Med., Univ. Tsukuba, [2]Fac. Life Environ. Sci., Univ. Tsukuba)

**P2-092**
**Binding position analysis of Bacillus anthracis transcription factor AtxA by Cappable-seq**
○Yoshikazu Furuta[1], Cheng Cheng[2], Hideaki Higashi[1] ([1]Res. Center. Zoonosis. Control., Hokkaido Univ., [2]Sch. Biomol. Biomed. Sci., Univ. College Dublin)

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

**P2-093 (WS05-4)**
**History-dependent maintenance of resistant phenotype against resistant gene deletion**
○Yuta Koganezawa[1], Miki Umetani[1,2], Moritoshi Sato[1,2,3], Yuichi Wakamoto[1,2,3] ([1]Dept. Multidisciplinary Sci., Grad Sch. Arts and Sci., Univ. Tokyo, [2]Res. Cent. Complex Syst. Biol., Univ. Tokyo, [3]Universal Biol. Inst., Univ. Tokyo)

## 4. Genetics / Genomics / Biotechnology -e. Others

**P2-094**
**Prevalence of emm1 Streptococcus pyogenes having a novel type of genomic composition**
◯Ichiro Tatsuno[1], Masanori Isaka[1], Masakado Matsumoto[2], Tadao Hasegawa[1] ([1]Dept. Bact., Sch. Med. Sci., Nagoya City Univ., [2]Dept. Micro. Med. Zool., Aichi Prefect. Inst. Pub. Heal.)

**P2-095**
**The role of intrinsically disordered region of mycobacterial histone-like protein in DNA compaction**
◯Akihito Nishiyama[1], Tomoyuki Narita[2], Noriyuki Kodera[2], Yoko Kobayashi[1], Hiroaki Muto[1], Junya Watanabe[1], Naoya Ohara[3], Yuriko Ozeki[1], Yoshitaka Tateishi[1], Sohkichi Matsumoto[1] ([1]Dept. Bacteriol., Sch. Med., Niigata Univ., [2]NanoLSI, Kanazawa Univ., [3]Dept. Oral Microbiol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci.)

## 5. Pathogenicity -a. Adhesins and colonization factors

**P2-096 (WS06-8)**
**Attachment of ETEC to intestinal cells via lipid-recognition by secreted protein**
◯Yuka Imoto[1], Hiroya Oki[2], Kazuki Kawahara[3], Tomoya Imai[4], Shigeaki Matsuda[2], Toshio Kodama[2], Tetsuya Iida[2], Takuya Yoshida[3], Tadayasu Ohkubo[3], Shota Nakamura[2] ([1]Sch. Pharm. Sci., Osaka Univ., [2]RIMD, Osaka Univ., [3]Grad. Sch. Pharm. Sci., Osaka Univ., [4]RISH, Kyoto Univ.)

**P2-097 (WS06-4)**
**Role of GP96 on exacerbation of bacterial pneumonia following influenza infection**
◯Tomoko Sumitomo[1], Masanobu Nakata[1], Satoshi Nagase[2], Yuki Takahara[1], Masaya Yamaguchi[1], Shigefumi Okamoto[2], Shigetada Kawabata[1] ([1]Dept. Oral and Mol. Microbiol., Osaka Univ. Grad. Sch. Dent., [2]Dept. Clin. Lab. Sci., Kanazawa Univ. Grad. Sch. Med., Pharm., and Health Sci.)

**P2-098**
**Detection of fibronectin-binding proteins in membrane vesicle produced by *Clostrodium perfringens***
◯Nozomu Matsunaga[1], Eiji Tamai[2], Seiichi Katayama[1], Yasuo Hitsumoto[1] ([1]Dept. Life Sci., Fac. Sci. Okayama Univ. Sci., [2]Dept., Infect., Dis. Col. Pharma. Sci., Matsuyama Univ.)

**P2-099**
**The bindig of GAPDH and autolysin from *Clostridium perfringens* to peptidoglycan**
◯Riyo Aono[1], Nozomu Matsunaga[2], Eiji Tamai[3], Seiichi Katayama[2], Yasuo Hitsumoto[2] ([1]Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. of Sci, [2]Dept. Life Sci., Fac. Sci., Okayama Univ. Sci., [3]Dept. Infect., Dis. Col. Pharma. Sci., Matsuyama Univ.)

**P2-100**
**The analysis of components in biofilm formed by Aeromonas strains**
◯Soshi Seike[1], Hidetomo Kobayashi[1], Eizo Takahashi[2], Keinosuke Okamoto[2], Hiroyasu Yamanaka[1] ([1]Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ., [2]Collab. Res. Ctr. Okayama Univ.)

**P2-101**
**Role of twin-arginine translocation system in *Citrobacter rodentium* fitness in the intestinal tract**
Tsuyoshi Otake, Mayuka Fujimoto, Takeshi Haneda, ◯Tsuyoshi Miki, Nobuhiko Okada (Dept. Microbiol., Sch. Pharm., Kitasato Univ.)

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

**P2-102 (WS06-3)**
**Group A Streptococcus modulates host membrane trafficking to impair epithelial barrier integrity**
◯Junpei Iibushi, Hitotaka Toh, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

**P2-103 (WS06-2)**
**Domain analysis of BopN produced by Bordetella.**
◯Saaya Kinoshita, Asaomi Kuwae, Akio Abe (Grad. Sch. Infection Control Sciences, Kitasato Univ.)

**P2-104 (WS06-1)**
**Cholix interacts with prohibitins and induces apoptosis mitochondrial dysfunction in hepatocytes**
◯Kinnosuke Yahiro[1], Kohei Ogura[2], Yasuhiko Terasaki[3], Satoru Miyagi[4], Eiki Yamasaki[5] ([1]Dept. Mol. Infect., Grad. Sch. Med. Chiba Univ., [2]Adv. Health. Care. Sci. Res. Unit., Inst. Frnt. Sci. Init, Kanazawa Univ., [3]Dept. Anal. Hum. Pathol., Nippon Med. Sch., [4]Dept. Life Sci., Fac. Med., Shimane Univ., [5]Diag. Cntr. Anim. Health. Food. Safety., Obihiro Univ. Agric. Vet. Med.)

**P2-105**
**Proteome analysis of extracellular vesicles produced by Streptococcus pyogenes**
◯Kazunori Murase, Chihiro Aikawa, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

**P2-106**
**Investigation of expression control mechanism of hyaluronidase in *Streptococcus intermedius***
◯Toshifumi Tomoyasu[1,2], Mari Deguchi[2], Atsushi Tabata[1,2], Ayuko Takao[3], Nobuko Maeda[3], Hideaki Nagamune[1,2] ([1]Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ., [2]Dept. Biol. Sci. & Tech., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., [3]Dept. Oral Bacteriol., Tsurumi Univ.)

**P2-107**

**Activation of NLRP3 inflammasome by mycoplasmal lipopeptides only through the TLR2-mediated signals**

○Ayumi Saeki[1], Takeshi Into[2], Akira Hasebe[1], Ken-ichiro Shibata[1] ([1]Dept. Oral Mol. Microbiol., Hokkaido Univ. Grad. Sch. Dent. Med., [2]Dept. Oral Microbiol., Asahi Univ. Sch. Dent.)

**P2-108**

**Lipid interaction analysis of botulinum neurotoxin type A using N-terminal heavy chain mutants**

○Tomoko Kohda, Shunji Kozaki, Masafumi Mukamoto (Dept. Vet. Sci., Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)

**P2-109**

**Investigating the consequence of EPEC infection on the host biogenesis of exosomes**

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

**P2-110**

**Vaginal *Lactobacillus iners* impacts on cellular junctions of the human vaginal epithelia**

○Masahiro Ito[1,2], Adam J. Ratner[3], Nobuhiko Okada[1], Melissa M. Herbst-Kralovetz[2,4] ([1]Dept. Microbiol., Sch. Pha., Kitasato Univ., [2]Dept. Bas. Med. Sci., Univ. of Arizona Col. Med. Phoenix, [3]Dept. Pediat. Microbiol., Divi. Pediat. Infect. Disea., New York Univ. Sch. Med., [4]Dept. Obs. Gyn., Univ. of Arizona Col. Med. Phoenix)

**P2-111**

**Diarrheagenic activity of each component of CPILE as a new *Clostridium perfringens* enterotoxin**

○Chie Monma[1], Dai Saiki[1], Kana Soeda[1], Yukako Shimojima[1], Jun Suzuki[1], Kenji Sadamasu[1], Tomohito Yamada[2], Toru Yoshida[2], Hideaki Tsuge[2], Yoichi Kamata[3] ([1]Tokyo Metropolitan Inst. Pub. Health, [2]Kyoto Sangyo Univ., [3]Koshien Univ.)

**P2-112**

**Identification and functional analysis of a host protein targeted by mycobacterial effector Zmp1**

○Giichi Takaesu[1,2], Masayuki Umemura[1,2], Goro Matsuzaki[1,2] ([1]Mol. Microbiol. Group, Trop. Biosph. Res. Ctr., Univ. of the Ryukyus, [2]Dept. Host Diffense., Grad. Sch. Med., Univ. of the Ryukyus)

**P2-113**

**Isolation of *Vibrio cholerae* O1 from environmental water using beads bound with anti-O1 antibody**

○Eizo Takahashi[1], Subha Sankar Paul[2], Goutam Chowdhury[2], Asish K. Mukhopadhyay[2], Shanta Dutta[2], Masatomo Morita[3], Makoto Ohnishi[3], Shin-ichi Miyoshi[4], Keinosuke Okamoto[1] ([1]Collabo. Res. Ctr. Okayama Univ. India, [2]Div. Bacteriol. NICED, [3]Bacteriol. I, NIID, [4]Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ.)

**P2-114**

**Molecular mechanism of *Clostridium perfringens* α-toxin-induced impairment of innate immunity**

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

**P2-115**

***Aeromonas* serine protease decreases epithelial barrier function and promotes bacterial translocation**

○Hidetomo Kobayashi[1], Soshi Seike[1], Masafumi Yamaguchi[2], Eizo Takahashi[3], Keinosuke Okamoto[3], Hiroyasu Yamanaka[1] ([1]Laboratory of Molecular Microbiological Science, Faculty of Pharmaceutical Sciences, Hiroshima International Univ., [2]Laboratory of Physiological Chemistry, Faculty of Pharmaceutical Sciences, Hiroshima International Univ., [3]Collaborative Research Center of Okayama Univ. for Infectious Diseases in India)

**P2-116**

**BafA, a novel *Bartonella* secreted protein promotes endothelial cell angiogenesis**

○Kentaro Tsukamoto[1], Akito Kawai[1], Masahiro Suzuki[1], Yasuhiko Horiguchi[2], Yohei Doi[1] ([1]Dept. Microbiol., Fujita Health Univ. Sch. Med., [2]Dept. Mol. Bact., RIMD, Osaka Univ.)

**P2-117**

**Staphylococcal enterotoxin A evokes diarrhea after vomiting reflex in common marmoset**

○Shouhei Hirose[1,2], Krisana Asano[1,2], Hisaya Ono[3], Kouji Narita[1], Dong-Liang Hu[3], Akio Nakane[2] ([1]Dept. Microbiol. Immunol., Grad. Sch. Med., Hirosaki Univ., [2]Dept. Biopol. health., Grad. Sch. Med., Hirosaki Univ., [3]Dept. Zoonoses, Sch. Vet. Med. Kitasato Univ.)

**P2-118**

**Analysis of transport mechanism of hemagglutinin of botulinum toxin complex to adherens junctions**

○Sho Amatsu[1,2], Yukako Fujinaga[1] ([1]Dept. Bacteriol., Sch. Med. Sci., Kanazawa Univ., [2]Dept. Forensic Med. Pahol., Sch. Med. Sci., Kanazawa Univ.)

**P2-119**

**Structural analysis and a clinical application of collagen-anchor from Clostridial collagenase**

○Osamu Matsushita[1], Takehiko Mima[1], Kazuyoshi Goto[1], Yumiko Yamamoto[1], Perry Caviness[2], Joshua Sakon[2], Kentaro Uchida[3], Shin Nakamura[4], Kentaro Okamaoto[4], Shogo Takashiba[4] ([1]Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., [2]Dept. Chem. Biochem., Univ. Arkansas, USA, [3]Dept. Orthop. Surg., Kitasato Univ. Sch. Med., [4]Dept. Pathophysiol. Periodont. Sci., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci.)

## 5. Pathogenicity -c. Cell invasion and intracellular parsitism

**P2-120 (WS06-7)**
**Large peritoneal macrophage delivers Salmonella from the peritoneal cavity to the greater omentum**
○Akiko Takaya[1], Shogo Tashiro[1], Tatsunari Yokoi[1], Yoshiyuki Goto[2], Motomichi Takahashi[3], Kentaro Oka[3], Hiroto Kawashima[1], Tomoko Yamamoto[2] ([1]Dept. Microbiol. Immunol., Grad. Sch. Pharm. Sci., Chiba Univ., [2]MMRC, Chiba Univ., [3]Miyarisan Pharm. Co. Ltd)

**P2-121 (WS06-5)**
**Induction mechanism analysis of LAPosome-like vesicles in *Streptococcus pneumoniae*-infected cells**
○Sayaka Shizukuishi[1,2], Michinaga Ogawa[1], Naoki Takada[1,3], Akihide Ryo[2], Haruko Takeyama[3], Makoto Ohnishi[1] ([1]Bacteriol. I, Nat. Inst. Infect. Dis., [2]Dept. Microbiol., Yokohama City Univ., Grad. Sch. Med., [3]Dept. Life Sci. and Med. Biosci., Waseda Univ.)

**P2-122**
**The host cell death induced by the infection of intact Mycobacterium tuberculosis bacilli.**
Mao Nakayama[2], Keiichi Taniguchi[1], Tomohiro Hasegawa[2], Takahiro Tanaka[3], Shinsaku Sakurada[3], Naoya Ohara[4], Saotomo Itoh[2], Shigeaki Hida[2], Kikuo Onozaki[2], ○Takemasa Takii[1,2] ([1]Dept. Mycobacteriol., Res. Inst. of Tuberculosis, JATA, [2]Dept. Hygienic chem., Grad. Sch. Pharm. Sci., Nagoya City Univ., [3]Res. Ins., NCGM, [4]Dept. Oral Microbiol., Grad. Sch. Med. Denti., Pharm., Okayama Univ.)

**P2-123**
**Chlamydophila pneumoniae regulates autophagy using the endogenous autophagy inhibitor GAPR-1 protein**
○Yoshikazu Naiki, Yinzhi Lin, Naoko Morita, Kazuko Takahashi, Takayuki Komatsu, Naoki Koide (Dept. Infect. Immunol. Aichi Med. Univ.)

**P2-124**
**Francisella soluble lyric transglycosylase is involved in intracellular growth and immunosuppression**
○Takashi Shimizu[1], Takemasa Nakamura[1], Kenta Watanabe[1], Akihiko Uda[2], Masahisa Watarai[1] ([1]Lab. Vet. Pub. Hlth., Jnt. Fac. Vet. Med., Yamaguchi Univ., [2]Dept. Vet. Sci., NIID)

**P2-125**
**Pathogenicity of prevalent-type *Streptococcus dysgalactiae* subsp. *equisimilis* strains**
Miki Matsue[1], ○Kohei Ogura[2], Tohru Miyoshi-Akiyama[3], Shigefumi Okamoto[1] ([1]Dept. Clinic. Labo. Sci., Inst. Med. Pharm. Health Sci., Kanazawa Univ., [2]Inst. Front. Sci. Init., Kanazawa Univ., [3]Patho. Micro. Lab., Res. Inst., NCGM)

**P2-126**
**Metabolic adaptation to glycolysis is a basic defense mechanism of macrophages for M. tuberculosis**
○Mayuko Osada-Oka[1], Yuriko Ozeki[2], Takehiro Yamaguchi[3], Sohkichi Matsumoto[3] ([1]Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., [2]Dept. Bacteriol., Grad. Sch. Med., Niigata Univ., [3]Dept. Pharmacol., Osaka City Univ. Med. Sch.)

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

**P2-127 (WS06-6)**
**Gram-positive pathogens activate inflammasome to promote bacterial survival in infected mice**
○Hideki Hara[1], Gabriel Nunez[2], Akihiko Yoshimura[1] ([1]Dept. Microbiol. Immunol., Sch. Med., Keio Univ., [2]Dept. Pathol., Sch. Med., Univ. Michigan)

**P2-128**
**Lipopolysaccharide-deficient *Acinetobacter baumannii* is sterilized by neutrophil-produced lysozyme**
○Go Kamoshida[1,2], Norihiko Takemoto[3], Tohru Miyoshi-Akiyama[3], Masataka Oda[2], Yasuo Ono[2] ([1]Dept. Microbiol. and Infect. Cont. Sci. Kyoto Pharm. Univ., [2]Dept. Microbiol. and Immunol., Teikyo Univ. Sch. Med., [3]Pathogenic Microbe Lab., Dept. Infect. Dis., NCGM)

## 5. Pathogenicity -e. Infection models

**P2-129**
**Effects of *Mycoplasma pneumoniae* infection on Th2 immune response**
○Satoshi Kurata[1], Takako Osaki[1], Hideo Yonezawa[1], Tomoko Hanawa[1], Haruhiko Taguchi[2], Shigeru Kamiya[3] ([1]Dept. Infect. Dis., Kyorin Univ., Sch. Med., [2]Dept. Immunol., Faculty of Health Sci., Kyorin Univ., [3]Faculty of Health Sci., Kyorin Univ.)

**P2-130**
**Analysis of host response in pulmonary MAC disease model mice.**
○Chiaki Kajiwara, Ayako Shiozawa, Kazuhiro Tateda (Dept. Microbiol. Infect. Dis., Sch. Med., Toho Univ.)

**P2-131**
**Type III secretion system genes of *E. piscicida* associated with virulence in Japanese flounder**
○Chigusa Suezawa[1], Yasuhiko Kawato[2], Takamitsu Sakai[2], Jun Okuda[1] ([1]Div. Microbiol., Dept. Med. Tech., Kagawa Pref. Univ. Health Sci., [2]NRIA FRA)

**P2-132**
**Role of chemokine receptors in the migration of mycobacterial antigen-specific T cells into the lung**
○Masayuki Umemura[1,2], Masatoshi Yamasaki[1], Toshiki Tamura[3], Goro Matsuzaki[1,2] ([1]Mol. Microbiol. Gr., TBRC, Univ. Ryukyus, [2]Dept. Host Def., Grad. Sch. Med., Univ. Ryukyus, [3]Dept. Mycobacteriol., LRC, NIID)

**P2-133**
**Mechanism of hyper-virulent mutation in *Streptococcus pyogenes***
○Norihiko Takemoto[1], Ayae Nishiyama[2], Mei Horino[1,3], Watanabe Shinya[4], Tohru Miyoshi-Akiyama[1] ([1]Pathogenic Microbe Lab., Dept. Infectious Diseases, NCGM, [2]Bacterial Infection Lab., Dept. Infectious Diseases, NCGM, [3]Tokyo College of Biotechnology, [4]Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

**P2-134**
**Necrotic soft tissue serves as bacterial reservoir in necrotizing soft tissue infections.**
○Takashige Kashimoto, Kohei Yamazaki, Shunji Ueno (Laboratory of Veterinary Public Health, Kitasato Univ.)

**P2-135**
***Staphylococcus aureus* exacerbates colitis in an experimental model of inflammatory bowel disease**
○Hisaya Ono[1,2], Ryousuke Mogi[1], Masashi Okamura[1], Krisana Asano[2], Akio Nakane[2,3], Dong-Liang Hu[1] ([1]Lab. Zoonoses, Sch. Vet. Med., Kitasato Univ., [2]Dept. Microbiol. Immunol., Grad. Sch. Med., Hirosaki Univ., [3]Dept. Biopolymer. Health Sci., Grad. Sch. Med., Hirosaki Univ.)

## 5. Pathogenicity -f. Others

**P2-136**
**Butyric acid (periodontopathic bacterial metabolite) effects on aggravation of ameloblastoma**
○Taichi Ishikawa, Yu Shimoyama, Yoshitoyo Kodama, Minoru Sasaki (Div. Mol. Microbiol., Iwate Med. Univ.)

**P2-137**
**The local anesthetic lidocaine suppresses T cell proliferation stimulated by TSST-1.**
○Hidehito Kato[1], Masayuki Kobayashi[2], Makoto Ozaki[2], Ken ichi Imanishi[3], Naoko Yanagisawa[1] ([1]Dept. Microbiol. Immunol., Sch. Med., TWM Univ., [2]Dept. Anesthesiol., Sch. Med., TWM Univ., [3]Dept. Nursing Sciences, Sch. Health Sciences, Japan Univ.)

**P2-138**
**Contribution of *in vivo*-induced antigens to pathogenicity of *S.* Gallinarum in chickens**
○Masashi Okamura[1], Takeshi Haneda[2], Akiko Tamura[1], Tsubasa Hamamoto[1], Shinjiro Ojima[1], Hisaya Ono[1], Dong-Liang Hu[1] ([1]Lab. Zoonoses, Kitasato Univ. Sch. Vet. Med., [2]Lab. Microbiol., Kitasato Univ. Sch. Pharm.)

**P2-139**
**Oral infection with *Streptococcus sanguinis* accelerates atherosclerosis in hyperlipidemic mice**
○Tomomi Hashizume-Takizawa[1], Yohei Yamaguchi[1], Ryoki Kobayashi[2], Noriko Shinozaki-Kuwahara[1], Masanori Saito[1], Tomoko Kurita-Ochiai[1] ([1]Dept. Microbiol. Immunol., Nihon Univ. Sch. Dent. at Matsudo, [2]Dept. Community Oral Health, Nihon Univ. Sch. Dent. at Matsudo)

**P2-140**
**Acid-resistance systems in *Candida glabrata***
○Azusa Takahashi-Nakaguchi, Michiyo Sato-Okamoto, Hiroji Chibana (Medic. Micol. Res. Cent., Chiba Univ.)

**P2-141**
**Gut microbiome and metabolome analyses in adenoma-carcinoma sequence of colorectal cancer**
○Sayaka Mizutani[1,2], Shinichi Yachida[3], Hirotsugu Shiroma[1], Satoshi Shiba[4], Takuji Yamada[1,5] ([1]Sch. Life Science and Tech., Tokyo Inst. of Tech., [2]JSPS Research Fellow, [3]Dept. Cancer Genome Informatics, Grad. Sch. Med., Osaka Univ., [4]National Cancer Research Center, [5]PRESTO)

**P2-142**
**Studies on pathogenicity of the elastolytic proteinases produced by *Aspergillus oryzae***
○Yumiko Komori, Toshiaki Nikai (Dept. Microbiol., Fac. Pharm., Meijo Univ.)

**P2-143**
**Analysis of the biofilm organization in *Acinetobacter* augmented with the host stress hormone.**
○Masato Inaba[1], Yohei Doi[1], Yoshichika Arakawa[2] ([1]Dept. Infect. Dis., Sch. Med., Fujita health Univ., [2]Dept. Bacteriol., Nagoya Univ. Grad. Sch. Med.)

## 6. Host defense -a. Innate immunity

**P2-144**

**Effect of macrolides on resistance against nitrosative stress in *Pseudomonas aeruginosa***

◯Takeshi Shimizu[1], Shota Murata[2], Shota Ishige[1], Kiyohiro Kai[1], Konosuke Mitsutsuka[1], Haruyoshi Tomita[3,4], Koichi Tanimoto[4], Akio Matsumoto[5] ([1]Dept. Mol. Infect., Grad. Sch. Med, Chiba Univ., [2]Div. Lab. Med, Chiba Univ. Hosp., [3]Dept. Bacteriol., Grad. Sch. Med., Gunma Univ., [4]Lab. Bacterial Drug Resi., Grad. Sch. Med., Gunma Univ., [5]Dept. Aging Pharmacol., Sch. Med., Toho Univ.)

**P2-145**

**Critical role of sequential sensing in protection against severe invasive streptococcal infection**

◯Takayuki Matsumura[1], Sadako Yoshizawa[2], Tadayoshi Ikebe[3], Makoto Ohnishi[3], Sho Yamasaki[4], Yoshimasa Takahashi[1], Manabu Ato[5] ([1]Dept. Immunol., Natl. Inst. Infect. Dis., [2]Dept. Microbiol. Infect. Dis., Toho Univ. Sch. Med., [3]Dept. Bacteriol. I, Natl. Inst. Infect. Dis., [4]Dept. Mol. Immunol., RIMD, Osaka Univ., [5]Dept. Mycobacteriol., Lepr. Res. Ctr., Natl. Inst. Infect. Dis.)

**P2-146**

**Gasdermin D mediates the release and maturation of IL-1alpha during inflammasome formation**

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

**P2-147 (WS11-4)**

**Antimicrobial peptide LL-37 induces antibacerial ectosomes from neutrophils and exosomes**

◯Yumi Kumagai[1], Taisuke Murakami[1], Kyoko Kuwahara[2], Isao Nagaoka[1] ([1]Dept. Host Defense and Biochemical Research, Sch. Med., Juntendo Univ., [2]Dept. Microbiol., Sch. Med., Juntendo Univ.)

**P2-148**

**A development of new combination therapy on colistin-resistant bacteria**

◯Aki Hirabayashi[1], Keigo Shibayama[2], Masato Suzuki[1] ([1]Dept. AMR, Nat. Inst. Infect. Dis., [2]Dept. Bacteriol. II Nat. Inst. Infect. Dis.)

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

**P2-149**

**Development of a booster vaccine for pulmonary tuberculosis consisting of MDP1 and DNA adjuvant**

◯Jun-ichi Maeyama[1], Daisuke Hayashi[2], Toshiko Yamamoto[2], Shinji Ooishi[2], Toshio Yamazaki[1], Yuriko Ozeki[3], Fumiko Suzuki[4], Sumiko Iho[4], Sohkichi Matsumoto[3], Saburo Yamamoto[2] ([1]Natl. Inst. Infect. Dis., [2]Japan BCG Laboratory, [3]Sch. Med., Niigata Univ., [4]Facl Med. Sci., Univ. Fukui)

**P2-150**

**Evaluation of growth inhibitory and synergistic effect of compound H1 against Group A Streptococcus**

◯Chihiro Aikawa[1], Masato Hoshino[2], Makoto Nakakido[2], Satoru Nagatoishi[2], Kazunori Murase[1], Kouhei Tsumoto[2], Ichiro Nakagawa[1] ([1]Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., [2]Dept. Bioeng., Sch. Eng., Univ. of Tokyo)

**P2-151**

**Development of the novel intranasal vaccine against highly virulent cryptococcosis**

◯Keigo Ueno[1], Nao Yanagihara[1,2], Kiminori Shimizu[2], Satoshi Yamagoe[1], Yoshitsugu Miyazaki[1] ([1]Dept. Chemother. Myco. NIID, [2]Dept. Biolog. Sci. Fac. Indust. Sci. Technol. Tokyo Univ. of Sci.)

**P2-152 (WS11-2)**

**Membrane vesicle-mediated immunogenic protein secretion in *Clostridium perfringens***

◯Hibiki Okuwaki[1], Nozomu Obana[2,3], Kyoko Nagayama[1], Ryoma Nakao[4], Hidenobu Senpuku[4], Nobuhiko Nomura[3,5] ([1]Grad. Life Environ. Sci., Univ. Tsukuba, [2]TMRC, Fac. Medicine, Univ. Tsukuba, [3]MiCS, Univ. Tsukuba, [4]Dept. Bacteriol I., Natl Inst Infect Dis., [5]Fac. Life Environ. Sci., Univ. Tsukuba)

**P2-153 (WS11-1)**

**A proline biosynthesis mutant of the intracellular pathogen *Erysipelothrix rhusiopathiae***

◯Sayaka Nishikawa[1], Yohsuke Ogawa[1], Kazumasa Shiraiwa[1], Masahiro Eguchi[1], Yoshihiro Shimoji[1,2] ([1]NIAH, NARO, [2]Res. Inst. Biomed. Sci., Tokyo Univ. Sci.)

**P2-154 (WS11-3)**

**Pioglitazone reinforces liver innate immunity against bacterial infection in aged mice**

◯Masahiro Nakashima, Manabu Kinoshita, Hiroyuki Nakashima, Shuhji Seki (Dept. Immunol. Microbiol., Nat. Def. Med. Col.)

**P2-155**
**An oral carbonaceous adsorbent AST-120 attenuates drug resistance and virulence in Escherichia coli**
○Hidetada Hirakawa[1], Haruyoshi Tomita[1,2] ([1]Dept. Bacteriol., Sch. Med., Gunma Univ., [2]Lab. Drug Resistance., Sch., Med., Gunma Univ.)

**P2-156**
**Analysis of the Host Immune Response against Mycobacterial Membrane Vesicles**
○Takehiro Yamaguchi, Shuhei Tomita (Dept. Pharmacol., Sch. Med., Osaka City Univ.)

**P2-157**
**Oral immunization with antigen/adjuvant co-producing Lactococcus lactis**
○Keita Takahashi, Nagisa Tokunoh, Daiki Yanagisawa, Nagisa Inoue (Microbiol. Immunol., Gifu Pharm. Univ.)

## 6. Host defense -c. Others

**P2-158**
**The analysis of novel enterococcal mobile linear plasmid pELF1 encoding vanA and vanM gene clusters**
○Yusuke Hashimoto[1], Takahiro Nomura[1], Hidetada Hirakawa[1], Koichi Tanimoto[2], Haruyoshi Tomita[1,2] ([1]Dept. Bacteriology, Grad. Sch. Med., Gunma Univ., [2]Lab. Bacterial Drug resistance, Grad. Sch. Med., Gunma Univ.)

**P2-159**
**Characterization of growth inhibitory action of *Streptococcus intermedius* in pharyngeal flora.**
○Rina Tanaka, Masanori Hashino, Tsuyoshi Sekizuka, Makoto Kuroda (Pathogen Genomics Center, Nat. Inst. Infect. Dis.)

**P2-160**
**The sterilizing effect of irradiation with 222 nm-UVC against pathogenic bacteria, fungi and viruses**
○Kouji Narita[1,2], Krisana Asano[2,3], Masahiro Sasaki[4], Yukihiro Morimoto[4], Tatsushi Igarashi[4], Akio Nakane[3] ([1]Inst. for Animal Exp., Hirosaki Univ. Grad. Sch. Med., [2]Dept. Microbiol. and Immunol., Hirosaki Univ. Grad. Sch. Med., [3]Dept. Biopolymer and Health Sci., Hirosaki Univ. Grad. Sch. Med., [4]Ushio Inc.)

**P2-161**
**Physiological role of b-lactam inactivation mediated by cysteine in redox-dependent manner**
○Katsuhiko Ono[1], Hiroyasu Tsutsuki[1], Tianli Zhang[1], Toshihiro Ihara[1], Takaaki Akaike[2], Tomohiro Sawa[3] ([1]Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., [2]Fac. Adv. Sci. Tech., Kumamoto Univ., [3]Dept. Envir. Med. Mol. Toxicol., Grad. Sch. Med., Tohoku Univ.)

**P2-162**
**Analysis of genetic background of CTX-M-producing *Escherichia coli* in healthy individuals in Japan**
○Kai Saito[1], Akiyo Nakano[1], Takashi Masui[1,2], Ryuichi Nakano[1], Mako Watanabe[1], Yuki Suzuki[1], Naoki Kakuta[1], Hisakazu Yano[1] ([1]Dept. Microbiol. Infect. Dis., Nara Med. Univ., [2]Dept. Otolaryngol Head Neck Surg., Nara Med. Univ.)

**P2-163**
**Bactericidal effect of low-concentration $ClO_2$ gas against *P.aeruginosa* and its mechanism of action**
○Masafumi Futatsukame, Hirofumi Morino, Takanori Miura, Kyoichi Oshida (TAIKO PHARMACEUTICAL CO., LTD.)

**P2-164 (WS11-7)**
**Therapeutic phage-mediated control of skin microbiome in atopic dermatitis.**
○Yuzuki Shimamori[1,2], Tohru Suzuki[3], Shoichi Mitsunaka[1], Masumi Saito[3], Kazuhiro Kuzui[3], Shigeki Takeda[2], Tomoko Kubori[1], Hiroki Nagai[1], Hiroki Ando[1] ([1]Dept. Microbiol., Sch. Med., Gifu Univ., [2]Sch. Sci. and Tech., Gunma Univ., [3]Fac. of Appl. Biol. Sci., Gifu Univ.)

**P2-165 (WS11-8)**
**Generation of bactericidal chimeric phage against MRSA using phagemid**
○Feng-Yu Li, Kotaro Kiga, Xin Ee Tan, Longzhu Cui (Div. Bacteriol, Sch. Med., Jichi Med. Univ.)

**P2-166 (WS11-5)**
**Biocontrol of *Clostridium perfringens* by using Two Types of Specific Endolysins**
○Hirofumi Nariya[1], Maho Okada[2], Eiji Tamai[3], Hiroshi Sekiya[3], Toshi Shimamoto[1], Tadashi Shimamoto[1] ([1]Lab. Food Microbiol. Hyg., Grad. Sch. Integrated Sci. Life., Hiroshima Univ., [2]Lab. Food Microbiol. Hyg., Grad. Sch. Biosphere Sci., Hiroshima Univ., [3]Dept. Infect. Dis., Col. Pharm. Sci., Matsuyama Univ.)

**P2-167 (WS11-6)**
**Fitness Cost Induced by Phage Resistance Shifts Phage Susceptibility in *P. aeruginosa* mutant.**
○Jumpei Fujiki[1], Montgomery Munby[1], Tomohiro Nakamura[1], Satoshi Gondaira[2], Michihito Sasaki[3], Masaru Usui[4], Hidetoshi Higuchi[2], Hirofumi Sawa[3], Yutaka Tamura[4,5], Hidetomo Iwano[1] ([1]Lab. Vet. Bio. Chem., Sch. Vet. Med., RGU, [2]Lab. Vet. Hyg., Sch. Vet. Med., RGU, [3]Div. Mol. Pathobiol., Ctr. Zoonosis. Cont., Hokkaido Univ., [4]Lab. Food. Microbiol., Sch. Vet. Med., RGU, [5]Ctr. Vet. Drug. Dev., RGU)

**P2-168**
**Characterization of class D β-lactamase from carbapenem-intermediate resistant *Bacteroides fragilis***
○Takatsugu Goto[1], Masahiro Hayashi[1], Yuji Morita[2], Kaori Tanaka[1] ([1]Div. Anaerobe Res., Life Sci. Res. Ctr., Gifu Univ., [2]Dept. Infect. Control Sci., Meiji Pharm. Univ.)

**P2-169**

**Deletion of the lytic transglycosylase gene in MRSA induces β-lactam sensitization**

○Ken-ichi Okuda[1,2], Anne-Aurelie Lopes[1], Yutaka Yoshii[1], Satomi Yamada[1], Mari Nagakura[1], Yoshimitsu Mizunoe[1], Yuki Kinjo[1,2] ([1]Dept. Bacteriol., Jikei Univ. Sch. Med., [2]Jikei Ctr. Biofilm Res. Tech.)

**P2-170**

**Evaluation of antibacterial prunin lauroyl ester on mouse model of experimental periodontitis**

Erika Wada[1], Chiharu Ito[1], Mai Shinohara[1], Miki Maetani[1], Ayaka Yazawa[1], Tatsuji Sakamoto[2], Mayo Yasugi[2], Masami Miyake[2], ○Shigeki Kamitani[1] ([1]Div. Clinical Nutrition., Osaka Pref. Univ., [2]Grad. Sch. Life. Environmental Sciences., Osaka Pref. Univ.)

**P2-171**

**Molecular mechanism of dissociation of glycopeptide antibiotics in Staphylococcus capitis**

○Yusuke Sato'o[1], Mitsutaka Shoji[2], Shinya Watanabe[1], Yoshifumi Aiba[1], Kotaro Kiga[1], Ken Kikuchi[3], Keiichi Hiramatsu[4], Longzhu Cui[1] ([1]Div. Bacteriol, Sch. Med., Jichi Med. Univ., [2]Funabashi Municipal Medical Center, [3]Infect. Dis., Tokyo Womens Med. Univ., [4]Center Excel. Infect. Cont. Sci., Grad. Sch. Med., Juntendo Univ.)

**P2-172**

**Search for spices with antibacterial activity against periodontal pathogen**

○Nanami Yoshino[1,2], Ryoma Nakao[2] ([1]Central Res. Inst., S&B FOODS Inc., [2]Dept. Bacteriol. 1, Natl. Inst. Infect. Dis.)

**P2-173**

**Structural and functional analysis of autolysin CD24020 catalytic domain of *Clostridium difficile***

○Eiji Tamai[1], Shigehiro Kamitori[2], Hiroshi Sekiya[1], Jyurina Kawasaki[1], Kaho Murakami[1] ([1]Dept. Infect. Dis., Col. Pharm. Sci., Matsuyama Univ., [2]LSRC, Fac. Med., Kagawa Univ.)

**P2-174**

**Novel bacteriocin produced by *Staphylococcus epidermidis* active against nasal commensals**

○Yuichi Oogai[1], Atsuko Watanabe[2], Miki Kawada-Matsuo[1], Hitoshi Komatsuzawa[3] ([1]Dept. Oral-Microbiol., Grad. Sch. Med. and Dent., Kagoshima Univ., [2]Dept. Orthodontics and Dentofacial Orthopedics, Grad. Sch. Med. and Dent., Kagoshima Univ., [3]Dept. Bacteriol., Grad. Sch. Biomedical and Health Sch., Hiroshima Univ.)

**P2-175**

**Inhibition of FosA by Phosphonoformate in Multidrug-Resistant Gram-Negative Pathogens.**

○Ryota Ito[1], Yohei Doi[1,2] ([1]Dept. Infect Dis. Sch. Med., Fujita Health Univ., [2]Dept. Microbiol. Sch. Med., Fujita Health Univ.)

## 7. Antimicrobial agents and resistance -a. Antimicrobial agents

**P2-176**

**On soil bacteria isolated from Kozu-shima island producing antibacterial compound.**

○Tadashi Baba[1], Hiroki Kato[2], Yuuhi Kumazawa[3], Yuh Morimoto[1], Tatsuya Tada[4], Yasuhiro Igarashi[2], Teruo Kirikae[4], Keiichi Hiramatsu[1] ([1]Center of Excellence for Infection Control Science, Grad. Sch. Med., Juntendo Univ., [2]Biotech. Res. Center and Dept. Biotech., Toyama Prefectural Univ., [3]Juntendo Univ. Sch. Med., [4]Dept. Microbiol. Juntendo Univ. Sch. Med.)

**P2-177**

**Role of P2X7 in LL-37-induced chemokine production and cytotoxicity in gingival fibroblasts**

○Megumi Inomata, Takeshi Into (Dept. Oral Microbiol., Sch. Dent., Asahi Univ.)

**P2-178**

**Growth inhibitors of *Porphyromonas gingivalis* identified by using a screening system**

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

**P2-179**

**A short peptide derived from the ZorO toxin functions as an effective antimicrobial.**

○Yuichi Otsuka[1], Tomohiro Ishikawa[2], Chisato Takahashi[2], Michiaki Masuda[2] ([1]Dept. Biochem. and Mol. Biol., Grad Sch. Sci. and Eng., Saitama Univ., [2]Dept. Microbiol., Sch. Med., Dokkyo Medical Univ.)

**P2-180**

**Antibacterial activity of *Bacillus subtilis* natto against *Staphylococcus aureus***

○Akio Chiba, Yuki Kinjo (Dept. Bacteriol., Sch. Med., Jikei Univ.)

## 7. Antimicrobial agents and resistance -b. Antimicrobial resistance

**P2-181 (WS05-7)**

**Genetic analysis of highly β-lactam-resistant mutants generated from OS-MRSA**

○Shinya Watanabe, Tanit Boonsiri, Kanate Thitiananpakorn, XinEe Tan, Yoshifumi Aiba, Yusuke Sato'o, Kotaro Kiga, Yusuke Taki, Teppei Sasahara, Longzhu Cui (Div. Bacteriol., Dept. Infect. Immunity, Sch. Med., Jichi Med. Univ.)

**P2-182 (WS05-6)**
**blaCTX-M horizontal transfer intra- and inter- families**
○Nobuyoshi Yagi, Itaru Hirai (Lab, Microbiol., Sch. Health. Sci., Univ. The Ryukyus)

**P2-183**
**Expression of carbapenem resistance in *Enterobacteriaceae* with chromosome/plasmid located $bla_{NDM}$**
○Noriko Sakamoto[1], Yukihiro Akeda[1,2], Yo Sugawara[1], Dan Takeuchi[1], Kazunori Tomono[2], Shigeyuki Hamada[1] ([1]RCC-ERI, RIMD, Osaka Univ., [2]Osaka Univ. Hosp.)

**P2-184**
**Regulation of carbapenemase NmcA expression in *Enterobacter cloacae* complex by induction assays**
○Ryuichi Nakano[1], Akiyo Nakano[1], Yuki Yamada[2], Kazuya Narita[2], Yuki Suzuki[1], Akira Suwabe[2,3], Hisakazu Yano[1] ([1]Dept. Microbiol. Infect. Dis., Nara Med. Univ., [2]Div. Ctr. Clin. Lab., Iwate Med. Univ. Hosp., [3]Dept. Lab. Med., Iwate Med. Univ. Sch. Med.)

**P2-185**
**Streptomycin dependent *Mycobacterium bovis* BCG possessing a 513 cytosine insertion in 16S rRNA gene**
○Naoko Honda[1], Norito Satoh[2], Masaaki Nakayama[2], Takayuki Matsumura[3], Tsuyoshi Sekizuka[5], Makoto Kuroda[5], Manabu Ato[4], Kazuo Kobayashi[3], Koji Ishii[1], Naoya Ohara[2] ([1]Dept. Qual. Assur. Radiol. Protect., Natl. Inst. Infect. Dis., [2]Dept. Oral Microbiol., Okayama Univ. Grad. Sch. Med. Dent. & Pharm. Sci., [3]Dept. Immunol., Natl. Inst. Infect. Dis., [4]Dept. Mycobacteriology., Natl. Inst. Infect. Dis., [5]Path. Genomics Ctr., Natl. Inst. Infect. Dis.)

**P2-186**
**Spread of ESC-resistant *Salmonella* harboring $bla_{CMY-2}$ among egg production environment**
○Hiroaki Shigemura[1], Toshi Maeda[2], Yuki Carle[1], Eiko Okuma[1], Akira Ohishi[1], Kouichi Murakami[3] ([1]Dept. Health Sci., Fukuoka Institute of Health and Environment Sciences, [2]MP AGRO Co., Ltd, [3]Infectious Disease Surveillance Center, National Institute of Infectious Diseases)

**P2-187**
**Analysis of NDM-5 carbapenemase-producing extensively drug-resistant *Escherichia coli***
○Hayato Tanaka[1], Eriko Arai[2], Shin Suzuki[2], Wataru Hayashi[3], Masaki Iimura[1], Eiji Soga[1], Yukiko Nagano[4], Noriyuki Nagano[1,3] ([1]Dept. Med. Sci., Grad. Sch. Med., Shinshu Univ., [2]Dept. Lab., Med., Shinshu Hosp., [3]Dept. Med. Sci., Grad. Sch. Med. Sci. and Technol., Shinshu Univ., [4]Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ.)

**P2-188**
**Isolation of group B Streptococcus with reduced β-lactam susceptibility from pregnant women**
○Hiroaki Moroi, Kouji Kimura, Hirotsugu Banno, Wanchun Jin, Jun-ichi Wachino, Keiko Yamada, Yoshichika Arakawa (Dept. Bacteriol., Sch. Med., Nagoya Univ.)

**P2-189**
**Clonal Spread of Quinolone-resistant Escherichia coli among Sika Deer Inhabiting in Nara Park**
○Shiori Ikushima[1], Harumi Torii[2], Makoto Asano[1], Masatsugu Suzuki[1], Tetsuo Asai[1] ([1]Grad. Sch. Vet. Sci., Gifu Univ., [2]Ctr. Nat. Environ. Educ., Nara Univ. Educ.)

**P2-190**
**Molecular imaging of the RND-type xenobiotic efflux transporter MmpL in *Mycobacterium tuberculosis***
○Kentaro Yamamoto, Noboru Nakata, Manabu Ato (Dept. Mycobacteriol., Leprosy Research Center, NIID)

**P2-191**
**BFF122 shows inhibitory activities against *Mycobacterium tuberculosis* and *M. leprae* DNA gyrases**
○Hyun Kim[1], Yumi Maeda[2], Emiko Rimbara[1], Keigo Shibayama[1], Toshiki Tamura[2], Shigetarou Mori[1] ([1]Dept. Bacteriology II., NIID, [2]Dept. Mycobacteriology., Leprosy Research Center., NIID)

## 7. Antimicrobial agents and resistance -c. Others

**P2-192 (WS05-8)**
**A study of killing *Legionella* spp. by mitomycin C induced phage**
○Kotaro Aoki, Tatsuya Nagasawa, Yoshikazu Ishii, Kazuhiro Tateda (Dept. Microbl. Infect. Dis. Toho Univ. Sch. Med.)

**P2-193**
**Isolation and genome sequence of jumbo phages that infects the fish pathogen *Tenacibaculum maritimum***
○Akiko Kusumoto, Haruka Hideshima (Diag. Ctr. for Animal Health & Food Safety, Obihiro Univ. of Agri. & Vet. Med.)

**P2-194**
**MPMBP down-regulates TLR2 ligand-induced proinflammatory cytokine production via NF-κB activation**
○Riyoko Tamai[1], Keiko Suzuki[2], Izumi Mashima[1], Yusuke Kiyoura[1] ([1]Dept. Oral Med. Sci., Sch. Dent., Ohu Univ., [2]Dept. Pharmacol., Sch. Dent., Showa Univ.)

**P2-195**

**Search for *Staphylococcus pseudintermedius* molecule associated with atopic dermatitis in dogs.**

◯Hidekatsu Shimakura[1,2], Hiroki Tsurui[1], Shuji Sakamoto[3], Takuma Higuchi[3], Keita Iyori[4], Kenta Shimoike[4], Masahiro Sakaguchi[1], Jumpei Uchiyama[1] ([1]Dept. Microbiol., Azabu Univ., [2]Dept. Microbiol., Sch. Med., Kitasato Univ., [3]Kochi Univ., [4]VetDerm Tokyo)

**P2-196**

**Salmonella infection promotes anti-tumor immune response.**

◯Yutaka Horiuchi, Ryotaro Iwata, Nobuharu Kobayashi, Takashi Murakami (Dept. Microbiol., Saitama Medical Univ.)

## Luncheon Seminar

**LS1**

19th, February (Wed) 11:55–12:55
Room 1 (2F Big Hall)

MC: Teppei Komatsu (Illumina K.K.)

Sponsored by Illumina K.K.

**LS1**

**Beyond metagenomes, Single-cell genomics illuminates microbiome functionality**

◯Masahito Hosokawa[1,2] ([1]bitBiome, Inc., [2]Waseda Research Institute for Science and Engineering, Waseda University)