

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

P-001

Insight into the Beijing genotype *Mycobacterium tuberculosis* in Myanmar

○Lai Lai San^{1,2}, Nan Aye Thida Oo^{1,2}, Wah Wah Aung², Khin Saw Aye², Chie Nakajima^{1,3}, Yasuhiko Suzuki^{1,3} (¹Div. Bioresources, Research Center for Zoonosis Control, Hokkaido Univ., ²Dept. Medical Research Myanmar, ³Hokkaido Univ. The Global Station for Zoonosis Control)

P-002

Microevolution of a European clone of atypical *Salmonella enterica* ser. Typhimurium in Japan

○Nobuo Arai¹, Tsuyoshi Sekizuka², Yukino Tamamura³, Masahiro Kusumoto⁴, Atsushi Hinenoya¹, Shinji Yamasaki¹, Taketoshi Iwata³, Makoto Kuroda², Ikuo Uchida⁵, Masato Akiba^{1,3} (¹Grad. Sch. Life and Environ. Sci., Osaka Pref. Univ., ²Pathogen Genomic Center, Nat. Inst. Infect. Dis., ³Bacterial Parasitic Dis. Res. Div., Natl. Inst. Anim. Health, ⁴Transbound. Anim. Dis. Res. Div., Natl. Inst. Anim. Health, ⁵Dept. Pathobiol., Sch. Vet. Med., Rakuno Gakuen Univ.)

P-003 (WS3-1)

Whole genome sequencing analysis of an unusual outbreak of CA-MRSA skin infections

○Katsuyuki Katahira¹, Yasuhiro Gotoh¹, Chieko Shimauchi², Dai Yoshimura³, Takehiko Itoh³, Yoshitoshi Ogura¹, Tetsuya Hayashi¹ (¹Dept. Bact., Grad. Sch. Med. Sci., Kyushu Univ., ²Dept. Nurs. and Bact., Miyazaki Pref. Nurs. Univ., ³Grad. Sch. Biosci. Biotech., Tokyo Tech.)

P-004

Development of a PCR-based O-genotyping method for an emerging enteropathogen, *Escherichia albertii*

○Tadasuke Ooka¹, Koichi Murakami², Kazuko Seto³, Yoshitoshi Ogura⁴, Naoko Imuta¹, Kiyotaka Yoshiie¹, Tetsuya Hayashi⁴, Junichiro Nishi¹ (¹Dept. Microbiol., Grad. Sch. Med & Dent. Sci., Kagoshima Univ., ²IDSC, NIID., ³QAU, Div. Planning, Osaka. Inst. Pub. Heal., ⁴Dept. Bacteriol. Fac. Med. Sci., Kyushu Univ.)

P-005

Whole-genome sequencing for analysis of genetic diversity in a neonatal MRSA outbreak

○Sanami Takada¹, Akiko Takaya², Yuumi Nakamura¹, Hiroki Takahashi³, Yuki Katayama¹, Toshiyumi Taniguchi⁴, Hidetoshi Igari⁴, Yoshiteru Osone⁵, Naoki Shimojo⁵, Hiroyuki Matsue¹ (¹Dept. Dermatol., Grad. Sch. Med., Chiba Univ., ²Dept. Microbiol. Mol. Genet., Grad. Sch. Pharm. Sci., Chiba Univ., ³Med. Mycol. Res. Cent., Chiba Univ., ⁴Dept. Infect. Sch. Med., Chiba Univ., ⁵Dept. Pediatr., Grad. Sch. Med., Chiba Univ.)

P-006

Systematic search of IS elements in EHEC O121 to develop an O121 IS-printing system

○Mana Matsuo¹, Keiji Nakamura¹, Ruriko Nishida¹, Sunao Iyoda², Makoto Ohnishi², Tadasuke Ooka³, Yoshitoshi Ogura¹, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Grad. Sch. Med. Sci., Kyushu Univ., ²Dept. Bacteriol., Natl. Inst. Infect. Dis., ³Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ.)

P-007

Whole genome sequencing of *Salmonella Enteritidis* having a novel amino acid substitution on GyrA

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P-008

Whole genome analysis of *Leptospira*, candidate of new species isolated from soil

○Toshiyuki Masuzawa¹, Ryo Nakao², Keiko Sakakibara¹, Mitsumasa Saito³, Junuko Tomita⁴, Yoshiaki Kawamura⁴ (¹Lab. Microbiol. Immunol., Fac. Pharm., Chiba Inst. Sci., ²Dept. Parasitol., Sch. Vet. Med., Univ. Hokkaido., ³Dept. Microbiol., Sch. Med., Univ. Occupat. Environ. Health., ⁴Dept. Microbiol., Sch. Pharm., Aichi Gakuin. Univ.)

P-009

Molecular epidemiological analysis of *Acinetobacter baumannii* isolated in two hospitals in Japan

○Asumi Yamaguchi¹, Yoshihiko Sakaguchi¹, Mari Matsui², Hidetomo Kobayashi³, Jumpei Uchiyama⁴, Yoko Osanai¹, Hidehito Matsui⁵, Hideaki Hanaki⁵, Shunji Hayashi¹ (¹Dept. Microbiol. Kitasato Univ. Sch. Med., ²AMR Center, NIID, ³Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ., ⁴Dept. Vet. Microbiol. Sch. Vet. Med. Azabu Univ., ⁵Infect. Cont. Res. Cent., Kitasato Inst. Life Sci., Kitasato Univ.)

P-010

Whole genome phylogenetic analysis based on distribution pattern of ORFs

○Masahiro Suzuki¹, Yohei Doi¹, Yoshichika Arakawa² (¹Dept. Microbiol. Sch. Med. Fujita Health Univ., ²Dept. Bacteriol. Sch. Med. Nagoya Univ.)

P-011

***Candida auris* detection from clinical isolates in Japan**

○Shigekazu Iguchi¹, Ryo Mizushima¹, Keisuke Kamata¹, Yasutomo Itakura¹, Atsushi Yoshida¹, Yutaka Uzawa¹, Yuko Arai¹, Koichi Makimura², Ken Kikuchi¹ (¹Dept. Infec. Dis., Tokyo Women's Med. Univ., ²Lab. of Space and Env. Med., Grad. Sch. Med., Teikyo Univ.)

P-012**Multiplex PCR for genotyping of *Erysipelothrix rhusiopathiae* strains currently circulating in Japan**

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

P-013**Full-length 16S rRNA gene sequences from rare non-tuberculosis mycobacteria**

○Keita Takeda^{1,2,3}, Kinuyo Chikamatsu¹, Yuriko Igarashi¹, Yoshiro Murase¹, Akio Aono¹, Hiroyuki Yamada¹, Akiko Takaki¹, Satoshi Mitarai^{1,2} (¹Dept. Mycobacterium Reference and Research, The Research Institute of Tuberculosis, ²Dept. Basic Mycobacteriology, Grad. Sch. Biomedical Science, Nagasaki Univ., ³Center for Pulmonary Diseases, National Hospital Organization Tokyo National Hospital)

P-014**Evolutional event estimated from comparative borrelial genomes**

○Hiroki Kawabata¹, Tsuyoshi Sekizuka², Ai Takano³, Makoto Kuroda², Kozue Sato¹, Makoto Ohnishi¹ (¹Dept. Bacteriol-I, Natl. Inst. Infect. Dis., ²Pathogen Genomics Center, Natl. Inst. Infect. Dis., ³Joint Faculty of Vet. Med., Yamaguchi Univ.)

P-015 (WS3-2)**Whole-genome comparative analysis of *Mycobacterium ulcerans* subsp. *shinshuense***

○Mitsunori Yoshida¹, Kazue Nakanaga¹, Yuji Miyamoto¹, Yoshitoshi Ogura², Tetsuya Hayashi², Norihisa Ishii¹, Yoshihiko Hoshino¹ (¹Dept. Mycobacteriol., Leprosy Research Center, NIID, ²Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ.)

P-016**Identification of novel species of genus *Actinomyces* isolated from Japanese serow oral cavities**

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

P-017**Genome diversity of EHEC O121:H19 strains and the variation in their STX2 production levels**

○Ruriko Nishida¹, Keiji Nakamura¹, Mitsuhiko Sato¹, Kazunori Murase², Yasuhiro Gotoh¹, Tadasuke Ooka³, Sunao Iyoda⁴, Makoto Ohnishi⁴, Yoshitoshi Ogura¹, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., ²Dept. Parasitic Dis., Fac. Med., Miyazaki Univ., ³Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ., ⁴Dept. Bacteriol., Natl. Inst. Infect. Dis.)

P-018**Whole genome analysis of *Vibrio cholerae* isolated between 2007 and 2010 in Vietnam**

○Taichiro Takemura¹, Fumito Maruyama², Atsushi Ota², Kazunori Murase³, Masatomo Morita⁴, Yu Takizawa⁴, Makoto Ohnishi⁴, Tetsu Yamashiro⁵ (¹Vietnam Research Station, Institute of Tropical Medicine, Nagasaki Univ., ²Section of Microbiology, Grad. Sch. Medicine, Kyoto Univ., ³Dept. Infectious Diseases, Faculty of Medicine, Univ. Miyazaki, ⁴Dept. Bacteriology I, National Institute of Infectious Diseases, ⁵Dept. Bacteriology, Grad. Sch. Medicine, Univ. Ryukyus)

P-019**Complete genome sequence of a GAS strain M3-b isolated from a patient with STSS**

○Kohei Ogura, Tohru Akiyama (Pathogenic Microbe Lab. Dept. Infect. Dis. NCGM)

P-020**Bacteriological analysis of pathogenic *Escherichia coli* isolated from swine in Kagoshima, Japan**

○Wakako Misumi¹, Taruho Funamori², Kyohei Hamada³, Shoichiro Fujisono¹, Masahiro Kusumoto⁴ (¹Kagoshima Chuo Livest. Hyg. Serv. Cntr., ²Hiroshima Seibu Livest. Hyg. Serv. Cntr., ³Fukuoka Chuo Livest. Hyg. Serv. Cntr., ⁴Natl. Inst. Anim. Health, NARO)

P-021 (JKIMS)**Proteomic Profiles of Reference Strains to improve identification of Pathogenic *Escherichia coli* Using Matrix-Assisted Laser Desorption/Ionization-Time of Flight Mass Spectrometry**

○Won-Seon Yu, Hyeon Nam Do, Mi Hee Kim, Hyang-Min Cheong, Kyeong-Min Lee, Kyu Jam Hwang (National Culture Collection for Pathogens (NCCP), Pathogen Resource TF, Center for Infectious Diseases Research, Korea National Institute of Health)

P-022 (JKIMS)***Sphingomonas* sp. nov., JB 7378, within 176 strains were collected from bank branches of NCCP**

○Joon Ki Kim, Kyeong Min Lee, Kyu Jam Hwang (National Culture Collection for Pathogens (NCCP), Pathogen Resource TF, Center for Infectious Diseases Research, Korea National Institute of Health)

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

P-023**Molecular Epidemiology of Cholera Outbreaks in Myanmar**

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

P-024

Detection of drug-resistant associated mutations in *Mycobacterium tuberculosis* isolates of Myanmar

○Nan Aye Thida Oo^{1,2}, Lai Lai San^{1,2}, Khin Saw Aye², Wah Wah Aung², Chie Nakajima^{1,3}, Yasuhiko Suzuki^{1,3} (¹Division of Bioresources, Research Center for Zoonosis Control, Hokkaido Univ., ²Dept. Med Res, Ministry of Health and Sports, Myanmar, ³Global Station for Zoonosis Control, Global Institution for Collaborative Research and Education (GI-CoRE), Hokkaido Univ.)

P-025

*bla*_{NDM}-carrying plasmids spread in clinical and wastewater isolates of *Enterobacteriaceae* in Myanmar

○Yo Sugawara¹, Yukihiro Akeda^{1,2}, Hideharu Hagiya², Noriko Sakamoto¹, Dan Takeuchi¹, Norihisa Yamamoto², Kazuhisa Okada¹, Kazunori Tomono², Shigeyuki Hamada¹ (¹RCC-ERI, RIMD, Osaka Univ., ²Dept. Infect. Cont. Prevent., Med. Hosp., Osaka Univ.)

P-026

Application of whole genome sequencing analysis for Ryoken study 2007 in Japan

○Takemasa Takii¹, Satoshi Mitarai², Yuta Morishige¹, Kengo Kato³, Akifumi Yamashita³, Tsuyoshi Sekizuka³, Akihiro Ohkado⁴, Naoto Kicho⁵, Makoto Kuroda³, Seiya Kato⁵ (¹Div. Mol. Epi., Dept. Mycobacterium Ref & Res, RIT, JATA, ²Dept. Mycobacterium Ref. & Res., RIT, JATA, ³Path. Gen. Centr., NIID, ⁴Dept. Epidemiology and Clin. Res., RIT, JATA, ⁵Research Institute of Tuberculosis, JATA)

P-027

Prevalence of colibactin-positive bacteria in colorectal cancer patients

○Yuko Yoshikawa^{1,2}, Yuta Tsunematsu³, Nobuo Matsuzaki³, Yuichiro Hirayama³, Michio Sato³, Noriyuki Miyoshi², Yuji Iwashita⁴, Haruhiko Sugimura⁴, Keiji Wakabayashi², Kenji Watanabe³ (¹Sch. Vet. Med., Nippon Vet. and Life Sci. Univ., ²Sch. Food and Nutr. Sci., Univ. Shizuoka, ³Sch. Pharma. Sci., Univ. Shizuoka, ⁴Sch. Med., Hamamatsu Univ. Sch. Med.)

P-028

F1:A2:B20 plasmid adapted to *E. coli* ST131 H30R1 is related to stable maintenance of *bla*_{CTX-M-14}

○Michiko Hayashi^{1,2}, Satowa Suzuki², Mari Matsui², Tsuyoshi Sekizuka³, Akifumi Yamashita³, Kengo Kato³, Kumiko Kawamura¹, Keigo Shibayama⁴, Makoto Kuroda³ (¹Grad. Sch. Med., Nagoya Univ., ²AMR Center, NIID, ³Pathogen Genomics Center, NIID, ⁴Bacteriology II, NIID)

P-029

Whole-genome phylogenetic analysis of *H. cinaedi* including isolates from nosocomial infection

○Emiko Rimbara¹, Masato Suzuki², Koji Yahara², Shigetaro Mori¹, Hyun Kim¹, Keigo Shibayama¹ (¹Bacteriol. II, NIID, ²Antimicrob. Resistance Research Center)

P-030

Elucidation of source of infection and character of clinical and environmental isolates of *Aeromonas*

○Kazufumi Miyagi¹, Noriaki Shimoji², Itaru Tamaki², Ayumi Uechi², Itaru Hirai¹ (¹Lab. Microbiol., Sch. Health Sci., Fac. Med., Univ. the Ryukyus, ²Dept. Clin. Lab., Urasoe General Hospital)

P-031

Antibiotic resistance and molecular characterization of *Vibrio cholerae* strains isolated from Kenya

○Mohammad Shah, Martin Bundi, Akihiro Wada, Kouichi Morita, Yoshio Ichinose (Kenya Res Sta. Ins of Trop Med. Nagasaki Univ.)

P-032

Prediction of tuberculosis transmission in Japan based on variable-number tandem-repeat typing

○Yoshiro Murase¹, Kiyohiko Izumi², Akihiro Ohkado², Akio Aono¹, Kinuyo Chikamatsu¹, Hiroyuki Yamada¹, Yuriko Igarashi¹, Akiko Takaki¹, Satoshi Mitarai¹ (¹Dept. Mycobacterium Ref. Res., Res. Inst. Tuberculosis, Jap. Anti-Tuberculosis Assoc., ²Dept. Epidemiol Clin. Res., Res. Inst. Tuberculosis, Jap. Anti-Tuberculosis Assoc.)

P-033 (WS3-3)

Molecular epidemiological analysis of *Salmonella* Agona in Japan

○Yasushi Torii¹, Eiji Yokoyama², Hiroaki Shigemura³, Taichiro Ishige¹, Naoshi Ando², Keita Nakazato¹, Ryouosuke Sohda¹, Tsutomu Fujimaki⁴, Keita Yanagimoto⁵, Satoshi Murakami¹ (¹Tokyo Univ. Agri., ²Chiba Pref. Inst. Heal., ³Fukuoka Inst. Heal. Enviro. Sci., ⁴Yamanashi Meat Sanitary Inspection Station, ⁵Yamanashi Inst. Heal.)

P-034

Transition of carbapenemase gene types of CRE isolated in a Thai university hospital

○Noriko Sakamoto¹, Yukihiro Akeda^{1,2,3}, Yo Sugawara¹, Norihisa Yamamoto^{1,2,3}, Dan Takeuchi¹, Masato Suzuki⁴, Kazunori Tomono^{2,3}, Shigeyuki Hamada¹ (¹RIMD, Osaka Univ., ²Dept. Infect. Cont. Prev., Grad. Sch. Med., Osaka Univ., ³Div. Infect. Cont. Prev., Osaka Univ. Hosp., Osaka Univ., ⁴NIID)

P-035

Genomic epidemiological analysis of *Salmonella enterica* serovar Typhi from domestic outbreak

○Risa Shimmura^{1,2}, Masatomo Morita², Hidemasa Izumiya², Nobuhiko Okada¹, Makoto Ohnishi² (¹Dept. Microbiol., Sch. Pharm., Kitasato Univ., ²Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

P-036**Various NDM-type metallo- β -lactamase-producing *Escherichia coli* clinical isolates in Nepal**

○Tatsuya Tada^{1,2}, Kayo Shimada², Basudha Shrestha³, Jeevan Sherchand³, Teruo Kirikae^{1,2} (¹Dept. Microbiol., Juntendo Univ. Sch. Med., ²Dept. Infect. Dis., Res Inst., NCGM., ³Dept. Microbiology, Shc. Med., Tribhuvan Univ.)

P-037**IPD (Invasive pneumococcal disease) surveillance both in children and adults in Kagoshima prefecture**

○Junichiro Nishi^{1,3}, Naoko Imuta¹, Yuichi Kodama², Hideki Kawamura³, Bin Chang⁴ (¹Dept. Microbiol., Sch. Med., Kagoshima Univ., ²Dept. Pediatrics, Kagoshima Univ. Hospital, ³Dept. Infection Control, Kagoshima Univ. Hospital, ⁴Dept. Bacteriol. I, National Institute of Infectious Diseases)

P-038**Development of dose-response models for quantitative microbial risk assessment of mycobacteriosis**

○Toshihiro Ito¹, Kenji Ohya², Tomotada Iwamoto³, Yukiko Nishiuchi⁴, Ichiro Nakagawa¹, Fumito Maruyama¹ (¹Dept. Microbial., Grad. Sch. Med. Fac. Med., Kyoto Univ., ²Dept. Appl. Biol. Sci., Gifu Univ., ³Dept. Infect. Dis., Kobe Inst. Heal., ⁴Inst. Toneyama Tuberculosis Res., Sch. Med., Osaka City Univ.)

P-039**An outbreak caused by enterohemorrhagic *Escherichia coli* O26:H11 occurring in nurseries in Fukuoka**

○Mitsuhiro Hamasaki¹, Shiko Nakayama¹, Shihoko Ueno², Midori Umezaki², Nobuyuki Sera¹ (¹Fukuoka Inst. Health Environ. Sci., ²Minamichikugo Office for Health, Human Service and Environmental Issues)

P-040**Diversity and microevolution of CRISPR loci in *Helicobacter cinaedi***

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

P-041**The follow-up survey revealed the different situation of pharyngeal and nasal carriage of *S. aureus***

○Miyo Murai¹, Rumi Tano², Junko Maekawa-Amemura³ (¹Div. Lab. Sci. Dept. Health Sci., Saitama Pref. Univ., ²Div. Oral Health Sci., Dept. Health Sci., Saitama Pref. Univ., ³Dept. Bacteriol. I, Nat. Inst. Infect. Dis.)

P-042**Shiga-toxin producing *Escherichia coli* isolation from wild animals**

Takaki Nakamura¹, Mizuki Toda¹, Yoshiyuki Tomino¹, Mutsuyo Gokuden², Seigo Yamamoto³, Hiromi Fujita⁴, Nobuko Fujita⁴, Hitoshi Hatai¹, ○Masako Andoh¹ (¹Dept. Vet Med Kagoshima Univ., ²Kagoshima Pref Inst Environ Res Public Health, ³Medico-Field Study & Support, ⁴Mahara Inst Med Acarology)

P-043**Correlation between VNTR genotypes and drug susceptibility in *Mycobacterium avium* clinical isolates derived from multiple regions**

○Yutaka Tatano¹, Setsuka Tomura¹, Chiaki Sano², Akira Umeda³, Satoshi Mitarai⁴, Shiomi Yoshida⁵, Kazunari Tsuyuguchi⁵, Junko Fujihara⁶, Haruo Takeshita⁶, Hideki Yagi¹, Haruaki Tomioka⁷ (¹Dept. Pharm. Sci., Sch. Pharm., IUHW, ²Dept. Community. Med. Mgt., Fac. Med., Shimane Univ., ³Resp. Med., IUHW Shioya Hosp., ⁴Dept. Mycobac. Ref. Res., Res. Inst. TB., JATA., ⁵Clin. Res. Ctr., NHO Kinki-Chuo Chest Med. Ctr., ⁶Dept. Legal Med., Fac. Med., Shimane Univ., ⁷Dept. Prim. Educ., Fac. Educ., Yasuda Womens Univ.)

P-044**Genomic analysis of CTX phage region of *Vibrio cholerae* in the 7th cholera pandemic wave 1 strains**

Tho Duc Pham¹, Tuan Hai Nguyen¹, Hanako Iwashita², Taichiro Takemura³, ○Tetsu Yamashiro² (¹Leading Program, Grad. Sch. Biomedical Sci., Nagasaki Univ., ²Dept. Bacteriol., Grad. Sch. Med., Univ. Ryukyus, ³Institute of Tropical Medicine, Nagasaki Univ.)

P-045**Subtyping Shiga toxin of Minor serogroup *Escherichia coli* isolated in Fukuoka prefecture**

○Yoshiki Etoh, Mitsuhiro Hamasaki, Nobuyuki Sera (Fukuoka Inst. Health Environ. Sci.)

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

P-046 (WS3-4)**Multiplex detection of diarrhea pathogens in hospitalized patients with acute diarrhea in Thailand**

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

P-047**Presence of an aberrant urease-negative *Actinobacillus pleuropneumoniae* mutant in Japan**

○Hiroya Ito¹, Sayaka Takahashi², Tetsuo Asai³, Yutaka Tamura⁴, Koshi Yamamoto⁵ (¹Nat. Inst. Anim. Health, NARO, ²Zen-Noh Inst. Anim. Health, ³Gifu Univ., ⁴Rakuno Gakuen Uni., ⁵Tokyo Univ. Agr.)

P-048**Analysis of SXT element & genetic change of *Vibrio cholerae* O1 isolated in Kolkata from 2007 to 2014**

○Daichi Morita¹, Eizo Takahashi¹, Tamaki Mizuno², Daisuke Imamura³, Asish K. Mukhopadhyay⁴, Shin-ichi Miyoshi², Sumio Shinoda¹, Keinosuke Okamoto¹ (¹Collab. Res. Ctr., Okayama Univ. in India, ²Grad. Med. Dent. Pharm. Sci., Okayama Univ., ³Fac. of Biosci. and Appl. Chem., Hosei Univ., ⁴NICED)

P-049

The biosynthesis gene cluster of a novel glycopeptidolipid from clinical nontuberculous mycobacteria

○Nagatoshi Fujiwara¹, Minoru Ayata², Takashi Naka¹, Hirotaka Kuwata³, Shinji Maeda⁴ (¹Dept. Food and Nutrition, Tezukayama Univ., ²Dept. Virol., Osaka City Univ. Grad. Sch. Med., ³Dept. Oral Microbiol. Immunol., Sch. Dentist., Showa Univ., ⁴Hokkaido Pharm. Univ., Sch. Pharm.)

P-050

Characterization of EHEC isolates from two HUS cases co-infected with two different EHEC

○Nozomi Ishijima¹, Ken-ichi Lee¹, Kazuko Seto², Makoto Ohnishi¹, Sunao Iyoda¹ (¹Dept. Bacteriol. I., Nat. Inst. Infect. Dis., ²Osaka Inst. Pub. Heal.)

P-051 (WS3-5)

Isolation of Leptospira from Raccoons in Hokkaido, Japan

○Ryo Murata¹, Jun Minaguchi², Yui Arakawa¹, Kazuya Matsuda¹, Nobuo Koizumi³, Mitsuhiko Asakawa¹, Ikuro Uchida¹, Naoya Kikuchi⁴ (¹Dept. Pathobiol., Sch. Vet. Med., Rakuno Gakuen Univ., ²Dept. Biosci., Sch. Vet. Med., Rakuno Gakuen Univ., ³Dept. Bacteriol. 1, NIID, ⁴Dept. Nut., Sch. Nurs., Tenshi Col.)

P-052

Characterization of novel pathogenic NTM

***Mycobacterium shigaense* and its source of infection**

○Hanako Fukano¹, Mitsunori Yoshida¹, Yuko Kazumi², Kentaro Arikawa³, Tomotada Iwamoto³, Yoshihiko Hoshino¹ (¹Dept. Mycobacteriol., NIID, ²AMR Research Center., NIID, ³Dept. Infectious Dis, Kobe Institute of Health)

P-053

The case of long-term colonization of emerging bacterial pathogen *Elizabethkingia anophelis*

○Kazuyoshi Gotoh¹, Takehiko Mima¹, Yumiko Yamamoto¹, Kenji Yokota², Osamu Matsushita¹ (¹Dept. Bacteriol., Okayama Univ., Grad. Sch. Med. Dent. Pharm. Sci., ²Okayama Univ., Grad. Sch. Health Sci.)

P-054

Characterization of *Escherichia albertii* strains isolated from a suspected case of food poisoning

Sachiyo Sonobe¹, Keiko Semba¹, ○Yuki Abe¹, Yukiko Asano², Tatsuya Karasudani², Manabu Aono¹, Satoshi Inoue¹, Hiroto Shinomiya¹ (¹Ehime Pref. Inst. Public Health Environ. Sci., ²Ehime Pref. Saijo Public Health Cent.)

P-055

Detection, isolation and characterization of *cdt*-positive *Providencia rustigianii*

○Jayedul Hassan¹, Sharda Prasad Awasthi¹, Noritoshi Hatanaka¹, Akira Nagita², Atushi Hinenoya¹, Shinji Yamasaki¹ (¹Dept. Vet. Sci., Grad. Sch. Life and Env. Sci., Osaka Prefecture Univ., ²Dept. Pediat. Mizushima Central Hospital)

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

P-056

Investigation of volatile organic compound in blood culture medium for identifying bacterial species

○Kouki Fujioka¹, Tadayuki Iwase¹, Hiroshi Iwata², Yutaka Aoki², Yoshimitsu Mizunoe¹, Yoshinobu Manome¹ (¹Jikei Univ. Sch. Med., ²Tech. Res. Lab., Shimadzu Corp.)

P-057

Diagnosis of tuberculosis by methyl green based loop-mediated isothermal amplification method

○Jeewan Thapa¹, Bhagwan Maharjan², Yukari Fukushima¹, Meena Malla³, Ajay Poudel⁴, Basu Dev Pandey⁵, Chie Nakajima¹, Yasuhiko Suzuki¹ (¹Hokkaido Univ. Research Center for Zoonosis Control, ²German Nepal Tuberculosis Project, Kalimati, Kathmandu, Nepal, ³Shi-Gan International College of Science and Technology, Nepal, ⁴Chitwan Medical College, Nepal, ⁵Dept. Health Services, Nepal)

P-058

Investigation for practical use of multiplex-PCR detection system targeted at pathogenic *S. mitis*

○Yayoi Iwasa¹, Asuka Fukutomi¹, Atsushi Tabata^{1,2}, Shu Murakami¹, Toshifumi Tomoyasu^{1,2}, Hideaki Nagamune^{1,2} (¹Dept. Biol. Sci. & Tech., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch.)

P-059

Purification of *M. tuberculosis* protein, and its application for diagnosis

○Yukiko Ohara^{1,2}, Yuriko Ozeki¹, Yoshitaka Tateishi¹, Akihito Nishiyama¹, Saburo Yamamoto³, Ichiro Nakagawa², Sohkiichi Matsumoto¹ (¹Dept. Bacteriology. Med., Niigata Univ., ²Dept. Microbiol. Med., Kyoto Univ., ³Japan BCG Laboratory)

P-060 (WS3-6)

Serotype specific identification of *Streptococcus pneumoniae* using the LAMP method

○Mitsuko Seki¹, Bin Chang², Makoto Ohnishi² (¹Dept. Pathol. Microbiol., Sch. Med., Nihon Univ., ²Bacteriol. I, Natl. Inst. Infect. Dis.)

P-061**MALDI-TOF MS analysis of spore germination with beads cell disrupter**

○Yoshihito Fujinami (National Research Institute of Police Science)

P-062**Development of fecal real-time PCR assays for detection of *Mycobacterium bovis* in Japanese wild deer**

○Reiko Nagata¹, Satoko Kawaji¹, Hiroki Sano², Yasuyuki Mori³, Makoto Osaki¹ (¹NIAH, Naro, ²Yamaguchi Pref. LHSC, ³Zen-noh)

P-063**Immunochromatography for detecting heat-labile enterotoxin from enterotoxigenic *E. coli***

○Hideyuki Arimitsu^{1,2}, Takao Tsuji³ (¹Sch. Human Sci. Environ., Univ. Hyogo, ²Res. Inst. Food Nutr. Sci., Univ. Hyogo, ³Dept. Microbiol., Sch. Med., Fujita Health Univ.)

P-064**ISO/IEC17025 accreditation at Testing Laboratory in Obihiro University**

○Eiki Yamasaki¹, Akiko Kusumoto¹, Shintaro Shichinohe¹, Shinya Fukumoto², Keisuke Suganuma², Kayo Okumura¹, Hisao Kurazono¹, Fumiki Morimatsu¹ (¹DCAHFS, Obihiro Univ., ²NRCPD, Obihiro Univ.)

P-065**Comparative study of three methods for identification of *Acinetobacter baumannii***

Asumi Yamaguchi¹, Yoshihiko Sakaguchi¹, Mari Matsui², Jumpei Uchiyama³, Hidehito Matsui⁴, Hideaki Hanaki⁴, Hidetomo Kobayashi⁵, Yoko Osanai¹, ○Shunji Hayashi¹ (¹Dept. Microbiol. Kitasato Univ. Sch. Med., ²AMR Center, NIID, ³Dept. Vet. Microbiol. Sch. Vet. Med. Azabu Univ., ⁴Infect. Cont. Res. Cent., Kitasato Inst. Life Sci., Kitasato Univ., ⁵Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ.)

P-066**The first case of gestational psittacosis found in Japan**

○Itaru Yanagihara¹, Michinobu Yoshimura¹, Yukiko Nakura¹, Makoto Takeuchi², Yoshiaki Imamura³, Yoshio Yoshida⁴, Harutaka Katano⁵, Hideki Hasegawa⁵, Daisuke Motooka⁶, Shota Nakamura⁶, Kisaburo Nagamune⁷ (¹Dept. Dev. Med., Osaka Women Child. Hosp., ²Dept. Pathol., Osaka Women Child. Hosp., ³Dept. Surg. Pathol., Univ. Fukui Hosp., ⁴Dept. Ob. Gyn., Fac. Med. Sci., Univ. Fukui, ⁵Dept. Pathol., NIID, ⁶GIRC, RIMD, Osaka Univ., ⁷Dept. Parasitol., NIID)

P-067**Detection and isolation of tick borne bacteria in *Aponomma lucasi* collected from lizard in Indonesia**

○Supriyono Supriyono¹, Ai Takano¹, Ryusei Kuwata¹, Hiroshi Shimoda¹, Jumrueang Panpiansil², Upik Hadi³, Agus Setiyono³, Srihadi Agungpriyono³, Eiichi Hondo⁴, Ken Maeda¹ (¹Joint Faculty of Vet. Med., Yamaguchi Univ., ²Mueang Chon Vet Clinic, ³Bogor Agricultural Univ., ⁴Grad. Sch. Bioagricultural Sci., Nagoya Univ.)

P-068**Attempt to detect Stx phages on foods and in beef drips**

○Masanori Watahiki, Chieko Mitsui, Keiko Kimata, Junko Isobe (Dept. Bacteriol., Toyama Inst. Health.)

P-069**Isolation method of *Scardovia wiggsiae* and relationship with adult dental caries**

○Osamu Tsuzukibashi¹, Satoshi Uchibori², Masanori Saito¹, Noriko Kuwahara¹, Tomoko Ochiai¹ (¹Dept. Microbiol. Immunol., Nihon Univ. Sch. Dent. at Matsudo, ²Dept. Crown Bridge Prosthodont., Nihon Univ. Sch. Dent. at Matsudo)

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

P-070**Enhancement of adherence of *Helicobacter pylori* to host cells by virus**

○Hong Wu, Takashi Nakano, Youichi Suzuki, Kouichi Sano (Dept. Microbiol. Infect. Control, Osaka Med. Coll)

P-071**Detection of a novel bacterial lineage (IOLA) in nasal discharge specimens of pediatric patients**

○Kazumasa Fukuda, Kaoru Haro, Midori Ogawa, Mitsumasa Saito (Dept. Microbiol., Sch. Med., UOEH)

P-072**Genotypic and phenotypic diversity of *Streptococcus ruminantium* from ruminants**

○Masatoshi Okura¹, Takeshi Tanaka², Yohei Matoba², Aya Osawa¹, Sadaat Sayed Mushtaq¹, Hiroyuki Egashira¹, Yumiko Hiramatsu¹, Fumito Maruyama³, Makoto Osaki¹, Daisuke Takamatsu^{1,4} (¹Bact./Parasit. Dis. Res. Division, NIAH, NARO, ²Nairiku Meat Inspect. Center, Yamagata, ³Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., ⁴Unit. Grad. Sch. Vet. Sci., Gifu Univ.)

P-073

Investigation of genes involved in promoting the growth rate of BCG

○Ayako Ryumon¹, Masaaki Nakayama^{1,2}, Takayuki Wada³, Masato Tachibana¹, Manabu Ato⁴, Chie Nakajima⁵, Yasuhiko Suzuki⁵, Hirotaka Kosaki¹, Naoya Ohara^{1,2} (¹Dept. Oral Microorganism., Okayama Univ. Grad. Sch. Med. & Dent. & Pharm., ²Advanced Research Center., Sch. Dent., Okayama Univ., ³Dept. International Health., Institute of Tropical Medicine, Nagasaki Univ., ⁴Dept. Immunology, Mycobacteriology, National Institute of Infectious Diseases, ⁵Division of Bioresources, Research Center for Zoonosis Control, Hokkaido Univ.)

P-074

Mechanism of the mode of action of NSAID celecoxib on their target cell membrane

○Yohei Tatematsu¹, Atsushi Tabata², Hideaki Nagamune², Kazuto Ohkura¹ (¹Grad. Sch. Pharm. Sci., Suzuka Univ. Med. Sci., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch.)

P-075

The outbreak of EHEC O157 associated with cucumbers in 2016

○Ryo Ozuru¹, Yoshitaka Tateishi², Noriko Konishi³, Sohkiichi Matsumoto², Takashi Matsuba¹, Jun Fujii¹ (¹Div. Bacteriol., Dept. Microbiol. Immunol., Fac. Med., Tottori Univ., ²Dept. Bacteriol., Sch. Med., Niigata Univ., ³Tokyo Metropolitan Inst. Pub. Health)

P-076

Campylobacter jejuni/coli infection is associate with in TAFRO syndrome

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

P-077

Relationship between anaerobes detection and poor oral hygiene using bacterial floral analysis

○Toshinori Kawanami¹, Ryosuke Hata¹, Shingo Noguchi¹, Kazumasa Fukuda², Kentaro Akata¹, Hiroshi Mukae³, Mitsumasa Saito², Kazuhiro Yatera¹ (¹Dept. Respir. Med. Univ. Occup. Environ. Health, Japan, ²Dept. Microbiol. Univ. Occup. Environ. Health, Japan, ³Second Intern. Med. Nagasaki Univ. Sch. Med.)

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

P-078

Legionella pneumophila TolC inhibits cellular trafficking in Paramecium tetraurelia

○Takashi Nishida¹, Naho Hara¹, Kenta Watanabe¹, Takashi Shimizu¹, Masahiro Fujishima², Masahisa Watarai¹ (¹Grad. Sch. Vet. Sci., Yamaguchi Univ., ²Grad. Sch. Sci. and Tech. for Innovation, Yamaguchi Univ.)

P-079 (WS3-7)

Investigation of Legionella genes involved in symbiosis using comparative genome analysis

○Kenta Watanabe¹, Takashi Nishida¹, Masato Tachibana², Masahiro Fujishima³, Takashi Shimizu¹, Masahisa Watarai¹ (¹Grad. Sch. Vet. Sci., Yamaguchi Univ., ²Grad. Sch. Med, Dent, Pharmaceut. Sci., Okayama Univ., ³Grad. Sch. Sci. and Tech. for Innovation, Yamaguchi Univ.)

P-080

Airborne bacterial communities in an underground pedestrian space in Sapporo

○Takanori Watanabe¹, Torahiko Okubo¹, Takako Osaki², Junji Matsuo¹, Shigeru Kamiya², Hiroyuki Yamaguchi¹ (¹Dept. Med. Lab. Sci., Fac. Health Sci., Hokkaido Univ., ²Dept. Infect. Dis, Kyorin Univ. Sch. Med.)

P-081

Enterococcus faecalis YM0831 suppresses sucrose-induced hyperglycemia in human

○Yasuhiko Matsumoto¹, Masaki Ishii^{1,2}, Kazuhisa Sekimizu^{1,2} (¹Teikyo Univ. Ins. Med. Mycol., ²Genome Pharm. Ins.)

P-082

Genome analysis of non pathogenic Rickettsia sp. LON

○Kentaro Kasama¹, Yasuhiro Gotoh¹, Yoshitoshi Ogura¹, Ai Takano², Seigo Yamamoto⁴, Hiroki Fujita³, Shuji Ando⁵, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Sch. Med., Kyushu Univ., ²Dept. Epidemiol., Sch. Veterinary Med., Yamaguchi Univ., ³Mahara Akari Med. Lab., ⁴Frontier Science Research Center, Miyazaki Univ., ⁵National Institute of Infectious Disease)

P-083 (WS3-8)

Iron acquisition through biofilm formation and corrosion on stainless steel by marine isolate FT01

○Hiroki Watanabe¹, Tomohiro Inaba², Nozomu Obana³, Yasuyuki Miyano⁴, Nobuhiko Nomura³ (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²Environ. Manage. Res. Inst., AIST, ³Fac. Life Environ. Sci., Univ. Tsukuba, ⁴Grad. Sch. Eng., Akita Univ.)

P-084**Assessment of non-tuberculous mycobacteria in river water in 2015-2017**

○Kentaro Arikawa¹, Yukiko Nishiuchi², Aki Tamaru³, Shiomi Yoshida^{4,5}, Tomotada Iwamoto¹ (¹Dept. Infec. Dis., Kobe Inst. Heal., ²Toneyama Inst. Tuberculosis Res., Osaka City Uni. Med. Sch., ³Dept. Bacteriol., Osaka Inst. Public Health, ⁴Clin. Res. Ctr., NHO Kinki-chou Chest Med. Ctr., ⁵Nagasaki Univ. Grad. Sch. Biomed. Sci, Nagasaki Univ.)

P-085**Establishment of oral bacteria biofilm by membrane vesicles from *Streptococcus mutans***

○Hidenobu Senpuku, Ryoma Nakao, Makoto Ohnishi (Dept. Bact I, Nat Inst Infect Dis)

P-086**Staphylococcal biofilm-dispersed cells induced by nuclease escape from neutrophil phagocytosis**

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

P-087**Transcriptomic dynamics of *Campylobacter jejuni* under freezing condition**

○Hiroshi Asakura¹, Shiori Yamamoto¹, Tatsuya Nakayama¹, Yukio Morita², Takehisa Chuma³ (¹Div. Biomed Food Res., Nat Inst Health Sci, ²Dept. Food Hyg., Sch. Life Sci. Tokyo Kasei Univ., ³Dept. Vet. Public Health, Sch. Vet. Med., Kagoshima Univ.)

P-088***Campylobacter* contamination among cooking environment swab samples from the small restaurants**

○Hiromi Nakamura¹, Hiroshi Asakura², Kaori Yamamoto¹, Kaoru Umeda¹, Jun Ogasawara¹ (¹Microbiol. Sec., OIPH, ²Div. Biomed. Food Res., NIHS)

P-089**Characterization of tick-associated *Coxiella* endosymbionts and *Rickettsia* by 16S rRNA meta-analysis**

Ayaka Sato¹, Naoya Takamoto¹, Ai Takano², Saori Ohishi³, Fuyuki Abe³, Takashi Kanda³, Masakatsu Taira⁴, Hiromi Fujita⁵, Yuko Shimamura¹, ○Norio Ohashi¹ (¹Dept. Food Nutr., Univ. Shizuoka, ²Dept. Epidemiol. Infect. Dis., Sch. Vet. Med., Yamaguchi Univ., ³Shizuoka Inst. Environ. Hygiene, ⁴Chiba Pref. Inst. Pub. Health, ⁵Mahara Inst. Med. Acari)

P-090**Type of nickel transporter genes correlate with ability of hydrogen production in marine vibrios**

○Yuta Matsumura¹, Sayaka Mino¹, Fumito Maruyama², Yoshitoshi Ogura³, Tetsuya Hayashi³, Ken Kurokawa⁴, Tomoo Sawabe¹ (¹Lab. Microbiol., Fac. Fish. Sci., Hokkaido Univ., ²Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., ³Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., ⁴Earth-Life Sci. Inst., Tokyo Inst. Tech.)

P-091**Survival of *Helicobacter pylori* in environmental soil and sterilized soil**

○Fuhito Hojo¹, Takako Osaki², Hideo Yonezawa², Tomoko Hanawa², Satoshi Kurata², Shigeru Kamiya² (¹Inst. Lab. Anim., Grad. Sch. Med., Kyorin Univ., ²Dept. Infect. Dis., Kyorin Univ., Div. Med. Microbiol.)

2. Ecology -b. Microbiota

P-092**Anaerobes in ventilated aspiration pneumoniae are markedly reduced by ventilatory management**

○Ken Otsuji^{1,2}, Kazumasa Fukuda¹, Midori Ogawa¹, Yoshihisa Fujino³, Mitsumasa Saito¹ (¹Dept. Microbiol., Sch. Med., UOEH., ²Dept. Crit. Care Med., Hosp. UOEH., ³Dept. Environ. Epidemiol., Inst. Indust. Ecolo. Sci., UOEH.)

P-093**Oral streptococcal fimbriae related to coaggregation with other oral streptococci**

○Yasuo Yoshida, Keiji Nagano, Yoshiaki Hasegawa (Dept. Microbiol. Sch. Dent, Aichi Gakuin Univ.)

P-094**Analysis of oral microbiome formation process in infancy**

○Ryutaro Jo¹, Kazuma Yama¹, Chikako Ishihara², Kota Tsutsumi², Masato Maruyama², Kaori Takeda³, Yuri Kono³, Seiji Morishima³ (¹Analytical Technology Research Center, Lion Corporation, ²Oral Care Research Laboratories, Lion Corporation, ³The Lion Foundation for Dental Health)

P-095 (WS9-2)**Comparative study of skin microbiota between bedridden, healthy elderly and juvenile**

○Satoshi Nagase¹, Kazuhiro Oogai², Yumiko Mori¹, Kana Shibata¹, Emi Matsubara¹, Kanae Mukai³, Tamae Urai⁴, Miki Matsue¹, Junko Sugama⁴, Shigefumi Okamoto¹ (¹Dept. Clin. Lab. Sci., Sch. Med. Sci., Kanazawa Univ., ²Wellness Promotion Sci. Center, Sch. Med. Sci., Kanazawa Univ., ³Dept. Clin. Nurs. Sci., Sch. Med. Sci., Kanazawa Univ., ⁴Institute for Frontier Science Initiative., Kanazawa Univ.)

P-096**Identification of novel bacteria from healthy human feces using conventional culture media**

○Tamaki Ito, Tsuyoshi Sekizuka, Norimi Kishi, Akifumi Yamashita, Kengo Kato, Yuba Inamine, Makoto Kuroda (Pathogen Genomics Center, Nat. Inst. Infect. Dis.)

P-097**Longitudinal study of *Campylobacter* colonization and chicken intestinal microbiota in broiler farms**

○Nachiko Takeshita, Takayasu Watanabe, Hyunjung Kim, Kasumi Kuroki, Tsutomu Sekizaki (Res. Center for Food Safety, Grad. Sch. Agr. Life Sci., Univ. Tokyo)

P-098**Gastro intestinal microbiota of Mongolian gerbil infected with *Helicobacter pylori***

○Takako Osaki¹, Fuhito Hojo¹, Hideo Yonezawa¹, Motomichi Takahashi², Kentaro Oka², Satoshi Kurata¹, Tomoko Hanawa¹, Shigeru Kamiya¹ (¹Dept. Infect. Dis., Kyorin Univ. Sch. Med., ²Tokyo R&D Center, Miyarisan Pharma. Co. Ltd.)

P-099 (WS9-1)**Association analysis using metagenomic data between gut microbiome and food/life habits of Japanese**

○Mari Tohya¹, Suguru Nishijima², Naoyoshi Nagata³, Wataru Suda², Toru Akiyama-Miyoshi¹, Junichi Akiyama³, Mitsuru Ohsugi⁴, Naomi Uemura⁵, Masahira Hattori² (¹Lab. Pathogenic Microbes, NCGM, ²Grad. Sch. Front. Sci, Univ. Tokyo, ³Dept. Gastroenterol. and Hepatol., NCGM, ⁴Dept. Diabetes, Endocrinol. and Metabol., NCGM, ⁵Dept. Gastroenterol. and Hepatol., Kohnodai Hospital, NCGM)

P-100**Investigation of microbiota in pig farms for understanding the route of *Streptococcus suis* infection**

○Hyunjung Kim¹, Sakura Arai^{1,2}, Kazunori Murase^{3,4}, Takayasu Watanabe¹, Kasumi Kuroki¹, Fumito Maruyama³, Mari Tohya^{1,5}, Eriko Suzuki¹, Nachiko Takeshita¹, Ichiro Nakagawa³, Ro Osawa⁶, Tsutomu Sekizaki¹ (¹Res. Center for Food Safety, Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²NIHS, ³Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., ⁴Dept. Infect. Dis., Fac. Med., Miyazaki Univ., ⁵Lab. Pathogenic Microbes, NCGM, ⁶Dept. Bioresour. Sci., Grad. Sch. Agric. Sci., Kobe Univ.)

P-101**Identification of isolates from boiled sardine and inactivation of their isolates using 280 nm light**

○Akihiro Shirai¹, Yu-ko Yokota², Kyoko Tabata³, Keiko Hada⁴ (¹Dep. Biosci. Bioind., Grad. Sch. Tech. Ind. Social Sci., Tokushima Univ., ²Grad. Sch. Tech. Ind. Social Sci., Tokushima Univ., ³Grad. Sch. Biosci. Bioind. Tokushima Univ., ⁴WDB Co., Ltd.)

P-102**The mechanisms involved in aggravation of respiratory disease focused on oropharyngeal pathogens**

○Katsuhiko Hirota¹, Hiromichi Yumoto², Yuka Ohno¹, Yuko Nakaishi¹, Kayo Nomura¹, Mayumi Sakamoto¹, Saki Wajiki¹, Miharuru Hamada¹, Tomoko Uchida¹ (¹Dept. Medical Hygiene, Dental Hygiene Course, Kochi Gakuen College, ²Dept. Periodontol. Endodontol. Tokushima Univ. Grad. Sch.)

P-103**Analysis of association between oral microbiota and bacterial sulfur metabolites**

Haruna Sakai¹, Ryoichi Okano³, Hayato Tokumoto⁴, Ayaka Yazawa^{1,2}, Iwao Ohtsu⁵, ○Shigeki Kamitani^{1,2} (¹Sch. Comprehensive Rehabilitation, Osaka Prefecture Univ., ²Grad. Sch. Comprehensive Rehabilitation, Osaka Prefecture Univ., ³Grad. Sch. Engineering, Osaka Prefecture Univ., ⁴Grad. Sch. Science, Osaka Prefecture Univ., ⁵Headquarters for International Industry-University Collaboration, Univ. Tsukuba)

P-104**Clustering of diarrhea intestinal microbiota in lab-bred Marmosets using T-RFLP analysis**

○Yuko Shigeno¹, Mutsumi Toyama¹, Mutsumi Nakamura¹, Kimie Niimi², Eiki Takahashi², Chitoshi Itakura², Yoshimi Benno¹ (¹Benno Lab., RIKEN Innov. Ctr., ²RRC, RIKEN BSI)

P-105**Identification of initial colonizers of enamel surfaces in dental plaque development of young adults**

○Toru Takeshita^{1,2}, Yukari Ihara¹, Shinya Kageyama¹, Rie Matsumi¹, Yoshihisa Yamashita¹ (¹Sect. Prev. Dent. Facul. Dent. Sci., Kyushu Univ., ²OBT Res. Cent., Fac. Dent. Sci., Kyushu Univ.)

P-106**Multi-omics analysis of host-microbiome interaction in the space environment**

○Tamotsu Kato¹, Jun Kikuchi², Toshiko Ohta³, Masaharu Kagawa³, Masahira Hattori⁴, Hiroshi Ohno¹ (¹Riken, Cent., Integr., Med., Sci., ²Riken, Cent., Sustain., Resour., Sci., ³Kagawa, Edu., Inst., Nutr., ⁴Fac., Sci., Eng., Waseda Univ.)

P-107**Functional metagenomics of antibiotics-treated infant gut microbiome**

○Haruyuki Imaohji¹, Aya Tanaka², Ryuichi Shimono², Atsushi Toyoda³, Hideto Takami⁴, Tomomi Kuwahara¹ (¹Dept. Microbiol., Sch. Med., Kagawa Univ., ²Dept. Pediatr. Surg., Sch. Med., Kagawa Univ., ³Center Inform. Biol., Natl. Inst. Genetics, ⁴Yokohama Inst., JAMSTEC)

P-108**Change of microbiota in saliva and tongue by elimination of *Helicobacter pylori***

○Nao Taniguchi¹, Richiko Beppu², Toru Takeshita³, Masahiro Yoneda⁴, Yoshihisa Yamashita³, Takashi Hanioka¹, Takao Hirofujii⁴, Tetsuo Shinohara² (¹Dept. Prev. & Public Health Dent., Fukuoka Dent. Col., ²Dept. Gen. Med., Fukuoka Dent. Col., ³Sect. Prev. & Public Health Dent., Fac. Dent. Sci., Kyushu Univ., ⁴Dept. Gen. Dent., Fukuoka Dent. Col.)

P-109**Molecular ecological analysis of salivary microbiota in Japanese patients with type 2 diabetes**

○Toshifumi Osaka¹, Tomoko Nakagami², Arata Ito², Tetsuya Babazono², Junji Yagi¹ (¹Dept. Microbiol. Immunol., Tokyo Women's Med. Univ., ²Dept. Med. III, Diabetes Center, Tokyo Women's Med. Univ.)

P-110**The fecal microbiome modification after FMT on IBD dogs**

○Ryoko Kibe¹, Ayaka Niina², Saki Konya¹, Hiroataka Matsumoto², Syuichi Koyama², Yasushi Kataoka¹ (¹Dept. Vet. Microbiol., Nippon Vet. Life Sci. Univ., ²Dept. Vet. Internal Med., Nippon Vet. Life Sci. Univ.)

P-111 [Withdrawn]**P-112****Nasal microbiome in healthy individuals using a viable cell specific microbiome method**

○Yujie Lu¹, Takashi Sasaki^{1,2,3}, Kyoko Kuwahara-Arai², Yuki Uehara^{1,2}, Keiichi Hiramatsu¹ (¹Dept. Infection Control Science, Sch. Med., Juntendo Univ., ²Dept. Bacteriol., Sch. Med., Juntendo Univ., ³Animal Res. Center, Sch. Med., Sapporo Med. Univ.)

2. Ecology -c. Growth and culture conditions

P-113 [Withdrawn]**P-114****Subtle change of host-cell density is a crucial factor, collapsing Chlamydial dynamics in hypoxia**

○Kohei Sakai¹, Junji Matsuo¹, Takanori Watanabe¹, Torahiko Okubo¹, Shinji Nakamura², Hiroyuki Yamaguchi¹ (¹Dept. Med. Lab. Sci., Fac. Health Sci., Hokkaido Univ., ²Lab. Morphol. Image Anal., Res. Sup. Cent., Juntendo Univ. Grad. Sch. Med.)

P-115**Influence of glycosidase activities on experimental biofilm amount of *Streptococcus intermedius***

○Ayuko Takao¹, Toshifumi Tomoyasu², Atsushi Tabata², Hideaki Nagamune², Nobuko Maeda¹ (¹Dept. Oral Microbiol., Sch. Dent. Med., Tsurumi Univ., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch.)

P-116**Microbes fighting each other on hospital floor materials in dry conditions**

○Torahiko Okubo¹, Junji Matsuo¹, Shinji Nakamura², Hiroyuki Yamaguchi¹ (¹Dept. Med. Lab. Sci., Fac. Health Sci., Hokkaido Univ., ²Lab. Morphol. Image. Anal., Res. Sup. Cent., Juntendo Univ. Grad. Sch. Med.)

P-117**Survival of *Leptospira* in a soil around the daily cattle barn**

○Maya Tominaga¹, Tamaki Kanda¹, Ryo Murata¹, Ikuo Uchida¹, Naoya Kikuchi² (¹Dept. Pathobiol., Sch. Vet. Med., Rakuno Gakuen Univ., ²Dept. Nut., Sch. Nurs., Tenshi Col.)

P-118**Research on the bacterial photo-inactivation phenomenon of *Staphylococcus aureus***

○Mana Oshiro¹, Tomoya Nishimura², Haruka Ogi², Kiyoshi Saito¹, Yuya Hasunuma³ (¹Basic Chem., Grad. Sch. Eng., Toin Yokohama Univ., ²Basic Chem., Dept. Med. Eng., Toin Yokohama Univ., ³Clin. Microbio., Dept. Med. Eng., Toin Yokohama Univ.)

P-119**Effect of White LED Light Irradiation on Growing Lag Time of *Staphylococcus aureus***

○Atsushi Tkahashi, Yuya Hasunuma, Masashi Ikegami, Yoshikazu Tokuoka (Toin Univ. Yokohama. Grad. Sch. Eng. Faculty of Biomed. Eng.)

P-120**Effect of pyruvate on resuscitation of VBNC (Viable But Non-Culturable) *Salmonella***

○Fumio Amano, Miwa Araki, Yuta Morishige, Atsushi Koike (Lab. Biodefense & Regulation, Osaka Univ. Pharm. Sci.)

P-121 (WS9-3)**Effect of salt concentration on the development of VBNC state of *Vibrio cholerae***

Toshi Shimamoto, Hirofumi Nariya, ○Tadashi Shimamoto (Lab. Food Microbiol. Hyg., Grad. Sch. Biosphere Sci., Hiroshima Univ.)

2. Ecology -d. Others

P-122**Observation of the growth dynamics of *Mycobacterium tuberculosis* after exposure to rifampicin**

○Akio Aono, Kinuyo Chikamatsu, Yuriko Igarashi, Yoshiro Murase, Hiroyuki Yamada, Akiko Takaki, Satoshi Mitarai (Bacteriol. Div., Dept. Mycobacterial Ref. Res., Res. Inst. Tuberculosis, Japan Anti-tuberculosis Assoc.)

P-123

Monitoring of *Cryptococcus* isolated from koala nasal smear

○Kazuo Satoh, Takashi Tamura, Koichi Makimura (Gen. Med. Educ. Res. Center, Teikyo Univ.)

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

P-124

Functional Analysis of Serine-Binding Protein derived from *Campylobacter jejuni*

○Ayako Watanabe¹, Taketoshi Iwata¹, Masahiro Kusumoto², Yukino Tamamura¹, Masato Akiba¹ (¹NARO, NIAH, Division of Bacterial and Parasitic Diseases, Enteric Pathogen Unit, ²NAR, NIAH, Division of Transboundary Animal Disease, Subtropical Disease Control Unit)

P-125

Biosynthesis pathway and physiological functions of cysteine persulfide in bacteria and yeast

○Akira Nishimura¹, Hiroshi Takagi², Tetsuro Matsunaga¹, Tomoaki Ida¹, Masanobu Morita¹, Shigemoto Fujii¹, Hozumi Motohashi³, Takaaki Akaike¹ (¹Dept. Environmental Health Sciences and Molecular Toxicology, Tohoku Univ. Grad. Sch. Medicine, Miyagi, Japan, ²Grad. Schl. Biol. Sci., Nara Inst. of Sci. and Tech., Nara, Japan, ³Dept. Gene Expression Regulation, Institute of Development, Aging and Cancer, Tohoku Univ.)

P-126

A Novel Group of Cyclic Nucleotide Phosphodiesterase Confers Heat Stress Resistance in Bacteria

○Shuhei Mitsutomi¹, Kazuhisa Sekimizu², Chikara Kaito¹ (¹Lab. Immun. Microbiol., Grad. Sch. Pharm. Sci., Univ. Tokyo, ²Inst. Med. Microbiol. Teikyo Univ.)

P-127

A novel cytosolic glycosylated protein with a single *N*-Acetylglucosamine in *Staphylococcus aureus*

○Kenji Kurokawa¹, Tatsuo Adachi¹, Tomokazu Higuchi¹, Naoshi Dohmae², Kazuhisa Sekimizu³, Masaru Himeno¹, Hiroshi Nakayama² (¹Div. of Pharm. Cell Biol., Fac. of Pharm., Nagasaki Int. Univ., ²Biomol. Char. Unit, RIKEN CSRS, ³Inst. Med. Mycol., Teikyo Univ.)

3. Physiology / Structural biology -b. Motility

P-128

Interaction of flagellar sheath protein FcpA with other flagellar proteins in *Leptospira biflexa*

○Yuya Sasaki^{1,2}, Akihiro Kawamoto³, Shuichi Nakamura⁴, Ryoichi Sato¹, Makoto Ohnishi², Nobuo Koizumi² (¹BASE, Tokyo Univ. Agri Tech, ²Dept. Bacteriol I, NIID, ³FBS, Osaka Univ., ⁴Dept. Appl Phys, Tohoku Univ.)

P-129

NMR and MD simulation analysis for switching mutants of flagellar rotor protein FliG in *Vibrio*

○Tatasuro Nishikino¹, Atsushi Hijikata², Yohei Miyanoiri³, Yasuhiro Onoue¹, Seiji Kojima¹, Tsuyoshi Shirai², Michio Homma¹ (¹Dev. Biol. Sci. Grad. Sch. Sci., ²Dep. Biosci. Nagahama Inst. of Bio-Sci. Tec., ³Inst. for Protein Res. Osaka Univ.)

P-130

3D torque measurements of the archaeal motor

○Seiji Iwata, Yoshiaki Kinoshita, Daisuke Nakane, Takayuki Nishizaka (Dept. Phys., Gakushuin Univ.)

P-131

Molecular speedometer indicating gliding speed in *Mycoplasma pneumoniae*

○Kohki Murata¹, Tsuyoshi Kenri², Daisuke Nakane¹, Keigo Shibayama², Takayuki Nishizaka¹ (¹Dept. Phys., Gakushuin Univ., ²Dept. Bact. II., NIID.)

P-132

Structure and function of six cytoskeletal proteins in *Spiroplasma swimming*

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

P-133

Implication of motility for skin penetration of the pathogen of zoonotic leptospirosis

○Kyosuke Takabe, Keigo Abe, Shuichi Nakamura (Dept. Appl. Phys., Grad. Sch. Eng., Tohoku Univ.)

P-134

Effect of MreB Depolymerization on Helicity-Switching Swimming in *Spiroplasma eriocheiris*

○Yuya Sasajima¹, Isil Tulum¹, Makoto Miyata^{1,2} (¹Grad. Sch. Sci., Osaka City Univ., ²OCARINA, Osaka City Univ.)

P-135

Role of internal structure in *Mycoplasmas mobile* gliding

○Isil Tulum, Kenta Kimura, Makoto Miyata (Grad. Sch. Sci., Dept. Biol., Osaka City Univ.)

P-136

Motor Evolved from F-ATPase for *Mycoplasma mobile* Gliding

○Takuma Toyonaga¹, Takayuki Kato², Akihiro Kawamoto², Noriyuki Koderu³, Toshio Ando³, Keiichi Namba^{2,4}, Makoto Miyata^{1,5} (¹Grad. Sch. Sci., Osaka City Univ., ²Grad. Sch. Front. Biosci., Osaka Univ., ³Bio AFM-FRC., Kanazawa Univ., ⁴QBiC, RIKEN, ⁵OCARINA, Osaka City Univ.)

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

P-137

Two component sensor SPY1588 regulates biofilm production and promotes transcription of *mga* gene

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

P-138

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

○Mayuko Osada-Oka¹, Risa Imamiya¹, Yui Kimura¹, Daisuke Yakura², Hiroshi Ichikawa², Yukiko Minamiyama¹, Yasuhiko Horiguchi³ (¹Food Hyg. Env. Health, Life Env. Sci., Kyoto Pref. Univ., ²Doshisya Univ., ³Dept. Mol. Bacteriol., RIMD, Osaka Univ.)

P-139

Second-messenger acts as a bacterial cyclin-like molecule to drive chromosome replication

○Shogo Ozaki^{1,2}, Urs Jenal² (¹Dept. Mol. Biol., Grad. Sch. Pharm. Sci., Kyushu Univ., ²Biozentrum, Univ. Basel)

P-140

Influence of second messengers to biofilm formation by *Paracoccus denitrificans*

○Shun Miyazaki¹, Kana Morinaga¹, Nozomu Obana², Masanori Toyofuku², Nobuhiko Nomura² (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²Fac. Life Environ. Sci., Univ. Tsukuba)

P-141

Temperature-dependent regulation of the taurine chemoreceptor gene of *Vibrio cholerae*

○So-ichiro Nishiyama^{1,2}, Shiori Onogi¹, Ikuro Kawagishi^{1,2} (¹Dept. Frontier Biosci., Hosei Univ., ²Res. Cen. Micro-Nano Tech., Hosei Univ.)

P-142

Ralfuranones are involved in mushroom-type biofilm formation by *Ralstonia solanacearum*

○Yasufumi Hikichi¹, Kazusa Hayashi¹, Kanako Inoue², Kouhei Ohnishi⁴, Akinori Kiba¹, Kenji Kai³ (¹Lab. Plant Pathol. & Biotechnol., Kochi Univ., ²Research Center for Ultra-High Voltage Electron Microscopy, Osaka Univ., ³Grad. Sch. Life and Environ. Sci., Osaka Pref. Univ., ⁴RIMG, Kochi Univ.)

P-143

Feedback regulation in quorum sensing of *Ralstonia solanacearum* through secondary metabolites

○Kazusa Hayashi¹, Kenji Kai², Kouhei Ohnishi³, Akinori Kiba¹, Yasufumi Hikichi¹ (¹Lab. Plant Pathol. & Biotechnol., Fac. Agri., Kochi Univ., ²Sch. Life and Environmental Sci., Osaka Pref. Univ., ³RIMG, Kochi Univ.)

P-144

High-speed AFM revealed the physical heterogeneous of bacterial membrane vesicles

○Yousuke Kikuchi¹, Nozomu Obana², Masanori Toyofuku², Nobuhiko Nomura², Noriyuki Kodera¹, Toshio Ando¹, Yoshihiro Fukumori³, Azuma Taoka¹ (¹Col. of Sci. and Eng., Kanazawa Univ., ²Life and Env. Sci., Tsukuba Univ., ³Vice President, Kanazawa Univ.)

P-145 (WS9-5)

Chemotactic control of the flagellar motor rotation of *Vibrio cholerae*

○Ikuro Kawagishi, Yuki Miura, Masatoshi Nishikawa, Yoshiyuki Sowa (Dept. Frontier Biosci., Hosei Univ.)

P-146

Functional analysis of immunogenic proteins related to membrane vesicle produced by *C. perfringens*

○Hibiki Okuwaki¹, Nozomu Obana², Ryoma Nakao³, Hidenobu Senpuku³, Nobuhiko Nomura² (¹Sch. Life Environ. Sci., Univ. Tsukuba, ²Fac. Life Environ. Sci., Univ. Tsukuba, ³Dept. Bacterial., Natl. Inst. Infect. Dis.)

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

P-147 (WS9-6)

In vitro reconstitution of the bacterial flagellar assembly by using the inverted membrane vesicles

○Hiroyuki Terashima^{1,2}, Chinatsu Tatsumi², Akihiro Kawamoto³, Tohru Minamino³, Katsumi Imada² (¹Grad. Sch. Sci., Nagoya Univ., ²Grad. Sch. Sci., Osaka Univ., ³Grad. Sch. Front. Biosci., Osaka Univ.)

P-148

Regulation of dynamics of cell shape determinant proteins MreB and RodZ in *Escherichia coli*

○Daisuke Shiomi¹, Keisuke Kurita¹, Risa Ago¹, Fumiya Kato¹, Hironori Niki² (¹Dept. LifeSci, Col. Sci, Rikkyo Univ., ²Nat. Inst. Gen.)

P-149

Regulation of extracellular amyloid-dependent biofilms by Myricetin-derivatives

○Shinya Sugimoto¹, Ken-ichi Arita-Morioka², Kunitoshi Yamanaka³, Teru Ogura³, Yoshimitsu Mizunoe¹ (¹Dept. Bacteriol., Jikei Univ., ²Adv. Sci. Res. Cent., Fukuoka Dent. Col., ³IMEG, Kumamoto Univ.)

P-150**Analysis of the mechanism of LPS glycosylation during persistent *Helicobacter pylori* infection**

○Eisuke Kuroda¹, Yoshitoshi Ogura², Tetsuya Hayashi², Hitomi Mimuro^{1,3} (¹Dept. Infection Microbiology, Research Institute for Microbial Diseases, Osaka Univ., ²Dept. Bacteriology, Faculty of Medical Sciences, Kyushu Univ., ³Division of Bacteriology, International Research Center for Infectious Diseases, Institute of Medical Science, The Univ. Tokyo)

P-151**Biochemical property of *Vibrio* FlhF belonging to SIMIBI proteins that regulate cellular process**

Shota Kondo, Akira Mizuno, ○Michio Homma, Seiji Kojima (Dev. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

P-152**Actin-like MamK cytoskeleton tethers bacterial magnetosome organelles in a static chain**

○Azuma Taoka^{1,2}, Ayako Kiyokawa¹, Yousuke Kikuchi¹, Yoshihiro Fukumori³ (¹Fac. Nat. Sys., Inst. Sci. and Eng., Kanazawa Univ., ²Bio-AFM FRC., Col. Sci. and Eng., Kanazawa Univ., ³Vice President, Kanazawa Univ.)

P-153**Structural analysis of polysaccharide fraction in *Acetobacter pasteurianus* lipopolysaccharide**

○Risako Baba, Tsuyoshi Ikeda, Shuhei Hashiguchi, Masahito Hashimoto (Grad. Sch. Sci. & Eng., Kagoshima Univ.)

P-154**RNA binding activity and multimer formation of bacterial cytoskeletal protein RodZ**

○Jiro Mitobe¹, Fumiko Nishiumi², Itaru Yanagihara², Makoto Ohnishi¹ (¹Dept. Bacteriology I, NIID, ²Dept. Dev. Med., Res. Inst., Osaka Medical Center for Maternal and Child Health)

P-155**Visualization of *Mycoplasma mobile* Gliding Machinery**

○Kohei Kobayashi¹, Noriyuki Kodera², Yuhei Tahara^{1,3}, Takuma Toyonaga¹, Taishi Kasai¹, Toshio Ando², Makoto Miyata^{1,3} (¹Grad. Sch. Sci, Osaka City Univ., ²Bio-AFM Frontier Research Center, Kanazawa Univ., ³OCARINA, Osaka City Univ.)

P-156**Relation between function of Mfa5 and Type IX secretion system in *Porphyromonas gingivalis***

○Yura Iijima¹, Yasuo Yoshida¹, Takeshi Kikuchi², Akio Mitani², Yoshiaki Hasegawa¹ (¹Dept. Microbiol., Sch. Dent., Aichi Gakuin Univ., ²Dept. Periodontol., Sch. Dent., Aichi Gakuin Univ.)

P-157 (WS9-4)**Analysis and real-time imaging of membrane-active antibiotics activities against bacterial cells**

○Satoru Hirayama¹, Yuri Yoshimasu¹, Nobuaki Sakai², Akira Yagi², Hidenobu Senpuku¹, Makoto Ohnishi¹, Ryoma Nakao¹ (¹Dept. Bac. I, Natl. Inst. Infect. Dis., ²R&D, MST, Olympus Co.)

P-158**lipoteichoic acid of *Lactobacillus gasseri* influences IL-8 production in intestine epithelial cells**

○Ryosuke Kutomi, Tsukasa Shiraishi, Toyotaka Sato, Shin-ichi Yokota (Dept. Microbiol., Sch. Med., Sapporo Medical Univ.)

P-159 (WS9-7)**Characterization of polysaccharide moiety in the lipopolysaccharides from *Vibrio parahaemolyticus* O7**

○Yasunori Isshiki, Tamae Amano, Emi Ishikawa, Mariko Matsushima, Harue Nomura, Seichi Kondo (Dept. Microbiol., Sch. PharmSci., Josai Univ.)

3. Physiology / Structural biology -e. Secretion and transport**P-160****The impact of lipopolysaccharide compositions on membrane vesicles**

○Yuma Susa¹, Masaharu Kurosawa¹, Masanori Toyofuku², Nozomu Obana², Nobuhiko Nomura² (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²Fac. Life Environ. Sci., Univ. Tsukuba)

P-161**A T9SS cargo protein involved in regulation of the T9SS expression in *Porphyromonas gingivalis***

○Hideharu Yukitake¹, Yusuke Handa², Tomoko Kadowaki³, Keiko Sato¹, Mikio Shoji¹, Mariko Naito¹, Katsumi Imada², Koji Nakayama¹ (¹Dept. Mol. Mikrobiol. Immunol., Grad. Sch. Biomedical. Sci., Nagasaki Univ., ²Dept. Macromol. Sci., Grad. Sch. Sci., Osaka Univ., ³Div. Front. Life Sci., Dept. Med. and Dent. Sci., Nagasaki Univ.)

P-162**The SsaH-SsaE heterodimer acts as a class III chaperone in SPI2-Type 3 secretion system**

○Akiko Takaya¹, Hikari Takeda¹, Tomoko Yamamoto², Hiroto Kawashima¹ (¹Dept. Microbiol. Mol. Genet., Grad. Sch. Pharm. Sci., Chiba Univ., ²MMRC, Chiba Univ.)

3. Physiology / Structural biology -f. Others**P-163 (WS9-8)****A restriction system associated with phosphorothioation of DNA in *Clostridium perfringens***

○Mayo Yasugi, Masami Miyake (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)

P-164**Structome analysis reveals decrease in ribosome density of mycobacteria under hypoxic culture**

○Hiroyuki Yamada, Kinuyo Chikamatsu, Akio Aono, Yuriko Igarashi, Yoshiro Murase, Akiko Takaki, Satoshi Mitarai (Dept. Mycobac. Ref. Res., RIT, JATA.)

P-165**Influence of the teichoic acid to lytic enzyme Psm**

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

P-166**Structural analysis of Type V pilus by Cryo-electron microscopy**

○Satoshi Shibata¹, Mikio Shoji², Koji Nakayama², Matthias Wolf¹ (¹Mol. Cryo-EM Unit, OIST, ²Dept. Microbiol. Oral Infection, Nagasaki Univ.)

4. Genetics / Genomics / Biotechnology**-a. Genomics, bioinformatics and systems biology****P-167****Genomic features of Mycobacterium avium strains that cause progression of pulmonary disease**

○Kei-ichi Uchiya¹, Shuta Tomida², Taku Nakagawa³, Kenji Ogawa³, Toshiaki Nikai¹ (¹Dept. Microbiol., Fac. Pharm., Meijo Univ., ²Dept. Biobank., Med. Dent and Pharm Sci., Dept. Biobank, ³NHO Higashinagoya Hosp, Dept. Respir Med.)

P-168**Investigation of CRISPRs and their immune targets in Porphyromonas genomes**

○Takayasu Watanabe¹, Masaki Shibasaki², Tsutomu Sekizaki¹, Ichiro Nakagawa³ (¹Res. Center for Food Safety, Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Div. Oral Implantol. Regen. Dent. Med., Grad. Sch. Med. Dent. Sci., Tokyo Med. Dent. Univ., ³Sec. Microbiol., Grad. Sch. Med., Kyoto Univ.)

P-169**Genome-wide association studied in bacteria -from two recent publications-**

○Koji Yahara¹, Guillaume Meric², Stephen Bentley³, Julian Parkhill³, Xavier Didelot⁴, David Kelly⁵, Samuel Sheppard², Masato Suzuki¹, Keigo Shibayama¹ (¹Nat. Inst. Infect. Dis., ²Dept. Biol. Biochem., Univ. Bath, ³Sanger Institute, ⁴Dept. Infect. Dis. Epi., Imperial College London, ⁵Dept. Mol. Biol. Biotech., Univ. Sheffield)

P-170**Genomic feature of Fusobacterium varium Fv113-g1 isolated from a patient with ulcerative colitis**

○Tsuyoshi Sekizuka¹, Toshifumi Ohkusa², Makoto Kuroda¹ (¹Pathogen Genomics Center, Nat. Inst. Infect. Dis., ²Dept. Microbiota Res., Juntendo Univ. Grad. Sch. Med.)

P-171**Network analysis of the components involved in Staphylococcus aureus staphyloxanthin biosynthesis**

○Marni Cueno, Kenichi Imai (Dept. Microbiol. Nihon Univ. Sch. Dent.)

P-172 (WS4-1)**Large scale genomics of bovine and human commensal E. coli to reveal the emerging process of EHEC**

○Yoko Arimizu^{1,2}, Tetsuya Hayashi¹, Yoshitoshi Ogura¹ (¹Dept. Bact., Fac. Med. Sci. Kyushu Univ., ²Dept. Med. and Biosystemic Sci., Grad. Sch. Med. Sci., Kyushu Univ.)

P-173**Genomic analysis of infant gut-derived Raoultella ornithinolytica strain AA097**

○Takaaki Yamamoto¹, Yasuhiro Gotoh², Haruyuki Imaohji³, Tadasuke Ooka⁴, Yoshitoshi Ogura², Hitoshi Houchi¹, Tetsuya Hayashi², Hideto Takami⁵, Tomomi Kuwahara³ (¹Dept. Pharmacy, Kagawa Univ. Hosp., ²Dept. Bacteriol., Grad. Sch. Med., Kyushu Univ., ³Dept. Microbiol., Sch. Med., Kagawa Univ., ⁴Dept. Microbiol., Grad. Sch. Med. and Dent. Sci., Kagoshima Univ., ⁵Yokohama Institute, JAMSTEC)

P-174**A bioinformatics pipeline to analyze NGS data derived from multiple generations**

○Wataru Nemoto¹, Yuto Kimura², Satoko Nakamura³, Noritaka Kashiwagi⁴, Chiaki Ogino^{3,4}, Akihiko Kondo^{3,4}, Shuichi Hirose⁵ (¹Life Sci. & Eng., Dept. Sch. & Eng., TDU, ²Life Sci. & Eng., Grad. Sch. Sci. & Eng., TDU, ³Chem. Sci. & Eng., Grad. Sch. Eng., Kobe Univ., ⁴Org. of Adv. Sci. & Tec., Kobe Univ., ⁵NAGASE R&D Center, NAGASE & CO., LTD)

P-175**Classifying metagenomic reads using GenomeSync and Genome Search Toolkit**

○Kirill Kryukov, Tadashi Imanishi (Dept. Molecular Life Science, Tokai Univ. Sch. Medicine)

4. Genetics / Genomics / Biotechnology**-b. Horizontal gene transfer, mobile genetic element and evolution****P-176****OC-SVM-based search for the genes acquired by horizontal transfer**

○Yoshio Nakano (Dept. Chem., Nihon Univ. Sch. Dent.)

P-177**Ciliates can bridge human pathogen and environmental bacteria by promoting plasmid conjugation**

○Mizue Matsushita, Junji Matsuo, Torahiko Okubo, Hiroyuki Yamaguchi (Dept. Med. Lab. Sci., Fac. Health Sci., Hokkaido Univ.)

P-178**Characterization of cryptic plasmids from *Streptococcus anginosus* subsp. *anginosus***

○Atsushi Tabata^{1,2}, Seiya Otsuka², Ken Kikuchi³, Toshifumi Tomoyasu^{1,2}, Hideaki Nagamune^{1,2} (¹Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch., ²Dept. Biol. Sci. & Tech., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ³Dept. Infect. Dis., Med. Sch., Tokyo Women's Med. Univ.)

P-179**Identification of the genetic characteristics in *Staphylococcus argenteus* related to food poisoning**

○Yuki Wakabayashi¹, Daisuke Motooka², Shota Nakamura², Shinya Yonogi^{1,3}, Kaoru Umeda¹, Tetsuya Iida^{2,3}, Kentaro Kawatsu¹ (¹Div. Microbiol. Osaka Institute of Public Health, ²Dept. Infect. Metagenomics, Genome Information Research Center, Research Institute of Microbial Dis, Osaka Univ., ³Dept. Bact. Infect., Research Institute of Microbial Dis, Osaka Univ.)

P-180**Analysis of botulinum neurotoxin-converting phages in *Clostridium botulinum* types C and D**

○Yoshihiko Sakaguchi¹, Jumpei Uchiyama², Yoshitoshi Ogura³, Kazuyoshi Gotoh⁴, Yumiko Yamamoto⁴, Shigenobu Matsuzaki⁵, Asumi Yamaguchi¹, Tetsuya Hayashi³, Keiji Oguma⁴, Shunji Hayashi¹ (¹Dept. Microbiol., Kitasato Univ. Sch. Med., ²Dept. Vet. Microbiol., Sch. Vet. Med., Azabu Univ., ³Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., ⁴Dept. Bacteriol., Grad. Sch. Med., Dent. Pharm. Sci., Okayama Univ., ⁵Dept. Microbiol. Infect., Kochi Med. Sch., Kochi Univ.)

P-181 (WS4-2)**Genome diversity of EHEC O145:H28 and genome-wide search of high Stx2 producibility-associated genes**

○Keiji Nakamura¹, Kazunori Murase², Sunao Iyoda³, Makoto Ohnishi³, Tadasuke Ooka⁴, Yasuhiro Gotoh¹, Yoshitoshi Ogura¹, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Grad. Sch. Med. Sci., Kyushu Univ., ²Dept. Parasitol., Sch. Med., Miyazaki Univ., ³Dept. Bacteriol., Natl. Inst. Infect. Dis., ⁴Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ.)

P-182**Analysis of the process of morphogenesis in Sp5, a bacteriophage encoding Shiga toxin 2**

○Jonghyun Kim, Keiji Nakamura, Yasuhiro Gotoh, Yoshitoshi Ogura, Tetsuya Hayashi (Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ.)

P-183**Genome analysis of *S. marcescens* to understand its pathogenicity and antimicrobial resistance**

○Tomoyuki Ono¹, Yasuhiro Gotoh¹, Ruriko Nishida², Atsushi Iguchi³, Naomasa Gotoh⁴, Takehiko Itoh⁵, Yoshitoshi Ogura¹, Tetsuya Hayashi¹ (¹Dept. Bact., Fac. Med. Sci., Kyushu Univ., ²Dept. Med. and Biosystemic Sci., Grad. Sch. Med. Sci., Kyushu Univ., ³Dept. Hyg. Microbiol., Fac. Agr., Univ. Miyazaki, ⁴Dept. Microbiol. Infect. Control Sci., Kyoto Pharm. Univ., ⁵Grad. Sch. Biosci. Biotech., Tokyo Tech.)

4. Genetics / Genomics / Biotechnology**-c. Gene regulation and transcriptome analysis****P-184****Heterogeneity and environmental adaptation of *Clostridium perfringens* biofilm**

○Nozomu Obana, Nobuhiko Nomura (Fac. Life Environ. Sci., Univ. Tsukuba)

4. Genetics / Genomics / Biotechnology**-c. Gene regulation and transcriptome analysis****P-185****The influence of Group A *Streptococcus* prophages on host gene expression**

○Shunsuke Yamada¹, Kazunori Murase², Chihiro Aikawa¹, Takashi Nozawa¹, Ichiro Nakagawa¹ (¹Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., ²Dept. Infectious Diseases, Sch. Med., Miyazaki Univ.)

P-186**Transcriptional regulation of *virS* by VirR in *Rhodococcus equi***

○Tsutomu Kakuda, Hirofumi Hagiuda, Shiko Miyazaki, Yukiyo Inamori, Shinji Takai (Dept. Animal Hyg, Sch. Vet. Med., Kitasato Univ.)

P-187**Transcription factor ArdK on IncN plasmid contributes to the *bla*_{IMP-6} repression in *Escherichia coli***

○Takaya Segawa¹, Tsuyoshi Sekizuka¹, Satowa Suzuki², Akifumi Yamashita¹, Keigo Shibayama³, Mari Matsui², Makoto Kuroda¹ (¹Pathogen Genomics Center, NIID, ²AMR Center, NIID, ³Dept. Bac. II, NIID)

P-188**Stability change of small RNA CsrB in response to glucose in *Escherichia coli***

○Kazushi Suzuki^{1,2}, Shunta Yamada¹, Takumi Amaki², Hayuki Sugimoto^{1,2} (¹Dept. Appl. Biol. Chem., Fac. Agric., Niigata Univ., ²Grad. Sch. Sci. & Tech., Niigata Univ.)

P-189**Inhibitory mechanism of Rv3406 expression by Rv3405c in BCG Tokyo**

○Kaori Shirasaki^{1,2}, Masaaki Nakayama², Masato Tachibana², Saburo Yamamoto³, Takemasa Takii⁴, Mayuko Okabe⁵, Manabu Ato⁵, Hiroshi Kamioka¹, Naoya Ohara² (¹Dept. Orthodontics., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ²Dept. Oral Microbiol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ³Japan BCG Lab., ⁴Dept. Mycobacterium Ref. Res., YATA, ⁵Dept. Immunol., Natl. Inst. Infect. Dis.)

P-190 (WS4-3)**Regulation of the LEE expression by RNA-binding protein Hfq in Enterohemorrhagic E.coli**

○Naoki Sudo¹, Sunao Iyoda¹, Shoichi Mitsunaka², Yasuhiko Sekine², Makoto Ohnishi¹ (¹Dept. Bacteriol., Natl. Inst. Infect. Dis., ²Dept. Life Sci., Coll. Sci., Rikkyo Univ.)

P-191**Role of the CsrA in biofilm formation by *Helicobacter pylori***

○Hideo Yonezawa, Takako Osaki, Tomoko Hanawa, Satoshi Kurata, Fuhito Hojo, Shigeru Kamiya (Dept. Infect. Dis., Kyorin Univ. Sch. Med.)

P-192**Conditional control of mycobacterial DNA-binding protein 1 expression in mycobacteria**

Anna Savitskaya, ○Akihito Nishiyama, Sohkiichi Matsumoto (Dept. Bacteriol. Niigata Univ. Sch. Med.)

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

P-193**Establishment of a highly efficient electroporation protocol for Staphylococci**

○Yusuke Sato^{o1}, Yoshifumi Aiba¹, Kotaro Kiga¹, Shinya Watanabe¹, Teppei Sasahara¹, Yasuhiko Hayakawa², Longzhu Cui¹ (¹Dev. Bacteriol., Jichi Med. Univ., ²NEPA GENE Co., Ltd.)

P-194**Comparison of budding yeast and *C. glabrata* with *Candida* virulence**

○Hidetsugu Kohzaki^{1,2,3} (¹Faculty of Teacher Education, Shumei Univ., ²Med. Mycol. Res.Ctr, Chiba Univ., ³Dept. Bioenvironm. Med., Grad Sch. Med, Chiba Univ.)

P-195**Expression of cellulosomal enzymes using recombinant *Clostridium perfringens***

○Ayaka Toritani¹, Shunya Sawairi¹, Eiji Tamai², Shigeru Miyata¹ (¹Coll. Biosci. Biotech., Chubu Univ., ²Dept. Microbiol., Fac. Med., Matsuyama Univ.)

P-196**A novel type of bent DNA activates the expression of *Clostridium perfringens* epsilon-toxin gene**

○Namiko Nodera¹, Chinami Yano¹, Seiichi Katayama², Shigeru Miyata¹ (¹Coll. Biosci. Biotech., Chubu Univ., ²Dept. Microbiol., Fac. Med., Matsuyama Univ.)

P-197**Deletion of NADH-dependent dehydrogenase genes in *C. perfringens* to enhance hydrogen production**

○Keina Nakamura¹, Hirofumi Nariya², Ryuichi Moriyama¹, Shigeru Miyata¹ (¹Coll. Biosci. Biotech., Chubu Univ., ²Grad. Sch. Biosphere Sci., Hiroshima Univ.)

4. Genetics / Genomics / Biotechnology
-e. Others

P-198**Comparison of sequencing biases among library preparation kits for Illumina sequencer**

○Mitsuhiko Sato¹, Yoshitoshi Ogura¹, Keiji Nakamura¹, Ruriko Nishida¹, Yasuhiro Gotoh¹, Masahiro Hayashi², Junzo Hisatsune³, Motoyuki Sugai³, Takehiko Itoh⁴, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., ²GCMR, Gifu Univ., ³Dept. Bacteriol., Grad. Sch. Biomed and Heal Sci., Hiroshima Univ., ⁴Grad. Sch. Biosci. Biotech., Tokyo Tech.)

P-199 (WS4-8)**Nobel Mismatch Repair (MMR) System alternative to canonical MutS-dependent system in Actinobacteria**

○Norihiko Takemoto¹, Hiroki Iwai², Itaru Numarta³, Masayuki Su'etsugu³, Tohru Miyoshi-Akiyama¹ (¹Pathogenic Microbe Lab., NCGM, ²Dept. Infect. Dis., NCGM, ³Dept. Life Sci., Rikkyo Univ.)

P-200**Single Nucleotide Polymorphisms among *emm12* Group A Streptococcus from two Scarlet Fever Outbreaks**

○Masaki Shibasaki¹, Takayasu Watanabe², Shohei Kasugai¹, Ichiro Nakagawa³ (¹Dept. Implantol., Sch. Dent., Tokyo Medical and Dental Univ., ²Res. Center for Food Safety, Grad. Sch. Agr. Life Sci., Univ. Tokyo, ³Dept. Microbiol. Sch. Med., Kyoto Univ.)

P-201**Nucleoid structure and compaction induced by oxidative stress in *Staphylococcus aureus***

○Mais Maree, Yuri Ushijima, Ryosuke L. Ohniwa, Kazuya Morikawa (Bacteriol Fac Med Univ. Tsukuba)

P-202**Analysis on novel mutants of DnaB helicase in *E. coli***

○Chihiro Hayashi, Erika Miyazaki, Masahiro Nishimura, Kazutoshi Kasho, Shogo Ozaki, Tsutomu Katayama (Dept. Mol. Biology., Sch. Pharm. Sci., Kyushu Univ.)

5. Pathogenicity -a. Adhesins and colonization factors

P-203

Analyses of phylogeny and pathogenicity in enterohemorrhagic *Escherichia coli* O115

○Ken-ichi Lee¹, Sunao Iyoda¹, Yoshitoshi Ogura², Tetsuya Hayashi², Makoto Ohnishi¹, EHEC Working Group³ (¹Dept. Bacteriol. 1, Natl. Inst. Infect. Dis., ²Dept. Bacteriol., Sch. Med., Kyushu Univ., ³Local Inst. Publ. Health)

P-204

Norgestimate inhibits biofilm formation and suppresses β -lactam resistance of *Staphylococcus aureus*

○Yutaka Yoshii^{1,2}, Ken-ichi Okuda^{1,2}, Satomi Yamada¹, Mari Nagakura¹, Shinya Sugimoto^{1,2}, Tetsuo Nagano³, Takayoshi Okabe³, Hirotatsu Kojima³, Takeo Iwamoto⁴, Yoshimitsu Mizunoe^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Ctr. Biofilm Res. Tech., Jikei Univ. Sch. Med., ³Drug Discov. Initiative, Univ. Tokyo, ⁴Div. Mol. Cell Biol. Jikei Univ. Sch. Med.)

P-205

Mechanism of action of the small molecule inhibitor against *Staphylococcus aureus* biofilm formation

○Ken-ichi Okuda^{1,2}, Satomi Yamada¹, Yutaka Yoshii^{1,2}, Yoshimitsu Mizunoe^{1,2} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Ctr. Biofilm Res. Tech., Jikei Univ. Sch. Med.)

P-206

The culture supernatant of T84 cells may contain factors that inhibit *Aeromonas* biofilm formation

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P-207

Analysis of the distribution of alginate production in mucoidy *Pseudomonas aeruginosa*

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P-208

Peptidoglycan acetylation of *Campylobacter jejuni* is essential for colonization in chicken intestine

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P-209

Role of virulence factors detected in the biofilm in colonization of *Bordetella pertussis*

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P-210

The gene promoters of the fibronectin-binding proteins, FbpC and FbpD, of *Clostridium perfringens*

○Tomomi Kawai¹, Kaoru Komoto¹, Ayumu Yamasaki¹, Hirofumi Nariya², Tadashi Shimamoto², Yasuo Hitsumoto³, Seiichi Katayama³ (¹Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., ²Lab. Food Microbiol. Hyg., Grad. Sch. Biosphere Sci., Hiroshima Univ., ³Dept. Life Sci., Fac. Sci., Okayama Univ. Sci.)

P-211

Analysis of *Prevotella intermedia* proteinases that have T9SS_CTD signal

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

P-212

Redundancy of a secretory protein and cell wall-anchored proteins on biofilm formation in *S. aureus*

○Keigo Yonemoto^{1,2}, Akio Chiba^{1,3}, Shinya Sugimoto^{1,3}, Mitsuru Saito², Keishi Marumo^{2,3}, Yoshimitsu Mizunoe^{2,3} (¹Dept. Bacteriology, Jikei Univ. Sch. Medicine, ²Dept. Orthopaedic Surgery, Jikei Univ. Sch. Medicine, ³Jikei Center for Biofilm Research and Technology, Jikei Univ. Sch. Medicine)

P-213

Expression of glyceraldehyde-3-phosphate dehydrogenase on the *Clostridium perfringens* cell surface

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

P-214

The role of TolB in uropathogenic *E. coli* (UPEC) on infections on the bladder epithelial cells

○Hidetada Hirakawa¹, Kumiko Kurabayashi¹, Haruyoshi Tomita^{1,2} (¹Dept. Bacteriol., Sch. Med., Gunma Univ., ²Lab. Drug Resistance., Sch., Med., Gunma Univ.)

P-215

Comparative analysis of plasma-biofilm formation among MRSA clinical isolates

○Masakaze Hamada, Tetsuo Yamaguchi, Yoshikazu Ishii, Kazuhiro Tateda (Dept. Microbiol. Infect. Dis., Sch. Med., Toho Univ.)

P-216**Biological Activity of *Porphyromonas salivosa* ATCC 49407 Fimbriae**

○Keitaro Inaba, Haruka Sasaki, Takenori Sato, Kiyoko Watanabe, Nobushiro Hamada (Dept. Microbiol., Sch. Dent., Kanagawa Dental Univ.)

P-217 (JKIMS)**The role of the extracellular loops in *Acinetobacter baumannii* outer membrane protein A (AbOmpA) as a potential anti-virulence target**

○Minsang Shin, Kyeongmin Kim, Je-Chul Lee (Dept. Microbiology, Kyungpook National Univ. Sch. Medicine, Korea)

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

P-218 (JKIMS)**Filamin as a host factor of *vibrio vulnificus* RTX toxin**

○Rui Hong Guo¹, Ju Young Lim¹, ○Se Jin Jo¹, Joon Haeng Rhee², Young Ran Kim¹ (¹College of Pharmacy and Research Institute of Drug Development, Chonnam National Univ., ²Clinical Vaccine R&D Center and Dept. Microbiology, Chonnam National Univ. Medical Sch., Korea)

P-219**Molecular mechanism of COX-2 expression and PGE2 production by *Porphyromonas gingivalis* gingipains**

○Masaaki Nakayama^{1,2}, Mariko Naito³, Masato Tachibana¹, Koji Nakayama³, Naoya Ohara^{1,2} (¹Dept. Microbiol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ²ARCOCS, Okayama Univ. Dent. Sch., ³Dept. Microbiol. Oral Infect., Nagasaki Univ. Grad. Sch. Biomed. Sci.)

P-220 (WS4-6)***Bordetella* Bcr4 plays essential roles for type III secretion system**

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

P-221**Pneumococcal DNA-binding proteins released by autolysis induce inflammatory cytokine production**

○Kosuke Nagai¹, Hisanori Domon^{1,2}, Tomoki Maekawa^{1,2}, Masaya Yamaguchi³, Shigetada Kawabata³, Yutaka Terao^{1,2} (¹Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. & Dent. Sci., ²Res. Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. & Dent. Sci., ³Dept. Oral & Mol. Microbiol., Osaka Univ. Grad. Sch. Dent.)

P-222**Binding of *Clostridium perfringens* iota-toxin b to LSR**

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

P-223**Effect of *Clostridium perfringens* beta-toxin on intestinal epithelia**

○Jirou Yamasaki¹, Soshi Seike², Masaya Takehara¹, Keiko Kobayashi¹, Masahiro Nagahama¹ (¹Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ., ²Lab. Mol. Microbio. Sci., Fac. Pharm. Sci., Hiroshima International Univ.)

P-224**Effect of *Clostridium perfringens* delta-toxin on Caco-2 cells**

○Mao Yoshimura¹, Soshi Seike², Kazuaki Miyamoto¹, Masaya Takehara¹, Keiko Kobayashi¹, Masahiro Nagahama¹ (¹Dept. Microbiol., Fac. Pharm. Sci., Tokushima Bunri Univ., ²Lab. Mol. Microbio. Sci., Fac. Pharm. Sci., Hiroshima International Univ.)

P-225**Role of acid sphingomyelinase on *Clostridium perfringens* epsilon-toxin-induced cytotoxicity**

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

P-226***Clostridium perfringens* α-toxin-induced blockage of erythroid differentiation**

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

P-227**Characterization of Elastolytic Proteinase, Asorylase1034 from *Aspergillus oryzae* L-1034**

○Sayaka Aoki, Yumiko Komori, Yoshiyuki Okumura, Toshiaki Nikai (Dept. Microbiol., Fac. Pharm., Meijo Univ.)

P-228**Activation of toll-like receptor 2 accelerates granulopoiesis**

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

P-229**Multivalency effect of HA of type B botulinum toxin complex on epithelial barrier disruption**

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

P-230**Transcriptional response of host cells induced by SLS-producing *S. anginosus* subsp. *anginosus***

○Takuya Yamada¹, Atsushi Tabata^{1,2}, Toshifumi Tomoyasu^{1,2}, Hideaki Nagamune^{1,2} (¹Dept. Biol. Sci. & Tech., Life Syst., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch.)

P-231

Inhibition of LEE-negative EHEC produced SubAB cytotoxicity by steroids and PKC activators

○Kinnosuke Yahiro¹, Sayaka Nagasawa², Kohei Ogura³, Takeshi Shimuzu¹, Hiroyasu Tsutsuki⁴, Sunao Iyoda⁵, Makoto Ohnishi⁵, Masatoshi Noda¹ (¹Dept. Mol. Infect., Grad. Sch. Med., Chiba Univ., ²Dept. Legal Med., Grad. Sch. Med., Chiba Univ., ³Patho. Micro. Lab, Research Institute, NCGHM., ⁴Dept. Microbiol., Grad. Sch. Med., Kumamoto Univ., ⁵Dept. Bacteriology I, NIID)

P-232

Optimization of culture conditions for the type III effector production in *Bordetella pertussis*

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

P-233

Comparison of CD59-recognizability among chol-dependent cytolysins using DTT-treated erythrocytes

○Toshifumi Tomoyasu¹, Akiko Tominaga², Atsushi Tabata^{1,2}, Ayuko Takao³, Hisashi Okuni⁴, Nobuko Maeda³, Hideaki Nagamune^{1,2} (¹Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch., ²Dept. Biol. Sci. & Tech., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ³Dept. Oral Bacteriol., Tsurumi Univ., ⁴Health Sci. Res. Inst. East Japan Co. Ltd.)

P-234

Involvement of the Arg-566 residue of *Aeromonas sobria* serine protease in substrate specificity

○Hidetomo Kobayashi¹, Tadamune Otsubo², Fumiteru Teraoka², Kiyoshi Ikeda², Soshi Seike¹, Eizo Takahashi³, Keinosuke Okamoto³, Toru Yoshida⁴, Hideaki Tsuge⁴, Hiroyasu Yamanaka¹ (¹Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ., ²Lab. Synth. Org. Chem., Fac. Pharm. Sci., Hiroshima International Univ., ³Collab. Res. Ctr. Okayama Univ., ⁴Fac. Life Sci., Kyoto Sangyo Univ.)

P-235

Characterization of a cholesterol-dependent cytolysin with tandem N-terminal additional domains

○Risako Araki¹, Atsushi Tabata^{1,2}, Shu Murakami¹, Ayuko Takao³, Hisashi Okuni⁴, Yoshitoshi Ogura⁵, Toshifumi Tomoyasu^{1,2}, Tetsuya Hayashi⁵, Nobuko Maeda³, Hideaki Nagamune^{1,2} (¹Dept. Biol. Sci. & Tech., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch., ³Dept. Oral Bacteriol., Tsurumi Univ., ⁴Health Sci. Res. Inst. East Japan Co. Ltd., ⁵Dept. Bacteriol., Facult. Med. Sci., Kyushu Univ. Grad. Sch.)

P-236

Relation between the gene pattern of pore-forming CDCs and their cytotoxicity in *S. mitis*

○Haruka Hino¹, Tatsuya Okahata¹, Atsushi Tabata^{1,2}, Ayuko Takao³, Hisashi Okuni⁴, Yoshitoshi Ogura⁵, Toshifumi Tomoyasu^{1,2}, Tetsuya Hayashi⁵, Nobuko Maeda³, Hideaki Nagamune^{1,2} (¹Dept. Biol. Sci. & Tech., Inst. Tech. & Sci., Tokushima Univ. Grad. Sch., ²Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Social Sci., Tokushima Univ. Grad. Sch., ³Dept. Oral Bacteriol., Tsurumi Univ., ⁴Health Sci. Res. Inst. East Japan Co. Ltd., ⁵Dept. Bacteriol., Faculty Med. Sci., Kyushu Univ. Grad. Sch.)

P-237

***Bordetella* effector BopN is translocated into host cells via its N-terminal residues**

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

P-238

The analysis of cytotoxicity-inducing domain of RtxA1 toxin produced by *Vibrio vulnificus*

○Hiroshi Azuhata, Ayako Uchida, Nozomi Tanaka, Takahiro Tsuchiya, Katsushiro Miyamoto, Hiroshi Tsujibo (Dept. Microbiol., Osaka Univ. Pharm. Sci.)

P-239

The analysis of invasion mechanism of RtxA1 toxin into the cell produced by *Vibrio vulnificus*

○Yoko Udeno, Ai Kashiara, Ayako Uchida, Takahiro Tsuchiya, Katsushiro Miyamoto, Hiroshi Tsujibo (Dept. Microbiol., Osaka Univ. Pharm. Sci.)

P-240

Screening for the *Bordetella* dermonecrotic toxin receptor

○Shihono Teruya¹, Aya Fukui¹, Keiji Nakamura², Naoaki Shinzawa³, Yasuhiko Horiguchi¹ (¹Dept. Mol. Bact., RIMD, Osaka Univ., ²Dept. Bacteriol., Fac. Med. Sci., Kyusu Univ., ³Dept. Environ. Parasitol., Grad. Sch. Med., Tokyo Medical and Dental Univ.)

P-241 (WS10-3)

Translocation of mycoplasmal lipopeptide FSL-1 into cytosol for the NLRP3 inflammasome activation

○Ayumi Saeki¹, Akira Hasebe¹, Toshihiko Suzuki², Ken-ichiro Shibata¹ (¹Dept. Oral Mol Microbiol, Dent Med, Hokkaido Univ., ²Dept. Bacterial Pathogen, Infect Host Response, Tokyo Med Dent Univ.)

P-242**Functional *in vivo* analysis of Subtilase cytotoxin by means of murine infection model**

○Hiroyasu Tsutsuki¹, Tianli Zhang¹, Kinnosuke Yahiro², Katsuhiko Ono¹, Sunao Iyoda³, Kazuko Seto⁴, Makoto Ohnishi³, Masatoshi Noda², Takaaki Akaike⁵, Tomohiro Sawa¹ (¹Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ²Dept. Mol. Infect., Grad. Sch. Med., Chiba Univ., ³Dept. Bacteriol., Natl. Inst. Infect. Dis., ⁴QAU, Div. Planning, Osaka Inst. Publ. Health, ⁵Dept. Environ. Health Sci., Mol. Toxicol., Tohoku Univ.)

P-243***Pseudomonas* protein exalts the risk of pancreatic fistula after surgery by activating trypsinogen**

○Ryota Itoh¹, Kanehumi Yamashita², Tadaomi Takenawa³, Yuichi Yamashita², Kenji Hiromatsu¹ (¹Dept. Microbiol. Immunol., Sch. Med., Fukuoka Univ., ²Dept. Gastroenterol. Surg., Sch. Med., Fukuoka Univ., ³ICMS, Grad. Sch. Med., Kobe Univ.)

P-244**LPS preconditioning drastically rescues mice from both gram-negative and positive lethal septicemia**

○Manabu Kinoshita¹, Hiromi Miyazaki², Masahiro Nakashima¹, Hiroyuki Nakashima¹, Takuya Ishikiriyama¹, Shouichiro Kato^{1,3}, Nariyoshi Shinomiya⁴, Shuhji Seki¹ (¹Dept. Immunol. Microbiol., National Defense Medical College, ²Dev. Traumatology, National Defense Medical College Research Institut, ³Dept. Internal Medicine., National Defense Medical College, ⁴Dept. Integrative Physiology and Bio-Nano Medicine., National Defense Medical College)

P-245 (WS4-4)**Regulation of collagenase expression by HapR in *Vibrio alginolyticus***

○Takehiko Mima¹, Yutaro Nishikawa¹, Yusuke Nakata², Naoya Hatano³, Kazuyoshi Gotoh¹, Yumiko Yamamoto¹, Kenji Yokota⁴, Osamu Matsushita¹ (¹Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ²Okayama Univ. Med. Sch., ³Kobe Univ. Grad. Sch. Med., ⁴Okayama Univ. Grad. Sch. Health Sci.)

P-246**Properties of *ctx*-positive *Vibrio cholerae* NAG strains isolated from environmental water in Kolkata**

○Eizo Takahashi¹, Daichi Morita¹, Goutam Chowdhury², Asish K. Mukhopadhyay², Tamaki Mizuno³, Shin-ichi Miyoshi³, Keinosuke Okamoto¹ (¹Collabo. Res. Ctr. Okayama Univ. India, ²Div. Bacteriol. NICED, ³Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ.)

P-247**Functional analysis of *Bordetella pertussis* autotransporter Vag8**

○Naoki Onoda¹, Yukihiro Hiramatsu¹, Shihono Teruya¹, Koichiro Suzuki², Yasuhiko Horiguchi¹ (¹Dept. Mol. Bacteriol., RIMD, Osaka Univ., ²BIKEN)

P-248**Functional characterization of two T3SS2-related proteins, VgpA and VgpB, of *Vibrio parahaemolyticus***

○Sarunporn Tandhavanant¹, Shigeaki Matsuda¹, Hirotaka Hiyoshi^{1,2}, Tetsuya Iida¹, Toshio Kodama¹ (¹Dept. Bact. Infect., RIMD, Osaka Univ., ²Dept. Med. Microbiol. Immunol., Sch. Med., UC Davis)

P-249**Characterization of the growth influencing factor in *C. jejuni***

○Tomoya Yamamoto, Tomoko Mizote (Dept. Human Nutrition, Yamaguchi Pref. Univ.)

P-250 (WS4-7)**Analysis of *Francisella* effector IgLC**

○Takashi Shimizu¹, Kenta Watanabe¹, Akihiko Uda³, Masahisa Watarai² (¹Lab. Vet. Pub. Hlth., Dept. Jnt. Fac. Vet. Med. Yamaguchi Univ., ²Dept. Prev. Pathol., Grad. Sch. Vet. Sci., Yamaguchi Univ., ³Dept. Vet. Sci., NIID)

P-251**Functional analysis of the heavy chain in variant botulinum neurotoxin type A**

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

P-252**Novel endothelial cell growth-related protein produced by *Bartonella henselae***

○Kentaro Tsukamoto¹, Toshiki Kameyama², Hisateru Yamaguchi³, Masahiro Suzuki¹, Yasuhiko Horiguchi⁴, Yohei Doi¹ (¹Dept. Microbiol., Fujita Health Univ. Sch. Med., ²Div. Gene Exp. Mech., ICMS, Fujita Health Univ., ³Div. Biomed. Poly. Sci., ICMS, Fujita Health Univ., ⁴Dept. Mol. Bact., RIMD, Osaka Univ.)

P-253**Naturally occurring a loss of a plasmid from *M. ulcerans* subsp. *shinshuense* makes it non-pathogenic**

○Yoshihiko Hoshino¹, Kazue Nakanaga¹, Yoshitoshi Ogura², Atsushi Toyoda³, Mitsunori Yoshida¹, Hanako Fukano¹, Yuko Kazumi⁴, Satoshi Mitarai⁴, Manabu Ato¹, Tetsuya Hayashi² (¹Dept. Mycobacteriol., Natl. Inst. Infect. Dis., ²Dept. Bacteriol., Fac. Med., Kyushu Univ., ³Cetr. Infom. Bio., Natl. Inst. Genet., ⁴Res. Inst. Tuberc. JATA)

P-254**Identification of *Salmonella* effector proteins related to T3SS-1 independent inflammation**

Shigeki Matsuda, Takeshi Haneda, Nobuhiko Okada (Dept. Microbiol. Sch. Pharm. Kitasato Univ.)

P-255 (WS10-1)**Chloroplastic proteins are targets of the RipG effectors of *Ralstonia solanacearum***

Amol Dahal¹, Akinori Kiba², Yasufumi Hikichi², ○Kouhei Ohnishi³ (¹UGAS, Ehime Univ., ²Lab. Plant Pathol & Biotechnol., Fac, Agric., Kochi Univ., ³RIMG, Kochi Univ.)

P-256 (WS4-5)**Analysis of novel *Shigella* effector mechanism that regulate host cell death**

○Hiroshi Ashida, Toshihiko Suzuki (Dept. Bacterial Infection and Host Response, Tokyo Medical and Dental Univ.)

P-257**Structure analysis of bacterial collagenases to develop therapeutics to induce osteogenesis**

○Osamu Matsushita¹, Kentaro Uchida², Takehiko Mima¹, Kazuyoshi Gotoh¹, Yumiko Yamamoto¹, Kenji Yokota³, Ryan Bauer⁴, Masashi Takaso², Joshua Sakon⁴ (¹Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ²Dept. Orthop. Surg., Kitasato Univ. Sch. Med., ³Okayama Univ. Grad. Sch. Health Sci., ⁴Dept. Chem. Biochem., Univ. Arkansas, USA)

P-258**Processing enzyme involved in *Aggregatibacter actinomycetemcomitans*-CDT holotoxin maturation**

○Keiko Tsuruda^{1,2}, Masaru Ohara³, Motoyuki Sugai¹ (¹Dept. Bact., Grad. Sch. Biomed. Helth Sci. Hiroshima Univ., ²Dept. Maxillo. Func. Dev., Grad. Sch. Biomed. Health Sci. Hiroshima Univ., ³Hiroshima Univ. Hospital)

P-259**Analysis of Low Molecular Weight Compounds Produced by *Bordetella* Species**

○Taisei Ito¹, Masato Iwatsuki², Keita Odanaka¹, Mineo Watanabe^{1,3} (¹Grad. Sch. Infect. Ctl. Sci., Kitasato Univ., ²Res. Ctr. Trop. Dis., Kitasato Inst. Life Sci., Kitasato Univ., ³Lab. Med. Microbiol., Kitasato Inst. Life Sci., Kitasato Univ.)

5. Pathogenicity -c. Cell invasion and intracellular parasitism

P-260**The effects of galectins on adhesin to and invasion of Ca9-22 cells by *Porphyromonas gingivalis***

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

P-261***Chlamydia trachomatis* prompts the activation of host cell caspase-3 at late times during infection**

○Junji Matsuo¹, Torahiko Okubo¹, Shinji Nakamura², Hiroyuki Yamaguchi¹ (¹Dept. Med. Lab. Sci., Fac. Health Sci., Hokkaido Univ., ²Lab. Morphol. Image. Anal., Res. Sup. Cent., Juntendo Univ. Grad. Sch. Med.)

P-262**Invasion of gingival epithelial cells by *Porphyromonas gulae* with different types of fimbriae**

○Hiroaki Inaba¹, Ryota Nomura², Kazuhiko Nakano², Michiyo Nakano¹ (¹Dept. Pediatr Dent., Okayama Univ., Grad. Sch. Med. Dent. Pharm. Sci., ²Dept. Pediatr Dent., Grad. Sch. Dent., Osaka Univ.)

P-263**Comparative analyses of OMP expression profiles between meningococci from carriers and patients**

○Hideyuki Takahashi¹, Shigeyuki Yokoyama², Tatsuo Yanagisawa² (¹Dept. Bacteriol 1, Nat Inst Infect Dis, ²RIKEN Structural Biology Laboratory, RIKEN)

P-264***Campylobacter jejuni* Utilized Autophagy for Survival and Invasion of the Bacteria in the Host Cells**

○Shiho Fukushima, Takaaki Shimohata, Sho Hatayama, Junko Kido, Aya Tentaku, Yuna Kanda, Takashi Uebanso, Kazuaki Mawatari, Akira Takahashi (Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch.)

P-265**ER stress induced by *Campylobacter jejuni*-Infection Suppresses the Bacterial Invasion**

○Aya Tentaku, Takaaki Shimohata, Sho Hatayama, Anh Nguyen Quoc, Junko Kido, Shiho Fukushima, Takashi Uebanso, Kazuaki Mawatari, Akira Takahashi (Dept. Preventive Environment and Nutrition, Inst. Health Biosciences, Univ. Tokushima Grad. Sch.)

P-266***P. aeruginosa* dnaK gene is associated with bacterial translocation across Caco-2 cell barrier**

○Masashi Yasuda, Syouya Nagata, Chigusa Suezawa, Jun Okuda (Dept. Med. Tech., Kagawa Pref. Univ. Health Sci.)

P-267 (WS10-2)**Analysis of Group A *Streptococcus* NAD-glycohydrolase as a regulator for uptake into HeLa cells**

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

P-268**The role of FABP4 on the intracellular growth of *Chlamydia pneumoniae* in murine adipocytes**

○Nirwana Walenna^{1,2}, Yusuke Kurihara¹, Bin Chou¹, Kazunari Ishii¹, Ryota Itoh¹, Toshinori Soejima¹, Kenji Hiromatsu¹ (¹Dept. Microbiol. Immunol., Sch. Med., Fukuoka Univ., ²Dept. Bacteriol., Grad. Sch. Med. Sci., Kyushu Univ.)

P-269 (WS10-4)**FABP4 is secreted from adipocytes by Chlamydia pneumoniae infection**

○Yusuke Kurihara¹, Nirwana Walenna^{1,2}, Bin Chou¹, Kazunari Ishii¹, Ryota Itoh¹, Toshinori Soejima¹, Kenji Hiromatsu¹ (¹Dept. Microbiol. Immunol., Sch. Med., Fukuoka Univ., ²Dept. Bacteriol, Grad. Sch. Med. Sci., Kyushu Univ.)

P-270**NLRX1 inhibits the Group A Streptococcus invasion into host epithelial cells**

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

P-271**Latent infection and intracellular parasitism in bone marrow by *Helicobacteri cinaedi***

○Tetsuro Matsunaga¹, Akira Nishimura¹, Masanobu Morita¹, Shigemoto Fujii¹, Tomoaki Ida¹, Tomohiro Sawa², Yoshiaki Kawamura³, Takaaki Akaike¹ (¹Dept. Environ. Health Sci. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Dept. Microbiol., Kumamoto Univ. Grad. Sch. Med. Sci., ³Dept. Microbiol., Sch. Pharmacy., Aichi-Gakuin Univ.)

P-272**Response of epithelial cells infected by *Treponema denticola***

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

P-273**A study on intracellular survival and dynamics of *Helicobacter cinaedi* within human macrophages**

○Tetsuya Furukawa¹, Takuya Onouchi¹, Junko Tomida², Yasuyuki Imai¹, Yoshiaki Kawamura², Masaki Miyake¹ (¹Lab. Microbiol. Immunol., Sch. Pharm. Sci., Univ. Shizuoka, ²Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ.)

P-274**Induction of cytotoxicity and autophagy of *Streptococcus suis* in human or porcine cells**

○Kasumi Kuroki¹, Takashi Nozawa², Takayasu Watanabe¹, Hyunjung Kim¹, Eriko Suzuki¹, Ichiro Nakagawa², Tsutomu Sekizaki¹ (¹Res. Center for Food Safety, Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

P-275**Molecular Mechanism of *Streptococcus pneumoniae*-targeting Selective Autophagy**

○Michinaga Ogawa¹, Ryuta Matsuda², Mikado Tomokiyo³, Miyo Murai², Makoto Ohnishi¹ (¹Dept. Bacteriol I, Nat. Inst. Infect. Dis., ²Div. Lab. Sci. Dept. Health Sci., Saitama Pref. Univ., ³Sch. Vet. Med., Azabu Univ.)

P-276**Analysis of *rpoZ* gene related to intracellular survival of *Mycobacterium smegmatis* J15cs**

○Midori Ogawa¹, Naoya Ohara², Kazumasa Fukuda¹, Mitsumasa Saito¹ (¹Dept. Microbiol., Sch. Med., UOEH, ²Dept. Oral Microbiol. Grad. Sch. Med., Den. Pharmac. Sci. Okayama Univ.)

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

P-277**Pathogenic *Acinetobacter baumannii* inhibits the formation of neutrophil extracellular traps**

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

P-278 (WS10-7)***ArcA* contributes to development of *Streptococcus pyogenes* skin lesion**

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

P-279**Role of pneumococcal choline binding proteins CbpJ and CbpL in development of pneumonia**

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

P-280**Role of pneumococcal β -helix protein PfbA in the evasion of phagocytosis**

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

P-281**Regulation of autophagy by reactive sulfide species and its effect on bacterial growth in host cells**

○Shigemoto Fujii¹, Tetsuro Matsunaga¹, Tomoaki Ida¹, Akira Nishimura¹, Katsuhiko Ono², Tomohiro Sawa², Takaaki Akaike¹ (¹Dept. Environ. Health Sci. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ.)

P-282**Cooperative roles of NO-metabolizing enzymes in EHEC against nitrosative stress**

○Takeshi Shimizu¹, Akio Matsumoto², Masatoshi Noda¹ (¹Depart. Mol. Infectiol., Grad. Sch. Med., Chiba Univ., ²Depart. Pharmacol., Grad. Sch. Med., Chiba Univ.)

P-283**Activation of an endogenous platelet clearance mechanism by *Staphylococcus aureus* alpha-toxin**

○Nao Ando^{1,2}, Yohei Kohno^{1,2}, Josh Sun², Victor Nizet², Satoshi Uchiyama² (¹Niigata Univ. Sch. Med, ²Dept. Pediatrics. Sch. Med. Univ. of Cal. San Diego)

P-284 (WS10-8)**Pathogenic mycobacteria infect human erythrocytes in vitro**

○Yukiko Nishiuchi¹, Yoshitaka Tateishi², Yuriko Ozeki², Takehiro Yamaguchi³, Sohkiichi Matsumoto² (¹Inst. Toneyama Tuberculosis Res., Sch. Med., Osaka City Univ., ²Dept. Bacterial., Grad. Sch. Med. Dent. Sci., Niigata Univ., ³Dept. Pharmacol., Grad. Sch. Med., Osaka City Univ.)

P-285**The capsular polysaccharide is required for the immune escape of fungal pathogen *Cryptococcus gattii***

○Yoshiko Otani^{1,2}, Keigo Ueno¹, Nao Yanagihara^{1,2}, Makoto Urai³, Kiminori Shimizu², Yoshitsugu Miyazaki¹, Yuki Kinjo¹ (¹Dept. Chemother. Myco., NIID, ²Dept. Biolog. Sci. Fac. Indust. Sci. Techol., Tokyo Univ. Sci., ³Dept. Chem. Life Sci. Agricul. Fac. Life Sci., Tokyo Univ. Agricul.)

P-286**HDL suppresses tumor necrosis factor alpha production by mycobacteria-infected human macrophages**

○Yuriko Ozeki¹, Manabu Inoue², Mamiko Niki³, Mayuko Oka⁴, Sohkiichi Matsumoto¹ (¹Dept. Bacteriol. Niigata Univ. Grad. Sch. Med. and Dent. Sci., ²Kyokuto Pharm. Ind. CO. LTD., ³Dept. Bacteriol. Osaka-City Univ. Grad. Sch. Med., ⁴Dept. Food Hyg. Environ. Grad. Sch. Life Environ. Sci. Kyoto Prefec. Univ.)

P-287**The physiological analysis of *Shigella* ubiquitin ligase IpaH4.5**

○Ryota Otsubo, Hitomi Mimuro (Dept. Infectious Microbiol., RIMD. Osaka Univ.)

P-288**Visualizing capsule positive and negative *Streptococcus suis* in infective endocarditis**

○Eriko Suzuki, Takayasu Watanabe, Kasumi Kuroki, Tsutomu Sekizaki (Res. Center for Food Safety, Grad. Sch. Agr. Life Sci., Univ. Tokyo)

P-289 (JKIMS)***Mycobacterium tuberculosis* AcpM inhibits macrophage apoptotic cell death through modulation of ROS/JNK pathway**

○Seungwha Paik^{1,2,3}, Seunga Choi^{1,2}, Kang-In Lee^{1,2}, Yong Woo Back^{1,2,3}, Yeo-Jin Son¹, Eun-Kyeong Jo^{1,2,3}, Hwa-Jung Kim^{1,2,3} (¹Dept. Microbiology, Chungnam National Univ. Sch. Medicine, Korea, ²Dept. Medical Science, Chungnam National Univ. Sch. Medicine, Korea, ³Infection Control Convergence Research Center, Chungnam National Univ., Korea)

P-290 (JKIMS)**Sirtuin 3 contributes to innate host defense against mycobacterial infection through peroxisome proliferator-activated receptor-α**

○Yi Sak Kim^{1,2,3}, Tae Sung Kim^{1,2,3}, Hye-Mi Lee^{1,2,3}, Eun-Kyeong Jo^{1,2,3} (¹Dept. Microbiology, Chungnam National Univ. Sch. Medicine, ²Dept. Medical Science, Chungnam National Univ. Sch. Medicine, ³Infection Control Convergence Research Center, Chungnam National Univ.)

P-291 (JKIMS)**Three TonB System Need for Full-blown Tissue Invasiveness by Regulating Flagellum Expression in *Vibrio vulnificus***

○Kwangjoon Jeong¹, Tra-My Duong-Nu¹, Shee Eun Lee², Joon Haeng Rhee¹ (¹Dept. Microbiology, Chonnam National Univ. Medical School, Gwangju, Korea, ²Dept. Pharmacology and Dental Therapeutics, Sch. Dentistry, Chonnam National Univ., Korea)

5. Pathogenicity -e. Infection models

P-292**Gastrointestinal colonization of *Candida albicans* in mice treated with antibiotics and prednisolone**

○Michiyo Kobayashi¹, Emiko Isogai² (¹Dept. Oral Sci., Ohu Univ. Sch., Dent., ²Dept. Animal Microbiol., Sch. Agri., Tohoku Univ.)

P-293**Drug sensitivity and experimental therapeutics for multidrug-resistant *Acinetobacter baumannii* (MDRA)**

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

P-294 (WS10-5)**Development of a rapid and convenient method for quantification of *Citrobacter rodentium***

○Yuki Hanamura, Keita Takahashi, Masaru Matsunishi, Kohei Kasai, Shiori Watanabe, Yusuke Mori, Nozomi Orito, Tsuyoshi Sugiyama, Naoki Inoue (Gifu Pharmaceutical Univ., Dept. Microbiol. Immunol.)

P-295**Systemic distribution of TSST-1 investigated by vaginocervical infection of mouse model**

○Krisana Asano^{1,2}, Akio Nakane^{1,2} (¹Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Dept. Biopolymer Health Sci., Hirosaki Univ. Grad. Sch. Med.)

P-296**Establishment of an animal model for evaluating oral anti-dermatophytosis drugs using silkworms**

○Masaki Ishii^{1,2}, Yasuhiko Matsumoto¹, Tsuyoshi Yamada¹, Shigeru Abe¹, Kazuhisa Sekimizu^{1,2} (¹Ins. Med. Mycol., Teikyo Univ., ²Genome Pharm. Ins.)

P-297**Effects of *Mycoplasma pneumoniae* antigen sensitization on Th2 chemokine responses**

○Satoshi Kurata¹, Takako Osaki¹, Hideo Yonezawa¹, Tomoko Hanawa¹, Haruhiko Taguchi², Shigeru Kamiya¹ (¹Dept. Infect. Dis., Kyorin Univ., Sch. Med., ²Dept. Immunol., Faculty of Health Sci., Kyorin Univ.)

P-298**CRAMP deficient mice have more invasive tail skin ulcers after *Mycobacterium marinum* infection**

○Emi Sato^{1,2}, Kazunari Ishii¹, Bin Chou¹, Masaki Fujita³, Kenji Hiromatsu¹ (¹Dept. Microbiol. Immunol., Sch. Med., Fukuoka Univ., ²Dept. Dermatol., Sch. Med., Fukuoka Univ., ³Dept. Respirato. Med., Sch. Med., Fukuoka Univ.)

P-299**Analysis of the adherence of *Clostridium perfringens* spores to intestinal epithelial cells Caco-2**

○Hideyo Sakanoue¹, Takashi Nakano², Kouichi Sano², Mayo Yasugi¹, Chie Monma³, Masami Miyake¹ (¹Lab. Vet. Public Health, Div. Vet. Sci., Osaka Pref. Univ., ²Dept. Microbiol. Infect. Control, Osaka Med. College., ³Tokyo Metro. Inst. Public Health.)

P-300**The exploration of virulence factor on emerging infections pathogen, *Borrelia miyamotoi***

○Ranna Nakao¹, Yukie Itoh¹, Hiroki Kawabata², Tetsuya Hayashi³, Yoshitoshi Ogura³, Ryusei Kuwata¹, Hiroshi Shimoda¹, Ken Maeda¹, Ai Takano¹ (¹Joint Faculty of Vet. Med., Yamaguchi Univ., ²Bacteriology-I, Nat. Inst. Infect. Dis., ³Dept. Bacteriol, Kyushu Univ.)

P-301**The pathogenicity analysis of clinical isolate *Acinetobacter baumannii* with lungs infection mouse**

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

P-302**Lactic acid bacteria regulate Foxp3⁺ Treg cells for prevent periodontal diseases**

○Ryoki Kobayashi, Tomoko Kurita-Ochiai (Dept. Micobiol. Immunol., Sch. Dent. at Matsudo, Nihon Univ.)

5. Pathogenicity -f. Others

P-303**IL-1 β production by dendritic cells and macrophages stimulated with *Candida albicans***

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

P-304***Staphylococcus aureus* aureus protein A enhances osteoclastogenesis and bone resorption**

○Asana Kamohara^{1,2}, Xianghe Xu¹, Makoto Shiraki^{1,3}, Hiroto Hirata^{1,3}, Sakuo Yamada⁴, Takeo Shoubuike¹, Hiroshi Miyamoto¹, Akiko Kukita¹ (¹Dept. Microbiol. Faculty of Med, Saga Univ., ²Dept. Oral & Maxillofacial Surger. Faculty of Med. Saga Univ., ³Dept. Orthopedic Surgery. Faculty of Med. Saga Univ., ⁴Dept. Med Technology. Clinical Nutrition, Kawasaki Univ. of Medical Welfare)

P-305***Acinetobacter baumannii* induced the inflammatory response of mast cells via adhesion to CD32**

○Takane Kikuchi-Ueda¹, Tsuneyuki Ubagai¹, Go Kamoshida¹, Ryuichi Nakano², Akiyo Nakano², Shigeru Tansho-Nagakawa¹, Satoshi Nishida¹, Yasuo Ono¹ (¹Dept. Microbiol. Immunol., Sch. Med., Teikyo Univ., ²Dept. Microbiol. Infect. Dis., Nara Med., Univ.)

P-306**Glycosyltransferase-encoding genes involved in LPS synthesis in *Porphyromonas gingivalis***

○Mikio Shoji, Keiko Sato, Hideharu Yukitake, Mariko Naito, Koji Nakayama (Dep. Microbiol. Oral Infect., Grad. Sch. Bio. Sci., Nagasaki Univ.)

P-307**Analysis of the mechanism of sporulation regulation by protein complex preserved in *Clostridium***

○Naoki Muto, Nozomu Obana, Nobuhiko Nomura (Sch. Life Environ. Sci., Univ. Tsukuba)

P-308 (WS10-6)**Metabolomic analysis of epithelial cellular metabolism during *Vibrio parahaemolyticus* infection**

○Anh Nguyen Quoc, Takaaki Shimohata, Sho Hatayama, Aya Tentaku, Junko Kido, Takashi Uebanso, Kazuaki Mawatari, Akira Takahashi (Dept. Preventive Environment and Nutrition, Inst. Health Biosciences, Univ. Tokushima Grad. Sch.)

P-309**Comparison of two novel *Edwardsiella* strains isolated from Olive Flounder and Red Sea Bream**

○Hidehiro Sugiura¹, Shinya Monno¹, Syun-ichirou Oshima², Masayuki Imajoh¹ (¹Lab. Fish Dis., Kochi Univ., ²Grad. Sch., Kuroshio Sci., Kochi Univ.)

P-310**Omega-3 fatty acid downregulated NLRP3 inflammasome in gram-negative bacteria-invaded macrophages**

○Toshinori Okinaga, Wataru Ariyoshi, Tatsuji Nishihara (Div. Infect. Mol. Biol. Kyushu Dent. Univ.)

P-311**Ability of aerotolerance among *Campylobacter jejuni* strains isolated from different origins**

○Takako Taniguchi¹, Maung latt Khin², Naoaki Misawa²
(¹CADIC., Univ. Miyazaki, ²Dept. Vet. Med., Univ. Miyazaki)

P-312**Influences of the butyric acid produced by periodontopathic bacteria on ameloblastoma**

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

P-313***V. parahaemolyticus* pathogenicity through T3SS2 under iron-limiting conditions**

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

P-314***P. gingivalis* promotes PAFR expression and adhesion of *S. pneumoniae* to human lung epithelial cells**

○Noriaki Kamio¹, Mayumi Hayata^{1,2}, Norihisa Watanabe^{1,3},
Keiko Noudomi¹, Muneaki Tamura¹, Kenichi Imai¹ (¹Dept.
Microbiol., Sch. Dent., Nihon Univ., ²Dept. Dysphagia. Rehabil.,
Sch. Dent., Nihon Univ., ³Dept. Periodontol., Sch. Dent., Nihon
Univ.)

P-315**Innate immune response attenuation by LpxR during enterohemorrhagic *Escherichia coli* infection**

Rikako Ogawa¹, ○Hilo Yen¹, Kiyoshi Kawasaki², Toru Tobe¹
(¹Dept. Biomed. Info., Grad. Sch. Med., Osaka Univ., ²Faculty of
Pharmaceutical Science, Doshisha Women's College)

P-316**Functional characterization of drug responsive protein 35kDa (Drp35) in *Staphylococcus aureus***

○Vishal Gor, Jake Montecillo, Veronica Medrano Romero,
Kazuya Morikawa (Bacteriol. Fac. Med. Univ. Tsukuba)

P-317***P. gingivalis* induces production of inflammatory cytokines in various respiratory epithelial cells**

○Mayumi Hayata^{1,2}, Muneaki Tamura², Noriaki Kamio²,
Hajime Tanaka², Norihisa Watanabe^{2,3}, Chihiro Miya^{2,4},
Kouichirou Ueda¹, Kenichi Imai² (¹Dept. Dysphasia. Rehabil.,
Sch. Dent., Nihon Univ., ²Dept. Microbiol., Sch. Dent., Nihon
Univ., ³Dept. Periodontol., Sch. Dent., Nihon Univ., ⁴Dept. Oral
Maxillofac Surg., Sch. Dent., Nihon Univ.)

P-318**What is a major pathogenic factor of *Filobacterium rodentium* infectious disease?**

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

P-319**Analysis of caries-related gene expression levels of mutans group streptococci**

○Noriko Kuwahara, Masanori Saito, Osamu Tsuzukibashi,
Ryoki Kobayashi, Tomoko Ochiai (Dept. Microbiol. Immunol.,
Nihon Univ., Sch. Dent. at Matsudo)

6. Host defense -a. Innate immunity

P-320**Effects of peptidoglycan from *Staphylococcus aureus* on Th1 cell development mediated by mast cells**

○Katsuhiko Matsui, Reiko Ikeda (Dept. Microbial. Sci. Host
Defence, Meiji Pharm. Univ.)

P-321**Bcl11b-independent CD5⁺NK1.1⁺ γδ T cells participate in early protection against *Listeria* infection**

○Shinya Hatano, Tesshin Murakami, Naoto Noguchi, Hisakata
Yamada, Yasunobu Yoshikai (Div. Host Defense, Med. Inst.
Bioreg., Kyushu Univ.)

P-322**IAP family members are involved in inflammasome activation in response to bacterial infection**

○Shiho Suzuki¹, Toshihiko Suzuki¹, Hitomi Mimuro², Chihiro
Sasakawa^{3,4} (¹Dept. Bacterial Infection and Host Response,
Tokyo Medical and Dental Univ., ²Dept. Infection Microbiology,
Research Institute for Microbial Diseases, Osaka Univ., ³Medical
Mycology Research Center, Chiba Univ., ⁴Nippon Institute for
Biological Science)

P-323**Neutrophil-mediated fungistatic effect for highly virulent fungal pathogen *Cryptococcus gattii***

○Keigo Ueno¹, Nao Yanagihara^{1,2}, Yoshiko Otani^{1,2}, Kimonori
Shimizu², Yoshitsugu Miyazaki¹, Yuki Kinjo¹ (¹Dept. Chemother.
Myco., NIID, ²Dept. Biolog. Sci. Fac. Indust. Sci. Techol. Tokyo
Univ. Sci.)

P-324**Structural analysis of *E. coli* lipid A formed by mutation and introduction of acyltransferase genes**

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

P-325**N-acetyl-L-cysteine-based persulfide donors ameliorate LPS-mediated endotoxin shock in mice**

○Tianli Zhang¹, Hiroyasu Tsutsuki¹, Katsuhiko Ono¹, Takaaki
Akaike², Tomohiro Sawa¹ (¹Dept. Microbiology, Grad. Sch.
Medical Science, Kumamoto Univ., Japan, ²Dept.
Environmental Health Sciences and Molecular Toxicology, Grad.
Sch. Medical Science, Tohoku Univ., Japan)

P-326**Development of novel therapy on colistin-resistant bacteria**

○Aki Hirabayashi¹, Keigo Shibayama², Masato Suzuki¹ (¹AMR Center, Nat. Inst. Infect. Dis., ²Dept. Bacteriol. II, Nat. Inst. Infect. Dis.)

P-327 (WS5-7)**Sulfur containing novel biological response modifiers that enhance bacterial killing by macrophages**

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

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

P-328**Combination effects of anti-LTA and anti-PGN mAbs or antibiotics on MRSA-induced murine bacteremia**

○Hiroyoshi Ohsawa^{1,2}, Tadashi Baba², Jumpei Enami¹, Keiichi Hiramatsu² (¹R&D Center, Zenyaku Kogyo Co., ²Res. Center. Infec. Control Sci., Grad. Sch. Med., Juntendo Univ.)

P-329**IL-21 induces short-lived effector CD8+ T cells after BCG infection in mice**

○Naoto Noguchi¹, Risa Nakamura^{1,2}, Shinya Hatano¹, Hisakata Yamada¹, Xun Sun³, Naoya Ohara⁴, Yasunobu Yoshikai¹ (¹Div. Host Defense, Med. Inst. Bioreg., Kyushu Univ., ²Dept. Parasitol., Inst. Tropic. Med., Nagasaki Univ., ³Dept. Immunol., China Medical Univ., ⁴Dept. Oral Microbiol., Okayama Univ. Grad. Sch. Med. Dent Pharm. Sci.)

P-330**Construction of a novel vaccine strain *Bordetella pertussis* Tohama co-producing Fim2 and Fim3**

○Nao Otsuka, Yukihiro Hiramatsu, Keigo Shibayama, Kazunari Kamachi (Dept. Bacteriol. II, Nat. Inst. Infect. Dis.)

P-331**Evaluation of the tuberculosis booster vaccine composed of MDP1 and G9.1 in cynomolgus monkeys**

○Jun-ichi Maeyama¹, Daisuke Hayashi², Toshiko Yamamoto², Tetsu Mukai¹, Sachi Okabayashi¹, Toshiki Tamura¹, Toshio Yamazaki¹, Yuriko Ozeki³, Sohkiichi Matsumoto³, Saburo Yamamoto² (¹Natl. Inst. Infect. Dis., ²Japan BCG Laboratory, ³Sch. Med., Niigata Univ.)

P-332 (WS5-8)**M cell-targeting enhances immune responses induced by nuclease-producing *Lactococcus lactis***

○Keita Takahashi, Ayumu Yano, Shiori Watanabe, Yusuke Mori, Tsuyoshi Sugiyama, Naoki Inoue (Dept. Microbiol. Immunol., Gifu Pharm. Univ.)

P-333**Development of DNA vaccine for *Clostridium difficile* infection**

○Mitsutoshi Senoh, Haru Kato, Masaaki Iwaki, Keigo Shibayama (Dept. Bacteriol. II, Natl. Inst. Infect. Dis.)

P-334**Difference in O4 antibody protection against O5 antigen positive and negative of *Salmonella***

Marta Elsheimer Matulova, Yumiko Masukagami, Kazumasa Shiraiwa, Sayaka Nishikawa, Yohsuke Ogawa, Yoshihiro Shimoji, ○Masahiro Eguchi (Natl. Inst. Anim. Health)

P-335 (JKIMS)**Longevity of antibody and T cell responses against outer membrane antigens of *Orientia tsutsugamushi* in scrub typhus patients**

○Nam-Hyuk Cho^{1,2}, Na-Young Ha^{1,2}, Myung-Sik Choi^{1,2} (¹Dept. Microbiology and Immunology, Seoul National Univ. College of Medicine, Korea, ²Dept. Biomedical Sciences, Seoul National Univ. College of Medicine, Korea)

6. Host defense -c. Others

P-336 (JKIMS)**Immunomodulatory effects of *Dendropanax morbifera* leaves**

○Jung Up Park, Bok Yun Kang, ○Young Ran Kim (College of Pharmacy and Research Institute of Drug Development, Chonnam National Univ., Korea)

P-337**The intracellular microbial sensor NLRP4 directs Rho-actin signaling to induce autophagy**

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

P-338**Alteration of *TREM1* gene expression in human neutrophils stimulated by PAMPs**

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

7. Antimicrobial agents and resistance

-a. Antimicrobial agents

P-339**In vitro evaluation of minimum inhibitory concentration of several antibiotics against *R. japonica***

○Masaaki Satoh, Motohiko Ogawa, Shuji Ando, Masayuki Saijo (Virology I., National Institute of Infectious Disease)

P-340**Antifungal susceptibility testing for *Malassezia* yeasts with a broth microdilution method**

○Takashi Tamura¹, Koichi Makimura^{1,2,3} (¹Gen. Med. Educ. Rec. Center, Teikyo Univ., ²Teikyo Univ. Inst. Med. Mycol., ³L-SEM, Grad. Sch. Teikyo Univ.)

P-341**Strong resistance of *Melissococcus plutonius* CC3 strains to antimicrobial activity of royal jelly**

○Daisuke Takamatsu^{1,2}, Aya Osawa³, Keiko Nakamura⁴, Mikio Yoshiyama⁵, Masatoshi Okura¹ (¹Div. Bact. Parasit. Dis., Natl. Inst. Anim. Hlth., NARO, ²Utd. Grad. Sch. Vet. Sci., Gifu Univ., ³Nagano Pref. Matsumoto Livest. Hyg. Ser. Ctr., ⁴Res. Inst. Anim. Sci. Biochem. Toxicol., ⁵Div. Anim. Breed. Reprod. Res., Inst. Livest. Grassl. Sci., NARO)

P-342**Inhibitory Effect of Lactobacilli culture supernatant on *Candida albicans***

○Yukako Kojima¹, Tomoko Ohshima², Tomomi Kawai², J. Chaminda Seneviratne³, Nobuko Maeda² (¹Dept. Microbiol., PhD, Tsurumi Univ., ²Dept. Oral Microbiol., Sch. Dent., Tsurumi Univ., ³Oral Sci., Fac. Dent., NUS)

P-343**The developments of antibiotics targeting the Bam complex for *Acinetobacter baumannii***

○Kaori Hashimoto¹, Kotaro Shimizu¹, Yusuke Koyama¹, Kana Otsuka¹, Akari Senda¹, Takahiro Tsuchiya¹, Katsushiro Miyamoto¹, Eisaku Yoshihara², Hiroshi Tsujibo¹ (¹Dept. Microbiol. Osaka Univ. Pharm. Sci., ²Dept. Appl. Biochem., Sch. Eng. Tokai Univ.)

P-344 (WS5-6)**Mutual Potentiation Drives Synergy between Trimethoprim and Sulfamethoxazole**

○Yusuke Minato¹, Surendra Dawadi², Shannon Kordus¹, Abiram Sivanandam¹, Courtney Aldrich², Anthony Baughn¹ (¹Dept. Microbiol. Immunol., Univ. Minnesota, Med Sch., ²Dept. Med. Chem., Univ. Minnesota)

P-345**Inhibitory activity of WQ-3810 against DNA gyrases of ofloxacin-resistant *Mycobacterium leprae***

○JongHoon Park, Tomoyuki Yamaguchi, Chie Nakajima, Yasuhiko Suzuki (Div. Biores., CZC, Hokkaido Univ.)

P-346**Antibacterial substance produced by *Streptococcus sanguinis***

Rina Tanaka¹, Kazuto Kamiya², Toshiaki Nikai¹, ○Yumiko Komori¹ (¹Dept. Microbiol., Fac. Pharm., Meijo Univ., ²Dept. Microbiol., Sch. Nurs. & Health, Aichi Pref. Univ.)

P-347**Antimicrobial peptide LL-37 induces microparticle release from neutrophils in a mouse sepsis model**

○Yumi Kumagai^{1,2}, Yan Li¹, Taisuke Murakami¹, Hiroshi Tamura², Isao Nagaoka¹ (¹Dept. Host Defense Biochem. Res., Grad. Sch. Med., Juntendo Univ., ²LPS Consult. Office)

P-348**Effects of S-PRG baionomaterial filler on biofilm formation and dimorphism of *Candida albicans***

○Muneaki Tamura^{1,2}, Kenichi Imai^{1,2} (¹Dept. Microbiol., Nihon Univ. Sch. Dent., ²Div. Immunol. Pathobiol., Dent. Res. Cent., Nihon Univ. Sch. Dent.)

P-349 (WS5-5)**Antibacterial activities of unsaturated fatty acids targeting alternative MK biosynthetic pathways**

○Hidenori Matsui (Kitasato Inst. for Life Sci., Kitasato Univ.)

P-350**Induction of autophagy in endothelial cells by human antimicrobial peptide LL-37**

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

P-351**On the QRDR sequences in Type IIA DNA topoisomerases from environmental bacteria**

○Tadashi Baba, Yuh Morimoto, Keiichi Hiramatsu (Center Infection Control Sci., Grad. Sch. Med., Juntendo Univ.)

P-352***Pseudomonas* spp. isolated from scoriaceous soil of Izu Oshima produces antimicrobial substances**

○Yuh Morimoto¹, Tadashi Baba¹, Mai Akimoto², Teruo Kirikae², Keiichi Hiramatsu¹ (¹Center Infection Control Sci., Sch. Med., Juntendo Univ., ²Dept. Microbiol. Sch. Med., Juntendo Univ.)

P-353***Kitasatospora* spp. isolated from Izu Oshima produces an antimicrobial agent**

○Mai Akimoto¹, Yuh Morimoto², Tadashi Baba², Keiichi Hiramatsu², Teruo Kirikae¹ (¹Dept. Microbiol., Sch. Med., Juntendo Univ., ²Center Infection Control Sci., Sch. Med., Juntendo Univ.)

P-354**Analysis of the components of neutrophil-derived microparticles with antibacterial activity**

○Yan Li, Yumi Kumagai, Kaori Suzuki, Isao Nagaoka (Dept. Host Defense and Biochem Res, Juntendo Univ., Sch. Med)

P-355**Antibacterial activity of glycyrrhetic acid derivative against *Streptococcus mutans***

Tsuyoshi Yamashita¹, ○Miki Kawada-Matsuo¹, Tatsuo Nakahara², Hitoshi Komatsuzawa¹ (¹Dept. Oral Microbiol., Grad. Sch. Med. and Dent, Kagoshima Univ., ²Maruzen Pharmaceuticals Co., Ltd.)

P-356**Involvement of MrgX2-mediated LL-37 internalization in degranulation of human mast cells**

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

P-357**Bactericidal effect of chlorous acid water against nontuberculous *Mycobacterium***

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

7. Antimicrobial agents and resistance

-b. Antimicrobial resistance

P-358**Functional predominance of *msr(D)*, over *mef(E)* in macrolide resistance in *Streptococcus pyogenes***

○Ichiro Tatsuno¹, Masakado Matsumoto², Hideyuki Matsui¹, Masanori Isaka¹, Tadao Hasegawa¹ (¹Dept. Bacteriol., Grad. Sch. Med. Sci., Nagoya City Univ., ²Dept. Microbiol. Med. Zool., Aichi Prefect. Inst. Pub. Health)

P-359**Characterization of antimicrobial resistance in *Enterobacteriaceae* from wastewater in Thailand**

○Risa Tsunoda¹, Masaru Usui², Hideshige Takada³, Chie Nakajima¹, Yasuhiko Suzuki¹, Yutaka Tamura² (¹Div. Biores., CZC, Hokkaido Univ., ²Dept. Health. Scie., Sch. Vet., Rakuno Univ., ³Lab. Organ. Geochem., Tokyo Univ. and Agricul and Tech)

P-360**Characterization of DNA gyrase in fluoroquinolone-resistant non-PGG3 *Mycobacterium tuberculosis***

○Yuki Ouchi, Chie Nakajima, Yasuhiko Suzuki (Div. Biores., CZC, Hokkaido Univ.)

P-361**Genetic analysis of colistin-resistant *E. coli* harbouring *mcr-3* isolated from pork in Vietnam**

○Takahiro Yamaguchi^{1,2}, Ryuji Kawahara¹, Shihono Teruya³, Kazuo Harada², Daisuke Motooka⁴, Shota Nakamura⁴, Tatsuya Nakayama⁵, Yoshimasa Yamamoto², Kazumasa Hirata² (¹Div. Bacteriol. Osaka Inst. Pub. Health, ²Grad. Sci. Pharm. Sci., Osaka Univ., ³Dept. Mol. Bact., RIMD, Osaka Univ., ⁴Dept. Infect. Metageom., RIMD, Osaka Univ., ⁵Div. BioMed. Food Res., National Inst. Health Sci.)

P-362 (WS5-1)**A novel plasmid carrying *bla_{IMP-6}* in carbapenem-resistant *K. pneumoniae* isolated in northern Osaka**

○Ryuichiro Abe¹, Yo Sugawara¹, Ryuji Kawahara², Norihisa Yamamoto¹, Isao Nishi³, Rumiko Asada⁴, Yukihiko Aakeda¹, Kazunori Tomono⁵, Shigeyuki Hamada¹ (¹RCC-ERI, RIMD, Osaka Univ., ²Div. Microbiol., Osaka Inst. Public Health, ³Lab. for Clin. Invest., Osaka Univ. Hosp., ⁴Osaka Pref. Govt., ⁵Dept. Infect. Cont. Prevent., Med. Hosp., Osaka Univ.)

P-363**Whole-genome analysis of carbapenem-intermediate resistant *Bacteroides fragilis***

○Takatsugu Goto¹, Yuji Morita², Masahiro Hayashi¹, Kaori Tanaka¹ (¹Div. Anaerobe Res., Life Sci. Res. Ctr., Gifu Univ., ²Dept. Microbiol., Sch. Pharm., Aichi Gakuin Univ.)

P-364**Prevalence, serotype changing and antimicrobial resistance of *Salmonella* isolated from broiler**

○Vuminh Duc¹, Hajime Toyofuku², Takeshi Obi³, Takehisa Chuma¹ (¹Vet. Public Health, Joint Fac. of Vet. Med., Kagoshima Univ., ²The United Grad. Sch. Vet. Sci., Yamaguchi Univ., ³Animal Microbiol., Joint Fac. of Vet. Med, Kagoshima Univ.)

P-365**Analysis of antimicrobial resistance mechanism in successive infections of *Pseudomonas aeruginosa***

○Noriko Nakanishi¹, Ryohei Nomoto¹, Kanako Sato², Chihiro Koike^{3,4}, Mari Kusuki^{3,4}, Tatsuya Nakamura^{3,4}, Katsumi Shigemura², Toshiro Shirakawa⁵, Issei Tokimatsu³, Kayo Osawa^{2,3} (¹Dept. Infec. Dis., Kobe Inst., ²Dept. Biophysics., Sch. Health Science., Kobe Univ., ³Dept. Infect Control Prevent., Kobe Univ. Hospital, ⁴Dept. Clinical Lab., Kobe Univ. Hospital, ⁵Kobe Univ. Technology and Innovation)

P-366**Detection of DNA damaging environments inside biofilms**

○Toru Isawa¹, Masanori Toyofuku², Tatsunori Kiyokawa¹, Jiayue Yang¹, Nozomu Obana², Nobuhiko Nomura² (¹Grad. Sch. Life Environ. Sci. Univ. Tsukuba, ²Fac. Life Environ. Sci. Univ. Tsukuba)

P-367**Genetic mechanism of high susceptibility to β -lactam in Oxacillin-susceptible MRSA**

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

P-368**Tebuconazole selection against *Aspergillus fumigatus* in vitro induces resistance to medical azoles**

○Takahito Toyotome¹, Kenji Onishi¹, Yoko Kusuya³, Junichi Ishihara³, Daisuke Hagiwara^{2,4}, Akira Watanabe², Katsuhiko Kamei², Hiroki Takahashi³ (¹Dept. Vet. Med., Obihiro Univ. Agric. Vet. Med., ²Div. Clin. Res., MMRC, Chiba Univ., ³Div. Bio-Res., MMRC, Chiba Univ., ⁴Fac. Life Env. Sci., Univ. Tsukuba)

P-369**Analysis of the bacitracin resistance in *Enterococci* from meat**

Keisuke Sugioka¹, Takahiro Nomura¹, Yusuke Hashimoto¹, Jun Kurushima¹, Koichi Tanimoto², ○Haruyoshi Tomita^{1,2} (¹Dept. Bacteriol., Grad. Sch. Med., Gunma Univ., ²Lab. Bacteriol. Drug Resist., Grad. Sch. Med., Gunma Univ.)

P-370**Identification of mutations associated with cross-resistance to daptomycin and vancomycin in MRSA**

○Kanate Thititananpakorn, Yoshifumi Aiba, Shinya Watanabe, Yusuke Sato'o, Kotaro Kiga, Teppei Sasahara, Tanit Boonsiri, Feng-Yu Li, Longzhu Cui (Divi., Bacteriol., Jichi Med., Univ.)

P-371**MICs of Bedaquiline, Clofazimine and Rifabutin against *Mycobacterium abscessus* complex**

○Kinuyo Chikamatsu¹, Akio Aono¹, Kozo Morimoto², Yuriko Igarashi¹, Yoshiro Murase¹, Hiroyuki Yamada¹, Akiko Takaki¹, Satoshi Mitarai¹ (¹Dept. Mycobac. Ref. Res., RIT, JATA., ²Div. Clin. Res., Fukujiji Hosp., JATA)

P-372**Elucidation of genetic diversity of the β -lactam resistance in MRSA**

○Yoshifumi Aiba, Shinya Watanabe, Yusuke Sato'o, Kotaro Kiga, Kanate Thititananpakorn, Tanit Boonsiri, Feng-Yu Li, Teppei Sasahara, Longzhu Cui (Divi. Bacteriol., Jichi. Med., Univ.)

P-373**First detection of *Salmonella* genomic island 1 variant in *Providencia stuartii* clinical isolate**

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

P-374**Fluoroquinolone resistance of vancomycin-resistant *Enterococcus gallinarum* isolated from chicken**

○Shiori Yamamoto¹, Hiroshi Asakura¹, Yoshikazu Ishii², Shizunobu Igimi³ (¹Nat. Inst. Health Sci., ²Toho Univ., ³Tokyo Univ. Agri.)

P-375 (WS5-2)**Prevalence of antimicrobial-resistant bacteria among companion animals from animal shelter in Osaka**

○Kaoru Umeda¹, Masashi Matsuo², Atsushi Hase¹, Tomoaki Horimoto², Jun Ogasawara¹ (¹Microbiol. Sec., OIPH., ²Osaka City Animal Care Center)

P-376**The relationship between bacitracin resistance and biofilm formation in *Streptococcus mutans***

○Ryo Nagasawa^{1,2}, Hidenobu Senpuku¹ (¹Dept. Bacteriol. I, Nat. Inst. Infect. Dis., ²Grad. Sch. Sci. Eng., Hosei Univ.)

P-377**Uptake of exogenous sterol promotes antifungal resistance in *Candida glabrata***

○Minoru Nagi¹, Koichi Tanabe², Keigo Ueno¹, Tatsuya Inukai¹, Shigeki Nakamura¹, Takashi Umeyama¹, Satoshi Yamagoe¹, Yoshitsugu Miyazaki¹ (¹Dept. Chemother. and Mycoses, Natl. Inst. of Infect., ²Dept. Food Sci. Hum. Nutrit., Fac. Agr., Ryukoku)

P-378**Diversity of CTX-M β -lactamase genotypes among IMP-6 producing *Escherichia coli* in Japan**

○Tomoki Mizuno¹, Ryuichi Nakano¹, Miho Ogawa², Yuki Suzuki¹, Akiyo Nakano¹, Sayaka Ando¹, Kei Kasahara³, Keiichi Mikasa³, Hisakazu Yano¹ (¹Dept. Microbiology and Infectious Diseases, Nara Medical Univ., ²Dept. Bacteriology, BML Inc., ³Center for Infectious Diseases, Nara Medical Univ.)

P-379**Analyses of NMC-A expression in *Enterobacter cloacae* complex first isolated in Japan**

○Ryuichi Nakano¹, Yuki Yamada², Akiyo Nakano¹, Kazuya Narita², Yuki Suzuki¹, Akira Suwabe³, Hisakazu Yano¹ (¹Dept. Microbiology and Infectious Diseases, Nara Medical Univ., ²Iwate Medical Univ. Hospital, ³Iwate Medical Univ.)

P-380**Molecular analysis of carbapenem-resistant gram negative rod isolated from Philippines environment**

○Yuki Suzuki¹, Ryuichi Nakano¹, Akiyo Nakano¹, Pearl Retiban², Melisa Mondoy², Ayako Tanouchi¹, Naoki Kakuta¹, Takashi Masui¹, Kazutoshi Nakashima³, Hisakazu Yano¹ (¹Dept. Microbiology and Infectious Diseases, Nara Medical Univ., ²Dept. Microbiology, Research Institute for Tropical Medicine., ³Faculty of Sports and Health Science, Daito Bunka Univ.)

P-381**Prevalence of drug-resistant *Campylobacter jejuni* isolated from chicken meat and human in Fukuoka**

○Yuki Carle¹, Hiroaki Shigemura¹, Shiko Nakayama¹, Akira Oishi², Koichi Murakami³, Nobuyuki Sera¹ (¹Fukuoka Institute of Health and Environmental Sciences, ²Cancer and Infection Disease Control Division, Dept. Public Health and Medical Affairs, Fukuoka Prefecture, ³National Institute of Infectious Diseases)

7. Antimicrobial agents and resistance
-c. Others

P-382**The amount of *Acinetobacter baumannii* biofilm alters in sub-MICs of polypeptide antibiotics**

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

P-383**Transfer frequency of plasmid *bla*_{CTX-M} to chromosome in *Escherichia coli***

○Kouta Hamamoto^{1,2,3}, Toshiro Tokunaga¹, Nobuyoshi Yagi¹, Itaru Hirai^{1,3} (¹Lab, Microbiol., Sch. Health. Sci., Univ. The Ryukyus, ²Research Fellow of Japan Society for the Promotion of Science DC1, ³AMED/e-ASIA)

P-384**Effect of *Lonicera caerulea* var. *emphyllocalyx* extract against enteropathogenic *Escherichia coli***

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

P-385**Antimicrobial activity of hinokitiol against the oral pathogenic bacteria**

Hisanori Domon^{1,2}, Eiji Kunitomo³, ○Yutaka Terao^{1,2} (¹Div. Microbiol. Infect. Dis., Niigata Univ., Grad. Sch. Med. & Dent. Sci., ²Res. Cent. Adv. Oral Sci., Niigata Univ., Grad. Sch. Med. & Dent. Sci., ³Central R&D Lab. Kobayashi Pharma.)

P-386**Characterization of ESBL-producing bacteria isolated from healthy individuals in Okinawa prefecture**

○Seina Higa^{1,2}, Kouta Hamamoto^{1,2}, Yasuaki Yakabi^{1,2}, Rosantia Sarassari^{1,2}, Yasuko Koja³, Itaru Hirai^{1,2} (¹Lab. Microbiol., Sch. Health Sci., Univ. The Ryukyus, ²AMED/e-ASIA, ³Field. Home Care & Chronic Care Nursing., Sch. Health Sci., Fac. Med., Univ. the Ryukyus)

P-387**Structure-Activity Relationship of a Proplis-Derived Antimicrobial Compound**

○Ryoma Nakao¹, Tsuyoshi Ikeda², Yuri Yoshimasu¹, Nobuaki Sakai³, Akira Yagi³, Satoru Hirayama¹, Makoto Ohnishi¹, Hidenobu Senpuku¹ (¹Dept. Bacteriol., Nat. Inst. Infect. Dis., ²Dept. Pharm. Sci., Sojo Univ., ³MST Dept., Olympus Corp.)

P-388**Colistin and tigecycline resistance in an epidemic clone, ST131, *Escherichia coli* clinical isolates**

○Toyotaka Sato¹, Masaru Usui², Masaaki Shinagawa³, Akira Fukuda², Hiroyuki Honda⁵, Tsukasa Shiraishi³, Yutaka Tamura³, Satoshi Takahashi^{3,4}, Shin-ichi Yokota¹ (¹Dept. Microbiol. Sch. Med., Sapporo Medical Univ., ²Lab. Food Microb. and Food Safety, Sch. Vet. Rakuno Gakuen Univ., ³Div. Lab. Med., Sapporo Medical Univ., ⁴Dept. Infect. Cont. and Lab. Med., Sapporo Medical Univ., ⁵Dept. Respirat. Med. and Allergol. Sapporo Medical Univ.)

P-389**The role of CpxA on Chlorhexidine resistance in *Serratia marcescens***

○Yuma Kondo¹, Yukiko Yamamoto², Takanori Kumagai¹, Yasuyuki Matoba¹, Wakano Ogawa³, Teruo Kuroda^{1,2} (¹Dept. Microbiol., Grad. Sch. Biomed. Heal. Sci., Hiroshima Univ., ²Dept. Microbiol., Fac. Pharm. Sci., Okayama Univ., ³Dept. Microbiol. Biochem., Daiichi Univ. Pharm.)

P-390**Colistin resistance gene *mcr-1* in an *E. coli* isolated from imported chicken meat**

○Koichi Tanimoto¹, Takahiro Nomura², Haruyoshi Tomita^{1,2} (¹Lab. Bacterial Drug Resistance, Gunma Univ. Grad. Sch. Med., ²Dept. Bacteriol., Gunma Univ. Grad. Sch. Med.)

P-391**Analysis of VanN-type VRE strains in Japan**

○Takahiro Nomura¹, Koichi Tanimoto², Haruyoshi Tomita^{1,2} (¹Dept. Bacteriol., Grad. Sch. Med., Gunma Univ., ²Lab. Bacterial Drug Resistance, Grad. Sch. Med., Gunma Univ.)

P-392**Genetic characteristics of BLNAR in Sapporo, Japan**

○Hiroyuki Honda^{1,2}, Toyotaka Sato², Hiroki Takahashi¹, Shin-ichi Yokota² (¹Dept. Resp. Allergol., Sch. Med., Sapporo Medical Univ., ²Dept. Microbiol., Sch. Med., Sapporo Medical Univ.)

P-393**Novel mechanism of antibiotic resistance via formation of cysteine-antibiotic adduct in bacteria**

○Katsuhiko Ono¹, Hiroyasu Tsutsuki¹, Zhang Tianli¹, Takaaki Akaike², Tomohiro Sawa¹ (¹Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., ²Dept. Envir. Health Sci. Mol. Toxicol., Grad. Sch. Med., Tohoku Univ.)

P-394**Analysis of nisin-resistant strains of methicillin-resistant *Staphylococcus aureus***

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

P-395**Genetic mechanisms of high β -lactam resistance in Methicillin-resistant *Staphylococcus aureus***

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

P-396**Accuracy of *in silico* *M. tuberculosis* drug resistance marker detection tool implemented in TGS-TB**

○Akifumi Yamashita¹, Tomotada Iwamoto², Tsuyoshi Sekizuka¹, Yoshiro Murase³, Kengo Kato¹, Takemasa Takii³, Satoshi Mitarai³, Shiomi Yoshida⁴, Seiya Kato³, Makoto Kuroda¹ (¹Pathogen Genomics Center, Nat. Inst. Infect. Dis., ²Kobe Inst. Health, ³Res. Inst. TB, ⁴Nat. Hospit. Org. Kinki-chuo Chest Medi. Cent.)

P-397**Cleansing effect of acidic L-arginine on human oral biofilm**

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

P-398 (WS5-4)**Biocontrol of *Clostridium perfringens* by using two types of specific endolysins**

○Maho Okada¹, Eiji Tamai², Hiroshi Sekiya², Toshi Shimamoto¹, Tadashi Shimamoto¹, Hirofumi Nariya¹ (¹Lab. Food Microbiol. Hyg., Grad. Sch. Biosphere Sci., Hiroshima Univ., ²Dept. Infect. Dis., Col. Pharm., Matsuyama Univ.)

P-399**Analysis of ESBL/AmpC producing Enterobacteriaceae isolated from domestic and imported chicken meats**

○Yosuke Otake¹, Naoko Chiba¹, Jun Kurushima¹, Koichi Tanimoto², Haruyoshi Tomita^{1,2} (¹Dept. Bacterial., Grad. Sch. Med., Gunma Univ., ²Lab. Bacterial Drug Resistance, Grad. Sch. Med., Gunma Univ.)

P-400**THE PATTERN OF ESBL PRODUCING GUT FLORA AMONG HOSPITALIZED PATIENTs AND COMMUNITY IN SURABAYA**

○Rosantia Sarassari^{1,3}, Usman Hadi², Itaru Hirai³, Kuntaman Kuntaman¹ (¹Dept. Clinical Microbiol., Faculty Med, Univ. Airlangga / Dr Soetomo Hospital Surabaya, ²Dept. Internal Med., Faculty Med, Univ. Airlangga / Dr Soetomo Hospital Surabaya, ³Lab. Microbiol., Sch. Health. Sci., Univ. The Ryukyus)

P-401**The AmpC β -lactamase-including plasmid-mediated DHA-1 induction of β -lactams in Enterobacteriaceae**

○Kentaro Akata¹, Tetsuro Muratani², Keisuke Naito¹, Shingo Noguchi¹, Toshinori Kawanami¹, Hiroshi Mukae³, Kazuhiro Yatera¹ (¹Dept. Respir. Medi., Univ. Occupational and Environmental Health, Japan, ²Kyurin Med. Lab., ³Second Intern. Med. Nagasaki Univ. Sch. Med.)

P-402**Mechanism of quinolone resistance in *Oligella urethralis***

○Ken Kikuchi, Yasutomo Itakura, Shigekazu Iguchi, Atsushi Yoshida, Keisuke Kamata, Yutaka Uzawa (Dept. Infect. Dis., Tokyo Women's Med. Univ.)

P-403**Horizontal transfer of antimicrobial resistance genes into K1 *E. coli* with a risk for meningitis**

○Naoko Imuta, Tadasuke Ooka, Kiyotaka Yoshiie, Junichiro Nishi (Dept. Microbiol., Kagoshima Univ. Grad. Sch. Med and Dent. Scie.)

P-404**Antibacterial effects of Prunin lauroyl ester and its derivatives on the periodontal pathogen**

○Erika Wada¹, Chiharu Ito², Mai Shinohara¹, Miki Maetani², Ayaka Yazawa^{1,2}, Mayo Yasugi³, Masami Miyake³, Tatsuji Sakamoto³, Shigeki Kamitani^{1,2} (¹Grad. Sch. Comprehensive Rehabilitation, Osaka Prefecture Univ., ²Sch. Comprehensive Rehabilitation, Osaka Prefecture Univ., ³Grad. Sch. Life. Environmental Sciences, Osaka Prefecture Univ.)

P-405**Analysis of the clinical enterococcal isolates with low-level VanB-type vancomycin resistance**

○Yusuke Hashimoto¹, Takahiro Nomura¹, Koichi Tanimoto², Kiyoko Tamai³, Hideji Yanagisawa⁴, Komei Shirabe⁵, Haruyoshi Tomita^{1,2} (¹Dept. Bacteriol., Grad. Sch. Med., Gunma Univ., ²Lab. Bacteriol. Drug. Resist., Grad. Sch. Med., Gunma Univ., ³MIROKU Medical Laboratory Co., ⁴MicroSKY Lab, Inc., ⁵Yamaguchi Prefectural Institute of Public Health and Environment)

P-406**Effect of antioinducer analogues on macrolide in *P. aeruginosa***

○Keiji Murakami¹, Takashi Amoh¹, Keiko Kataoka², Reiko Kariyama³, Katsuhiko Hirota⁴, Yoichiro Miyake⁵, Hideki Fujii¹ (¹Dept. Oral Microbiolol. Institute Biomed. Sci. Tokushima Univ. Grad. Sch., ²Dept. Microbiol. Gene. Anal., Grad. Sch. Biomed. Sci., Tokushima Univ., ³Dept. Food and Nutr., Okayama Gakuin Univ., ⁴Dept. Med. Hygiene, Kochi Gakuen College, ⁵Facult. Pharmaceut. Sci., Tokushima Bunri Univ.)

P-407

Role of *Pseudomonas aeruginosa* rpoS gene on antibiotic tolerance

○Takashi Amoh¹, Keiji Murakami¹, Reiko Kariyama^{2,3}, Katsuhiko Hirota⁴, Yoichiro Miyake⁵, Hideki Fujii¹ (¹Dept. Oral Microbiol., Institute Biomed Sci., Tokushima Univ. Grad. Sch., ²Dept. Food and Nutr., Okayama Gakuin Univ., ³Dept. Urol., Grad. Sch. Med. Dent. and Pharm., Okayama Univ., ⁴Dept. Med. Hygiene., Kochi Gakuen College, ⁵Facult. Pharmaceut. Sci., Tokushima Bunri Univ.)

P-408

Functional analysis of KatG mutations associated with isoniazid-resistance in *M. tuberculosis*

○Hyun Kim^{1,2}, Ruwen Jou², Shigetaru Mori¹, Emiko Rimbara¹, Keigo Shibayama¹ (¹Dept. Bacteriology II National Institute of Infectious Diseases, ²Reference Laboratory of Mycobacteriology, Research and Diagnostic Centre, CDC, Taiwan)

P-409 (WS5-3)

Persister formation mechanism with DNA binding protein, YjiJ

○Yuki Maeda¹, Ryoma Yokoi¹, Yoshihiro Yamaguchi² (¹Fac. Sci., Osaka City Univ., ²OCARINA, Osaka City Univ.)

P-410

Molecular characterization of VIM-2 β -lactamase producing *Citrobacter freundii* isolated in Japan

○Sayaka Ando¹, Ryuichi Nakano¹, Yuki Suzuki¹, Tomokazu Kuchibiro², Katsutoshi Yamasaki³, Akiyo Nakano¹, Ayako Tanouchi¹, Naoki Kakuta¹, Takashi Masui¹, Hisakazu Yano¹ (¹Dept. Microbiology and Infectious Diseases, Nara Med. Univ., ²Dept. Clinical Lab., Naga Municipal Hosp., ³Central Clinical Lab., Wakayama Rosai Hosp.)

P-411

Effect of non-thermal atmospheric pressure plasmas on biofilm of *Pseudomonas aeruginosa*

○Haruka Yoshida¹, Kanako Suzuki¹, Masafumi Ito², Yumiko Komori¹ (¹Dept. Microbiol., Fac. Pharm., Meijo Univ., ²Dept. Electrical & Electronic Eng., Fac. Sci. & Technol., Meijo Univ.)

P-412

222 nm UVC light elicits sterilizing effect without DNA damage in mouse keratinocytes

○Kouji Narita^{1,2}, Masahiro Sasaki³, Yukihiro Morimoto³, Tatsushi Igarashi³, Akio Nakane^{1,4} (¹Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., ²Inst. of Animal Experimentation., Hirosaki Univ. Grad. Sch. Med., ³Ushio Inc., ⁴Dept. Biopolymer and Health Sci., Hirosaki Univ. Grad. Sch. Med)

P-413

Structural insights into the TLA-3 ESBL and its inhibition by avibactam and OP0595

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

P-414

Investigation into bactericidal effect of metal nano particles

○Miwa Sekine¹, Kyoko Kuwahara¹, Teruo Kirikae¹, Keiichi Hiramatsu² (¹Dept. Microbiol., Juntendo Univ., ²Dept. Infection Control., Juntendo Univ.)

P-415

Synergy in antimicrobial activities of vapors from terpene-aldehydes

○Sanae Ishijima, Kunio Ezawa, Toshio Takizawa, Masatoshi Yamazaki, Shigeru Abe (Teikyo Univ., Institute of Medical Mycology)

P-416

Injured *Listeria monocytogenes* by high hydrostatic pressure and its tolerance

○Yumiko Okada¹, Hodaka Suzuki², Yoshika Momose¹ (¹Div. Biomed. Food Res. NIHS, ²Col. Agric. Ibaraki Univ.)