

## On-demand Presentation

### 1. Taxonomy / Epidemiology / Infectious diseases

#### -a. Phylogenetics, taxonomy and strain typing

#### ODP-001/W5-2

##### Global population analysis of *Escherichia coli* O103:H2 and comparison of complete genomes

○Itsuki Taniguchi<sup>1</sup>, Keiji Nakamura<sup>1</sup>, Yasuhiro Gotoh<sup>1</sup>, Kenichi Lee<sup>2</sup>, Tadasuke Ooka<sup>3</sup>, Yoshitoshi Ogura<sup>4</sup>, Makoto Ohnishi<sup>2</sup>, Sunao Iyoda<sup>2</sup>, Tetsuya Hayashi<sup>1</sup> (<sup>1</sup>Dept. Bact., Grad. Sch. Med. Sci., Kyushu Univ., <sup>2</sup>Dept. Bact. I, NIID, <sup>3</sup>Dept. Microbiol., Grad. Sch. Med. Dent. Sci., Kagoshima Univ., <sup>4</sup>Div. Microbiol., Dept. Infect. Med., Kurume Univ. Sch. Med.)

#### ODP-002

##### Sequence mutations in *Vibrio cholerae* *hapR* affect gene function and biofilm formation

○Jant Cres Caigoy<sup>1</sup>, Tadashi Shimamoto<sup>1</sup>, Toshi Shimamoto<sup>1</sup>, Asish Kumar Mukhopadhyay<sup>2</sup>, Sumio Shinoda<sup>3</sup> (<sup>1</sup>Program Food AgriLife Sci., Grad. Sch. Integr. Sci. Life, Hiroshima Univ., <sup>2</sup>Div. Bacteriol., Natl. Inst. Cholera Enteric Dis., Kolkata, India, <sup>3</sup>Collab. Res. Cent. Okayama Univ. Infect. Dis. India, Okayama Univ., Kolkata, India)

#### ODP-003

##### Diversification of *Escherichia albertii* H-Antigens and Development of H-Genotyping PCR

○Koji Nakae<sup>1</sup>, Tadasuke Ooka<sup>1</sup>, Koichi Murakami<sup>2</sup>, Yukiko Hara-Kudo<sup>3</sup>, Naoko Imuta<sup>1</sup>, Yasuhiro Gotoh<sup>4</sup>, Yoshitoshi Ogura<sup>5</sup>, Tetsuya Hayashi<sup>4</sup>, Yasuhiro Okamoto<sup>1</sup>, Junichiro Nishi<sup>1</sup> (<sup>1</sup>Grad. Sch. Med. and Dent., Kagoshima Univ., <sup>2</sup>Center for Emergency Preparedness and Response, NIID, <sup>3</sup>Div. Microbiology, Natl. Inst. Health Sci., <sup>4</sup>Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., <sup>5</sup>Dept. Infect. Med., Kurume Univ. Sch. Med.)

#### ODP-004

##### A novel *Filobacterium* sp found in feline chronic bronchitis

○Fumio Ike<sup>1</sup>, Martina Maceradska<sup>2</sup>, Sona Pekova<sup>3</sup>, Patrizia Danesi<sup>4</sup>, Tommaso Furlanello<sup>4</sup>, Roberta Calleo<sup>4</sup>, Patricia Martin<sup>5</sup>, Richard Malik<sup>5</sup> (<sup>1</sup>Div. Exp. Anim., RIKEN BRC, Japan, <sup>2</sup>Czech Univ in Prague, Czech Rep., <sup>3</sup>Tilia Lab, Czech Rep., <sup>4</sup>Inst Zooprofilattico Sperimentale Venezia, San Marco Vet Clin Lab, Italy, <sup>5</sup>Univ Sydney, Australia)

#### ODP-005

##### Diversity of the Tellurite Resistance Gene Operon in *Escherichia coli*

○Atsushi Iguchi<sup>1</sup>, Thi Thu Huong Nguyen<sup>1</sup>, Taisei Kikuchi<sup>2</sup>, Sunao Iyoda<sup>3</sup> (<sup>1</sup>Fac. Agr., Miyazaki Univ., <sup>2</sup>Fac. Med., Miyazaki Univ., <sup>3</sup>Dept. Bacteriol. I, Nat. Inst. Infect. Dis.)

#### ODP-006

##### Molecular epidemiology of MDR *E. coli* isolated from one of the largest hospitals in Vietnam

○Tohru Miyoshi-Akiyama<sup>1</sup>, Do Van Thanh<sup>2</sup>, Truong Thai Phuong<sup>2</sup>, Nguyen Quang Huy<sup>2</sup>, Pham Thi Phuong Thuy<sup>3</sup>, Teruo Kirikae<sup>4</sup>, Pham Hong Nhung<sup>2</sup>, Norio Ohmagari<sup>4</sup> (<sup>1</sup>Dept. Infect. Dis, Nat. Center. Global Health Med., <sup>2</sup>Bach Mai Hospital, <sup>3</sup>NCGM-Bach Mai Hospital Medical Collaboration Center, <sup>4</sup>Nat. Center Global Health Med.)

### 1. Taxonomy / Epidemiology / Infectious diseases

#### -b. Epidemiology and molecular epidemiology

#### ODP-007

##### Antimicrobial resistance of *Neisseria gonorrhoeae* isolated in Okinawa in 2021

○Hiroshi Nakao<sup>1</sup>, Akiko Uehara<sup>1</sup>, Toshiaki Nakada<sup>2</sup>, Tominobu Takara<sup>2</sup>, Daiki Kinjo<sup>1</sup> (<sup>1</sup>Lab. Molec. Genetics, Sch. Health Sci., Univ. Ryukyus, <sup>2</sup>Lifestyle Related Dis. Med. Ctr., Naha City Med. Assoc.)

#### ODP-008

##### Clonal lineages and antimicrobial resistance of nonencapsulated *Streptococcus pneumoniae* in Hokkaido

○Mitsuyo Kawaguchiya<sup>1</sup>, Noriko Urushibara<sup>1</sup>, Meiji Soe Aung<sup>1</sup>, Kenji Kudo<sup>2</sup>, Masahiko Ito<sup>2</sup>, Nobumichi Kobayashi<sup>1</sup> (<sup>1</sup>Dept. Hygiene, Sapporo Med. Univ., Sch. Med., <sup>2</sup>Sapporo Clinical Laboratory, Inc.)

#### ODP-009

##### MLST analysis of *Cronobacter* spp. isolated in Japan

○Yumiko Okada<sup>1</sup>, Hirokazu Ogihara<sup>2</sup>, Yuichi Kodama<sup>3</sup>, Junichiro Nishi<sup>3,4</sup>, Naoko Imuta<sup>4</sup>, Stephen Forsythe<sup>5</sup> (<sup>1</sup>Div. Biomedical Food Res., Nat. Inst. Health Sci., <sup>2</sup>Col. Bioresource Sci. Nihon Univ., <sup>3</sup>Kagoshima Univ. Hosp., <sup>4</sup>Sch. Med and Dent., Kagoshima Univ., <sup>5</sup>foodmicrobe.com)

#### ODP-010

##### Survey of MRSA rates in *Staphylococcus aureus* isolated from sewage in Saitama, Japan

○Miyu Murai, Kozue Kishii (Div. Lab. Sci., Dept. Health Sci., Saitama Pref. Univ.)

#### ODP-011

##### Molecular epidemiology of MRSA isolates from bloodstream infections in northern Japan

○Meiji Soe Aung<sup>1</sup>, Noriko Urushibara<sup>1</sup>, Mitsuyo Kawaguchiya<sup>1</sup>, Masahiko Ito<sup>2</sup>, Satoshi Habadera<sup>2</sup>, Mina Hirose<sup>3</sup>, Nobumichi Kobayashi<sup>1</sup> (<sup>1</sup>Dept. Hygiene, Sapporo Med. Univ., <sup>2</sup>Sapporo Clin. Lab. Inc., <sup>3</sup>Dept. Pediatr. Dentistry, Health Sci. Univ. Hokkaido)

#### ODP-012

##### Molecular epidemiological properties of CPiLE-producing *Clostridium perfringens* by MLST analyses

○Chie Monma<sup>1</sup>, Wakaba Okada<sup>1</sup>, Satoru Akase<sup>1</sup>, Keiko Yokoyama<sup>1</sup>, Kenji Sadamasu<sup>1</sup>, Yoichi Kamata<sup>2</sup> (1Dept. Microbiol., Tokyo Metropolitan Inst. P.H., 2Senri Kinran Univ.)

#### ODP-013

##### Molecular epidemiological analysis of enterococcal linear plasmids

○Yusuke Hashimoto<sup>1</sup>, Masato Suzuki<sup>2</sup>, Takahiro Nomura<sup>1</sup>, Jun Kurushima<sup>1</sup>, Hidetada Hirakawa<sup>1</sup>, Koichi Tanimoto<sup>3</sup>, Haruyoshi Tomita<sup>1,3</sup> (1Dept. Bacteriol., Grad. Sch. Med., Gunma Univ., 2Antimicrobial Resistance Research Center, National Institute of Infectious Diseases, 3Lab. Bacteriol. Drug Resist., Grad. Sch. Med., Gunma Univ.)

---

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

---

#### ODP-014/W5-3

##### Characterization of *Clostridium tetani* detected from the soil in Kumamoto prefecture

○Chie Shitada<sup>1</sup>, Tsuyoshi Sekizuka<sup>2</sup>, Chiyomi Sakamoto<sup>1</sup>, Makoto Kuroda<sup>2</sup>, Motohide Takahashi<sup>1</sup> (1Kumamoto Health Science Univ. Toxin and Biologicals Research Laboratory, 2Pathogen Genomics Center., NIID)

#### ODP-015

##### Detection of *Escherichia albertii* in retail oysters

○Sakura Arai<sup>1</sup>, Satoko Yamaya<sup>2</sup>, Kayoko Ohtsuka<sup>3</sup>, Noriko Konishi<sup>4</sup>, Hiromi Obata<sup>4</sup>, Tadasuke Ooka<sup>5</sup>, Shouhei Hirose<sup>1</sup>, Yukiko Kudo<sup>1</sup> (1Div. Microbiol., Natl. Inst. Health Sci., 2Miyagi Pref. Inst. Public Health and Env., 3Saitama Inst. Public Health, 4Tokyo Metropol. Inst. Public Health, 5Kagoshima Univ.)

#### ODP-016

##### Isolation and detection methods for *Lautropia mirabilis* and analysis of drug susceptibility

○Ayame Sato<sup>1,2</sup>, Masaaki Nakayama<sup>1</sup>, Nobuharu Fujii<sup>3</sup>, Ken-ichi Matsuoka<sup>4</sup>, Yoshinobu Maeda<sup>4</sup>, Takayuki Wada<sup>5</sup>, Yoshihiko Soga<sup>2</sup>, Naoya Ohara<sup>1</sup> (1Dept. Oral Microbiol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., 2Div. Hosp. Dent., Cent. Clin. Dept., Okayama Univ. Hosp., 3Div. Blood Transfusion, Okayama Univ. Hosp., 4Dept. Blood Tumor Respiratory Med., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., 5Dept. Human Life Sci., Grad. Sch., Osaka City Univ.)

#### ODP-017/W5-7

##### Differences in the PlcR regulation system affect sphingomyelinase production in *Bacillus cereus*

○Atsushi Yokotani<sup>1</sup>, Fumi Takahashi<sup>1</sup>, Ryoko Aoyama<sup>1</sup>, Go Kamoshida<sup>1</sup>, Tadashi Kosaka<sup>2</sup>, Masaki Nakanishi<sup>3</sup>, Naohisa Fujita<sup>4</sup> (1Dept. Microbiol. Infect. Cont. Sci., Kyoto Pharm. Univ., 2Dept. Pharm., Univ. Hosp., Kyoto Pref. Univ. Med., 3Dept. Infect. Cont. Lab. Med. Univ. Hosp., Kyoto Pref. Univ. Med., 4Kyoto Prefectural Institute of Public Health and Environment)

#### ODP-018

##### High-ROS production from *Enterococcus faecium* causes diverse colitis in IL10--mice

○Ziyu Wang, Noriho Iida, Shuichi Kaneko (Dept. Gastroenterology, Grad. Sch. Medical Sciences, Kanazawa Univ.)

#### ODP-019

##### Genotyping of *Campylobacter* isolated from poultry farm with time course study

○Tomoya Yamamoto<sup>1</sup>, Tomoko Mizote<sup>3</sup>, Hajime Toyofuku<sup>2</sup> (1Dept. Health and Welfare, Yamaguchi Pref. Univ., 2Dept. Human Nutrition, Yamaguchi Pref. Univ., 3The United Grad. Sch. Vet. Sci., Yamaguchi Univ.)

---

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

---

#### ODP-020

##### Identification of capsular type of *Streptococcus pneumoniae* using LAMP method

○Takahiro Iijima<sup>1</sup>, Chika Takano<sup>2</sup>, Mitsuko Seki<sup>1,2</sup>, Chang Bin<sup>3</sup>, Satoshi Hayakawa<sup>2</sup>, Tomonori Hoshino<sup>1</sup> (1Dept. Pediatric Dentistry., Sch. Dent., Meikai Univ., 2Dept. Microbiol., Sch. Med., Nihon Univ., 3Dept. Bacteriology I., NIID)

#### ODP-021

##### Rapid determination of *M. leprae* drug resistance and genotype using nested multiplex PCR with NGS

○Yasuhisa Iwao<sup>1,2</sup>, Shuichi Mori<sup>1</sup>, Manabu Ato<sup>1</sup>, Noboru Nakata<sup>1,2</sup> (1Dept. Mycobacteriol., Lepr. Res. Ctr., Natl. Inst. Infect. Dis., 2Anti. Resis. Res. Cent., Natl. Inst. Infect. Dis.)

---

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

---

#### ODP-022

##### Pathogenic characterization of hemolytic *Rodentibacter* sp. isolated from laboratory rodents

○Hiraku Sasaki<sup>1</sup>, Hidehiro Ueshiba<sup>2</sup>, Naoko Yanagisawa<sup>2</sup>, Hiroki Ishikawa<sup>3</sup>, Fumio Ike<sup>4</sup> (1Dept. Health Sci., Sch. Health Sci., Sports Sci., Juntendo Univ., 2Dept. Microbiol. Immunol. Sch. Med., Tokyo Women's Med. Univ., 3Dept. Microbiol. Immunol., Sch. Med., Showa Univ., 4RIKEN BRC)

---

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

---

### ODP-023

#### *Paramecium bursaria* as a novel host model for *Francisella novicida*

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

### ODP-024

#### Do soil bacteria soar and float in the air due to changes in environmental factors?: a field trial

○Saaya Mori, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

### ODP-025

#### Investigation of the mechanism of symbiotic bacteria-dependent bacterial transport by amoebae

○Torahiko Okubo<sup>1</sup>, Toyotaka Sato<sup>2,3</sup>, Shin-ichi Yokota<sup>2</sup>, Shinji Nakamura<sup>4</sup>, Hiroyuki Yamaguchi<sup>1</sup> (<sup>1</sup>Fac. Health Sci., Hokkaido Univ., <sup>2</sup>Dept. Microbiol., Sch. Med., Sapporo Med. Univ., <sup>3</sup>Fac. Vet. Med., Hokkaido Univ., <sup>4</sup>Div. Biomed. Imag. Res., Juntendo Univ. Grad. Sch. Med.)

### ODP-026

#### Killing mechanism of wild ciliate *Anteglaucoma* CS11A by *Legionella pneumophila* JR32

○Airi Kawashiro<sup>1</sup>, Torahiko Okubo<sup>1</sup>, Shinji Nakamura<sup>2</sup>, Jeewan Thapa<sup>3</sup>, Hiroyuki Yamaguchi<sup>1</sup> (<sup>1</sup>Fac. Health Sci., Hokkaido Univ., <sup>2</sup>Grad. Sch. Med., Juntendo Univ., <sup>3</sup>Res. Cent. Zoonosis Control, Hokkaido Univ.)

### ODP-027

#### Evaluation of predation of antimicrobial resistant bacteria by protists

○Yuka Tanaka, Mio Tsurui, Yuki Kobayashi (Dept. Med. Lab. Sci., Fac. Health Sci., Yamaguchi Univ.)

### ODP-028

#### **[Withdrawn]**

### ODP-029

#### Survival of Actinomycetes Isolated from Food and Human Feces in Artificial Digestive Media

○Akira Take<sup>1</sup>, Yoshihiko Sakaguchi<sup>1</sup>, Yuki Inahashi<sup>2</sup>, Kazuyoshi Gotoh<sup>3</sup>, Shunji Hayashi<sup>1</sup>, Haru Kato<sup>4</sup>, Naoki Ohmiya<sup>5</sup> (<sup>1</sup>Dept. Microbiol., Sch. Med., Kitasato Univ., <sup>2</sup>Omura Satoshi Mem. Inst., Kitasato Univ., <sup>3</sup>Dept. Bacteriol., Grad. Sch. Med. Dent. Pharm. Sci., Okayama Univ., <sup>4</sup>Dept. AMR Res. Ctr., NIID, <sup>5</sup>Dept. Adv. Endoscopy, Fujita Health Univ.)

---

## 2. Ecology -b. Microbiota

---

### ODP-030

#### *Staphylococcus aureus* and *Staphylococcus caprae* colonized on skins healed from ulcer

○Kohei Ogura<sup>1</sup>, Hiroka Furuya<sup>2</sup>, Natsuki Takahashi<sup>1</sup>, Shigefumi Okamoto<sup>1</sup>, Kazuhiro Ogai<sup>3</sup>, Junko Sugama<sup>4</sup> (<sup>1</sup>Front. Sci. Init., Kanazawa Univ., <sup>2</sup>Div. Health Sci., Grad. Sch. Med., Kanazawa Univ., <sup>3</sup>Al Cent., Grad. Sch. Med., Kanazawa Univ., <sup>4</sup>Sch. Health Sci., Fujita Health Univ.)

### ODP-031

#### Impact of Gut Microbiome on Dyslipidemia in female : Shika Study Results

○Yuna Miyajima<sup>1</sup>, Shigehiro Karashima<sup>2</sup>, Kazuhiro Ogai<sup>3</sup>, Kouki Taniguchi<sup>1</sup>, Masaki Kawakami<sup>4</sup>, Hidetaka Nambo<sup>4</sup>, Satoshi Nagase<sup>1</sup>, Hiromasa Tsujiguchi<sup>5</sup>, Hiroyuki Nakamura<sup>5</sup>, Shigefumi Okamoto<sup>1</sup> (<sup>1</sup>Dept. Clin. Lab. Sci., Sch. Med. Sci., Kanazawa Univ., <sup>2</sup>Inst. Lib. Arts Sci., Kanazawa Univ., <sup>3</sup>AI Center, Inst. Med. Pharm. Health Sci., Kanazawa Univ., <sup>4</sup>Sch. Elect., Inform., Commun. Eng., Sch. Sci. Eng., Kanazawa Univ., <sup>5</sup>Dept. Environ. Prev. Med., Adv. Prev. Med. Sci., Kanazawa Univ.)

### ODP-032/W3-3

#### Breastfeeding regulates acquisition of maternal oral bacteria in infant oral microbiota

○Shinya Kageyama, Michiko Furuta, Toru Takeshita, Jiale Ma, Mikari Asakawa, Yoshihisa Yamashita (Sect. Prevent. Dent. Public Health, Grad. Sch. Dent., Kyushu Univ.)

### ODP-033

#### Alteration of metabolic function during reconstitution process of infant gut flora

○Haruyuki Imaohji<sup>1</sup>, Atsushi Toyoda<sup>2</sup>, Hideto Takami<sup>3</sup>, Aya Tanaka<sup>4</sup>, Ryu-ichi Shimono<sup>4</sup>, Tomomi Kuwahara<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Sch. Med., Kagawa Univ., <sup>2</sup>Center Inform. Biol., Natl. Inst. Genetics, <sup>3</sup>Dept. Microbiol., Atmosphere Ocean Res. Inst., The Univ. of Tokyo, <sup>4</sup>Dept. Pediatr. Surg., Sch. Med., Kagawa Univ.)

### ODP-034

#### Influence of antibiotic exposure during infancy on gut environment of NASH model mice

Yoshimi Matsuda, Rino Tanaka, Nono Higashi, Akiko Sakurai,  
○Keiko Kataoka (Dept. Microbiol. Gen. Anal., Sch. Med., Tokushima Univ.)

### ODP-035

#### Analysis of multispecies biofilm formed by skin bacteria on a micro-structured surface

○Mizuho Nakayama<sup>1</sup>, Kaori Tsuruy<sup>1,2</sup>, Nobuhiko Nomura<sup>2,3</sup>, Andrew Shinichi Utada<sup>2,3</sup>, Nozomu Obana<sup>3,4</sup> (<sup>1</sup>Grad. Life Environ. Sci., Univ. Tsukuba, <sup>2</sup>Fac. Life Environ. Sci., Univ. Tsukuba, <sup>3</sup>MiCS, Univ. Tsukuba, <sup>4</sup>TMRC, Fac. Medicine, Univ. Tsukuba)

---

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

---

### ODP-036

#### Effects of temperature and humidity control on the survivability of *E. coli* on dry surface model

○Ayano Konno, Torahiko Okubo, Hiroyuki Yamaguchi (Fac. Health Sci., Hokkaido Univ.)

### ODP-037

#### [Withdrawn]

### ODP-038/W3-1

#### *D. acidovorans* inhibited the *S. epidermidis* growth by alkaline stress that induces ROS production

○Tomotaka Ohkubo<sup>1,2</sup>, Yasuhiko Matsumoto<sup>1</sup>, Otomi Cho<sup>1</sup>, Takashi Sugita<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Meiji. Pharm. Univ., <sup>2</sup>Dept. Anal. Biochem., Meiji. Pharm. Univ.)

### ODP-039

#### Effect of D-fructose on the interaction of *Fusobacterium nucleatum* with host cells

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

### ODP-040

#### Growth inhibition of *Staphylococcus aureus* by interaction of commensal bacteria and free fatty acids

○Akiko Tajima<sup>1</sup>, Yuki Kinjyo<sup>1,2</sup> (<sup>1</sup>Dept. Bacteriol., The Jikei Univ. Sch. Med., <sup>2</sup>Jikei Ctr. Biofilm Sci. & Tech.)

---

## 2. Ecology -d. Others

---

### ODP-041/W3-2

#### Growth inhibition of group A *Streptococcus* via extracellular vesicle produced by *Escherichia coli*

○Yu Kawagishi, Kazunori Murase, Chihiro Aikawa, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

---

## 3. Physiology / Structural biology

---

### -a. Metabolism, biosynthesis and metabolome

---

### ODP-042

#### Identification and functional analysis of a new type of *Z,E*-mixed prenyl reductase from mycobacteria

○Tohru Abe<sup>1,2,3</sup>, Mariko Hakamata<sup>2</sup>, Akihito Nishiyama<sup>2</sup>, Yoshitaka Tateishi<sup>2</sup>, Sohkichi Matsumoto<sup>2</sup>, Hisashi Hemmi<sup>3</sup>, Daijiro Ueda<sup>1</sup>, Tsutomu Sato<sup>1</sup> (<sup>1</sup>Grad. Sch., Sci. Technol., Niigata Univ., <sup>2</sup>Dept. Bacteriol., Sch. Med., Niigata Univ., <sup>3</sup>Grad. Sch., Bioagricultural Sci., Nagoya Univ.)

### ODP-043/W3-4

#### The resuscitation-promoting mechanism of albumin to VBNC *Mycobacterium tuberculosis*

○Yuta Morishige<sup>1</sup>, Yoshiro Murase<sup>1</sup>, Kinuyo Chikamatsu<sup>1</sup>, Akio Aono<sup>1</sup>, Yuriko Igarashi<sup>1</sup>, Asanu Osugi<sup>1</sup>, Keisuke Kamada<sup>1</sup>, Hiroyuki Yamada<sup>1</sup>, Akiko Takaki<sup>1</sup>, Satoshi Mitarai<sup>1,2</sup> (<sup>1</sup>Dept. Mycobac. Ref. Res., Res. Inst. Tubercul., JATA, <sup>2</sup>Dept. Basic Mycobacteriol., Grad. Sch. Biomed. Sci., Nagasaki Univ.)

### ODP-044

#### Cross-species conservation and generation of knockout mice of sulfurtransferase, Rhodanese

○Akira Sato<sup>1</sup>, Masanobu Morita<sup>1</sup>, Minkyung Jung<sup>1</sup>, Tetsuro Matsunaga<sup>1</sup>, Tsuyoshi Takata<sup>1</sup>, Tomoaki Ida<sup>1</sup>, Hozumi Motohashi<sup>2</sup>, Takaaki Akaike<sup>1</sup> (<sup>1</sup>Dept. Environ. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch. Med., <sup>2</sup>Dept. Gene Exp. Reg., IDAC, Tohoku Univ.)

### ODP-045

#### Supersulfide metabolism regulated by rhodanese in bacteria and mitochondria

○Yuka Unno<sup>1</sup>, Tetsuro Matsunaga<sup>1</sup>, Masanobu Morita<sup>1</sup>, Minkyung Jung<sup>1</sup>, Tsuyoshi Takata<sup>1</sup>, Tomoaki Ida<sup>1</sup>, Michito Yoshizawa<sup>2</sup>, Hozumi Motohashi<sup>3</sup>, Takaaki Akaike<sup>1</sup> (<sup>1</sup>Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., <sup>2</sup>Lab. Chem. Life Sci., Inst. Innov. Res., Tokyo Inst. Tech., <sup>3</sup>Dept. Gene Exp. Regulation, IDAC, Tohoku Univ.)

### ODP-046

#### Longevity regulation by supersulfide in yeast

○Minkyung Jung<sup>1</sup>, Akira Nishimura<sup>2</sup>, Tomoaki Ida<sup>1</sup>, Tetsuro Matsunaga<sup>1</sup>, Masanobu Morita<sup>1</sup>, Hiroshi Takagi<sup>2</sup>, Hozumi Motohashi<sup>3</sup>, Takaaki Akaike<sup>1</sup> (<sup>1</sup>Dept. Environ. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch. of Med., <sup>2</sup>Grad. Sch. Biol. Sci. NAIST, <sup>3</sup>Dept. Gene Exp. Reg., IDAC, Tohoku Univ.)

### ODP-047

#### Supersulfide biosynthesis pathway mediated by aminoacyl-tRNA synthetase in *E. coli*

○Tomoaki Ida<sup>1</sup>, Minkyung Jung<sup>1</sup>, Akira Nishimura<sup>2</sup>, Tetsuro Matsunaga<sup>1</sup>, Masanobu Morita<sup>1</sup>, Tsuyoshi Takata<sup>1</sup>, Hozumi Motohashi<sup>3</sup>, Takaaki Akaike<sup>1</sup> (<sup>1</sup>Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., <sup>2</sup>Div. Biol. Sci, NAIST, <sup>3</sup>Dept. Gene Exp. Regulation, IDAC, Tohoku Univ.)

### ODP-048

#### The effect of organic acid on *Campylobacter jejuni* infection

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

#### ODP-049

##### Glutathione synthetase gene in *Streptococcus anginosus* group

- Ken Kikuchi<sup>1</sup>, Michiko Furugaito<sup>2</sup>, Yuko Arai<sup>1</sup>, Yutaka Uzawa<sup>1</sup>, Tohru Miyoshi-Akiyama<sup>3</sup> (<sup>1</sup>Dept. Infect. Dis., Tokyo Women's Med. Univ., <sup>2</sup>Dept. Labo. Med., Kindai Univ. Hosp., <sup>3</sup>Natl. Cent. Glob. Health. Med.)

---

### 3. Physiology / Structural biology

#### -b. Motility

---

#### ODP-050

##### Direct measurement of filamentous-shaped motility of clinically isolated *Vibrio cholerae* O1

- Jun Xu, Tetsu Yamashiro (Dept. Bacteriol., Grad. Sch. Med., Univ. Ryukyus)

#### ODP-051/W3-6

##### The directional switching of flagellar rotation affected by mutations in the stator protein PomA

- Hiroyuki Terashima<sup>1</sup>, Kiyoshiro Hori<sup>2</sup>, Kunio Ihara<sup>3</sup>, Michio Homma<sup>2</sup>, Seiji Kojima<sup>2</sup> (<sup>1</sup>Dept. Bacteriol., Inst. Trop. Med. (NEKKEN), Nagasaki Univ., <sup>2</sup>Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., <sup>3</sup>Cent. Gen. Res., Nagoya Univ.)

#### ODP-052

##### Hyalin-like protein of *Capnocytophaga ochracea* involves in gliding

- Takenobu Warita<sup>1</sup>, Daichi Kita<sup>2</sup>, Eitoyo Kokubu<sup>1</sup>, Kazuyuki Ishihara<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Tokyo Dent Col., <sup>2</sup>Dept. Periodontol., Tokyo Dent Col.)

#### ODP-053

##### Structural analysis of *Mycoplasma mobile* internal machinery for gliding by electron tomography

- Minoru Fukushima<sup>1</sup>, Takuma Toyonaga<sup>1</sup>, Yuhei Tahara<sup>1</sup>, Daisuke Nakane<sup>2</sup>, Makoto Miyata<sup>1</sup> (<sup>1</sup>Dept. Sci., Grad. Sch. Sci., Osaka City Univ., <sup>2</sup>Dept. Eng. Sci., Grad. Sch. Info. Eng., Univ. Electro-Communication)

#### ODP-054

##### *Thermosynechococcus* switches the phototaxis direction by a c-di-GMP dependent process

- Daisuke Nakane<sup>1</sup>, Gen Enomoto<sup>2</sup>, Annegret Wilde<sup>2</sup>, Takayuki Nishizaka<sup>3</sup> (<sup>1</sup>Dept. Eng. Sci., UEC, <sup>2</sup>Inst. Biol. III, Freiburg Univ., <sup>3</sup>Dept. Phys., Gakushuin Univ.)

---

### 3. Physiology / Structural biology

#### -c. Signal transduction (intracellular and intercellular)

---

#### ODP-055

##### An optimized method to identify attractants for *Clostridium sporogenes*

- So-ichiro Nishiyama, Shohei Koike, Ami Takahashi, Hiroshi Urakami (Fac. App. Life Sci., Niigata Univ. Pharm. App. Life Sci.)

#### ODP-056

##### Two component signal transduction system and stress response of *Campylobacter jejuni*

- Kanta Hamaguchi<sup>1</sup>, Rina Takada<sup>2</sup>, Kaito Morinaga<sup>2</sup>, Sae Hisaoka<sup>2</sup>, Akira Akasaka<sup>2</sup>, Yoko Eguchi<sup>1,2</sup> (<sup>1</sup>BOST. Grad. Sch., Kindai Univ., <sup>2</sup>Dept. Sci Tech on Food Safety, BOST, Kindai Univ.)

#### ODP-057

##### Enhancement of biofilm formation by OMVs released from *Aeromonas*

- Soshi Seike<sup>1</sup>, Hidetomo Kobayashi<sup>1</sup>, Eizo Takahashi<sup>2</sup>, Keinosuke Okamoto<sup>3</sup>, Hiroyasu Yamanaka<sup>1</sup> (<sup>1</sup>Lab. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ., <sup>2</sup>Lab. Med. Microbiol., Dept. Health Pharm., Yokohama Univ. of Pharm., <sup>3</sup>Collab. Res. Ctr. Okayama Univ.)

#### ODP-058

##### Identification of the chemoreceptor of *Vibrio cholerae* for pyruvate and oxaloacetate

- Hirotaka Tajima<sup>1,2</sup>, Kazuki Yao<sup>3</sup>, Chiaki Fukushima<sup>1</sup>, So-ichiro Nishiyama<sup>1,4</sup>, Ikuro Kawagishi<sup>1,2,3</sup> (<sup>1</sup>Dept. Front. Biosci., Hosei Univ., <sup>2</sup>Res. Cent. Micro-Nano Tech., Hosei Univ., <sup>3</sup>Grad. Sch. Eng., Hosei Univ., <sup>4</sup>Fac. App. Life Sci., NUPALS)

#### ODP-059

##### Regulation of cysteine taxis of the marine bacterium *Vibrio alginolyticus*

- Karin Yamane<sup>1</sup>, Mariko Momma<sup>1</sup>, Manabu Konishi<sup>1</sup>, Yukako Tsuji<sup>1</sup>, Hirotaka Tajima<sup>3</sup>, Masatoshi Nishikawa<sup>1,2</sup>, Ikuro Kawagishi<sup>1,2,3</sup> (<sup>1</sup>Grad. Sch. Eng., Hosei Univ., <sup>2</sup>Dept. Frontier Biosci., Hosei Univ., <sup>3</sup>Res. Cen. Micro-Nano Tech., Hosei Univ.)

#### ODP-060

##### Role of magnesium ion in ligand recognition by the citrate chemoreceptor Tcp of *Salmonella enterica*

- Fuga Omori<sup>1</sup>, Mariko Matsuda<sup>1</sup>, Hirotaka Tajima<sup>2,3</sup>, Ikuro Kawagishi<sup>1,2,3</sup> (<sup>1</sup>Grad. Sch. Eng., Hosei Univ., <sup>2</sup>Dept. Frontier Biosci., Hosei Univ., <sup>3</sup>Res. Cen. Micro-Nano Tech., Hosei Univ.)

---

### 3. Physiology / Structural biology

#### -d. Cell surface structure, membrane structures and cytoskeleton

---

#### ODP-061

##### Multi-flagellar phenotype caused by a mutation in flagellar motor protein FlhM of marine *Vibrio*

- Michio Homma<sup>1</sup>, Norihiro Takekawa<sup>2</sup>, Hiroki Kajino<sup>1</sup>, Kazushi Fujiwara<sup>1</sup>, Yasuhiro Onoue<sup>3</sup>, Seiji Kojima<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Nagoya Univ., <sup>2</sup>Dep. Macromol. Sci., Osaka Univ., <sup>3</sup>College Life Sci., Ritsumeikan Univ.)

#### ODP-062

##### Dual inhibitory activity of compound-X enriched in fennel against *Porphyromonas gingivalis*

○Ryoma Nakao<sup>1</sup>, Nanami Yoshino<sup>2</sup>, Tsuyoshi Ideda<sup>3</sup> (<sup>1</sup>Dept. Bacteriol., Natl. Inst. Infect. Dis., <sup>2</sup>R&D, S&B Foods, <sup>3</sup>Dept. Pham. Sci., Sojo Univ.)

#### ODP-063

##### Glycopeptidolipid in nontuberculous bacteria relates the colony morphology and host responses

○Nagatoshi Fujiwara<sup>1</sup>, Takashi Naka<sup>1</sup>, Minoru Ayata<sup>2</sup>, Yuji Miyamoto<sup>3</sup>, Saburo Yamamoto<sup>4</sup>, Shinji Maeda<sup>5</sup> (<sup>1</sup>Dept. Food and Nutrition, Fac. Contemporary Human Life Science, Tezukayama Univ., <sup>2</sup>Dept. Virology, Osaka City Univ. Grad. Sch. Med., <sup>3</sup>Leprosy Research Center, National Instit. Infect. Disea., <sup>4</sup>Japan BCG Laboratory, <sup>5</sup>Fac. Pharmacy, Hokkaido Univ. of Science)

#### ODP-064/W3-5

##### Magnetosomal protein MamJ regulates polymerization of MamK cytoskeleton

○Azuma Taoka<sup>1,2</sup>, Takumi Saito<sup>1</sup>, Yousuke Kikuchi<sup>2</sup> (<sup>1</sup>Inst. Sci. Eng., Kanazawa Univ., <sup>2</sup>Nano LSI, Kanazawa Univ.)

#### ODP-065

##### Visualization of peptidoglycan in diderm bacteria by quick-freeze and deep-etch electron microscopy

○Yuhei Tahara<sup>1</sup>, Makoto Miyata<sup>1,2</sup> (<sup>1</sup>Dept. Bio., Grad. Sch. Sci., Osaka City Univ., <sup>2</sup>OCARINA)

---

### 3. Physiology / Structural biology

#### -e. Secretion and transport

---

#### ODP-066/W3-7

##### Multiple roles of flagellar export chaperones for flagellar filament formation in *Salmonella*

○Tohru Minamino<sup>1</sup>, Yusuke Morimoto<sup>2,3</sup>, Miki Kinoshita<sup>1</sup>, Keiichi Namba<sup>1,4,5</sup> (<sup>1</sup>Grad. Sch. Front. Biosci., Osaka Univ., <sup>2</sup>Dept. Phys. Info. Tech., Kyushu Inst. Tech., <sup>3</sup>PREST, JST, <sup>4</sup>BDR, RIKEN, <sup>5</sup>Spring-8, RIKEN)

#### ODP-067

##### Interaction mapping of BamA the subunit of the BAM complex by site-specific photocrosslinking

○Yuki Maruno<sup>1,2</sup>, Edward Germany<sup>1</sup>, Takuya Shiota<sup>1</sup> (<sup>1</sup>Org. Prom. TT., Miyazaki Univ, <sup>2</sup>Dept. Applied. Biological. Science., Sch. Agri., Miyazaki Univ.)

#### ODP-068/W3-8

##### Manganese and zinc efflux via MntE is critical for the growth and virulence of Group A *Streptococcus*

○Chihiro Aikawa, Akihiko Shimizu, Kazunori Murase, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

#### ODP-069

##### The role of intrabacterial nanotransportation system for cholera toxin in *Vibrio cholerae*

○Hong Wu, Shouichi Takayama, Shoichi Sakaguchi, Youichi Suzuki, Takashi Nakano (Dept. Microbiol. & Infect. Cont., Fac. Med., Osaka Med. & Pharm. Univ.)

#### ODP-070

##### Crystal structures of a lipid flippase essential for peptidoglycan synthesis

○Hidetaka Kohga<sup>1</sup>, Yoshiki Tanaka<sup>1</sup>, Kunihiro Yoshikawa<sup>1</sup>, Katsuhide Taniguchi<sup>1</sup>, Kei Fujimoto<sup>1</sup>, Lisa Fritz<sup>2</sup>, Tanja Schneider<sup>2</sup>, Tomoya Tsukazaki<sup>1</sup> (<sup>1</sup>Nara Inst. of Sci. and Tech., <sup>2</sup>Univ. of Bonn)

---

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

---

#### ODP-071

##### Variety of fundamental cell morphology in *Mycobacterium avium* strains examined with cryo-TEM

○Hiroyuki Yamada<sup>1</sup>, Kinuyo Chikamatsu<sup>1</sup>, Akio Aono<sup>1</sup>, Kazuyoshi Murata<sup>2</sup>, Naoyuki Miyazaki<sup>2,3</sup>, Yoko Kayama<sup>2,4</sup>, Satoshi Mitarai<sup>1,5</sup> (<sup>1</sup>Dept. Mycobac. Ref. Res., RIT, JATA., <sup>2</sup>Div. Struct. Biol., NIPS, <sup>3</sup>Otsuka Pharma. Co., Ltd., <sup>4</sup>Terabase Inc., <sup>5</sup>Nagasaki Univ.)

#### ODP-072

##### Characterization of TA system targeting DNA gyrase in *Staphylococcus aureus*

○Fuminori Kato<sup>1</sup>, Masayori Inouye<sup>2</sup> (<sup>1</sup>Grad. Sch. Biomed. & Hlth. Sci., Hiroshima Univ., <sup>2</sup>CABM, Rutgers Univ.)

---

### 4. Genetics / Genomics / Biotechnology

#### -a. Genomics, bioinformatics and systems biology

---

#### ODP-073

##### Genomic dissection of the *Vibrio cholerae* O-serogroup global reference strains

○Kazunori Murase<sup>1</sup>, Masatomo Morita<sup>2</sup>, Eiji Arakawa<sup>2</sup>, Hidemasa Izumiya<sup>2</sup>, Ichiro Nakagawa<sup>1</sup>, Makoto Ohnishi<sup>2</sup> (<sup>1</sup>Dept. Microbiol., Grad. Sc. Med., Kyoto Univ., <sup>2</sup>Dept. Bact I., Natl. Inst. Infect. Dis.)

#### ODP-074

##### Deep learning-based relation extraction on biomedical text concerning antimicrobial plant extracts

○Hiroaki Yabuuchi, Akihiko Shigemoto, Yuhei Nomura, Mayumi Nakashima, Shin-ichi Tokumoto (WINTEC)

#### ODP-075

##### **Analysis of the genome diversity of EHEC O157 clade 8 and their Stx2 phages using complete genomes**

○Tatsuya Miyata<sup>1,2</sup>, Itsuki Taniguchi<sup>1</sup>, Keiji Nakamura<sup>1</sup>, Yasuhiro Gotoh<sup>1</sup>, Yoshitoshi Ogura<sup>1,3</sup>, Makoto Ohnishi<sup>4</sup>, Sunao Iyoda<sup>4</sup>, Tetsuya Hayashi<sup>1</sup> (<sup>1</sup>Dept. Bacteriol. Fac. Med. Sci, Kyushu Univ., <sup>2</sup>Dept. Pediatr. Fac. Med. Sci, Kyushu Univ., <sup>3</sup>Dept. Infect. Med., Kurume Univ. Sch. Med., <sup>4</sup>Dept. Bacteriol. I, NIID)

#### ODP-076/W5-4

##### **BeMAP for practical phylogenetic analysis and mapping of antimicrobial resistance plasmids**

○Yusuke Tsuda<sup>1</sup>, Masahiro Suzuki<sup>2</sup>, Jun-ichi Wachino<sup>1,3</sup>, Kouji Kimura<sup>1</sup>, Yoshichika Arakawa<sup>1,3</sup> (<sup>1</sup>Dept. Bacteriol., Grad. Sch. Med., Nagoya Univ., <sup>2</sup>Dept. Microbiol., Sch. Med., Fujita Health Univ., <sup>3</sup>Dept. Med. Tech., Shubun Univ.)

#### ODP-077

##### **The discovery and evaluation of the novel energy metabolic pathway in oral *Veillonella***

○Izumi Mashima<sup>1</sup>, Yu-Chieh Liao<sup>2</sup>, Chieh-Hua Lin<sup>2</sup>, Futoshi Nakazawa<sup>3</sup>, Elaine Haase<sup>4</sup>, Yusuke Kiyoura<sup>1</sup>, Frank Scannapieco<sup>4</sup> (<sup>1</sup>Dept. Oral Med. Sci., Sch. Dent., Ohu Univ., <sup>2</sup>Inst. Pop. Heal. Sci., Nat. Heal. Res. Inst., <sup>3</sup>Dept. Oral Biol., Fac. Dent., Univ. Indonesia, <sup>4</sup>Dept. Oral Biol., Sch. Dent. Med., Univ. Buffalo, SUNY)

#### ODP-078

##### **De novo assembly of *Actinomyces capricornis* strain MAS-1<sup>T</sup> complete genome sequence**

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

#### ODP-079

##### ***Helicobacter cinaedi* is a human-adapted lineage in the *H. cinaedi/canicola/magdeburgensis* complex**

○Yasuhiro Gotoh<sup>1</sup>, Yuya Atsuta<sup>2</sup>, Takako Taniguchi<sup>3</sup>, Ruriko Nishida<sup>1</sup>, Keiji Nakamura<sup>1</sup>, Yoshitoshi Ogura<sup>4</sup>, Naoaki Misawa<sup>3</sup>, Tetsuya Hayashi<sup>1</sup> (<sup>1</sup>Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., <sup>2</sup>Dept. Hematol., Tokyo Met. Komagome Hosp., <sup>3</sup>CADIC, Univ. Miyazaki, <sup>4</sup>Dept. Infect. Med., Kurume Univ. Sch. Med.)

#### 4. Genetics / Genomics / Biotechnology

##### **-b. Horizontal gene transfer, mobile genetic element and evolution**

#### ODP-080

##### **Genomic diversity of Stx1 phages in the EHEC O26:H11 ST21 lineage**

○Bungo Yano<sup>1</sup>, Itsuki Taniguchi<sup>1</sup>, Yasuhiro Gotoh<sup>1</sup>, Yoshitoshi Ogura<sup>2</sup>, Tetsuya Hayashi<sup>1</sup>, Keiji Nakamura<sup>1</sup> (<sup>1</sup>Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., <sup>2</sup>Dept. Infect. Med., Kurume Univ. Sch. Med.)

#### ODP-081

##### **Protein-synthesis inhibitors and mechanical stimuli promote *E. coli* cell-to-cell transformation**

○Yuuna Hayase, Sayuri Kasagaki, Sumio Maeda (Dept. Food Sci., Grad. Sch. Humanities and Sci., Nara Women's Univ.)

#### ODP-082/W5-6

##### **Pheromone-responsive bacteriolysin Bac41 maintains plasmid propagation in *Enterococcus faecalis***

○Jun Kurushima, Haruyoshi Tomita (Dept. Bacteriol., Sch. Med., Gunma Univ.)

#### ODP-083

##### **Discovery of integrative elements with strand-biased circularization activity**

○Hirokazu Yano<sup>1</sup>, Michiaki Masuda<sup>2</sup>, Lisa Nonaka<sup>2,3</sup> (<sup>1</sup>Grad. Sch. Life Sci., Tohoku Univ., <sup>2</sup>Dept. Microbiol. Dokkyo Med. Univ. Sch. Med., <sup>3</sup>F. Human Life Sci., Shokei Univ.)

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

#### ODP-084

##### **Intra-Macrophage Expression of ArtAB Toxin Gene in *Salmonella***

○Rin Satoh<sup>1</sup>, Ikuo Uchida<sup>1</sup>, Shou Miura<sup>1</sup>, Ryo Murata<sup>1</sup>, Yukino Tamamura<sup>2</sup>, Kanetaka Tokugawa<sup>1</sup>, Miho Beppu<sup>1</sup>, Chiharu Nozaki<sup>1</sup>, Masahiro Kusumoto<sup>2</sup> (<sup>1</sup>Dept. Pathobiol., Sch. Vet. Med., Rakuno Gakuen Univ., <sup>2</sup>Div. Bacterial and Parasitic., Animal Health Inst.)

#### ODP-085

##### **Regulation of expression of the VarS/VarA-controlled sRNA by Arca in *Vibrio alginolyticus***

○Takehiko Mima<sup>1</sup>, Eka Darwinata Agus<sup>2</sup>, Kazuyoshi Gotoh<sup>3</sup>, Yumiko Yamamoto<sup>3</sup>, Osamu Matsushita<sup>3</sup> (<sup>1</sup>Dept. Med. Technol., Fac. Health Sci., Ehime Pref. Univ. Health Sci., <sup>2</sup>Dept. Clin. Microbiol., Fac. Med., Udayana Univ., Indonesia, <sup>3</sup>Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci.)

#### ODP-086/W5-8

##### **Temperature-dependent regulation and heterogeneity of *myo-inositol* operon in *Clostridium perfringens***

○Ryosuke Fukuda<sup>1</sup>, Nozomu Obana<sup>2,3</sup>, Nobuhiko Nomura<sup>3,4</sup> (<sup>1</sup>Sch. Life Environ. Sci., Univ. Tsukuba, <sup>2</sup>TMRC, Fac. Medicine, Univ. Tsukuba, <sup>3</sup>MiCS, Univ. Tsukuba, <sup>4</sup>Fac. Life Environ. Sci., Univ. Tsukuba)

#### ODP-087

##### **Regulation of chitinase gene expression by small RNA and Hfq in *Serratia***

○Kazushi Suzuki<sup>1,2,3</sup>, Tomoki Ishida<sup>1</sup>, Hibiki Higuchi<sup>2</sup>, Yujo Kojima<sup>1</sup>, Hayuki Sugimoto<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Sci. & Tech., Niigata Univ., <sup>2</sup>Dept. Agric., Fac. Agric., Niigata Univ., <sup>3</sup>Sakeology Center, Niigata Univ.)

#### ODP-088

##### Post-transcriptional regulation by 3'UTR of glutamine synthetase mRNA in Enterobacteriaceae

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

#### ODP-089

##### Post-transcriptional regulation by RodZ protein essential for rod shape of bacilli. (3)

○Jiro Mitobe, Hideo Yonezawa, Tomoko Hanawa, Takako Osaki (Dept. Infect. Dis., Sch. Med., Kyorin Univ.)

#### ODP-090

##### Xenogeneic silencing-mediated regulation of T3SS2 in *Vibrio parahaemolyticus*

○Andre Pratama<sup>1</sup>, Eiji Ishii<sup>1</sup>, Toshio Kodama<sup>2</sup>, Tetsuya Iida<sup>1</sup>, Shigeaki Matsuda<sup>1</sup> (<sup>1</sup>Dept. Bac. Infect., RIMD, Osaka Univ., <sup>2</sup>Dept. Bac., Inst. Trop. Med., Nagasaki Univ.)

#### ODP-091

##### The complex landscape of *Vibrio parahaemolyticus* transcriptome

○Mohamad Al Kadi<sup>1</sup>, Eiji Ishii<sup>1</sup>, Dang Tat Truong<sup>2</sup>, Daisuke Motooka<sup>2</sup>, Shigeaki Matsuda<sup>1</sup>, Tetsuya Iida<sup>1</sup>, Toshio Kodama<sup>3</sup>, Daisuke Okuzaki<sup>4</sup> (<sup>1</sup>Dept. Bact. Infec., RIMD, Osaka Univ., <sup>2</sup>Dept. Infec. Meta., RIMD, Osaka Univ., <sup>3</sup>Dept. Bac., Inst. Tropical Med., Nagasaki Univ., <sup>4</sup>Single Cell Gen., RIMD, Osaka Univ.)

---

#### 4. Genetics / Genomics / Biotechnology

##### -d. Genetic manipulation and analysis, biotechnology and synthetic biology

---

#### ODP-092/W5-5

##### Development of an efficient gene-targeting system in the fungal pathogen *Trichosporon asahii*

○Yasuhiko Matsumoto<sup>1</sup>, Tae Nagamachi<sup>1</sup>, Asami Yoshikawa<sup>1</sup>, Tsuyoshi Yamada<sup>2,3</sup>, Takashi Sugita<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Meiji Pharm. Univ., <sup>2</sup>Teikyo Univ. Ins. Med. Mycol., <sup>3</sup>Asia Int. Ins. Infect. Dis. Contr., Teikyo Univ.)

#### ODP-093

##### Mycobacterial protease clp is a promising anti-TB drug target

○Takehiro Yamaguchi<sup>1,2</sup>, Noriaki Samukawa<sup>1</sup>, Yuriko Ozeki<sup>3</sup>, Sohkiichi Matsumoto<sup>3</sup>, Shuhei Tomita<sup>1</sup> (<sup>1</sup>Dept. Pharmacol., Grad. Sch. Med., Osaka City Univ., <sup>2</sup>Dept. Bacteriol. I, Natl. Inst. Infect. Dis., <sup>3</sup>Dept. Bacteriol., Grad. Sch. Med., Niigata Univ.)

#### ODP-094

##### Establishment of the genetic engineering systems for *Clostridium botulinum*

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

#### ODP-095

##### Metabolic engineering of *Clostridium perfringens* for fermentation of xylose and cellobiose

○Yuya Miyagi, Hiroki Kawahata, Ryuichi Moriyama, Shigeru Miyata (Coll. Biosci. Biotech., Chubu Univ.)

#### ODP-096

##### Improved hydrogen production from glycerol by metabolically engineered *Clostridium perfringens*

○Yuichiro Sato<sup>1</sup>, Miki Kato<sup>1</sup>, Chinami Yano<sup>1</sup>, Hirofumi Nariya<sup>2</sup>, Shigeru Miyata<sup>1</sup> (<sup>1</sup>Coll. Biosci. Biotech., Chubu Univ., <sup>2</sup>Facul. Human Life, Jumonji Univ.)

---

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

---

#### ODP-097

##### Comparison of the profiles of essential genes between *Mycobacterium intracellulare* strains

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

#### ODP-098/W5-1

##### Analysis of the toxin-antitoxin system, ECs3274-ECs3275, encoded in *Escherichia coli* O157 strain

○Yuka Sasaki<sup>1</sup>, Mizuki Yoshioka<sup>1</sup>, Yuna Mogi<sup>2</sup>, Yuichi Otsuka<sup>1</sup> (<sup>1</sup>Dept. Biochem. Mol. Biol., Grad. Sch. Sci. Eng., Saitama Univ., <sup>2</sup>Grad. Sch. Front. Sci., Univ. of Tokyo)

---

#### 5. Pathogenicity

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

---

#### ODP-099

##### Diversity of the binding region in Hsa adhesin and its homologs among oral streptococcal strains

○Yuiko Ishikawa, Keitarou Saiki, Yumiko Urano-Tashiro, Yuki Yamanaka, Naoto Hayashida, Yukihiko Takahashi (Dept. Microbiol., Nippon Dent. Univ. Sch. Life Dent. at Tokyo)

#### ODP-100

##### Whole-genome analysis of diffusely adherent *Escherichia coli* without typical adhesins

○Kosuke Yamasaki<sup>1</sup>, Yoshihiko Tanimoto<sup>1,2</sup>, Yen Lin Chen<sup>1</sup>, Yoshikazu Nishikawa<sup>3</sup>, Eriko Nakadai-Kage<sup>1</sup>, Takayuki Wada<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Grad. Sch. Hum. Life Sci., Osaka City Univ., <sup>2</sup>Dept. Infect. Dis., Kobe Inst. Heal., <sup>3</sup>Fac. Nutr. Food Sci., Tezukayama Gakuin Univ.)



## ODP-101

**[Withdrawn]**

## ODP-102/W6-7

### **Roles of outer membrane components for the leptospiral motility on the kidney cells**

○Keigo Abe<sup>1</sup>, Nobuo Koizumi<sup>2</sup>, Shuichi Nakamura<sup>1</sup> (<sup>1</sup>Grad. Sch. Eng., Univ. Tohoku, <sup>2</sup>Dept. Bacteriology I, National Institute of Infectious Disease)

## ODP-103

### **Prevalence and Divergence of intimin/Tir/TccP Variants in *Escherichia albertii***

○Tadasuke Ooka<sup>1</sup>, Naoko Imuta<sup>1</sup>, Tetsuya Hayashi<sup>2</sup>, Junichiro Nishi<sup>1</sup> (<sup>1</sup>Grad. Sch. Med. Dent. Sci., Kagoshima Univ., <sup>2</sup>Dept. Bact., Grad. Sch. Med. Sci., Kyushu Univ.)

## ODP-104

### **Analysis on the host receptor of enterotoxigenic *Escherichia coli* colonization factor CS6**

○Alafate Ayibieke, Hiroshi Deguchi, Momoka Asano, Takashi Hamabata (Dept. Infect. Dis., National Center for Global Health and Medicine)

## ODP-105/W6-8

### **Pathogenicity analysis of experimentally evolved *Acinetobacter baumannii* strains by tracheal tube**

○Go Kamoshida<sup>1</sup>, Daiki Yamaguchi<sup>1</sup>, Noriteru Yamada<sup>1</sup>, Norihiko Takemoto<sup>2</sup>, Kinnosuke Yahiro<sup>1</sup> (<sup>1</sup>Dept. Microbiol. and Infect. Cont. Sci. Kyoto Pharm. Univ., <sup>2</sup>Pathogenic Microbe lab., Dept. Infect. Dis., NCGM)

## ODP-106

### **Degradation of the autolysin of *Clostridium perfringens***

○Riyo Aono<sup>1</sup>, Nozomu Matsunaga<sup>2</sup>, Eiji Tamai<sup>3</sup>, Seiichi Katayama<sup>2</sup>, Yasuo Hitsumoto<sup>2</sup> (<sup>1</sup>Dept. Material Sci., Grad. Sch. Sci., Okayama Univ. Sci., <sup>2</sup>Dept. Life Sci., Fac. Sch. Sci., Okayama Univ. Sci., <sup>3</sup>Dept. Infect. Dis., Coll. Pharm., Matsuyama Univ.)

## ODP-107

### **Involvement of autolysin in cell lysis of *Clostridium perfringens* cells**

○Seira Egusa<sup>1</sup>, Nozomu Matsunaga<sup>2</sup>, Seiichi Katayama<sup>2</sup>, Yasuo Hitsumoto<sup>2</sup> (<sup>1</sup>Dept. Life Sci., Grad. Sch. Sci., Okayama Univ. Sci., <sup>2</sup>Dept. Life Sci., Fac. Sci., Okayama Univ. Sci.)

## ODP-108

### **Appearance of phage-like, filamentous aggregate, and pilus structures on the surface of CA-MRSA/J**

○Tsai-Wen Wan<sup>1,2</sup>, Wei-Chun Hung<sup>1,3</sup>, Lee-Jene Teng<sup>2</sup>, Tatsuo Yamamoto<sup>1</sup> (<sup>1</sup>Dept. Epidemiol. Genomics Evol., Intl. Med. Edu. Res. Center, <sup>2</sup>National Taiwan Univ., Col. Med., <sup>3</sup>Kaohsiung Med. Univ.)

## ODP-109/W6-2

### **Pneumolysin-dependent nasal epithelial barrier dysfunction involved in pneumococcal dissemination**

○Yuki Takahara<sup>1</sup>, Tomoko Sumitomo<sup>1</sup>, Masamitsu Kono<sup>3</sup>, Masaya Yamaguchi<sup>1</sup>, Masanobu Nakata<sup>4</sup>, Muneki Hotomi<sup>3</sup>, Shigetada Kawabata<sup>1</sup> (<sup>1</sup>Dept. Oral Mol Microbiol. Osaka Univ. Grad. Sch. Dent., <sup>2</sup>Dept. Fixed Prosthodont. Osaka Univ. Grad. Sch. Dent., <sup>3</sup>Dept. Otorhinolaryngology-Head and Neck Surgery. Wakayama Medical Univ., <sup>4</sup>Dept. Oral. Microbiol., Grad. Sch. Med. and Dent. Kagoshima Univ.)

## 5. Pathogenicity

### **-b. Toxins, effectors and physically active substances**

## ODP-110/W6-5

### ***Bordetella parapertussis* produces melanin involved in the bacterial survival during host infection**

○Yukihiro Hiramatsu<sup>1</sup>, Takashi Nishida<sup>1</sup>, Dendi Krisna Nugraha<sup>1</sup>, Yasuhiko Horiguchi<sup>1,2</sup> (<sup>1</sup>Dept. Mol. Bact., RIMD, Osaka Univ., <sup>2</sup>CiDER, Osaka Univ.)

## ODP-111

### **Role of extracellular vesicles from *Staphylococcus aureus* on pathogenicity of *Pseudomonas aeruginosa***

○Phawinee Subsomwong<sup>1</sup>, Kouji Narita<sup>1,2</sup>, Noriaki Kawai<sup>1</sup>, Akio Nakane<sup>3,4</sup>, Krisana Asano<sup>1,3</sup> (<sup>1</sup>Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., <sup>2</sup>Inst. Anim. Exp., Hirosaki Univ. Grad. Sch. Med., <sup>3</sup>Dept. Biopolym. Health Sci., Hirosaki Univ. Grad. Sch. Med., <sup>4</sup>Hirosaki Univ. Health Welf.)

## ODP-112

### **Critical residues of *Clostridium perfringens* delta-toxin for biological activity**

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

## ODP-113

### **Cellular uptake of *Clostridium botulinum* C2 toxin requires cathepsin B activity**

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

## ODP-114

### **A new endoplasmic stress mediator, KLHDC7B, increased Harakiri in SubAB-induced apoptosis**

○Kinnosuke Yahiro<sup>1</sup>, Kohei Ogura<sup>2</sup>, Hiroyasu Tsutsuki<sup>3</sup>, Sunao Iyoda<sup>4</sup>, Makoto Ohnishi<sup>4</sup> (<sup>1</sup>Dept. Microbiol. Infect. Cont. Sci., Kyoto Pharma. Univ., <sup>2</sup>Front. Sci. Init., Kanazawa Univ., <sup>3</sup>Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., <sup>4</sup>Dept. Bacteriol. I., Nat. Inst. Inf. Dis.)

**ODP-115****Enhanced production of Shiga toxin 2 in enterohemorrhagic *Escherichia coli* by oxygen**

○Takeshi Shimizu<sup>1</sup>, Manami Onuki<sup>1</sup>, Shinichiro Hirai<sup>2</sup>, Eiji Yokoyama<sup>3</sup>, Akio Matsumoto<sup>4</sup>, Takashi Hamabata<sup>5</sup> (<sup>1</sup>Dept. Mol. Infect., Sch. Med., Chiba Univ., <sup>2</sup>Dept. Infect. Dise. Risk Manag. Center, N. I. I. D., <sup>3</sup>Div. Bacteriol., Chiba Prefect. Instit. Pub. Heal., <sup>4</sup>Dept. Aging Pharmacol., Sch. Med., Toho Univ., <sup>5</sup>Sect. Bact. Infect., Re. Inst., Nat. Cen. Glo. Heal. Med.)

**ODP-116****Role of calcium channels in COX-2 expression and PGE2 production by gingipains**

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

**ODP-117****Staphylococcal Superantigen-like 12 activates murine mast cells and basophils**

○Saotomo Itoh, Ayaka Urabe, Masato Kobayashi, Arisa Morikawa, Saishi Nishiyama, Takuma Kitano, Shigeaki Hida (Dept. Mol. Cell. Health Sci., Grad. Sch. Pharm., Nagoya City Univ.)

**ODP-118/W6-6****Investigation of the mechanism by which Bcr4 controls T3SS activity in *Bordetella bronchiseptica***

○Masataka Goto<sup>1</sup>, Asaomi Kuwae<sup>1</sup>, Tomoko Hanawa<sup>2</sup>, Akio Abe<sup>1</sup> (<sup>1</sup>Lab. Bact. Infect., Grad. Sch. Infect. Cont. Sci., Kitasato Univ., <sup>2</sup>Dept. Infect. Dis., Kyorin Univ. Sch. Med.)

**ODP-119****Analysis of interaction between *Bordetella BteA* and human Moesin**

○Mao Yamashita, Asaomi Kuwae, Akio Abe (Lab. Bact. Infect., Grad. Sch. Infect. Cont. Sci., Kitasato Univ.)

**ODP-120****Analysis of Francisella effector protein IglC controlling host gene expression**

○Takashi Shimizu<sup>1</sup>, Takemasa Nakamura<sup>1</sup>, Kenta Watanabe<sup>1</sup>, Akihiko Uda<sup>2</sup>, Masahisa Watarai<sup>1</sup> (<sup>1</sup>Lab. Vet. Pub. Hlth., Jnt. Fac. Vet. Med., Yamaguchi Univ., <sup>2</sup>Dept. Vet. Sci., NIID)

**ODP-121/W6-1*****Streptococcus pyogenes* secreted toxin NAD-glycohydrolase inhibits host translation systems**

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

**ODP-122****Detection of F4 Homologous Adhesion Factor in *Escherichia coli* Carrying astA**

○Yuki Suzuki<sup>1</sup>, Yoshihiko Tanimoto<sup>1,2</sup>, Yen Lin Chen<sup>1</sup>, Hiromi Nakamura<sup>3</sup>, Kenji Ohya<sup>4</sup>, Yoshikazu Nishikawa<sup>5</sup>, Takayuki Wada<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Fac. Hum. Life. Sci., Osaka City Univ., <sup>2</sup>Dept. Infect. Dis., Kobe Inst. Heal., <sup>3</sup>Div. Microbiol., Osaka Inst. Publ. Heal., <sup>4</sup>Div. Microbiol., Nat. Inst. Heal. Sci., <sup>5</sup>Fac. Nutr. Food. Sci., Tezukayama Gakuin Univ.)

**ODP-123****Biological function of pneumococci-derived hydrogen peroxide on the host cells**

Yuko Honjo<sup>1,2</sup>, Michinaga Ogawa<sup>2</sup>, ○Runa Furuya<sup>2,3</sup>, Ryoichi Saito<sup>3</sup>, Yukihiro Akeda<sup>2</sup>, Haruko Takeyama<sup>1</sup>, Makoto Ohnishi<sup>4</sup> (<sup>1</sup>Dept. Life Sci. Med. Biosci., Waseda Univ., <sup>2</sup>Dept. Bac. 1, Natl. Inst. Infect. Dis., <sup>3</sup>Dept. Mol. Microbiol., Grad. Sch. Med., Tokyo Medical and Dental Univ., <sup>4</sup>Natl. Inst. Infect. Dis.)

**ODP-124****A comparative of *Candida albicans* from patients with oral candidiasis and from non-oral candidiasis**

○Chisato Ouchi, Akira Hasebe (Hokkaido Univ. Grad. Sch. Dent. Med. Dept. Oral Mol. Microbiol.)

**ODP-125/W6-3*****Aeromonas sobria* serine protease disrupts tight junctions and contributes to bacterial translocation**

○Hidetomo Kobayashi<sup>1</sup>, Soshi Seike<sup>1</sup>, Eizo Takahashi<sup>2</sup>, Keinosuke Okamoto<sup>3</sup>, Hiroyasu Yamanaka<sup>1</sup> (<sup>1</sup>Labo. Mol. Microbiol. Sci., Fac. Pharm. Sci., Hiroshima International Univ., <sup>2</sup>Labo. Med. Microbiol., Dept. Health Pharm., Yokohama Univ. of Pharmacy, <sup>3</sup>Collaborative Research Center of Okayama Univ. for Infect. Diseases in India)

**ODP-126****Characterization of neutralizing human antibody against botulinum neurotoxin type E**

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

**ODP-127****Response of human macrophage-like cells to pore-forming toxin produced by *S. mitis* clinical isolate**

○Momoka Kubo<sup>1</sup>, Atsushi Tabata<sup>1,2</sup>, Takuya Ikeda<sup>1</sup>, Toshifumi Tomoyasu<sup>1,2</sup>, Hisashi Ohkuni<sup>3</sup>, Hideaki Nagamune<sup>1,2</sup> (<sup>1</sup>Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., <sup>2</sup>Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., <sup>3</sup>Health Sci. Res. Inst. East Japan Co. Ltd.)

**ODP-128****Functional analysis of a novel cell wall-anchored glycosidase of *Streptococcus intermedius***

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

#### ODP-129

##### **A microporous carbon suppresses virulence of Enterohemorrhagic Escherichia coli**

○Hidetada Hirakawa<sup>1</sup>, Kazutomo Suzue<sup>3</sup>, Ayako Takita<sup>1</sup>, Wataru Kamitani<sup>3</sup>, Haruyoshi Tomita<sup>1,2</sup> (<sup>1</sup>Dept. Bacteriol., Sch. Med., Gunma Univ., <sup>2</sup>Lab. Drug Resist., Sch. Med., Gunma Univ., <sup>3</sup>Dept. Infect Dis., Sch. Med., Gunma Univ.)

#### ODP-130

##### **Characterization of $\beta$ -hemolysin produced by *Streptococcus phocae***

○Shuto Yokohata<sup>1</sup>, Atsushi Tabata<sup>1,2</sup>, Toshifumi Tomoyasu<sup>1,2</sup>, Hideaki Nagamune<sup>1,2</sup> (<sup>1</sup>Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., <sup>2</sup>Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ.)

#### ODP-131

##### **Red ginseng extracts relieve atopic dermatitis by reducing alpha-hemolysin production from *S. aureus***

Yuina Iwasaki<sup>1</sup>, Sakura Tsutamoto<sup>2</sup>, Risa Imamiya<sup>2</sup>, Keiichi Samukawa<sup>3</sup>, Hiroshi Iwao<sup>4</sup>, Dendi Krisna Nugraha<sup>5</sup>, Yasuhiko Horiguchi<sup>5</sup>, ○Mayuko Osada-Oka<sup>1</sup> (<sup>1</sup>Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., <sup>2</sup>Faculty Life Env. Sci., Kyoto Pref. Univ., <sup>3</sup>Dept. Pharm., Osaka City Univ. Med. Sch., <sup>4</sup>Shitennoji Univ., <sup>5</sup>Dept. Mol. Bacteriol., RIMD, Osaka Univ.)

#### ODP-132

##### ***C. botulinum* and related clostridia derived membrane vesicles induce inflammatory responses**

○Nobuhide Kobayashi<sup>1</sup>, Kimihiro Abe<sup>2</sup>, Sachiyo Akagi<sup>1</sup>, Sho Amatsu<sup>1</sup>, Takuhiro Matsumura<sup>1</sup>, Nobuhiko Nomura<sup>2</sup>, Nozomu Obana<sup>3</sup>, Yukako Fujinaga<sup>1</sup> (<sup>1</sup>Dept. Bacteriol., Grad. Sch. Med., Kanazawa Univ., <sup>2</sup>Fac. Life Environ. Sci., Univ. Tsukuba, <sup>3</sup>TMRC, Fac. Med., Univ. Tsukuba)

#### ODP-133

##### **Production and molecular characterization of mitilectin homolog derived from *S. mitis***

○Hiroki Oda<sup>1</sup>, Airi Matsumoto<sup>2</sup>, Atsushi Tabata<sup>1,2</sup>, Toshifumi Tomoyasu<sup>1,2</sup>, Hisashi Ohkuni<sup>3</sup>, Hideaki Nagamune<sup>1,2</sup> (<sup>1</sup>Div. Bioresour. Sci., Grad. Sch. Sci. & Tech. for Innov., Tokushima Univ., <sup>2</sup>Div. Biosci. & Bioindust., Grad. Sch. Tech., Indust. & Soc. Sci., Tokushima Univ., <sup>3</sup>Health Sci. Res. Inst. East Japan Co. Ltd.)

#### ODP-134

##### **Identification of a functional type 6 secretion system in *Helicobacter cinaedi***

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

#### ODP-135/W6-4

##### ***E. coli*-derived CirA relayed by extracellular vesicles induce inflammatory responses in macrophages**

○Risa Imamiya<sup>1</sup>, Mayuko Osada-Oka<sup>2</sup>, Akari Shinohara<sup>2</sup>, Yasuhiko Horiguchi<sup>3,4</sup> (<sup>1</sup>Food Hyg. Health., Life Env. Sci., Kyoto Pref. Univ., <sup>2</sup>Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., <sup>3</sup>Dept. Mol. Bact., RIMD, Osaka Univ., <sup>4</sup>CiDER, Osaka Univ.)

#### ODP-136

##### **ESAT-6 like protein contributes to T7SS-dependent cytotoxicity in *Streptococcus intermedius***

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

#### ODP-137

##### **Elucidating the role of Drp35 in *Staphylococcus aureus***

○Maaya Sasaki<sup>1</sup>, Vishal Gor<sup>2</sup>, Kazuya Morikawa<sup>2</sup> (<sup>1</sup>Sch. Med. Sci., Univ. Tsukuba, <sup>2</sup>Fac. Med., Univ. Tsukuba)

#### ODP-138

##### **Serine clamp of *Clostridium perfringens* binary toxin CPiLEb induces the strong cytotoxicity**

○Toru Yoshida<sup>1</sup>, Yuto Uchida<sup>2</sup>, Tomohito Yamada<sup>2</sup>, Hideaki Tsuge<sup>2</sup> (<sup>1</sup>Dept. Chem. Biol. Sci., Japan Women's Univ., <sup>2</sup>Fac. Life Sci., Kyoto Sangyo Univ.)

---

## 5. Pathogenicity

### -c. Cell invasion and intracellular parasitism

---

#### ODP-139

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

○Dendi Krisna Nugraha<sup>1</sup>, Hiroyuki Yamaguchi<sup>2</sup>, Yasuhiko Horiguchi<sup>1,3</sup> (<sup>1</sup>Dept. Mol. Bact., RIMD, Osaka Univ., <sup>2</sup>Dept. Med. Lab. Sci., Fac. Health Sci., Hokkaido Univ., <sup>3</sup>CiDER, Osaka Univ.)

#### ODP-140

##### **Exploration for signal transduction pathways utilized by *Chlamydia trachomatis* with drug libraries**

○Ruiyu Li<sup>1</sup>, Jeewan Thapa<sup>1,2</sup>, Torahiko Okubo<sup>1</sup>, Yoshikazu Furuta<sup>2</sup>, Hideaki Higashi<sup>2</sup>, Hiroyuki Yamaguchi<sup>1</sup>, Saicheng Zhang<sup>1</sup> (<sup>1</sup>Fac. Health Sci., Hokkaido Univ., <sup>2</sup>Div. Biores., Hokkaido Univ. Res Center Zoonosis Ctrl.)

#### ODP-141/W9-4

##### **Indole suppresses the intracellular growth of *Chlamydia trachomatis* L2**

○Hiroyuki Yamaguchi<sup>1</sup>, Jeewan Thapa<sup>2</sup>, Torahiko Okubo<sup>1</sup>, Yoshikazu Furuta<sup>2</sup>, Shinji Nakamura<sup>3</sup>, Hideaki Higashi<sup>2</sup> (<sup>1</sup>Fac. Health Science, Hokkaido Univ., <sup>2</sup>Int. Inst. Zoonosis Cont., Hokkaido Univ., <sup>3</sup>Lab. Morphol. Image. Anal., Res. Sup. Cent., Juntendo Univ. Grad. Sch. Med.)

#### ODP-142

##### **Analysis of cytotoxicity of intact Mycobacterium tuberculosis for human lung fibroblasts**

○Takemasa Takii<sup>1,2,3</sup>, Naomi Yasuda<sup>1</sup>, Hiroyuki Yamada<sup>1</sup>, Naoya Ohara<sup>3</sup> (<sup>1</sup>Dept. Mycobacterium Reference & Research, Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, <sup>2</sup>Dept. Hygienic Chemistry, Grad. Sch. Pharmaceutical Sciences, Nagoya City Univ., <sup>3</sup>Dept. Oral Microbiology, Grad. Sch. Medicine, Dentistry and Pharmaceutical Sciences, Okayama Univ.)

#### ODP-143/W9-3

##### **Development of NanoBiT assay system for evaluating pneumococcal virulence, and its application**

○Sayaka Shizukuishi<sup>1,2</sup>, Michinaga Ogawa<sup>1</sup>, Yukihiro Akeda<sup>1</sup>, Akihiko Ryo<sup>2</sup>, Makoto Ohnishi<sup>1</sup> (<sup>1</sup>Bacteriol. I, Nat. Inst. Infect. Dis., <sup>2</sup>Dept. Microbiol., Yokohama City Univ., Grad. Sch. Med.)

#### ODP-144

##### **Initiation points of pathogenicity in gut commensal pathobionts *Klebsiella pneumoniae***

○Hitoshi Tsugawa<sup>1</sup>, Hidekazu Suzuki<sup>2</sup> (<sup>1</sup>Transkingdom Signaling Research Unit, Division of Host Defense Mechanism, Tokai Univ. Sch. Med., <sup>2</sup>Dept. Internal Med., Tokai Univ., Sch. Med.)

#### ODP-145

##### **Bacterial component analysis of *Paraclostridium bifermentans* subsp. *muricolitidis***

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

#### ODP-146/W9-7

##### **Examination of a meningococcal function-unknown protein with unnatural amino acid photocrosslinkers**

○Hideyuki Takahashi<sup>1</sup>, Makoto Ohnishi<sup>1</sup>, Ken Shimuta<sup>1</sup>, Shigeyuki Yokoyama<sup>2</sup>, Tatsuo Yanagisawa<sup>2</sup> (<sup>1</sup>Dept. Microbiol I, Nat. Inst. Infect. Dis., <sup>2</sup>Structural Lab., RIKEN)

#### ODP-147

##### **LC3 is utilized to the invasion of *Campylobacter jejuni* via Rac1 signaling pathway**

○Shiho Fukushima<sup>1</sup>, Takaaki Shimohata<sup>1,2</sup>, Takashi Uebanso<sup>1</sup>, Kazuaki Mawatari<sup>1</sup>, Akira Takahashi<sup>1</sup> (<sup>1</sup>Dept. Prevent. Environ. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch., <sup>2</sup>Dept. Marine Bioresour., Fukui Pref. Univ.)

#### ODP-148

##### **The role of polyamine synthesis and efflux during low Mg<sup>2+</sup> stress and during infection in *Salmonella***

○Yumi Iwadate, Rouhallah Ramezanifard, Yekaterina Golubeva, Luke Fenlon, James Slauch (Dept. Microbiol., U of I)

#### ODP-149

##### **Inactivation of *Prevotella intermedia* OxyR results in reduced invasion into host cells**

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

## 5. Pathogenicity

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

#### ODP-150

##### ***Streptococcus gordonii* DL1 survives PMNs killing through its resistance to lysozyme**

○Yumiko Tashiro, Keitarou Saiki, Yuki Yamanaka, Yuiko Ishikawa, Naoto Hayashida, Yukihiro Takahashi (Dept. Microbiol., Nippon Dent. Univ. Sch. Life Dentistry at Tokyo)

#### ODP-151/W9-5

##### **LLO promotes phosphorylation of the inflammasome adaptor ASC through Lyn to exacerbate infection**

Yuko Tanishita<sup>1</sup>, Hisateru Sekiya<sup>1</sup>, Gabriel Nunez<sup>2</sup>, Akihiko Yoshimura<sup>1</sup>, ○Hideki Hara<sup>1</sup> (<sup>1</sup>Dept. Microbiol. Immunol., Sch. Med., Keio Univ., <sup>2</sup>Dept. Pathol., Sch. Med., Univ. Mich.)

#### ODP-152

##### **The identification of the immune evasion factors of *Francisella tularensis***

○Takemasa Nakamura<sup>1</sup>, Ryo Ikegaya<sup>1</sup>, Takashi Shimizu<sup>1</sup>, Kenta Watanabe<sup>1</sup>, Akihiko Uda<sup>2</sup>, Masahisa Watarai<sup>1</sup> (<sup>1</sup>Lab. Vet. Pub. Hlth., Jnt. Fac. Vet. Med., Yamaguchi Univ., <sup>2</sup>Dept. Vet. Sci., NIID)

#### ODP-153/W9-6

##### **Knockout of the *ykjB* gene increases virulence in *Bacillus subtilis***

○Daiki Takano, Chikara Kaito, Kazuyuki Furuta (Grad. Sch. of Med., Dent., and Pharm. Sci., Okayama Univ.)

#### ODP-154

##### ***Borrelia miyamotoi* BOM1093 contributes serum resistance by Vitronectin binding**

○Kozue Sato<sup>1</sup>, Yumi Kumagai<sup>2</sup>, Tetsuya Hayashi<sup>3</sup>, Ai Takano<sup>4</sup>, Makoto Ohnishi<sup>1</sup>, Hiroki Kawabata<sup>1</sup> (<sup>1</sup>Dept. Bacteriol. I, NIID, <sup>2</sup>Dept. Biochem. System Biomed., Grad. Sch. Med., Juntendo Univ., <sup>3</sup>Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., <sup>4</sup>Dept. Vet. Med., Joint Fac. Vet. Med., Yamaguchi Univ.)

#### ODP-155

##### **The expression of MacAB is controlled by Rof through Rho dependent transcription termination system**

○Sohei Nakano<sup>1,2</sup>, Seiji Yamasaki<sup>1,2</sup>, Atsushi Taguchi<sup>1,2</sup>, Kunihiko Nishino<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Pharm. Sci., Osaka Univ., <sup>2</sup>SANKEN, Osaka Univ.)

---

## 5. Pathogenicity -e. Infection models

---

### ODP-156

#### **Pneumococcal triosephosphate isomerase binds to host plasminogen and promotes its activation**

○Satoru Hirayama<sup>1</sup>, Hisanori Domon<sup>1,2</sup>, Takumi Hiyoshi<sup>1,2,3</sup>, Toshihito Isono<sup>1</sup>, Hikaru Tamura<sup>1,3</sup>, Karin Sasagawa<sup>1,3</sup>, Fumio Takizawa<sup>1,3</sup>, Yutaka Terao<sup>1,2</sup> (<sup>1</sup>Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., <sup>2</sup>Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., <sup>3</sup>Div. Periodontol., Niigata Univ. Grad. Sch. Med. Dent. Sci.)

### ODP-157

#### ***P. gingivalis* components/secretions synergistically enhance pneumonia caused by *S. pneumoniae***

Tepei Okabe<sup>1</sup>, Yosuke Kamiya<sup>1</sup>, Takeshi Kikuchi<sup>1</sup>, ○Masayuki Umemura<sup>2</sup>, Yoshihiko Sugita<sup>3</sup>, Yoshikazu Naiki<sup>4</sup>, Yoshiaki Hasegawa<sup>4</sup>, Jun-ichiro Hayashi<sup>1</sup>, Naoya Higuchi<sup>5</sup>, Akio Mitani<sup>1</sup> (<sup>1</sup>Dept. Periodontol., Sch. Dent., Aichi Gakuin Univ., <sup>2</sup>Mol. Microbiol. Gr., TBRC, Univ. Ryukyus, <sup>3</sup>Dept. Oral Pathol., Sch. Dent., Aichi Gakuin Univ., <sup>4</sup>Dept. Microbiol., Sch. Dent., Aichi Gakuin Univ., <sup>5</sup>Dept. Endod., Sch. Dent., Aichi Gakuin Univ.)

### ODP-158

#### **Changes in gastric microflora in the *Helicobacter pylori* infection model using MPS mice**

○Fuhito Hojo<sup>1</sup>, Hideo Yonezawa<sup>2</sup>, Kentaro Oka<sup>3</sup>, Motomichi Takahashi<sup>3</sup>, Satoshi Kurata<sup>4</sup>, Tomoko Hanawa<sup>2</sup>, Shigeru Kamiya<sup>2</sup>, Jiro Mitobe<sup>2</sup>, Takako Osaki<sup>2</sup> (<sup>1</sup>Inst. Lab. Anim. Facilt., Kyorin Univ. Sch. Med., <sup>2</sup>Dept. Infect. Dis., Kyorin Univ. Sch. Med., <sup>3</sup>Central Research Inst., Miyarisan Pharma. Co., Ltd., <sup>4</sup>Div. Microbiol., Dept. Med Technol., Faculty of Health Sci., Kyorin Univ.)

### ODP-159

#### **Mechanism of exacerbation of pneumonia by oral commensals in HOMA mouse model**

○Manami Hayashi<sup>1,2</sup>, Momoe Itsumi<sup>1</sup>, Mina Mori<sup>1</sup>, Haruka Fukamachi<sup>1</sup>, Hirotaka Kuwata<sup>1</sup> (<sup>1</sup>Dept. Oral Microbiol. Immunol., Sch. Dent., Showa Univ., <sup>2</sup>Div. Anesth., Sch. Dent. Showa Univ.)

---

## 5. Pathogenicity -f. Others

---

### ODP-160

#### ***Leptospira interrogans* induces decrease of proteins involved in junction stabilization**

○Romina Tokumon, Isabel Sebastian, Yuta Hashimoto, Tetsu Yamashiro, Claudia Toma (Dept. Bacteriol., Grad. Sch. Med., Univ. Ryukyus)

### ODP-161

#### **Influences of *Staphylococcus aureus* on scratching behavior in NC/Nga mice with atopic dermatitis**

○Katsuhiko Matsui, Midori Nakamura, Noriko Obana (Dept. Clin. Immunol., Meiji Pharmaceut. Univ.)

### ODP-162

#### **Effect of periodontal pathogen culture supernatant and antimicrobial agents on *S. pneumoniae***

○Yu Kono<sup>1,2</sup>, Muneaki Tamura<sup>3,4</sup>, Noriaki Kamio<sup>3,4</sup>, Hajime Tanaka<sup>3,4</sup>, Kenichi Imai<sup>3,4</sup> (<sup>1</sup>Div. Oral Struct. Funct. Sci., Nihon Univ. Sch. Dent. Grad. Sch. Dent., <sup>2</sup>Dept. Oral Surg. 1, Nihon Univ. Sch. Dent., <sup>3</sup>Dept. Microbiol., Nihon Univ. Sch. Dent., <sup>4</sup>Div. Immunol. Pathobiol., Dent. Res. Cent., Nihon Univ. Sch. Dent.)

### ODP-163

#### **Analysis of the swarming regulation mechanism of *Proteus mirabilis***

○Saki Tawata, Seina Higa, Itaru Hirai (Lab. Microbiol., Sch. Health. Sci., Univ. The Ryukyus)

### ODP-164

#### **The repression of antitoxin gene ECs5399 of toxin-antitoxin system in EHEC reduces pathogenicity**

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

### ODP-165

#### **Analysis on the pathogenicity of *flaA* and swimming motility by a polar flagellum of *Aeromonas* spp.**

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

### ODP-166

#### **Effect of pH changes on gene expression of *A. actinomycetemcomitans* in the gingival sulcus**

○Noriko Shinozaki-Kuwahara<sup>1</sup>, Koichi Hiratsuka<sup>2</sup>, Masanori Saito<sup>1</sup>, Tomomi Hashizume-Takizawa<sup>1</sup>, Hidenobu Senpuku<sup>1</sup> (<sup>1</sup>Dept. Microbiol. Immunol., Nihon Univ. Sch. Dent. at Matsudo, <sup>2</sup>Dept. Biochem. Mol. Biol., Nihon Univ. Sch. Dent. at Matsudo)

---

## 6. Host defense -a. Innate immunity

---

### ODP-167

#### **Effect of zymosan on poly(I:C)-induced production of proinflammatory cytokines and type I interferon**

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

### ODP-168/W9-8

#### **Role of toll-like receptor 4 during *Clostridium perfringens* type A infection**

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

#### ODP-169

##### **Salmonella fimbrial protein induces interferon- $\beta$ expression via Toll-like receptor in macrophages**

Masahiro Ando, Eri Jino, Takeaki Wajima, ○Kei-ichi Uchiya  
(Dept. Microbiol., Fac. Pharm., Meijo Univ.)

#### ODP-170/W9-2

##### **Investigation of the mechanism by which pneumococcal infection becomes severe in elder mice**

○Masaya Yamaguchi<sup>1</sup>, Kunio Kawanishi<sup>2</sup>, Momoko Kobayashi<sup>1</sup>,  
Daisuke Motooka<sup>3</sup>, Daisuke Okuzaki<sup>3,4</sup>, Shigetada Kawabata<sup>1</sup>  
(<sup>1</sup>Dept. Oral Mol. Microbiol., Osaka Univ. Grad. Sch. Dent., <sup>2</sup>Fac.  
Med., Tsukuba Univ., <sup>3</sup>Res. Inst. Microb. Dis., Osaka Univ.,  
<sup>4</sup>Osaka Univ., Immunol. Front. Res. Cent.)

#### ODP-171

##### **Effects of priming with proinflammatory factors on monocyte responses to Fusobacterium nucleatum LPS**

○Hideo Kataoka, Taiki Mori, Takeshi Into (Dept. Oral  
Microbiol., Div. Oral Infect Health Sci., Asahi Univ. Sch. Dent.)

#### ODP-172

##### **Aging impairs LC3-associated phagocytosis-mediated immune defense against Streptococcus pneumoniae**

○Megumi Inomata<sup>1,2</sup>, John Leong<sup>2</sup> (<sup>1</sup>Div. Microbiol. Immunol.,  
Sch. Dent., Meikai Univ., <sup>2</sup>Dept. Mol. Biol. Microbiol., Sch. Med.,  
Tufts Univ.)

#### ODP-173

##### **Analysis of host immunity through HIF-1 activating factor Mint3 in Listeria monocytogenes infection**

○Takayuki Uematsu<sup>1</sup>, Kohsuke Tsuchiya<sup>2</sup>, Noritada  
Kobayashi<sup>1</sup>, Takeharu Sakamoto<sup>3</sup> (<sup>1</sup>Biomed. Lab., Div. Biomed.  
Res., Kitasato Univ. Med. Ctr., <sup>2</sup>Div. Immunol. Mol Biol., Cancer  
Res. Inst., Kanazawa Univ., <sup>3</sup>Div. Cancer Biol., Inst. Biomed Sci.,  
Kansai Med. Univ.)

#### ODP-174

##### **Analysis of Card9 function in pulmonary mycobacterial infection**

○Kenji Toyonaga<sup>1</sup>, Masayuki Umemura<sup>2</sup>, Goro Matsuzaki<sup>2</sup>,  
Hiromitsu Hara<sup>3</sup>, Yoshihiko Tanaka<sup>1</sup>, Sho Yamasaki<sup>4</sup> (<sup>1</sup>Sect.  
Infect. Biol., Dept. Funct. Biosci., Fukuoka Dent. Coll., <sup>2</sup>Mol.  
Microbiol. Gr., TBRC, Univ. Ryukyus, <sup>3</sup>Dept. Immunol., Grad.  
Sch., Med. & Dent. Sci., Kagoshima Univ., <sup>4</sup>Dept. Mol. Immunol.,  
RIMD, Osaka Univ.)

#### ODP-175

##### **Neutrophil-derived ectosomes with antibacterial potential ameliorate mouse sepsis**

○Yumi Kumagai<sup>1</sup>, Nagomi Kurebayashi<sup>2</sup>, Isao Nagaoka<sup>1,3</sup>, Etsuo  
Susaki<sup>1</sup> (<sup>1</sup>Dept. Biochem. System Biomed., Grad. Sch. Med.,  
Juntendo Univ., <sup>2</sup>Dept. Pharmacol., Sch. Med., Juntendo Univ.,  
<sup>3</sup>Faculty Health Sci., Juntendo Univ.)

#### ODP-176

##### **The microflora has an important role for the differentiation of oral immune cell**

○Mina Mori<sup>1</sup>, Natasa Trtic<sup>2</sup>, Momoe Itsumi<sup>1</sup>, Natsuno  
Nakamura<sup>1</sup>, Manami Hayashi<sup>1</sup>, Haruka Fukamachi<sup>1</sup>, Hirotaka  
Kuwata<sup>1</sup> (<sup>1</sup>Dept. Oral. Microbiol. Immunol., Sch. Dent., Showa  
Univ., <sup>2</sup>Dept. Perio. and Oral Med., Sch. Med., Banja Luka Univ.)

---

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

---

#### ODP-177

##### **Francisella tularensis escapes from host immunity by metabolic reprogramming**

○Kensuke Shibata<sup>1,2,3</sup>, Takashi Shimizu<sup>4</sup>, Masahisa Watarai<sup>4</sup>,  
Mutsunori Shirai<sup>1</sup> (<sup>1</sup>Dept. Microbiol. Immunol., Yamaguchi  
Univ., <sup>2</sup>Dept. Ophthal., Sch. Med., Kyushu Univ., <sup>3</sup>Dept. Mol.  
Immunol., Res. Inst. Microbial Diseases, Osaka Univ., <sup>4</sup>Joint  
Faculty of Vet. Med., Yamaguchi Univ.)

#### ODP-178

##### **Intimate adhesion of Citrobacter rodentium is the cue to initiate anti-pathogen immune responses**

○Keita Takahashi<sup>1</sup>, Tsuyoshi Sugiyama<sup>2</sup>, Nagisa Tokunoh<sup>1</sup>,  
Shun Tsurumi<sup>1</sup>, Tetsuo Koshizuka<sup>1</sup>, Naoki Inoue<sup>1</sup> (<sup>1</sup>Dept.  
Microbiol. Immunol., Sch. Pharm., Gifu Pharm. Univ., <sup>2</sup>Dept.  
Pharm. Sci., Gifu Univ. Med. Sci.)

#### ODP-179

##### **Effect of eggshell-derived hydroxyapatite on mucosal vaccine using bacterial vesicles**

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

#### ODP-180

##### **Effects of mucosal immunization of gut bacterial membrane vesicles on humoral immunity**

○Mayu Okuda<sup>1</sup>, Nozomu Obana<sup>2,3</sup>, Hibiki Okuwaki<sup>1</sup>, Ryoma  
Nakao<sup>4</sup>, Hidenobu Senpuku<sup>5</sup>, Nobuhiko Nomura<sup>3,6</sup> (<sup>1</sup>Grad. Life  
Environ. Sci., Univ. Tsukuba, <sup>2</sup>TMRC, Fac. Medicine, Univ.  
Tsukuba, <sup>3</sup>MiCS, Univ. Tsukuba, <sup>4</sup>Dept. Bacteriol I., NIID., <sup>5</sup>Sch.  
Dent. Matsudo, Nihon Univ., <sup>6</sup>Fac. Life Environ. Sci., Univ.  
Tsukuba)

#### ODP-181

##### **Supersulfides regulate immune response via T cell receptor signaling**

○Masanobu Morita<sup>1</sup>, Mitsuhiro Yamada<sup>2</sup>, Yusaku Sasaki<sup>2</sup>,  
Tomoaki Ida<sup>1</sup>, Tetsuro Matsunaga<sup>1</sup>, Kenji Inaba<sup>3</sup>, Naoto Ishi<sup>4</sup>,  
Hisatoshi Sugiura<sup>2</sup>, Hozumi Motohashi<sup>5</sup>, Takaaki Akaike<sup>1</sup>  
(<sup>1</sup>Dept. Environ. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch.  
Med., <sup>2</sup>Dept. Respir. Med., Tohoku Univ., Grad. Sch. Med., <sup>3</sup>Inst.  
Multidisciplinary Research for Advanced Materials, Tohoku  
Univ., <sup>4</sup>Dept. Microbiol. Immunol., Tohoku Univ., Grad. Sch. of  
Med., <sup>5</sup>Dept. Gene Exp. Reg., IDAC, Tohoku Univ.)

#### ODP-182

##### The effect of antigen binding and administration route of BLP on its immunogenicity

○Haruka Sudo, Ayato Tsujii, Tetsuo Koshizuka, Naoki Inoue, Keita Takahashi (Dept. Microbiol. Immunol. Gifu Pharm. Univ.)

#### ODP-183

##### Development of novel neutralizing human monoclonal antibodies against tetanus neurotoxin

○Ryota Otsubo<sup>1,2</sup>, Toshihiro Ito<sup>3</sup>, Teruhito Yasui<sup>1,2,4</sup>  
(<sup>1</sup>Laboratory of Infectious Diseases and Immunity, National Institutes of Biomedical Innovation, Health and Nutrition, <sup>2</sup>Lab. Immunobiologics Evaluation, Center for Vaccine and Adjuvant Research, National Institutes of Biomedical Innovation, Health and Nutrition, <sup>3</sup>Lab. Proteome Research, National Institutes of Biomedical Innovation, Health and Nutrition, <sup>4</sup>Lab. Pharmaceutical Integrated Omics, Dept. Pharmaceutical Engineering, Fac. Engineering, Toyama Prefectural Univ.)

---

### 6. Host defense -c. Others

---

#### ODP-184

##### Germicidal effect of 222 nm-UVC on *S. aureus* and *B. cereus* adhered to fabrics

○Risako Fukushi<sup>1,2</sup>, Makiko Yamauchi<sup>1</sup>, Sonoko Takase<sup>1</sup>, Ryoko Kimura<sup>1</sup>, Miwa Miura<sup>1</sup>, Masumi Saito<sup>1</sup>, Kouji Narita<sup>2,3</sup>, Krisana Asano<sup>2,4</sup>, Akio Nakane<sup>1,4</sup> (<sup>1</sup>Dept. Nursing, Sch. Health Sci., Hirosaki Univ. Health Welfare, <sup>2</sup>Dept. Microbiol. Immunol., Hirosaki Univ. Grad. Sch. Med., <sup>3</sup>Inst. Animal Exp., Hirosaki Univ. Grad. Sch. Med., <sup>4</sup>Dept. Biopolymer Health Sci., Hirosaki Univ. Grad. Sch. Med.)

#### ODP-185

##### The intracellular invasion of Group A *Streptococcus* regulated by autophagy related gene 9

○Junpei Iibushi, Hirotaka Toh, Takashi Nozawa, Ichiro Nakagawa (Dept. Microbiol., Grad. Sch. Med., Kyoto Univ.)

#### ODP-186

##### The effects of D-amino acids produced by *Mycobacterium avium* complex on macrophages

○Yutaka Tatano<sup>1</sup>, Akari Kitagawa<sup>2</sup>, Mami Maruhashi<sup>2</sup>, Miharuru Nara<sup>2</sup>, Tatsuo Munakata<sup>1</sup>, Chiaki Sano<sup>3</sup>, Hideki Yagi<sup>2</sup>, Haruaki Tomioka<sup>4</sup> (<sup>1</sup>Dept. Pharm. Sci., Sch. Pharm. Fukuoka, IUHW, <sup>2</sup>Dept. Pharm. Sci., Sch. Pharm., IUHW, <sup>3</sup>Dept. Community. Med. Mgt., Fac. Med., Shimane Univ., <sup>4</sup>Dept. Prim. Educ., Fac. Psych., Yasuda Women's Univ.)

#### ODP-187

##### Infection defense through supersulfides production by NADPH oxidase and nitric oxide synthase

○Tsuyoshi Takata<sup>1</sup>, Tomoaki Ida<sup>1</sup>, Tetsuro Matsunaga<sup>1</sup>, Masanobu Morita<sup>1</sup>, Yukihiro Tsuchiya<sup>2</sup>, Yasuo Watanabe<sup>2</sup>, Hozumi Motohashi<sup>3</sup>, Michito Yoshizawa<sup>4</sup>, Hideki Sumimoto<sup>5</sup>, Takaaki Akaike<sup>1</sup> (<sup>1</sup>Dept. Environ. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch. Med., <sup>2</sup>Dept. Pharm., Showa Pharm. Univ., <sup>3</sup>Dept. Gene Exp. Reg., IDAC, Tohoku Univ., <sup>4</sup>Lab. Chem. Life Sci., Tokyo Tech., <sup>5</sup>Dept. Biochem., Kyushu Univ., Grad. Sch. Med. Sci.)

#### ODP-188

##### Salmonella infected-tumor cells elicit anti-tumor immunity

○Yutaka Horiuchi, Akihiro Nakamura, Takashi Imai, Takashi Murakami (Dept. Microbiol. Saitama Med. Univ.)

#### ODP-189/W9-1

##### Guanylate binding protein 1 regulates GAS-targeting selective autophagy by TBK1 phosphorylation

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

---

### 7. Antimicrobial agents and resistance

#### -a. Antimicrobial agents

---

#### ODP-190

##### Estimation of the mode of action and targets for antimicrobial peptide, protamine against *C. acnes*

○Momoka Okubo, Michiyo Honda (Dept. AC. Sch. S/E., Meiji Univ.)

#### ODP-191

##### Effect of macrolides on the expression against pneumolysin of *Streptococcus pneumoniae*

○Hisanori Doman<sup>1,2</sup>, Toshihito Isono<sup>1</sup>, Takumi Hiyoshi<sup>1,2,3</sup>, Hikaru Tamura<sup>1,3</sup>, Karin Sasagawa<sup>1,3</sup>, Tomoki Maekawa<sup>1,2,3</sup>, Satoru Hirayama<sup>1</sup>, Katsunori Yanagihara<sup>4</sup>, Yutaka Terao<sup>1,2</sup>  
(<sup>1</sup>Div. Microbiol. Infect. Dis., Niigata Univ. Grad. Sch. Med. Dent. Sci., <sup>2</sup>Cent. for Adv. Oral Sci., Niigata Univ. Grad. Sch. Med. Dent. Sci., <sup>3</sup>Div. Periodontol., Niigata Univ. Grad. Sch. Med. Dent. Sci., <sup>4</sup>Dept. Lab. Med., Nagasaki Univ. Grad. Sch. Biomed. Sci.)

#### ODP-192

##### Enhancement of antibacterial activity of lactic acid bacteria by stimulation of *Lonicera caerulea*

○Masaaki Minami<sup>1</sup>, Mineo Nakamura<sup>2</sup> (<sup>1</sup>Dept. Bacteriol., Grad. Sch. Med., Nagoya City Univ., <sup>2</sup>Nakamura Pharmacy)

### ODP-193

#### The growth inhibitory effect of pathogenic bacteria by *Serratia marcescens*

○Tomohiro Miyoshi<sup>1</sup>, Chisato Ohori<sup>1</sup>, Yu Muto<sup>2</sup>, Atsushi Ishihara<sup>2</sup>, Kumiko Osaki-Oka<sup>2</sup>, Akihiro Yoshida<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Fac. Dent., Matsumoto Dental Univ., <sup>2</sup>Fac. Agric., Tottori Univ.)

### ODP-194

#### Complete sequences of bacteriocin plasmids of *S. epidermidis* and their antibacterial activity

○Miki Kawada-Matsuo<sup>1,2</sup>, Mi Nguyen-Tra Le<sup>1,2</sup>, Junzo Hisatsune<sup>2,3</sup>, Motoyuki Sugai<sup>2,3</sup>, Hitoshi Komatsuzawa<sup>1,2</sup> (<sup>1</sup>Dept. Bacteriol., Grad. Biomed., Hiroshima Univ., <sup>2</sup>Proj. Res. Cent. for Nosoc. Infect. Dis., Hiroshima Univ., <sup>3</sup>Antimicrob. Resist. Res. Cent., Nat. Inst. Infect. Dis.)

### ODP-195

#### Growth inhibition of *Campylobacter jejuni* by *Bacillus natto* and identification of antibiotics

○Ryosuke Kadoya, Serina Kato, Nanako Sugimoto (Dept. Food and Nutrition, Sch. Life Stud., Sugiyama Jogakuen Univ.)

### ODP-196

#### Inhibition of LPS-induced oxidative and inflammatory reactions by Kumazasa extract and constituent

○Yinzh Lin<sup>1</sup>, Shiori Kojima<sup>2,3</sup>, Hitomi Fukatsu<sup>2,3</sup>, Masatoshi Hakamata<sup>3,4</sup>, Toshimichi Asanuma<sup>4</sup>, Naoki Koide<sup>1</sup>, Kazuo Umezawa<sup>3</sup> (<sup>1</sup>Dept. Microbiol. Immunol., Sch. Med., Aichi Med. Univ., <sup>2</sup>Fukuyu Med. Inst., <sup>3</sup>Dept. Mol. Target, Sch. Med., Aichi Med. Univ., <sup>4</sup>Industrial Research Institute of Shizuoka Prefecture)

### ODP-197

#### Dynamics of Antibiotic-resistant bacteria in water environments

○Mio Tsurui, Yuka Tanaka, Yuki Kobayashi (Dept. Med. Lab. Sci., Fac. Health Sci., Yamaguchi Univ.)

### ODP-198/W10-5

#### Classification and characterization of bacteriocin immunity factors in *Streptococcus mutans*

○Mi Nguyen-Tra Le, Miki Kawada-Matsuo, Hitoshi Komatsuzawa (Dept. Bacteriol., Grad. Biomed., Hiroshima Univ.)

### ODP-199

#### Enterococcal V-ATPase inhibitor inhibits the growth of *Clostridium perfringens*

○Shohei Abe<sup>1</sup>, Kouki Shimizu<sup>1</sup>, Tatsushi Kanazawa<sup>1</sup>, Yuya Miyagi<sup>2</sup>, Issei Seiki<sup>1</sup>, Katsuhiko Moriyama<sup>1</sup>, Shigeru Miyata<sup>2</sup>, Takeshi Murata<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Chiba Univ., <sup>2</sup>Grad. Sch. Biosci. Biotech., Chubu Univ.)

### ODP-200

#### Analysis of cell death in *Bacillus subtilis* caused by essential oils

○Kei Asai<sup>1</sup>, Yoshiki Ozawa<sup>2</sup> (<sup>1</sup>Dept. Biosci., Tokyo Univ. Agricul., <sup>2</sup>Dept. Biochem. Molec. Biol., Saitama Univ.)

### ODP-201/W10-8

#### A novel antibiotic Lysocin E exhibits high therapeutic efficacy through host-microbe interaction

○Hiroshi Hamamoto<sup>1</sup>, Suresh Panthee<sup>2</sup>, Atmika Paudel<sup>3</sup>, Atsushi Miyashita<sup>1</sup>, Kazuhisa Sekimizu<sup>2,4</sup> (<sup>1</sup>Teikyo Univ. Institut. of Med. Mycol., <sup>2</sup>Drug Discoveries by Silkworm Models, Fac., Pharma-Sci., Teikyo Univ., <sup>3</sup>Int. Institut. Zoono. Cont., Hokkaido Univ., <sup>4</sup>Genome Pharm., Sci., Inst.)

### ODP-202

#### Inactivation of human norovirus by chlorous acid water, a novel chlorine-based disinfectant

○Hisataka Goda<sup>1,2</sup>, Haruyuki Imaohji<sup>3</sup>, Hitoshi Yamaoka<sup>2,3</sup>, Ayano Tada<sup>3</sup>, Tamiko Nagao<sup>4</sup>, Tomohiko Fujisawa<sup>1</sup>, Hajime Koyama<sup>3</sup>, Tomomi Kuwahara<sup>3</sup> (<sup>1</sup>Lab. Food Hygiene, Appl. Life Sci. Nippon Vet., and Life Sci., Univ., <sup>2</sup>Sankei Co. Ltd., <sup>3</sup>Dept. Microbiol, Med, Kagawa Univ., <sup>4</sup>Dept. Sci. Human Health. Shikoku Univ. Junior College)

### ODP-203

#### A comprehensive search for synergistic antimicrobial drug pairs against *Mycobacteroides abscessus*

○Yui Kitagawa<sup>1</sup>, Motoko Shinohara<sup>1</sup>, Toshiharu Sasaki<sup>2</sup>, Yohei Doi<sup>1,2</sup>, Yusuke Minato<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Sch. Med., Fujita Health Univ., <sup>2</sup>Dept. Infectious Diseases, Sch. Med., Fujita Health Univ.)

---

## 7. Antimicrobial agents and resistance

### -b. Antimicrobial resistance

---

### ODP-204

#### Biological significance of $\beta$ -lactam carbathioic S-acids mediated by cysteine hydropersulfide

○Katsuhiko Ono<sup>1</sup>, Tianli Zhang<sup>1</sup>, Hiroyasu Tsutsuki<sup>1</sup>, Takaaki Akaike<sup>2</sup>, Tomohiro Sawa<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Grad. Sch. Med. Sci., Kumamoto Univ., <sup>2</sup>Dept. Envir. Med. Mol. Toxicol., Tohoku Univ., Grad. Sch. Med.)

### ODP-205

#### Increased tellurite resistance by a nonsynonymous mutation on *tehA* gene in EHEC O157

○Ryuya Akasaka<sup>1,2</sup>, Yuko Matsumoto<sup>3</sup>, Kenichi Lee<sup>2</sup>, Mitsumasa Koizumi<sup>3</sup>, Hisao Sato<sup>4</sup>, Yukihiko Akeda<sup>2</sup>, Makoto Ohnishi<sup>2</sup>, Sunao Iyoda<sup>2</sup> (<sup>1</sup>Tokyo Coll. Biotech., <sup>2</sup>Dept. Bacteriol. 1, Natl. Inst. Infect. Dis., <sup>3</sup>Yokohama Inst. Pub. Health, <sup>4</sup>Japan Microbial Research Inst Co., Ltd.)



### ODP-206

#### Molecular characteristics of *Klebsiella pneumoniae* complex isolates causing bloodstream infections

○Akiko Takaya<sup>1,2</sup>, Natsuki Yamanaka<sup>1</sup>, Yoko Kusuya<sup>2</sup>, Nozomi Takahashi<sup>3</sup>, Taka-Aki Nakata<sup>3</sup>, Hiroki Takahashi<sup>2</sup>, Masami Ishibashi<sup>1</sup> (<sup>1</sup>Dept. Nat. Prod. Chem., Grad. Sch. Pharm. Sci., Chiba Univ., <sup>2</sup>MMRC, Chiba Univ., <sup>3</sup>Dept. Emerg. Crit. Care Med., Grad. Sch. Med., Chiba Univ.)

### ODP-207

#### Molecular profiling of extended spectrum $\beta$ -lactamases and class 1 integrons in retail chicken meat

○Christian Xedzro, Toshi Shimamoto, Tadashi Shimamoto (Lab. Food. Microbiol. Hyg, Grad. Sch. Integ. Sci. Life., Hiroshima Univ.)

### ODP-208

#### Analysis of antimicrobial-resistant bacteria derived from sewage effluent

Kako Nakamoto<sup>1</sup>, Toshi Shimamoto<sup>2</sup>, Yo Sugawara<sup>3</sup>, Motoyuki Sugai<sup>3</sup>, ○Tadashi Shimamoto<sup>2</sup> (<sup>1</sup>Lab. Food Microbiol. Hyg., Sch. Appl. Biol. Sci., Hiroshima Univ., <sup>2</sup>Lab. Food Microbiol. Hyg., Grad. Sch. Integrated Sci. Life, Hiroshima Univ., <sup>3</sup>Antimicrob. Resist. Res. Ctr., Nat. Inst. Infect. Dis.)

### ODP-209/W10-4

#### Functional analysis of multi-drug resistance genes in *M. tuberculosis* using CRISPR interference

○Nao Hirata, Kayo Kumadaki, Motoko Shinohara, Yui Kitagawa, Yusuke Minato (Dept. Microbiol., Sch. Med., Fujita Health Univ.)

### ODP-210

#### Investigation of resistant factors by comparative genome analysis in *Campylobacter jejuni*

Hiroki Arai<sup>1</sup>, ○Daichi Morita<sup>1,2</sup>, Junko Isobe<sup>3</sup>, Emi Maenishi<sup>3</sup>, Takanori Kumagai<sup>1,2</sup>, Fumito Maruyama<sup>4</sup>, Teruo Kuroda<sup>1,2</sup> (<sup>1</sup>Sch. Pharm. Sci., Hiroshima Univ., <sup>2</sup>Grad. Sch. Bio. Heal. Sci., Hiroshima Univ., <sup>3</sup>Toyama Inst. Heal., <sup>4</sup>Dept. Microb. Gen. Ecol. Lab., Office Acad. Res. Indust. Gov. Commun. Collaboration, Hiroshima Univ.)

### ODP-211

#### Analysis of antimicrobial-resistant bacteria derived from retail vegetables

○Toshi Shimamoto<sup>1</sup>, Yo Sugawara<sup>2</sup>, Motoyuki Sugai<sup>2</sup>, Tadashi Shimamoto<sup>1</sup> (<sup>1</sup>Lab. Food Microbiol. Hyg., Grad. Sch. Integrated Sci. Life, Hiroshima Univ., <sup>2</sup>Antimicrob. Resist. Res. Ctr., Nat. Instit. Infect. Dis.)

### ODP-212/W10-1

#### Genetic analysis of quinolone resistance in *Gemella* isolated from clinical specimens

○Michiko Furugaito<sup>1</sup>, Yuko Arai<sup>2</sup>, Yutaka Uzawa<sup>2</sup>, Ken Kikuchi<sup>2</sup> (<sup>1</sup>Dept. Central Clinical Laboratory, Kindai Univ. Hospital, <sup>2</sup>Dept. Infectious Diseases, Tokyo Women's Medical Univ.)

### ODP-213/W10-6

#### Antipseudomonad activity of polycarboxylated aminopenicillin derivatives

○Touya Toyomoto, Akter Shahinur, Hiroyasu Tsutsuki, Katsuhiko Ono, Tianli Zhang, Tomohiro Sawa (Dept. Microbiol., Sch. Med., Kumamoto Univ.)

### ODP-214/W10-7

#### Bacteriophage-resistant variants of MRSA are resensitized to $\beta$ -lactam antibiotics

○Tomohiro Nakamura<sup>1</sup>, Keita Nishida<sup>1</sup>, Jumpei Fujiki<sup>1</sup>, Ryo Murata<sup>2</sup>, Kazuki Yamamoto<sup>3</sup>, Satoshi Ichikawa<sup>3</sup>, Hidetomo Iwano<sup>1</sup> (<sup>1</sup>Lab. Vet. Biochem., Sch. Vet. Med., Rakuno Gakuen Univ., <sup>2</sup>Lab. Vet. Bacteriol., Sch. Vet. Med., Rakuno Gakuen Univ., <sup>3</sup>Lab. Drug Discov., Grad. Sch. Pharm. Sci., Hokkaido Univ.)

### ODP-215

#### Emergence and evolution of antimicrobial resistance genes and mutations in *Neisseria gonorrhoeae*

○Koji Yahara<sup>1</sup>, Ken Shimuta<sup>2</sup>, Shu-ichi Nakayama<sup>2</sup>, Aki Hirabayashi<sup>1</sup>, Masato Suzuki<sup>1</sup>, Mitsuru Yasuda<sup>3</sup>, Michio Jinnai<sup>4</sup>, Hitomi Ohya<sup>4</sup>, Toshiro Kuroki<sup>4</sup>, Yuko Watanabe<sup>4</sup>, Takashi Deguchi<sup>5</sup>, Kevin C. Ma<sup>6</sup>, Tatum D. Mortimer<sup>6</sup>, Vegard Eldholm<sup>7</sup>, Odile B. Harrison<sup>8</sup>, Martin C. J. Maiden<sup>8</sup>, Yonatan H. Grad<sup>6</sup>, Makoto Ohnishi<sup>2</sup> (<sup>1</sup>AMRRC, Nat. Inst. Infect. Dis., <sup>2</sup>Dept. Bact. I, Nat. Inst. Infect. Dis., <sup>3</sup>Gifu Univ. Hosp., <sup>4</sup>Kanagawa Pref. Inst. Pub. Health, <sup>5</sup>Kizawa Memorial Hospital, <sup>6</sup>Harvard T. H. Chan School of Public Health, <sup>7</sup>Norwegian Institute of Public Health, <sup>8</sup>Dept. Zoology, Univ. Oxford)

### ODP-216

#### The effect of zinc against biofilms by non-ESBL-producing *Escherichia coli*

○Sanae Kurakado<sup>1</sup>, Shintaro Eshima<sup>1</sup>, Yasuhiko Matsumoto<sup>1</sup>, Takayuki Kudo<sup>2</sup>, Takashi Sugita<sup>1</sup> (<sup>1</sup>Dept. Microbiol., Meiji Pharm. Univ., <sup>2</sup>Toshiba Rinkan HP.)

### ODP-217

#### Characteristics of *E. coli* isolated from urinary tract infections at the Kyorin University Hospital

Nhat Minh Le<sup>1</sup>, Tomoya Suda<sup>2</sup>, Mayuko Tanaka<sup>3</sup>, Shota Yonetani<sup>4</sup>, Takeaki Matsuda<sup>1,2</sup>, ○Tomoko Hanawa<sup>3</sup> (<sup>1</sup>Dept. Traumatology and Critical Care Medicine, Kyorin Univ. Sch. Med., <sup>2</sup>Dept. General Medicine, Kyorin Univ. Sch. Med., <sup>3</sup>Dept. Infectious Diseases, Kyorin Univ. Sch. Med., <sup>4</sup>Dept. Laboratory Medicine, Kyorin Univ. Sch. Med.)

### ODP-218

#### Molecular epidemiological analysis of VanD-type vancomycin-resistant *Enterococcus faecalis*

○Kensuke Mimura<sup>1</sup>, Yusuke Hashimoto<sup>1</sup>, Takahiro Nomura<sup>1</sup>, Jun Kurushima<sup>1</sup>, Hidetada Hirakawa<sup>1</sup>, Koichi Tanimoto<sup>2</sup>, Tetsuro Muratani<sup>3</sup>, Haruyoshi Tomita<sup>1,2</sup> (<sup>1</sup>Dept. Bacteriology, Grad. Sch. Med., Gunma Univ., <sup>2</sup>Lab. Bacterial Drug Resistance, Grad. Sch. Med., Gunma Univ., <sup>3</sup>Hibiki AMR Laboratory)

#### **ODP-219**

##### **Streptomycin dependent *Mycobacterium bovis* BCG possessing a 513 cytosine insertion in 16S rRNA gene**

○Naoko Honda<sup>1</sup>, Norito Sato<sup>2</sup>, Masaaki Nakayama<sup>2</sup>, Takayuki Matsumura<sup>3</sup>, Tsuyoshi Sekizuka<sup>4</sup>, Makoto Kuroda<sup>4</sup>, Manabu Ato<sup>5</sup>, Kazuo Kobayashi<sup>2</sup>, Kouji Ishii<sup>1</sup>, Naoya Ohara<sup>2</sup> (<sup>1</sup>Dept. Qual. Assur. Radiol. Protect., Natl. Inst. Infect. Dis., <sup>2</sup>Dept. Oral Microbiol., Okayama Uni. Grad. Sch. Med. Dent. & Pharm. Sci., <sup>3</sup>Dept. Immunol., Natl. Inst. Infect. Dis., <sup>4</sup>Path. Genomics Ctr., Natl. Inst. Infect. Dis., <sup>5</sup>Dept. Mycobacteriology, Natl. Inst. Infect. Dis.)

---

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

---

#### **ODP-220/W10-2**

##### **Multidrug efflux pump of *Pseudomonas aeruginosa* represses the effect of sub-MIC of macrolide**

○Shin Suzuki<sup>1</sup>, Yuji Morita<sup>2</sup>, Takeshi Shimizu<sup>1</sup> (<sup>1</sup>Dept. Molecular Infectiology, Grad. Sch. Medicine, Chiba Univ., <sup>2</sup>Dept. Infection Control Science, Meiji Pharmaceutical Univ.)

#### **ODP-221**

##### **Isolation and susceptibility of ESBL-producing *Escherichia coli* phage using clinical isolates**

○Tomoko Hanawa<sup>1</sup>, Nhat Minh Le<sup>1,2</sup>, Tomoya Suda<sup>3</sup>, Mayuko Tanaka<sup>1</sup>, Yasunori Tanji<sup>1,3</sup>, Kazuhiko Miyanaga<sup>3</sup>, Takeaki Matsuda<sup>2,4</sup> (<sup>1</sup>Dept. Infect. Dis, Sch. Med., Kyorin Univ., <sup>2</sup>Dept. TCC, Sch. Med., Kyorin Univ., <sup>3</sup>Dept. ATT, Sch. Med., Kyorin Univ., <sup>4</sup>Dept. Life Sci. and Tech., Sch. Life Sci. and Tec. Tokyo Tech.)

#### **ODP-222/W10-3**

##### **The Establishment of the ARG-UGS Analysis for the environmental AMR monitoring**

○Nobuyoshi Yagi, Itaru Hirai (Lab. Microbiol., Sch. Health. Sci., Univ. Ryukyu)

#### **ODP-223**

##### **Analysis of *Clostridioides difficile* - specific lytic enzyme CD09610**

○Hiroshi Sekiya, Hina Yamashi, Eiji Tamai (Dept. Infect. Dis., Coll. Pharm., Matsuyama Univ.)







