

Symposium

S1 Integrated Bio-Metal Science

23rd, March (Tue) 9:15–11:45
Channel 1

Conveners: Ichiro Nakagawa (Kyoto University)
Tomohiro Sawa (Kumamoto University)

Co-host: Research to explore Dynamics of Metals in Cellular Systems

S1-1

Effect of grafting the stem domain of staphylococcal pore forming toxin

○ Takeshi Yokoyama¹, Nouran Ghanem¹, Natsuki Kanagami¹, Takashi Matsui², Tsubasa Hashimoto¹, Tomohisa Ogawa³, Yoshikazu Tanaka¹ (¹Grad. Sch. Life. Science., Tohoku Univ., ²Grad. Sch. Science., Kitasato Univ., ³Grad. Sch. Agricultural. Science., Tohoku Univ.)

S1-2

Development of functional inhibitors to MtsA, a metal ion transporter from *Streptococcus pyogenes*

○ Makoto Nakakido¹, Miyu Takeuchi¹, Satoru Nagatoishi^{1,2}, Chihiro Aikawa³, Ichiro Nakagawa³, Kouhei Tsumoto^{1,2} (¹Dept. Bioeng., Sch. Eng., Univ Tokyo, ²Inst. Med. Sci., ³Dept. Infect. Microbiol., Sho. Med., Kyoto Univ)

S1-3

Structural basis for the survival of hemolytic bacteria by a heme-responsive sensor protein

○ Hitomi Sawai^{1,2} (¹Grad. Life Sci., Univ. Hyogo, ²RIKEN SPring-8 Cent.)

S1-4

Functional analysis of bacterial Cu/Zn-superoxide dismutase and its maturation mechanism

○ Yoshiaki Furukawa (Dept. Chem., Fac. Sci. Eng., Keio Univ.)

S1-5

Exploring Inhibitors against the iron acquisition system for Group A *Streptococcus* growth

○ Chihiro Aikawa¹, Satoru Nagatoishi², Makoto Nakakido², Akinobu Senoo², Masato Hoshino², Takashi Nozawa¹, Kazunori Murase¹, Kouhei Tsumoto², Ichiro Nakagawa¹ (¹Dept. Microbiol., Grad. Sch. Med., Kyoto Univ., ²Dept. Bioeng., Sch. Eng., Univ. of Tokyo)

S2 Host adaptation of pathogenic bacteria –doesn't bacteria want to cause disease?

23rd, March (Tue) 9:15–11:45
Channel 3

Convener: Hitomi Mimuro (Osaka University)

S2-1

Host adaptation and pathogenicity of *Helicobacter pylori*

○ Hitomi Mimuro, Ryo Kinoshita-Daitoku (Dept. Infect. Microbiol., RIMD, Osaka Univ.)

S2-2

Staphylococcal secretion toxins and ecological significances

○ Ichiro Imanishi¹, Koji Nishifuji², Tadayuki Iwase³ (¹Dept. Microbiol., Sch. Med., Kitasato Univ., ²Dept. Vet., Agri. Tech., Tokyo Univ., ³Core Res. Facil., Res. Cent. Med. Sci., Jikei Univ.)

S2-3

Environmental adaptation and pathogenicity of periodontal disease-related bacteria

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

S2-4

Host adaptation and virulence evolution in *Escherichia coli*

○ Yoshitoshi Ogura (Div. Micro., Dep. Infect. Med., Kurume Univ. Sch. Med.)

S2-5

Host adaptation and pathogenicity of *Vibrio parahaemolyticus*

○ Toshio Kodama (Dept. Bacteriol., Inst. Trop. Med., Nagasaki Univ.)

S2-6

Strategies of *C. botulinum* to survive in intestinal environment; learning from infant botulism

○ Yukako Fujinaga (Dept. Bacteriol., Sch. Med., Kanazawa Univ.)

S3 New approach for mycology on the basis of the microbes sharing

23rd, March (Tue) 9:15–11:45
Channel 4

Conveners: Koichi Tanabe (Ryukoku University)
Takahito Toyotome (Obihiro University of
Agriculture and Veterinary Medicine)

Co-host: Japanese Society for Medical Mycology

S3-1

Mechanism for emergence and maintenance of [GAR⁺] yeast cells

○Koichi Tanabe¹, Jun Shima² (¹Dept. Food Science and Human Nutrition, Faculty of Agriculture, Ryukoku Univ., ²Dept. Plant Life Science, Fac. Agriculture, Ryukoku Univ.)

S3-2

Microbial interactions of endobacteria coexisted within the filamentous fungus cells

○Tomoyasu Nishizawa¹, Yong Guo¹, Yusuke Takashima² (¹Col. Agri., Ibaraki Univ., ²Sugadaira Res. Sta., Mtn. Sci. Ctr., Univ. Tsukuba)

S3-3

"Domesticated" viruses in fungal cells

○Syun-ichi Urayama^{1,2}, Akihiro Ninomiya¹, Yuto Chiba³, Ayano Ikeda³, Yan-Jie Zhao¹, Sayoko Oiki¹, Daisuke Hagiwara^{1,2} (¹Faculty of Life and Environ. Sciences, Univ. of Tsukuba, ²Microbiol. Research Center for Sustainability (MiCS), Univ. of Tsukuba, ³Degree Programs in Life and Earth Sciences, Univ. of Tsukuba)

S3-4

Mycovirus Associated with Reduced Virulence of the Human Pathogenic Fungus

○Azusa Takahashi-Nakaguchi (MMRC. Chiba Univ.)

S3-5

A Study of Host Response in the Influenza-Associated Pulmonary Aspergillosis

○Shogo Takatsuka¹, Yurika Dantsuji¹, Ken Miyazawa¹, Tatsuya Inukai², Masahiro Abe¹, Keigo Ueno¹, Takashi Umeyama¹, Yasutaka Hoshino¹, Satoshi Yamagoe¹, Yoshitsugu Miyazaki¹ (¹National Institute of Infectious Diseases, ²Tokyo Medical Univ.)

S4 Interactions between bacterial pathogens and the host immune systems

24th, March (Wed) 9:15–11:45
Channel 1

Conveners: Tomoko Kubori (Gifu University)
Hirotaka Hiyoshi (Institute of Tropical Medicine,
Nagasaki University)

S4-1

Legionella exploits host cellular systems using unconventional post-translational modifications

○Tomoe Kitao¹, Hiroki Nagai^{1,2}, Tomoko Kubori^{1,2} (¹Dept. Microbiol., Grad. Sch. Med., Gifu Univ., ²G-CHAIN, Gifu Univ.)

S4-2

Bartonella autotransporter BafA: A novel virulence factor for a bacterial survival strategy

○Kentaro Tsukamoto (Dept. Microbiol., Fujita Health Univ. Sch. Med.)

S4-3

Helicobacter metabolites exacerbate gastritis through C-type lectin receptors

○Sho Yamasaki (Dept. Mol. Immunol., RIMD, Osaka Univ.)

S4-4

Bacterial pathogenicity regulated by host defense ability to interact with the gut environment

○Hitoshi Tsugawa (Dept. Biochem., Keio Univ., Sch. Med.)

S4-5

Salmonella can colonize the gut by exploiting intestinal inflammation

○Tsuyoshi Miki (Dept. Microbiol., Sch. Pharm., Kitasato Univ.)

S4-6

Efferocytosis of macrophage-entrapped bacteria shelters *S. Typhimurium* from neutrophil killing

○Hirotaka Hiyoshi^{1,2}, Tamding Wangdi², Lillian F. Zhang², Takeshi Haneda³, Andreas J. Bäuml² (¹Institute of Tropical Medicine, Nagasaki Univ., ²Univ. of California at Davis, ³Kitasato Univ.)

S5 Forefront of population microbiology and bacterial biofilm research

24th, March (Wed) 9:15–11:45
Channel 3

Conveners: Nobuhiko Nomura (University of Tsukuba)
Hidenobu Senpuku (National Institute of
Infectious Diseases)

Co-host: JST ERATO NOMURA Microbial Community
Control Project

S5-1

Biofilm and microbial community

○Nobuhiko Nomura^{1,2}, Masanori Toyofuku^{1,2}, Nozomu
Obana^{2,3,4} (¹Fac. Life Environ. Sci., Univ. Tsukuba, ²MiCS, Univ.
tsukuba, ³Fac. Med., Univ. Tsukuba, ⁴TMRC, Univ. Tsukuba)

S5-2

Bacterial biofilm scaffolded on fungal network

○Norio Takeshita (MiCS, Univ. Tsukuba)

S5-3

Corrosion by microorganisms on metal surface

○Satoshi Wakai (JAMSTEC · X-star)

S5-4

Metabolic function of oral biofilm involved in oral and systemic health

○Nobuhiro Takahashi, Jumpei Washio (Div. Oral Ecol.
Biochem., Grad. Sch. Dent., Tohoku Univ.)

S5-5

Bacterial survival strategies by metabolites of oral microbial populations

○Hidenobu Senpuku (Dept. Bac. I, Nat. Inst. Infect. Dis.)

S6 Bacterial Infection Strategy by the Adhesion Factors Recognizing Extracellular Matrix

24th, March (Wed) 9:15–11:45
Channel 4

Convener: Nozomu Matsunaga (Okayama University of
Science)

S6-1

Streptococcal molecular mechanism and pathogenic characteristic targeting host extracellular matrix

○Kohei Ogura¹, Wataru Hashimoto² (¹Front. Sci. Init.,
Kanazawa Univ., ²Grad. Sch. Agric., Kyoto Univ.)

S6-2

Pathogenic streptococci exploit cell adhesion molecules for establishment of bacterial infection

○Tomoko Sumitomo (Dept. Oral and Mol. Microbiol., Osaka
Univ. Grad. Sch. Dent.)

S6-3

Characterization and pathogenicity of fibronectin binding protein of anginosus group of streptococci

○Yoshitoyo Kodama (Div. Mol. Microbiol., Dept. Microbiol.,
Iwate Med. Univ.)

S6-4

The trimeric autotransporter adhesin of the highly adhesive *Acinetobacter* strain Tol 5

○Katsutoshi Hori, Shogo Yoshimoto (Dept. Biomolecul. Eng.,
Grad. Sch. Eng., Nagoya Univ.)

S6-5

Complexity of the Fibronectin receptor in *Clostridium perfringens*

○Nozomu Matsunaga (Dept. Life Science, Faculty of Science,
Okayama Univ. of Science)

S7 Current topics in intracellular perception system against unwelcome invaders

25th, March (Thu) 9:15–11:45
Channel 1

Conveners: Takashi Nozawa (Kyoto University)
Michinaga Ogawa (National Institute of Infectious
Diseases)

S7-1

A unique bacterial strategy to circumvent the host cell-death crosstalk

○Hiroshi Ashida^{1,2}, Chihiro Sasakawa^{2,3}, Toshihiko Suzuki¹
(¹Dept. Bacterial Infection and Host Response, Tokyo Medical
and Dental Univ., ²Medical Mycology Research Center, Chiba
Univ., ³Nippon Institute for Biological Science)

S7-2

Identification of novel autophagic receptor and its roles on *Salmonella xenophagy*

○Eiji Morita (Dept. Biochemistry and Molecular Biology,
Faculty of Agriculture and Life Science, Hiroasaki Univ.)

S7-3

ESCRT machineries regulate Group A *Streptococcus* infection

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

S7-4

***Campylobacter jejuni* Utilized Autophagy for Survival and Invasion into the Host Epithelial Cells**

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

S7-5

The host autophagy during pneumococcal infection

○Michinaga Ogawa, Makoto Ohnishi (Dept. Bacteriol I, Natl. Inst. Infect. Dis.)

S7-6

IFN-inducible mechanisms to detect an intracellular pathogen *Toxoplasma*

○Masahiro Yamamoto^{1,2} (¹Dept. Immunoparasitol., RIMD, Osaka Univ., ²Lab. Immunoparasitol., IFReC, Osaka Univ)

S8 Bacterial methylomics and metaepigenomics

25th, March (Thu) 9:15–11:45
Channel 3

Conveners: Ichizo Kobayashi (Hosei University)
Richard J. Roberts (New England Biolabs)
Jonas Korlach (Pacificbiosciences of California)

S8-1

Direct detection of DNA methylation during single-molecule, real-time (SMRT) sequencing

○Jonas Korlach (Pacific Biosciences)

S8-2

Matching bacterial genes with methylation signals

○Richard J. Roberts (New England Biolabs)

S8-3

Random Switching of Expression or Specificity of DNA methyltransferases of Type I and Type III Restriction-Modification Systems can Regulate Global Gene Expression in Bacterial Pathogens

○Michael P. Jennings (Griffith Univ.)

S8-4

Networking and specificity-changing DNA methyltransferases in *H. pylori*

○Ichizo Kobayashi^{1,2,3,4,5} (¹Dept. Micro-nano Tech., Hosei Univ., ²Dept. Infect. Dis., Sch. Med., Kyorin Univ., ³Univ. of Paris-Saclay, ⁴Dept. Info. Biol. Med. Sci., Univ. Tokyo, ⁵Inst. Med. Sci., Univ. Tokyo)

S8-5

Epigenome micro-evolution associated with DNA methyltransferases' specificity changes in *H. pylori*

○Masaki Fukuyo¹, Hideo Yonezawa², Mutsuko Konno³, Tomoko Shibata⁴, Shuji Shigenobu⁴, Bahityar Rahmutulla¹, Ikuo Uchiyama⁴, Atsushi Kaneda¹, Ichizo Kobayashi⁵ (¹Chiba U., ²Kyorin U., ³Sapporo Kosei General Hospital, ⁴NIBB, ⁵Hosei U.)

S8-6

'Metaepigenomic' analysis for identification of unexplored prokaryotic DNA methylation in nature

○Satoshi Hiraoka (Deep-Sea Bioresource Research Group, Research Center for Bioscience and Nanoscience (CeBN), Japan Agency for Marine-Earth Science and Technology (JAMSTEC))

S9 Front line on dysbiosis study –How far can the risk of developing diseases be clarified from changes in the composition of microbiome?–

25th, March (Thu) 9:15–11:45
Channel 4

Conveners: Shigefumi Okamoto (Kanazawa University Institute of Medical, Pharmaceutical, and Health Sciences)
Akihiro Yoshida (Matsumoto Dental University)

S9-1

Crosstalk between skin microbiome and cutaneous immunity

○Saeko Nakajima (Dept. Dermatology, Kyoto Univ. Grad. Sch. Medicine)

S9-2

Dysbiosis of skin microbiota in bedbound older patients

○Kazuhiro Ogai¹, Satoshi Nagase², Junko Sugama³, Shigefumi Okamoto² (¹AI Center, Inst. Med. Pharm. Health Sci., Kanazawa Univ., ²Dept. Clin. Lab. Technol., Inst. Med. Pharm. Health Sci., Kanazawa Univ., ³Inst. Front. Sci. Initiative, Kanazawa Univ.)

S9-3

Dysbiosis in immune disorders

○Kiyoshi Takeda^{1,2} (¹Immunology Frontier Research Center, Osaka Univ., ²Grad. Sch. Medicine, Osaka Univ.)

S9-4

Dysbiosis of intestinal microbiota and application of synbiotics

○Takashi Asahara (Yakult Central Institute)

S9-5

Molecular insight into infant gut microbiota formation: Milk oligosaccharides and bifidobacteria

○Takane Katayama (Dept. Bios., Kyoto Univ.)

S10 Microorganisms discussed from the evolutionary point of view

25th, March (Thu) 15:45–18:15
Channel 2

Conveners: Chikara Kaito (Okayama University)
Norikazu Ichihashi (The University of Tokyo)

Co-host: Grant-in-Aid for Scientific Research on Innovative Areas “Evolutionary theory for constrained and directional diversities”

S10-1

Understanding of bacterial virulence by experimental evolution

○Chikara Kaito (Lab. Mol. Biol., Grad. Sch. Med. Dent. Pharm., Okayama Univ.)

S10-2

High-throughput Laboratory Evolution of *Escherichia coli* for Prediction and Control of Evolution

○Chikara Furusawa^{1,2} (¹BDR, RIKEN, ²UBI, Univ. Tokyo)

S10-3

Adaptive evolution of bacteriophage Q β in a laboratory

○Akiko Kashiwagi (Hirosaki Univ.)

S10-4

Diversification through coevolution between artificial self-replicating and parasitic RNAs

○Norikazu Ichihashi^{1,2,3} (¹Grad. Sch. Arts and Science, The Univ. of Tokyo, ²Komaba Institute for Science, The Univ. of Tokyo, ³Universal Biology Institute, The Univ. of Tokyo)

S11 Biochemistry of antimicrobial target proteins

25th, March (Thu) 15:45–18:15
Channel 3

Conveners: Mikio Tanabe (KEK/High Energy Accelerator Research Organization, Institute of Materials Structure Science)
Takeshi Murata (Chiba University, Graduate School of Science)

S11-1

Bacterial Multidrug Efflux Pumps and Their Inhibitors: A Novel Approach to Combat Drug Resistance

○Kunihiko Nishino^{1,2} (¹Lab. Cell. Biol., Sch. Pharm., Osaka Univ., ²Dept. Biomol. Sci. Reg., ISIR (SANKEN), Osaka Univ.)

S11-2

Regulation of bacterial flora–Periodontal disease

○Keiko Sato¹, Masami Naya⁵, Yoshio Kondo¹, Katsuki Takebe², Mariko Naito¹, Mamoru Suzuki², Katsumi Imada³, Takeshi Ishikawa⁴, Chikara Sato⁵ (¹Grad. Sch. Biomed. Nagasaki Univ., ²Ins. Protein Res. Osaka Univ., ³Dept. Macromol. Sci. Osaka Univ., ⁴Grad. Sch. Sci. Kagoshima Univ., ⁵Health Med. Res. Ins. AIST)

S11-3

Cryo-EM analyses of new antibiotics-bound ribosomes for measures to prevent multidrug resistance

○Takeshi Yokoyama (Grad. Sch. Life. Science., Tohoku Univ.)

S11-4

Modulation of cytochrome c oxidase activity (CcO) is a novel therapeutic strategy

○Yasunori Shintani (National Cerebral and Cardiovascular Center)

S11-5

Biochemistry of V-ATPase in Vancomycin-resistant *Enterococcus*

○Takeshi Murata (Dept. Chem., Sch. Sci., Chiba Univ.)

S12 Brave New World of Phage

25th, March (Thu) 15:45–18:15
Channel 4

Conveners: Hiroki Ando (Gifu University · Astellas Pharma)
Kotaro Kiga (Jichi Medical University)

S12-1

Engineering Bacteriophages for Practical Applications

○Shoichi Mitsunaka^{1,2}, Hiroki Ando^{1,2,3,4} (¹Dept. Microbiol., Grad. Sch. Med., Gifu Univ., ²Phage Biologics, Grad. Sch. Med., Gifu Univ., ³G-CHAIN, Gifu Univ., ⁴Astellas Pharma)

S12-2

Features of Mu phage subunits revealed by three-dimensional structural analysis

○Shigeki Takeda (Sch. Sci. and Tech., Gunma Univ.)

S12-3

Development of Phage Therapy against Pathobionts by Metagenome Data

○Kosuke Fujimoto^{1,2}, Satoshi Uematsu^{1,2} (¹Dept. Immunol. Genomics., Sch. Med., Osaka City Univ., ²Div. Metagenome Med., HGC, IMSUT)

S12-4

Viruses of Archaea from boiling hot environment

○Tomohiro Mochizuki (ELSI, Tokyo Institute of Technology)

S12-5**Bacteriophage therapy – research and application at the Eliava Institute**

○Mzia Kutateladze (Director of the G. Eliava Institute of Bacteriophages, Microbiology and Virology, Tbilisi, Georgia)

Workshop**WS1 Bacteriological and immunological research that provide an opportunity to advance vaccine development**

23rd, March (Tue) 13:00–15:00
Channel 3

Conveners: Soichiro Kimura (Toho University)
Ryoma Nakao (National Institute of Infectious Diseases)

WS1-1**Virus-like particle structure enhances protective IgA antibody responses against noroviruses**

○Taishi Onodera¹, Kana Hashi¹, Reiko Todaka^{2,5}, Manabu Ato³, Hideki Hasegawa⁴, Kelsoe Garnet⁵, Kazuhiko Katayama², Yoshimasa Takahashi¹ (¹Dept. Immunol. National Institute of Infectious Diseases, ²Dept. Infection Control and Immunology, Kitasato Univ., ³Dept. Microbial Infection and Immunity, National Institute of Infectious Diseases, ⁴Dept. Influenza Research center, National Institute of Infectious Diseases, ⁵Dept. Immunol. and Human Vaccine Institute, Duke Univ.)

WS1-2**Development of recombinant BCG vaccine against intractable diseases**

○Sohkichi Matsumoto (Dept. Bacteriology., Sch. Med., Niigata Univ.)

WS1-3**Vaccine development based on the findings of bacterial and immunological research**

○Yuki Kinjo^{1,2,3} (¹Dept. Bacteriol., Jikei Univ. Sch. Med., ²Jikei Cent. Biofilm Sci. Technol., Jikei Univ. Sch. Med., ³Dept. Intelligent Network, Infect. Cont., Tohoku Univ. Grad. Sch. Med.)

WS1-4**Bacterial Membrane Vesicles: Towards vaccine applications based on the versatile functions**

○Ryoma Nakao (Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

WS2 Current research on the intestinal microflora

23rd, March (Tue) 13:00–15:00
Channel 4

Conveners: Yoshihiko Sakaguchi (Kitasato University School of Medicine)
Hideki Hara (Keio University)

WS2-1**Research targeting low-molecular-weight metabolites produced by intestinal microbiome**

○Mitsuharu Matsumoto (Res. Lab., Kyodo Milk Industry Co. Ltd.)

WS2-2**Comprehensive analysis of the fecal microbiota of healthy Japanese adults**

○Kaihei Oki (Yakult Central Inst.)

WS2-3**Strategy for health and longevity based on the gut microbiota**

○Toshitaka Odamaki, Noriko Katsumata, Makoto Yoshimoto, Kazuya Ohno, Eri Mitsuyama, Keisuke Yoshida, Takashi Shimizu, Kanetada Shimizu (Next Gen. Sci. Inst., Morinaga Milk Ind.)

WS2-4**Isolation of uncultured microbes from the human gut and proposal of novel species**

○Mitsuo Sakamoto (Microbe Div., RIKEN BRC)

WS2-5**Analysis of the mechanism by which Gram-positive bacteria activates NLRP6 inflammasome**

○Hideki Hara¹, Gabriel Nunez², Akihiko Yoshimura¹ (¹Microbiology and Immunology, Keio Univ. Sch. Medicine, ²Pathology, Univ. of Michigan Medical Sch.)

WS2-6**Omics analysis in fecal transplantation therapy for *Clostridioides difficile* infection**

○Yoshihiko Sakaguchi¹, Kazuyoshi Gotoh², Akira Take¹, Hayato Osaki³, Yasutaka Jodai³, Mitsutaka Wakuda⁴, Shunji Hayashi¹, Naoki Ohmiya³, Haru Kato⁵ (¹Dept. Microbiol., Kitasato Univ. Sch. Med., ²Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci., ³Dept. Gastro., Fujita Heal. Univ. Sch. Med., ⁴Dept. Joint Res. Lab. Clin. Med., Fujita Health Univ. Hosp., ⁵Dept. Bacteriol. II, Natl. Inst. Infect. Dis.)

WS3 Microbiology and microbiome research

23rd, March (Tue) 16:00–18:00
Channel 1

Convener: Tohru Miyoshi-Akiyama (National Center for
Global Health and Medicine)

WS3-1

Medication use and the gut microbiome alterations

○Naoyoshi Nagata¹, Suguru Nishijima², Tohru Miyoshi-Akiyama³, Moto Kimura³, Yasushi Kojima³, Takashi Kawai¹, Naomi Uemura³, Masahira Hattori⁴ (¹Dept. Gastroenterological Endoscopy, Tokyo Medical Univ., ²European Molecular Biology Laboratory, ³National Center for Global Health and Medicine, ⁴Univ. of Tokyo)

WS3-2

Human gut virome diversity in a large-scale Japanese cohort

○Suguru Nishijima¹, Naoyoshi Nagata², Tohru Miyoshi-Akiyama³, Yuya Kiguchi^{4,5}, Moto Kimura³, Yasushi Kojima³, Takashi Kawai², Naomi Uemura³, Masahira Hattori^{4,5} (¹European Molecular Biology Laboratory, ²Tokyo Medical Univ., ³National Center for Global Health and Medicine, ⁴Waseda Univ., ⁵RIKEN)

WS3-3

Lifespan and the gut microbiome dynamics through life

○Lena Takayasu^{1,2} (¹Grad. Sch. Medicine, The Univ. of Tokyo, ²RIKEN Center for Integrative Medical Sciences)

WS3-4

Species interaction networks and microbiome design

○Hirokazu Toju (Center for Ecological Research, Kyoto Univ.)

WS4 Selected from Oral Session:

Microbial Taxonomy, Physiology, Structure and Ecology / Application of Microorganisms

23rd, March (Tue) 16:00–18:00
Channel 4

Conveners: Tsutomu Sekizaki (The University of Tokyo)
Hideaki Nagamune (Tokushima University)

WS4-8/ODP-018

Shotgun metagenome sequencing identification of microbial genes associated with an oral disease

○Koji Yahara⁴, Hiroko Yahara¹, Akimitsu Hiraki², Yutaka Maruoka³, Aki Hirabayashi⁴, Masato Suzuki⁴ (¹Genome Med. Sci. P.J. (Toyama), R.I., NCGM, ²Sec. Oral Oncol., Dep. Oral Maxillofac. Surg, Fukuoka Dental. Coll., ³Dep. Oral Maxillofac. Surg, H.P., NCGM, ⁴AMR Res. Ctr., NIID)

WS4-1/ODP-009

Detection of airborne bacteria by the handmade air sampler build by 3D printer

○Torahiko Okubo¹, Satoru Miyazaki¹, Masato Sumi¹, Jeewan Thapa², Hiroyuki Yamaguchi¹ (¹Fac. Health Science, Hokkaido Univ., ²Res. Cent. Zoonosis Control Hokkaido Univ.)

WS4-2/ODP-010

Analysis of *Legionella*-containing vacuoles in *Paramecium* hosts

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

WS4-3/ODP-233

Visualization of gene expression history Using Genetic Toggle Switch

○Miki Sekimoto¹, Naoki Yamamoto¹, Yuto Kawai¹, Daisuke Kiga², Satoshi Tsuneda¹ (¹Dept. Life Sci. Med. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ., ²Dept. Electr. Eng. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ.)

WS4-4/ODP-034

Structure of the helical cytoskeleton Fibril involved in *Spiroplasma* swimming revealed by cryoEM

○Yuya Sasajima¹, Takayuki Kato², Tomoko Miyata³, Keiichi Namba^{3,4,5}, Makoto Miyata¹ (¹Grad. Sch. Sci., Osaka City Univ., ²IPR., Osaka Univ., ³Grad. Sch. Front. Biosci., Osaka Univ., ⁴BDR & SPring-8 Center, Riken, ⁵JEOL Yokogushi Res. Alliance. Lab. Osaka Univ.)

WS4-5/ODP-033

Role of seven proteins conferring *Spiroplasma* swimming motility to synthetic bacterium JCVI-syn3.0

○Hana Kiyama¹, Shigeyuki Kakizawa², Makoto Miyata^{1,3} (¹Grad. Sch. Sci., Osaka City Univ., ²Bioproduction Research Institute, AIST, ³OCARINA, Osaka City Univ.)

WS4-6/ODP-031

Rheotaxis in *Mycoplasma pneumoniae*

○Daisuke Nakane¹, Yoshiki Kabata², Takayuki Nishizaka² (¹Dept. Eng. Sci., Univ. of Electro-Communications, ²Dept. Phys., Gakushuin Univ.)

WS4-7/ODP-008

A symbiotic relationship between intestinal lymphoid tissue resident *Alcaligenes* and dendritic cells

○Koji Hosomi¹, Naoko Shibata^{1,2,3}, Atsushi Shimoyama⁴, Tomoya Uto⁴, Takahiro Nagatake¹, Haruko Takeyama³, Koichi Fukase⁴, Hiroshi Kiyono², Jun Kunisawa^{1,2,3,4,5} (¹National Institutes of Biomedical Innovation, Health, and Nutrition, ²The Univ. of Tokyo, ³Waseda Univ., ⁴Osaka Univ., ⁵Kobe Univ.)

WS5 New perspective on oral bacteria -From individual pathogens to bacterial flora analysis-

24th, March (Wed) 16:00–18:00
Channel 1

Conveners: Naoya Ohara (Okayama University)
Hitoshi Komatsuzawa (Hiroshima University)

WS5-1

The significance of calcium influx on COX-2 expression induced by *P. gingivalis* gingipains

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

WS5-2

Virulence factors of *A. actinomycetemcomitans* and their etiologic significance in periodontitis

○Akihiro Yoshida (Dept. Oral Microbiol., Fac. Dent., Matsumoto Dent. Univ.)

WS5-3

Comprehensive analysis of bacteriocins in *Streptococcus mutans*

○Miki Matsuo, Hitoshi Komatsuzawa (Dept. Bacteriol., Grad. Sch. Biomed and Health Sci., Hiroshima Univ.)

WS5-4

Understanding the oral microflora Dysbiosis from metabolic fluctuations

○Masae Kuboniwa (Dept. Prevent. Dent., Grad. Sch. Dent., Osaka Univ)

WS5-5

The impact of gastrointestinal microbiota in health and disease

○Shinji Fukuda^{1,2,3,4} (¹Inst. Adv. Biosci., Keio Univ., ²KISTEC-KAST, ³Univ. Tsukuba TMRC, ⁴Metabologenomics, Inc.)

**WS6 Selected from Oral Session:
Molecular Microbiology: Genes, Proteins,
Signal Transduction, Metabolism, Omics**

24th, March (Wed) 16:00–18:00
Channel 3

Conveners: Daisuke Shiomi (Rikkyo University)
Tomomi Kuwahara (Kagawa University)

WS6-1/ODP-040

Prophages in prophages: a mechanism to accumulate T3SS effector and *stx* genes in *E. coli*

○Keiji Nakamura¹, Yoshitoshi Ogura², Yasuhiro Gotoh¹, Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fac. Med. Sci., Kyushu Univ., ²Dept. Infect. Med., Kurume Univ. Sch. Med.)

WS6-2/ODP-082

Single-cell level analysis of strain-level microbial diversity in human skin microbiome

○Tatsuya Saeki^{1,2}, Koji Arikawa^{1,2}, Takuya Yoda^{1,2}, Taruho Endoh¹, Keigo Ide^{3,4}, Masato Kogawa^{3,4}, Haruko Takeyama^{2,3,4,5}, Masahito Hosokawa^{1,2,5} (¹bitBiome, Inc., ²Research Organization for Nano and Life Innovation, Waseda Univ., ³Dept. Life Science and Medical Bioscience, Waseda Univ., ⁴Computational Bio Big-Data Open Innovation Laboratory, AIST-Waseda Univ., ⁵Institute for Advanced Research of Biosystem Dynamics, Waseda Research Institute for Science and Engineering, Waseda Univ.)

WS6-3/ODP-048

***Helicobacter cinaedi* is a human-specific lineage in the *H. cinaedi* complex**

○Yasuhiro Gotoh¹, Takako Taniguchi², Keiji Nakamura¹, Naoaki Misawa², Tetsuya Hayashi¹ (¹Dept. Bacteriol., Fac. Medical Sci., Kyushu Univ., ²Dept. Vet Med Sci., Fac. Agric., Miyazaki Univ.)

WS6-4/ODP-062

Functional hierarchy of JDP in biofilm formation and thermal adaptation of *E. coli*

○Shinya Sugimoto¹, Kunitoshi Yamanaka², Tatsuya Niwa³, Yurika Terasawa¹, Yoshimitsu Mizunoe¹, Teru Ogura², Yuki Kinjo¹ (¹Dept. Bacteriol., Jikei Univ. Schol. Med., ²IMEG, Kumamoto Univ., ³Cell Biol. Cent., Tokyo Inst. Technol.)

WS6-5/ODP-078

Longevity is dependent on sulfide:quinone oxidoreductase mediated energy metabolism in fission yeast

○Masanobu Morita¹, Akira Nishimura², Tomoaki Ida¹, Minkyung Jung¹, Tetsuro Matsunaga¹, Tsuyoshi Takata¹, Hozumi Motohashi³, Takaaki Akaike¹ (¹Dept. Environ. Med. Mol. Toxicol., Tohoku Univ. Grad. Sch. Med., ²Grad. Sch. Biol. Sci., NAIIST, ³Dept. Gene Expression Regulation, IDAC, Tohoku Univ.)

WS6-6/ODP-063

Structure-based investigation of hyaluronidase activity in *Streptococcus pyogenes*

○Kotaro Higashi^{1,2}, Masaya Yamaguchi¹, Masanobu Nakata^{1,3}, Katsuki Takebe⁴, Tomoko Sumitomo¹, Mamoru Suzuki⁵, Shigetada Kawabata¹ (¹Dept. Oral Microbiol., Grad. Sch. Dent., Osaka Univ., ²Dept. Prosthodont. Gerodontology. Oral Rehabil., Grad. Sch. Dent., Osaka Univ., ³Dept. Oral Microbiol., Grad. Sch. Med. & Dent. Sci., Kagoshima Univ., ⁴Dept. Oral Maxillofacial Surg. II, Grad. Sch. Dent., Osaka Univ., ⁵Inst. Protein Res., Osaka Univ.)

WS6-7/ODP-057

Analysis of regulatory mechanisms of novel Toxin-antitoxin systems found in EHEC O157 Sakai

○Shinya Ebihara, Rina Kojima, Hilo Yen, Toru Tobe (Dept. Clinic. Lab. Med. Sci., Grad. Sch. Med., Osaka Univ.)

WS6-8/ODP-060**Regulation of sRNA1 expression by Lrp in *Vibrio alginolyticus***

○Chieko Hino, Takehiko Mima, Naoya Isomura, Kazuyoshi Gotoh, Yumiko Yamamoto, Osamu Matsushita (Dept. Bacteriol., Okayama Univ. Grad. Sch. Med. Dent. Pharm. Sci.)

WS7 Selected from Oral Session:**Virulence Factors and Biophylaxis: Toxins, Effectors, Bioactive substances**

24th, March (Wed) 16:00–18:00
Channel 4

Conveners: Kiyotaka Nishikawa (Doshisha University)
Atsushi Tabata (Tokushima University)

WS7-1/ODP-143**Regulatory mechanism of TSST-1 production in clinically isolated *Staphylococcus aureus***

○Yusuke Taki^{1,2}, Shinya Watanabe¹, Yusuke Sato'o¹, Fengyu Li¹, Kanate Thitianapakorn¹, XinEe Tan¹, Yoshifumi Aiba¹, Kotaro Kiga¹, Teppei Sasahara¹, Longzhu Cui¹ (¹Div. Bacteriology, Sch. Med., Jichi Med. Univ., ²Dept. Gastroenterological Surg. Shizuoka General Hosp.)

WS7-2/ODP-141**Identification of signaling pathway that HA of botulinum toxin complex promotes cell proliferation**

○Sho Amatsu^{1,2}, Yukako Fujinaga¹ (¹Dept. Bacteriol., Sch. Med. Sci., Kanazawa Univ., ²Dept. Forensic Med. Pathol., Sch. Med. Sci., Kanazawa Univ.)

WS7-3/ODP-191**Guanylate binding protein-1 regulates xenophagy through TBK1 activation**

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

WS7-4/ODP-185**LL-37 ameliorates mouse sepsis by releasing antimicrobial extracellular vesicles**

○Yumi Kumagai¹, Soichiro Kakuta², Kyoko Kuwahara³, Isao Nagaoka^{1,4} (¹Dept. Host Defense Biochem. Res., Sch. Med., Juntendo Univ., ²Lab. Morphol. Image Analysis, Sch. Med., Juntendo Univ., ³Dept. Microbiol., Sch. Med., Juntendo Univ., ⁴Faculty Health Sci., Juntendo Univ.)

WS7-5/ODP-131***E. coli*-derived CirA induces the pro-inflammatory factors via extracellular vesicles**

○Risa Imamiya¹, Mayuko Osada-Oka², Akari Shinohara¹, Yasuhiko Horiguchi³ (¹Food Hyg. Health., Life Env., Kyoto Pref. Univ., ²Food Hyg. Env. Health., Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., ³Dept. Mol. Bact., RIMD, Osaka Univ.)

WS7-6/ODP-137**A molecular mechanism of IL-1 β inhibition by mycobacterial effector protein**

○Tomomi Kurane¹, Giichi Takaesu^{1,2}, Kazuko Sawada², Masayuki Umemura^{1,2}, Goro Matsuzaki^{1,2} (¹Dept. Host defense, Grad. Sch. Med., Univ. of the Ryukyus, ²Mol. Microbiol. Group, Tropical Biosphere Research Center, Univ. of the Ryukyus)

WS7-7/ODP-127**Optimization of culture conditions for type III secreted proteins production in *B. pertussis***

○Masataka Goto¹, Asaomi Kuwae¹, Tomoko Hanawa², Akio Abe¹ (¹Lab. Bact. Infect., Grad. Sch. Infect. Cont. Sci., Kitasato Univ., ²Dep. Infect. Dis., Kyorin Univ. Sch. Med.)

WS7-8/ODP-126**Effect of O₂ availability on Stx1 and Stx2 productions in enterohemorrhagic *Escherichia coli***

○Takeshi Shimizu¹, Manami Onuki¹, Akio Matsumoto², Takeshi Hamahata³ (¹Dept. Molecular Infectiology, Grad. Sch. Medicine, Chiba Univ., ²Dept. Aging Pharmacology, Sch. Medicine, Toho Univ., ³Section of Bacterial Infection, Research Institute, National Center for Global Health and Medicine)

WS8 Molecular basis of hypoxic environment and associated diseases (cancer, infectious diseases)

25th, March (Thu) 12:45–14:45
Channel 2

Convener: Toshihiko Suzuki (Tokyo Medical and Dental University)

WS8-1**Formation of aberrant tumor metabolism under hypoxic condition**

○Koh Nakayama (Dept. Pharmacol., Sch. Med., Asahikawa Med. Univ.)

WS8-2**Regulation of oxygen sensing mechanisms controls tumor progression in cancer and stromal cells**

○Takeharu Sakamoto (Dept. System Biol., Inst. Med. Pharm. Health Sci., Kanazawa Univ.)

WS8-3**TRIF- HIF-1 α signaling under hypoxia drives enhancement of inflammasome activation by *P. gingivalis***

○Tokuju Okano, Toshihiko Suzuki (Dept. Bacterial Pathogenesis, Infection and Host Response Grad. Sch. Medical and Dental Sciences Tokyo Medical and Dental Univ. (TMDU))

WS8-4**Mycobacterial DNA-binding protein 1, a major protein in hypoxic dormant mycobacteria**

○Akihito Nishiyama¹, Noriyuki Kodera², Masahiro Shimizu³, Anna Savitskaya¹, Shymaa Enany¹, Kouta Mayanagi⁴, Takehiro Yamaguchi⁵, Yuriko Ozeki¹, Yoshitaka Tateishi¹, Sohkiichi Matsumoto¹ (¹Dept. Bacteriol., Sch. Med., Niigata Univ., ²NanoLSI, Kanazawa Univ., ³KURNA, Kyoto Univ., ⁴Med. Inst. Bioregulation, Kyushu Univ., ⁵Dept. Pharmacol., Med. Sch., Osaka City Univ.)

WS8-5**Intracellular adaptation mechanism of *Chlamydia trachomatis* L2/434/Bu in hypoxic environment**

○Hiroyuki Yamaguchi¹, Jeewan Thapa², Torahiko Okubo¹ (¹Fac. Health Science Hokkaido Univ., ²Res. Cent. Zoonosis Control Hokkaido Univ.)

WS9 Selected from Oral Session:**Virulence Factors and Biophylaxis: Infection Models, Parasitism, Immunity, Vaccines / Pathogens and Infectious Diseases**

25th, March (Thu) 12:45–14:45
Channel 3

Conveners: Yukako Fujinaga (Kanazawa University)
Tomoko Sumitomo (Osaka University)

WS9-1/ODP-175***In vitro* Bacterial Evaluation Model using Human iPS Cell-derived Small Intestinal Epithelial Cells**

○Nao Yamazaki¹, Shinji Mima¹, Yuki Imakura¹, Takahiro Iwao², Tamihide Matsunaga², Shinichi Watanabe¹, Kozo Nagata¹, Masahiko Taniguchi¹ (¹Bio Science & Engineering Laboratory, FUJIFILM Corporation, ²Dept. Clinical Pharmacy, Grad. Sch. Pharmaceutical Sciences, Nagoya City Univ.)

WS9-2/ODP-098**Host immune induction via membrane vesicles produced by *Clostridium perfringens***

○Mayu Okuda¹, Nozomu Obana², Hibiki Okuwaki¹, Ryoma Nakao³, Hidenobu Senpuku³, Nobuhiko Nomura⁴ (¹Grad. Life Environ. Sci., Univ. Tsukuba, ²TMRC, Fac. Medicine, Univ. Tsukuba, ³Dept. Bacteriol I., NIID., ⁴Fac. Life Environ. Sci., Univ. Tsukuba)

WS9-3/ODP-156**Non-hematogenous dissemination of *Streptococcus pneumoniae* from nasopharynx to brain tissue**

○Yuki Takahara^{1,2}, Tomoko Sumitomo¹, Masamitsu Kono³, Masaya Yamaguchi¹, Masanobu Nakata⁴, Muneki Hotomi³, Shigetada Kawabata¹ (¹Dept. Oral Mol. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Dept. Fixed Prothodont., Osaka Univ. Grad. Sch. Dent., ³Dept. Otorhinolaryngology-Head and Neck Surgery, Wakayama Medical Univ., ⁴Dept. Oral. Microbiol., Grad. Sch. Med. and Dent., Kagoshima Univ.)

WS9-4/ODP-161**Monitoring mycobacterial infection in vivo by 3D imaging CUBIC**

○Mariko Hakamata^{1,2}, Erina Inouchi¹, Akira Yokoyama^{1,3}, Yuriko Ozeki¹, Akihito Nishiyama¹, Yoshitaka Tateishi¹, Riuko Ohashi⁴, Toshiaki Kikuchi², Kazuki Tainaka⁵, Sohkiichi Matsumoto¹ (¹Dept. Bacteriol., Sch. Med., Niigata Univ., ²Dept. Respiratory Medicine and Infectious Disease., Sch. Med., Niigata Univ., ³Dept. Respiratory Medicine, Sch. Med., The Univ. of Tokyo, ⁴Histopathology Core Facility, Sch. Med., Niigata Univ., ⁵Dept. System Pathology for Neurological Disorders, Brain Research Institute, Niigata Univ.)

WS9-5/ODP-099**Investigation of pathogenic mechanism of invasive infection caused by *emm 89 Streptococcus pyogenes***

○Masayuki Ono^{1,2}, Masaya Yamaguchi¹, Yujiro Hirose¹, Kotaro Higashi^{1,3}, Norihiko Takemoto⁴, Tohru Miyoshi-Akiyama⁴, Tomoko Sumitomo¹, Tadayoshi Ikebe⁵, Shigetada Kawabata¹ (¹Dept. Oral Mol. Microbiol., Osaka Univ. Grad. Sch. Dent., ²Dept. Fixed Prothodont., Osaka Univ. Grad. Sch. Dent., ³Dept. Prothodont. Gerodontol. Oral Rehabil., Osaka Univ. Grad. Sch. Dent., ⁴Pathogenic Microbe Lab., Dept. Infectious Diseases, NCGM, ⁵Dept. Bacteriol. I, Natl. Inst. Infect. Dis.)

WS9-6/ODP-110**bGWAS reveals putative bacterial factors that affect pathological outcomes of MAC lung disease**

○Hirokazu Yano¹, Yukiko Nishiuchi², Kentaro Arikawa³, Atsushi Ota⁴, Mari Miki⁵, Fumito Maruyama⁴, Hiroshi Kida⁵, Seigo Kitada⁵, Tomotada Iwamoto³ (¹Grad. Sch. Life Sciences, Tohoku Univ., ²Grad Sch. Medicine, Osaka City Univ., ³Kobe Institute of Health, ⁴Center for Holobiome and Built Environment (CHOBE), Hiroshima Univ., ⁵National Hospital Organization Osaka Toneyama Medical Center)

WS9-7/ODP-090**Molecular epidemiology of enterohemorrhagic *Escherichia coli* from asymptomatic carriers**

○Rina Takahashi¹, Yutaka Uzawa¹, Shigekazu Iguchi¹, Koichi Uno², Akio Noguchi², Hiroshi Kaneko², Toshio Sato², Ken Kikuchi¹ (¹Dept. Infectious Diseases, Tokyo Women's Medical Univ., ²Japan Biosciences Co., Ltd.)

WS9-8/ODP-100**Global Genome Epidemiology Database (gGENEPID) for pathogenic bacteria**

○Makoto Kuroda, Tsuyoshi Sekizuka, Kentaro Itokawa, Koji Yatsu (Pathogen Genomics Center, NIID)

**WS10 Selected from Oral Session:
Antimicrobials and Drug Resistance**

25th, March (Thu) 12:45–14:45
Channel 4

Conveners: Hironobu Nakayama (Suzuka University of
Medical Science)
Kunihiko Nishino (The Institute of Scientific and
Industrial Research, Osaka Univ.)

WS10-8/ODP-192

**Adduct formation of delamanid with NAD in
mycobacteria**

○Akihito Nishiyama¹, Mikayo Hayashi², Ryuki Kitamoto²,
Yoshitaka Tateishi¹, Mayuko Osada-Oka³, Yukiko Nishiuchi⁴,
Xiuhao Chen², Kentaro Kaneko⁵, Makoto Matsumoto², Sohkichi
Matsumoto¹ (¹Dept. Bacteriol., Sch. Med., Niigata Univ.,
²Pharm. Bus. Div., Otsuka Pharmaceutical Co., Ltd., ³Div.
Applied Life Sci., Grad. Sch. Life Environ. Sci., Kyoto Prefect.
Univ., ⁴Toneyama Ins. for Tuberculosis Res., Med. Sch., Osaka
City Univ., ⁵Grad. Sch. Sci. Technol., Niigata Univ.)

WS10-1/ODP-207

**Heterogeneity of intracellular ATP abundance in
Salmonella Typhimurium induces diverse persisters**

○Naoki Yamamoto, Satoshi Tsuneda (Dept. Life Sci. Med.
Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ.)

WS10-2/ODP-219

***E. coli* persister formation from *ldhA* expression is
mediated by DNA repair via *recA* expression**

○Yurino Ohno, Naoki Yamamoto, Satoshi Tsuneda (Dept. Life
Sci. Med. Biosci., Grad. Sch. Adv. Sci. Eng., Waseda Univ.)

WS10-3/ODP-218

**ATP-dependent Lon protease regulates awakening from
ciprofloxacin-induced persistence**

Naoki Maekawa¹, Kengo Itadera², Junichi Ishihara², Satsuki
Kajiyama³, Daiki Tanaka⁴, Tetsushi Sekiguchi⁴, Shuichi Shoji³,
Masami Ishibashi¹, Hiroki Takahashi², ○Akiko Takaya^{1,2} (¹Dep.
Nat. Prod. Chem., Grad. Sch. Pharm. Sci., Chiba Univ., ²MMRC,
Chiba Univ., ³Fac. Sci. Eng., Waseda Univ., ⁴Res. Org. Nano Life
Inno., Waseda Univ.)

WS10-4/ODP-206

**Functional analysis of intrinsic drug resistance genes in
M. tuberculosis using CRISPR interference**

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

WS10-5/ODP-209

**Qualitative and quantitative assessments of ESBL-
producing *Escherichia coli* in retail chicken meats**

○Shiori Yamamoto, Tatsuya Nakayama, Rika Machida, Hiroshi
Asakura (Div. Biomed. Food Res., Nath. Inst. Health Sci.)

WS10-6/ODP-214

**Exploration of host receptors in PB1-like phages
infection towards *Pseudomonas aeruginosa***

○Keisuke Nakamura¹, Jumpei Fujiki¹, Takaaki Furusawa¹,
Montgomery Munby¹, Tomohiro Nakamura¹, Masaru Usui²,
Satoshi Gondaira³, Hidetoshi Higuchi³, Yutaka Tamura²,
Hidetomo Iwano¹ (¹Lab. Vet. Biochem., Dept. Vet. Med., Rakuno
Gakuen Univ., ²Lab. Food. Microbiol., Dept. Vet. Med., Rakuno
Gakuen Univ., ³Lab. Vet. Hygiene., Dept. Vet. Med., Rakuno
Gakuen Univ.)

WS10-7/ODP-195

**Anti-inflammatory effect of *Staphylococcus aureus*
phage ΦMR003 on wound infection**

○Tomoya Suda¹, Tomoko Hanawa², Mayuko Tanaka², Kazuhiko
Miyanaga³, Yasunori Tanjii³, Takeaki Matsuda^{1,4} (¹Dept. Gen.
Med., Sch. Med., Kyorin Univ., ²Dept. Infect. Dis., Sch. Med.,
Kyorin Univ., ³Dept. Lif. Sci. Tech., Tokyo Tech Univ., ⁴Dept.
Trauma and Crit. Care., Sch. Med., Kyorin Univ.)

Evening · Workshop

**EWS1 The second "Big Bang" of bacterial flagellar
researches**

23rd, March (Tue) 19:00–21:00
Channel 1

Conveners: Tohru Minamino (Osaka University)
Seiji Kojima (Nagoya University)

EWS1-1

**Mechanism of the stator-rotor interactions essential for
bacterial flagellar rotation**

○Hiroyuki Terashima, Seiji Kojima, Michio Homma (Div. Biol.
Sci., Grad. Schol. Sci., Nagoya Univ.)

EWS1-2

**Structural differences of the flagellar rotor in the
counterclockwise and clockwise rotation states**

○Tatsuro Nishikino¹, Britany Carroll², Shiwei Zhu², Seiji
Kojima³, Jun Liu², Michio Homma³ (¹Inst for Protein Res.,
Osaka Univ., ²Dep. Microbial Pathogenesis, Microbial Sci. Inst.,
Yale Univ., ³Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)

EWS1-3

**Activation mechanism of the Na⁺-driven export engine of
the flagellar protein export apparatus**

○Tohru Minamino (Grad. Sch. Front. Biosci., Osaka Univ.)

EWS1-4

**Mechanisms of substrate selectivity and protein secretion
during assembly of the bacterial flagellum**

○Marc Erhardt (Institute for Biology, Humboldt Univ. Berlin)

EWS1-5

Gradually increasing detail, towards an atomic understanding of flagellar architecture

○Susan M. Lea (NCI, Frederick)

EWS2 A World Tuberculosis Day; from knowledge so far to current research topics about mycobacteria and mycobacteriosis

23rd, March (Tue) 19:00–21:00

Channel 3

Conveners: Sohkiichi Matsumoto (Niigata University)

Chie Nakajima (Hokkaido University)

EWS2-1

Unsolved problems of tuberculosis and the current approaches in the research field

○Naoto Keicho (The Research Institute Tuberculosis, JATA)

EWS2-2

Population structure of Mycobacterium abscessus in patients with Cystic Fibrosis

○Astrid Lewin¹, Elisabeth Kamal¹, Torsten Semmler², Katja Winter³, Sandra Appelt³, Hubert Schäfer¹, Lei Mao¹, Patience Eschenhagen⁴, Claudia Grehn⁴, Carsten Schwarz⁴ (¹Unit 16 Mycotic and Parasitic Agents and Mycobacteria, Robert Koch Institute, Seestraße 10, Berlin, Germany, ²Unit NG 1 Microbial Genomics, Robert Koch Institute, Nordufer 20, Berlin, Germany, ³Unit MF1 Bioinformatics, Robert Koch Institute, Seestraße 10, Berlin, Germany, ⁴Dept. Pediatrics, Div. Pulmonology, Immunology and Intensive Care Medicine, Div. Cystic Fibrosis, Charité – Universitätsmedizin, Augustenburger Platz 1, 13353 Berlin, Germany)

EWS2-3

Genome analysis of Beijing lineage of Mtb and monitoring mycobacterial infection by CUBIC

○Mariko Hakamata^{1,2}, Hayato Takihara³, Yuriko Ozeki¹, Akihito Nishiyama¹, Yoshitaka Tateishi¹, Riuko Ohashi⁴, Shujiro Okuda³, Kazuki Tainaka⁵, Toshiaki Kikuchi², Sohkiichi Matsumoto¹ (¹Dept. Bacteriol., Sch. Med., Niigata Univ., ²Dept. Respiratory Medicine and Infectious Disease., Sch. Med., Niigata Univ., ³Dept. Bioinformatics., Sch. Med., Niigata Univ., ⁴Histopathology Core Facility, Sch. Med., Niigata Univ., ⁵Dept. System Pathology for Neurological Disorders., Brain Research Institute., Niigata Univ.)

EWS2-4

Anura Rambukkana (Chair of Regeneration Biology, Centre for Regenerative Medicine, Institute for Regeneration and Repair Centre for Infectious Diseases, The University of Edinburgh)

EWS2-5

The Future of Infectious Diseases

○Taro Yamamoto (Dept. of International Health and Medical Anthropology)