

The 11th Awaji International Forum on Infection and Immunity Program

September 11 (Tue)

7:30 – 9:00 *Free Breakfast for Participants*

9:00 – 10:00 **Training Course I: Virology**
Tatsuo Shioda, Osaka University, Japan

10:00 – 10:15 *Coffee Break*

10:15 – 11:15 **Training Course II: Parasitology**
Yoichi Maekawa, Gifu University, Japan

11:15 – 11:30 *Coffee Break*

11:30 – 12:30 **Training Course III: Immunology**
Takashi Fujita, Kyoto University, Japan

12:30 – 13:30 *Free Lunch for Training Course Attendees*

13:30 – 14:30 **Training Course IV: Bacteriology**
Yasuhiko Suzuki, Hokkaido University, Japan

15:00 **Opening Remarks**
Yoshiharu Matsuura, Osaka University, Japan

15:15 – 17:30 **Session 1: Pathogen to Host Interaction I - A Variety of Pathogens in Nature -**

Chairs: Yasuhiko Horiguchi, Osaka University, Japan
Shinji Makino, University of Texas Medical Branch, USA

15:15 S1-1 **Takema Fukatsu**, National Institute of Advanced Industrial Science and Technology, Japan
Symbiosis as evolutionary force generating novel biological functions through inter-organismal interactions

15:45 S1-2 **Shiroh Iwanaga**, Mie University, Japan
A high-coverage artificial chromosome library for the genome-wide screening of drug resistance genes in malaria parasites

16:15 S1-3 **Shahid M. Khan**, Leiden University Medical Center, Netherlands
Functional redundancy in Plasmodium digestive food vacuole proteins and parasite development inside red blood cells without hemoglobin degradation

16:45 S1-4 **Tatsuya Tsurumi**, Aichi Cancer Center Research Institute, Japan
Epstein-Barr virus replication factory

17:15 S1-5 (P-65) **Hiroataka Hiyoshi**, Osaka University, Japan
VopV, an F-actin-binding type III secretion effector, is required for *Vibrio parahaemolyticus*-induced enterotoxicity

18:30 – 20:30 **Welcome Party**
Banquet Hall STELLA (Westin Hotel 1F)

September 12 (Wed)

7:30 – 9:00 *Free Breakfast for Participants*

9:00 – 12:05 **Session 2: Pathogen to Host Interaction II - Modulations of Host Systems by Pathogens -**

Chairs: Keiji Ueda, Osaka University, Japan
Peter Sarnow, Stanford University, USA

- 9:00 S2-1 **Peter Sarnow**, Stanford University, USA
Protection of the hepatitis C viral RNA genome and modulation of polyadenylation site usage in Insig1 mRNA by liver-specific microRNA 122
- 9:30 S2-2 (P-04) **Takasuke Fukuhara**, Osaka University, Japan
miR122 expression and lipid metabolism participate in the cell tropism of hepatitis C virus infection
- 9:45 S2-3 **Shinji Makino**, University of Texas Medical Branch, USA
SARS coronavirus nsp1 protein is a novel eukaryotic translation inhibitor, which represses multiple steps of translation initiation
- 10:15 S2-4 (P-24) **Tomohisa Tanaka**, Osaka University, Japan
Circumvention of the translational shutoff in cells infected with SARS coronavirus through a specific interaction of nsp1 with the 5'UTR of viral RNA
- 10:30 *Coffee Break (20 min)*
- 10:50 S2-5 **Edward S. Mocarski, Jr.**, Emory University, USA
RIP3 and caspase 8 control of programmed necrosis induced by virus infection and pathogen recognition receptors
- 11:20 S2-6 **Craig R. Roy**, Yale University, USA
Modulation of eukaryotic membrane transport proteins and host immune functions by *Legionella pneumophila* effector proteins
- 11:50 S2-7 (P-79) **Takahito Sanada**, The University of Tokyo, Japan
A bacterial effector targets the TRAF6-NF- κ B pathway to modulate the acute inflammatory response to bacterial invasion of epithelial cells

12:05 – 13:30 *Lunch Break (own)*

13:30 – 15:00 **Poster Session 1 (odd numbers)**

15:00 – 18:05 **Session 3: Host to Pathogen Interaction I - The Recognition of Pathogens -**

Chairs: Hisashi Arase, Osaka University, Japan
James Chen, University of Texas Southwestern Medical Center, USA

- 15:00 S3-1 **Karl-Klaus Conzelmann**, University of Munich, Germany
Sequential activation of IRF3 and interference by rhabdo- and paramyxoviruses
- 15:30 S3-2 **James Chen**, University of Texas Southwestern Medical Center, USA
Signal transduction in the RIG-I antiviral innate immunity pathway
- 16:00 S3-3 **Kensuke Miyake**, The University of Tokyo, Japan
Toll-like receptor logistics by Unc93B1
- 16:30 *Coffee Break (20 min)*

- 16:50 S3-4 **Mitsutoshi Yoneyama**, Chiba University, Japan
Stress granule-like aggregates play a critical role in anti-viral innate immunity
- 17:20 S3-5 (P-94) **Seigyoku Go**, Kyoto University, Japan
Mechanism and physiological role of granules formed by viral nucleocapsid protein
- 17:35 S3-6 (P-69) **Shiou-Ling Lu**, Osaka University, Japan
Deficiency in selective autophagy leads to *Streptococcus pyogenes* multiplication in endothelial cells
- 17:50 S3-7 (P-33) **Emi E. Nakayama**, Osaka University, Japan
A naturally occurring single amino acid substitution in human TRIM5 α linker region affects its anti-HIV-1 activity and susceptibility to HIV-1 infection

September 13 (Thu)

7:30 – 9:00 *Free Breakfast for Participants*

9:00 – 11:50 **Session 4: Host to Pathogen Interaction II - Vaccines and Epidemiology -**

Chairs: Shizuo Akira, Osaka University, Japan
Antonio Lanzavecchia, Institute for Research in Biomedicine, Switzerland

- 9:00 S4-1 **Antonio Lanzavecchia**, Institute for Research in Biomedicine, Switzerland
Dissecting the human B and T cell response to pathogens
- 9:30 S4-2 (P-92) **Midori Nakamura**, National Institute of Infectious Diseases, Japan
Efficacy of CTL induction by vaccination under antiretroviral therapy in SIV-infected rhesus macaques
- 9:45 S4-3 (P-07) **Keisuke Nakagawa**, Gifu University, Japan
Generation of live rabies virus strain with high levels of safety and immunogenicity by mutations in nucleoprotein and glycoprotein
- 10:00 S4-4 (P-54) **Masanori Yagi**, Osaka University, Japan
Immunogenicity of SE36 and boosting effect following infection in a clinical trial in Uganda
- 10:15 *Coffee Break (20 min)*
- 10:35 S4-5 **Hiroshi Kida**, Hokkaido University, Japan
For the control of highly pathogenic avian influenza and preparedness for pandemic influenza
- 11:05 S4-6 (P-72) **Dan Takeuchi**, Osaka University, Japan
The contribution of suilysin to the pathogenesis of *Streptococcus suis* infection caused by different MLST strains
- 11:20 S4-7 **Satoshi Koike**, Tokyo Metropolitan Institute of Medical Science, Japan
Scavenger receptor B2 is a receptor for Enterovirus 71

11:50 – 13:30 *Lunch Break (own)*

13:30 – 15:00 **Poster Session 2 (even numbers)**

15:00 – 17:50 **Session 5: Pathogen to Host Interaction III - Chronic Infections and Oncogenesis -**

Chairs: Yasushi Kawaguchi, The University of Tokyo, Japan
Manuel R. Amieva, Stanford University, USA

- 15:00 S5-1 **Masao Matsuoka**, Kyoto University, Japan
How human T-cell leukemia virus type 1 induces diseases
- 15:30 S5-2 **Teruhito Yasui**, Osaka University, Japan
Pathogenic activation and evasion of humoral immune responses by γ -herpesvirus infection
- 16:00 S5-3 (P-09) **Yasushi Kawaguchi**, The University of Tokyo, Japan
Evasion of CD8⁺ T cells mediated by HSV-1 Us3 kinase contributes to viral replication in vivo
- 16:15 *Coffee Break (20 min)*
- 16:35 S5-4 **Elina Zuñiga**, University of California, San Diego, USA
GP130 signaling cytokines during chronic viral infections
- 17:05 S5-5 **Manuel R. Amieva**, Stanford University, USA
Colonization of the precursor cell compartment by *Helicobacter pylori*
- 17:35 S5-6 (P-53) **Cevayir Coban**, Osaka University, Japan
Lipocalin 2 and the iron metabolism during malaria infection

19:00 – 21:00 **BBQ Party**

Terrace of Coccolare (Westin Hotel 2F)

September 14 (Fri)

7:30 – 9:00 *Free Breakfast for Participants*

9:00 – 11:50 **Session 6: Host to Pathogen Interaction III - Host Response to Pathogens -**

Chairs: Hiroshi Kiyono, The University of Tokyo, Japan
Andreas J. Bäumlner, University of California, Davis, USA

- 9:00 S6-1 **Toshiaki Ohteki**, Tokyo Medical and Dental University, Japan
Monocyte-derived dendritic cells perform hemophagocytosis to fine-tune excessive immune responses
- 9:30 S6-2 **Masahiro Yamamoto**, Osaka University, Japan
Essential role of interferon- γ -inducible p65 GTPases in host cellular innate immunity against *Toxoplasma gondii*
- 10:00 S6-3 (P-83) **Linda Wiltzer**, Monash University, Australia
Identification of the STAT1/2 binding site in the rabies virus interferon antagonist, P-protein
- 10:15 *Coffee Break (20 min)*
- 10:35 S6-4 **Hiroshi Ohno**, RIKEN Research Center for Allergy and Immunology, Japan
M cells, a unique subset of intestinal epithelial cells specialized for mucosal antigen-uptake

- 11:05 S6-5 **Andreas J. Bäuml**, University of California, Davis, USA
How the host response feeds *Salmonella*
- 11:35 S6-6 (P-89) **Takashi Nozawa**, Tokyo Medical and Dental University, Japan
The small GTPases Rab9A and Rab23 function at distinct steps in autophagy during Group A Streptococcus infection
- 11:50 – 13:00 *Lunch Break (own)*
- 13:00 – 15:00 **Session 7: Pathogen to Host Interaction IV - Invasion of Pathogens -**
Chairs: Toshihiro Horii, Osaka University, Japan
Dominique Soldati-Favre, University of Geneva, Switzerland
- 13:00 S7-1 **Marc Lecuit**, Institut Pasteur, France
Listeria monocytogenes, a silent invader
- 13:30 S7-2 **Dominique Soldati-Favre**, University of Geneva, Switzerland
Adaptation to an obligate intracellular life style: the Apicomplexa way
- 14:00 S7-3 **Tomoyoshi Nozaki**, National Institute of Infectious Diseases, Japan
Evolution of the mitochondria under anaerobic conditions: Function and import machinery of the highly divergent mitochondrion-related organelle in the parasitic protozoan *Entamoeba histolytica*
- 14:30 S7-4 **Yukako Fujinaga**, Osaka University, Japan
Strategies of botulinum neurotoxin complex to cross the intestinal epithelial barrier
- 15:00 **Closing Remarks**

List of Poster Presentations

P-01

A reverse transcription real-time loop mediated isothermal amplification assay for rapid detection of Yellow Fever Virus for use in resource poor settings

Allan Ole Kwallah, Shingo Inoue, Anne W.T. Muigai, Matilu Mwau, Kouichi Morita

P-02

Identification of the signal peptidase complex subunit 1 as a novel host factor that participates in the assembly of hepatitis C virus

Ryosuke Suzuki, Mami Matsuda, Koichi Watashi, Hideki Aizaki, Yoshiharu Matsuura, Takaji Wakita, Tetsuro Suzuki

P-03

Human Monoclonal Antibodies Broadly Protective against Influenza B Virus

Mayo Yasugi, Ritsuko Koketsu, Akifumi Yamashita, Norihito Kawashita, Anariwa Du, Motoki Kuhara, Kazuhito Fujiyama, Yoshinobu Okuno, Kazuyoshi Ikuta

P-04 (S2-2)

miR122 expression and lipid metabolism participate in the cell tropism of hepatitis C virus infection

Takasuke Fukuhara, Hiroto Kambara, Mai Shiokawa, Chikako Ono, Hiroshi Katoh, Toru Okamoto, Yoshiharu Matsuura

P-05

Establishment of mouse liver cell lines susceptible to hepatitis C virus infection

Chikako Ono, Takasuke Fukuhara, Mai Shiokawa, Toru Okamoto, Yoshiharu Matsuura

P-06

Involvement of human liver-specific factors in a complete propagation of hepatitis C virus

Mai Shiokawa, Takasuke Fukuhara, Chikako Ono, Toru Okamoto, Yoshiharu Matsuura

P-07 (S4-3)

Generation of live rabies virus strain with high levels of safety and immunogenicity by mutations in nucleoprotein and glycoprotein

Keisuke Nakagawa, Naoto Ito, Tatsunori Masatani, Satoko Yamaoka, Kota Okadera, Makoto Sugiyama

P-08

N-terminal hydrophobic amino acid residues of the capsid protein are critical for the co-localization with the p150 protein and production of rubella virus

Masafumi Sakata, Kiyoko Okamoto, Noriyuki Otsuki, Masaki Anraku, Makoto Takeda, Yoshio Mori

P-09 (S5-3)

Evasion of CD8+ T cells Mediated by HSV-1 Us3 Kinase Contributes to Viral Replication In Vivo

Takahiko Imai, Naoto Koyanagi, Akihisa Kato, Yasushi Kawaguchi

P-10

Monitoring membrane fusion by dual-functional split reporter protein

Hirohito Ishikawa, Fanxia Meng, Naoyuki Kondo, Aikichi Iwamoto, Zene Matsuda

P-11

Population analysis of effector CD4+ T cells in MHV68 infection by single cell-based RT-PCR

Kentaro Morita, Shuhei Sakakibara, Teruhito Yasui, Hitoshi Kikutani

P-12

Interferon gamma enhances anti-viral activity induced by double-stranded RNA in keratinocytes surrounding herpetic vesicles

Shin Morizane, Ai Kajita, Takenobu Yamamoto, Tetsuya Takiguchi, Kenshi Yamasaki, Yumi Aoyama, Keiji Iwatsuki

P-13

Whole genomic characterization of an unusual human G5P[6] rotavirus identified in Japan

Satoshi Komoto, Yoshimasa Maeno, Tsuyoshi Matsuoka, Masaharu Ohfu, Toshifumi Yodoshi, Hideki Akeda, Koki Taniguchi

P-14

Canine distemper virus possesses an ability to use human nectin4 as a receptor

Noriyuki Otsuki, Tsuyoshi Sekizuka, Fumio Seki, Kouji Sakai, Toru Kubota, Yuichiro Nakatsu, Seal Chan, Hideo Fukuhara, Katsumi Maenaka, Ryoji Yamaguchi, Makoto Kuroda, Makoto Takeda

P-15

Japanese encephalitis virus core protein inhibits stress granule formation through an interaction with Caprin-1 and facilitates viral propagation

Hiroshi Katoh, Toru Okamoto, Takasuke Fukuhara, Hiroto Kambara, Eiji Morita, Yoshio Mori, Wataru Kamitani, Yoshiharu Matsuura

P-16

The accessory C proteins of Sendai virus are involved in triggering IFN- β production

Asuka Yoshida, Takemasa Sakaguchi, Takashi Irie

P-17

Rabies virus phosphoprotein gene is important for peripheral infectivity.

Satoko Yamaoka, Naoto Ito, Keisuke Nakagawa, Kota Okadera, Makoto Sugiyama

P-18

Antiviral activity of glycyrrhizin against hepatitis C virus in vitro

Yoshihiro Matsumoto, Noriyuki Watanabe, Koichi Watashi, Ryosuke Suzuki, Tomokazu Matsuura, Tetsuro Suzuki, Tatsuo Miyamura, Shizuko Ichinose, Kenjiro Wake, Takaji Wakita, Hideki Aizaki

P-19

Human poliovirus receptor-dependent and -independent trafficking of poliovirus

Seii Ohka, Mai Sakai, Hiroko Igarashi, Akio Nomoto

P-20

Application of humanized mice for the evaluation of measles virus vector

Shota Ikeno, Kazutaka Terahara, Masayuki Ishige, Motoomi Suzuki, Yu-ya Mitsuki, Yuko Morikawa, Tetsuo Nakayama, Yasuko Tsunetsugu-Yokota

P-21

Importance of the P3 Glutamine residue for proteolytic activation of the fusion protein of parainfluenza virus by TMPRSS2

Masako Abe, Atsushi Kato, Maino Tahara, Kouji Sakai, Kazuhiko Kanou, Kazuya Shirato, Masahiro Noda, Hirokazu Kimura, Yasushi Ami, Shutoku Matsuyama, Katsumi Mizuta, Makoto Takeda

P-22

Generation of virus-and self-reactive B cells during herpesvirus infection.

Shuhei Sakakibara, Teruhito Yasui, Takeharu Minamitani, Hitoshi Kikutani

P-23

Sheeppox Virus SPPV14 Encodes a Bcl 2-like Cell death Inhibitor that Counters a Distinct Set of Mammalian Pro-apoptotic Proteins

Toru Okamoto, Marc Kvansakul, David CS Huang

P-24 (S2-4)

Circumvention of the translational shutoff in cells infected with SARS coronavirus through a specific interaction of nsp1 with the 5'UTR of viral RNA

Tomohisa Tanaka, Yoshiharu Matsuura, Wataru Kamitani

P-25

Novel G27P[36] group A rotaviruses detected in sugar gliders (*Petaurus breviceps*)

Kota Okadera, Naoto Ito, Keisuke Nakagawa, Satoko Yamaoka, Yumi Une, Hiroshi Tsunemitsu, Makoto Sugiyama

P-26

A novel regulatory mechanism for polarity of mononegavirus RNA synthesis

Takashi Irie, Takemasa Sakaguchi

P-27

Characterization of pseudotype VSV possessing New and Old World arenavirus envelope proteins

Hideki Tani, Koichiro Iha, Shuetsu Fukushi, Satoshi Taniguchi, Tomoki Yoshikawa, Masayuki Saijo, Shigeru Morikawa

P-28

Identification of novel influenza A virus proteins translated from PA mRNA

Yukiko Muramoto, Takeshi Noda, Eiryu Kawakami, Yoshihiro Kawaoka

P-29

Nuclear Distribution Gene C (NUDC) is Involved in Influenza Virus Replication

Takashi Ishii, Hiroko Fujii, Hideo Goto, Hiroko Kozuka-Hata, Masaaki Oyama, Tokiko Watanabe, Yoshihiro Kawaoka

P-30

Development of a neutralization assay system for chikungunya virus that uses a safe and convenient pseudotyped lentiviral vector

Natsuko Kishishita, Naokazu Takeda, Atchareeya A-nuegoonpipat, Surapee Anantapreecha

P-31

Involvement of the Leader Sequence in Rinderpest Virus Pathogenesis

Toshiyuki Nakamura, Chieko Imai, Kentaro Fujita, Miho Ishii, Fusako Ikeda, Hiroki Sato, Misako Yoneda, Chieko Kai

P-32

Persistent expression of the full genome of hepatitis C virus in B cells induces spontaneous development of B-cell lymphomas in vivo.

Kyoko Tsukiyama-Kohara, Michinori Kohara

P-33 (S3-7)

A naturally occurring single amino acid substitution in human TRIM5 α linker region affects its anti-HIV-1 activity and susceptibility to HIV-1 infection

Emi Nakayama E, Toshiaki Nakajima, Gurvinder Kaur, Jun-ich Mimaya, Hiroshi Terunuma, Narinder Mehra, Akinori Kimura, Tatsuo Shioda

P-34

Characterization of Borna disease virus-induced RNA speckles in the nucleus

Tomoyuki Honda, Yusuke Matsumoto, Akiko Makino, Kan Fujino, Kozue Sofuku, Shoko Nakamura, Keizo Tomonaga

P-35

Functional analyses of mutations in the hemagglutinin of measles virus from persistently infected Vero and A549 cells

Tomoyuki Honda, Takaaki Sugiyama, Hiroki Sato, Misako Yoneda, Chieko Kai

P-36

Antigenic Diversification of H5N1 Highly Pathogenic Avian Influenza A Virus Sublineages Co-Circulating in Egypt

Yohei Watanabe, Madiha S Ibrahim, Hany F Ellakany, Tomo Daidoji, Takaaki Nakaya, Kazuyoshi Ikuta

P-37

Glycoprotein B (gB), gH, gL, gQ1 and gQ2 of Human Herpesvirus 6 Mediate Membrane Fusion

Yuki Tanaka, Tadahiro Suenaga, Maki Matsumoto, Yasuko Mori, Hisashi Arase

P-38

Induction of anti-viral immunity against influenza A virus by GFP-based immunogen carrying HA-derived epitope structure

Yuji Inoue, Ritsuko Kubota-Koketsu, Kazuyoshi Ikuta

P-39

Virulence determinants of pandemic A(H1N1)2009 influenza virus in a mouse model

Ryuta Uraki, Maki Kiso, Kyoko Shinya, Hideo Goto, Ryo Takano, Kiyoko Iwatsuki-Horimoto, Tokiko Watanabe, Yoshihiro Kawaoka

P-40

***Candida albican* cytosolic protein loaded PLGA microsphere entrapped into the plasma beads impart protection against candidiasis in *Balb/c* mice**

Ejaj Ahmad, Mohammad Saleemuddin, Mohammad Owais

P-41

Post-entry neutralization of Chikungunya virus by a monoclonal antibody

Orapim Puiprom, Promsin Masrinoul, Panjaporn Chaichana, Kazuyoshi Ikuta, Pongrama Ramasoota, Yoshiharu Matsuura, Tamaki Okabayashi

P-42

Serum level of Soluble Interferon Gamma -Receptor alpha (sIFNG-R α) and Multiple Serotype Dengue Infection in Pediatric Patient with Different Clinical Severity.

Agung Dwi Wahyu Widodo, Helen Susilowati, Eryk Hendrianto, Fedik A Rantam, Boerhan Hidajat, Yoes Prijatna Dachlan

P-43

Tethered expression of neutralizing scFV with HIV-1 Envelope blocks syncytia formation in CD4-positive cells

Hongyun Wang, Xiao Li, Aikichi Iwamoto, Zene Matsuda

P-44

A structural and biochemical basis for the single serotype nature of MV

Maino Tahara, Yuri Ito, Melinda A Brindley, Xuemin Ma, Jilan He, Songtao Xu, Hideo Fukuhara, Kouji Sakai, Shinji Ohno, Katsuhiko Komase, Paul A Rota, Richard K Plempner, Katsumi Maenaka, Makoto Takeda

P-45

Characterization of Hepatitis E Virus Capsid C-terminal 52 Amino Acids in the Viral Life-Cycle

Tomoyuki Shiota, Tiang-Cheng Li, Sayaka Yoshizaki, Naokazu Takeda, Takaji Wakita, Koji Ishii

P-46

A hypothesis on diversification of *Plasmodium* species based on the comparative analyses of the reiterated-sequence and the genome sequence encoding the infection control proteins

Koichi Shirakawa, Mitsuaki Nishibuchi

P-47

Loop-mediated isothermal amplification (LAMP) for the detection of *Clonorchis sinensis* DNA in human fecal samples

S M Mazidur Rahman, Jin-Kyoung Oh, Min Kyung Lim, Young Mee Bae, Min-Ho Choi, Sung-Tae Hong

P-48

Oxidative stress response in *Giardia*

Sandipan Ganguly

P-49

Absence of antigenic variation and limited polymorphism makes *Plasmodium falciparum* SERA5 a promising vaccine

Nobuko Arisue, Nirianne M. Q. Palacpac, Kazuyuki Tanabe, Toshihiro Horii

P-50

Murine *Plasmodium* virulence is affected due to oxidative stress status of the host

Maria S. Herbas C., Magloire Natama, Hiroshi Suzuki

P-51

CD8⁺ T cell activation by murine erythroblasts infected with malaria parasites

Takashi Imai, Hajime Hisaeda

P-52

IFN- γ up-regulates NKG2D expression on intestinal intra epithelial cells in mice infected with amoebic parasites.

Chikako Shimokawa, Masachika Senba, Shinjiro Hamano

P-53 (S5-6)

Lipocalin 2 and the iron metabolism during malaria infection

Hong Zhao, Masanori Yagi, Shintaro Sato, Toshihiro Horii, Shizuo Akira, Ken J Ishii, Cevayir Coban

P-54 (S4-4)

Immunogenicity of SE36 and boosting effect following infection in a clinical trial in Uganda

Masanori Yagi, Nirianne M Q Palacpac, Edward Ntege, Adoke Yeka, Betty Balikagala, Nahoko Suzuki, Hiroki Shirai, Christopher Nsereko, Takuya Okada, Kohhei Tetsutani, Nobuko Arisue, Sawako Itagaki, Takahiro Tougan, Ken J Ishii, Shigeharu Ueda, Thomas Egwang, Toshihiro Horii

P-55

Bacteria-like ferrochelatase in animal parasitic nematodes

Eiji Nagayasu, Shota Ishikawa, Shigeru Taketani, Gunimala Chakraborty, Ayako Yoshida, Yuji Inagaki, Haruhiko Maruyama

P-56

The development of genetically attenuated parasites as potential anti-malaria vaccines

Takeshi Annoura, Mohammed Sajid, Ivo H. J. Ploemen, Ben C.L. van Schaijk, Blandine M.D. Franke-Fayard, Sanna R. Rijpma, Jan B. Koenderink, Severine Chavelley, Jing-wen Lin, Geert-Jan van Gemert, Dominique Mazier, Stephen L. Hoffman, Robert W. Sauerwein, Chris J. Janse

P-57

***P. vivax* Shizont Parasite Induce Partially Maturation of Human Myeloid Dendritic Cells**

Patchanee Chootong, Egarit Noulisri, Rachanee Udomsangpetch, John H Adams

P-58

***Plasmodium vivax* inhibit erythroid cell development**

Tasanee Panichakul, Witchuda Payuhakrit, Chokdee Wongborisuth, Suradej Hongeng, Rachanee Udomsangpetch

P-59

GliA, a transporter gene in the gliotoxin biosynthetic gene cluster of *Aspergillus fumigatus*, is implicated in its tolerance to gliotoxin.

Danni Wang, Takahito Toyotome, Katsuhiko Kamei

P-60

***Bordetella* blocks phagocytosis and alters host cell signaling through BopC/BteA, a type III effector**

Asaomi Kuwae, Kanna Nagamatsu, Akio Abe

P-61

Evaluation of the function of Stn produced by *Salmonella*

Masayuki Nakano, Eiki Yamasaki, Takaaki Shimohata, Akira Takahashi, Hisao Kurazono, Toshiya Hirayama

P-62

As simple as *bapABC*: A new insight into the virulence of the human pathogen *Burkholderia pseudomallei*

Puthyalai Treerat, Priyangi Alwis, Tanya D Cruze, Meabh Cullinane, Jamunarani Vadivelu, Lan Gong, Rodney J Devenish, Mark Prescott, Ben Adler, John D Boyce

P-63

Characterisation of an OmpR-EnvZ -like two-component signal transduction system in *Burkholderia pseudomallei*.

Priya A Alwis, Elizabeth M Allwood, Mark Prescott, Rodney J Devenish, Ben Adler, John D Boyce

P-64

A Bacterial Effector Targets Caspase-4 to Modulate Epithelial Cell Death for Promoting infection

Taira Kobayashi, Michinaga Ogawa, Hitomi Mimuro, Chihiro Sasakawa

P-65 (S1-5)

VopV, an F-Actin-Binding Type III Secretion Effector, is Required for *Vibrio parahaemolyticus*-Induced Enterotoxigenicity

Hiroataka Hiyoshi, Toshio Kodama, Kazunobu Saito, Kazuyoshi Gotoh, Shigeaki Matsuda, Yukihiro Akeda, Takeshi Honda, Tetsuya Iida

P-66

Legionella DotI and DotJ form a multimeric subcomplex associated with the core complex of the Dot/Icm type IVB secretion system

Tomoko Kubori, Takuya Kuroda, Katsumi Imada, Hiroki Nagai

P-67

Construction of assay system for *Candida glabrata* pathogenicity using *Caenorhabditis elegans* as a host and the screening of the antibiotic medicine for *Candida glabrata*

Takahiro Oiwa, Atsushi Maeda, Masanori Bun-ya, Hiroji Chibana, Hironobu Nakayama, Takayuki Mizuno

P-68

Discovery of *Streptococcus pyogenes* genes contributing to evasion of autophagic degradation system

Chihiro Aikawa, Takashi Nozawa, Takayasu Watanabe, Akira Goda, Takashi Ode, Fumito Maruyama, Ichiro Nakagawa

P-69 (S3-6)

Deficiency in selective autophagy leads to *Streptococcus pyogenes* multiplication in endothelial cells

Shiou-Ling Lu, Yee-Shin Lin, Tamotsu Yoshimori

P-70

Actin Recognition and ADP-ribosylation of *C. perfringens* iota-toxin

Hideaki Tsuge, Toshiharu Tsurumura, Masataka Oda, Masahiro Nagahama

P-71

Control of host cell responses by *Helicobacter pylori* infection

Hitomi Mimuro, Kotaro Kiga, Chihiro Sasakawa

P-72 (S4-6)

The contribution of suliyisin to the pathogenesis of *Streptococcus suis* infection caused by different MLST strains

Dan Takeuchi, Tatsuya Nakayama, Kerdsin Anusak, Yukihiro Akeda, Surang Dejsirilert, Kazunori Oishi

P-73

Inhibitory effects of diffusely adherent *Escherichia coli* strains isolated from healthy carriers on interleukin-8 secretion of epithelial cells

Takehiro Matsuzaki, Yoshihiko Tanimoto, Yoshikazu Nishikawa

P-74

***De novo* designed molecule to develop structure-based vaccine against Anthrax**

Naomi Ohnishi, Daisuke Fujikura, Manabu Igarashi, Memi Muto, Hirohito Ogawa, Yasuko Orba, Hirofumi Sawa, Hideaki Higashi

P-75

Identification of two component system that controls bacterial pathogenicity in host organism

Pattaporn Pukklay, Yoshinobu Nakanishi, Kaneyoshi Yamamoto, Akira Ishihama, Akiko Shiratsuchi

P-76

***In vivo* Expressed-Tag Immunoprecipitation Analysis Monitoring Temporal Gene Expression Profiles of *Bordetella bronchiseptica* in Rats**

Hiroyuki Abe, Shigeaki Kamitani, Aya Fukui, Yasuhiko Horiguchi

P-77

Isd-mediated heme utilization in *Staphylococcus aureus* is required for infection in diabetic hosts

Yasuhiko Matsumoto, Shinya Miyazaki, Yohei Hayashi, Tohru Sakagami, Masaki Ishii, Chikara Kaito, Kazuhisa Sekimizu

P-78

Draft Sequencing of Rodent Pneumonic CAR Bacillus

Fumio Ike, Ayako Kajita, Atsushi Yoshiki, Masato Okubo, Takehide Murata, Kenshiro Oshima, Masahira Hattori, Toshiaki Kokubo

P-79 (S2-7)

A bacterial effector targets the TRAF6-NF- κ B pathway to modulate the acute inflammatory response to bacterial invasion of epithelial cells

Takahito Sanada, Minsoo Kim, Hitomi Mimuro, Jun-ichiro Inoue, Tsunehiro Mizushima, Chihiro Sasakawa

P-80

Bio-control of phytopathogenic fungus infection in chickpea by bacterial strain *Pseudomonas aeruginosa* OS 41

Mohammad Oves, Ees Ahmad, Almas Zaidi, Mohammad Saghir Khan

P-81

Molecular biological characterization of Three TonB systems of *Vibrio vulnificus*

Hoan Ngo, Soo Young Kim, Shee Eun Lee, Joon Haeng Rhee

P-82

A cross-protective cytotoxic T lymphocyte epitope selection system against highly pathogenic influenza A viruses in a HLA-A*2402 human immunity model

Toru Ichihashi, Reiko Yoshida, Chihiro Sugimoto, Ayato Takada, Kiichi Kajino

P-83 (S6-3)

Identification of the STAT1/2 binding site in the rabies virus interferon antagonist, P-protein

Linda Wiltzer, Satoko Yamaoka, Florence Larrous, Danielle Blondel, Bevan Hirst, Sibil Oksayan, Herve Bourhy, David A Jans, Naoto Ito, Gregory W Moseley

P-84

Interferon- γ elicits macrophage autophagy via the p38 MAPK signaling pathway

Takeshi Matsuzawa, John D. MacMicking

P-85

The significance of IL28B genetic polymorphism in IFN response to HCV infection

Takashi Motomura, Takasuke Fukuhara, Akinori Ninomiya, Yoshihiko Maehara, Yoshiharu Matsuura

P-86

The measles virus C protein counteracts interferon beta induction in the nucleus

Konstantin MJ Sparrer, Christian K Pfaller, Karl-Klaus Conzelmann

P-87

Prolongevity effects of bifidobacteria in *Caenorhabditis elegans* and the mechanism

Tomomi Komura, Takanori Ikeda, Chikako Yasui, Yoshikazu Nishikawa

P-88

The anti-tumor agent DMXAA induces IFN- β response via STING

Dang N Vo, Hiroki Kato, Takashi Fujita

P-89 (S6-6)

The small GTPases Rab9A and Rab23 function at distinct steps in autophagy during Group A Streptococcus infection

Takashi Nozawa, Chihiro Aikawa, Akira Goda, Fumito Maruyama, Ichiro Nakagawa

P-90

The chicken 2'-5' oligoadenylate synthetase A inhibits the replication of West Nile Virus

Hassan T. Tag El-Din Hassan, Nobuya Sasaki, Kanako Moritoh, Daisuke Torigoe, Akihiko Maeda, Takashi Agui

P-91

Association of GPI-anchored proteins with lipid rafts is important for maintenance of immunological tolerance

Yetao Wang, Yoshiko Murakami, Taroh Kinoshita, Yusuke Maeda

P-92 (S4-2)

Efficacy of CTL induction by vaccination under antiretroviral therapy in SIV-infected rhesus macaques

Midori Nakamura, Yusuke Takahara, Saori Matsuoka, Tetsuro Matano

P-93

Human cytomegalovirus UL10 regulates immune response via inhibitory PILR α

Fuminori Arisawa, Jing Wang, Tadahiro Suenaga, Hisashi Arase

P-94 (S3-5)

Mechanism and Physiological Role of Granules Formed by Viral Nucleocapsid Protein

Seigyoku Go, Koji Onomoto, Fumiyoshi Ishidate, Hiroki Kato, Takashi Fujita

P-95

Cellular prion protein on Peyer's patch M cells could serves as an invasive receptor for *Brucella abortus*

Gaku Nakato, Koji Hase, Michio Suzuki, Masanobu Kimura, Manabu Ato, Misaho Hanazato, Minoru Tobiume, Motohiro Horiuchi, Ryuichiro Atarashi, Noriyuki Nishida, Masahisa Watarai, Koichi Imaoka, Hiroshi Ohno

P-96

Genome rearrangements of Mycoreovirus 1 segment 4 deletion mutant virus (MyRV1/S4ss) in an RNA silencing defective host

Ana E Cope

P-97

Critical role of Interferon alpha constitutively produced in human hepatocytes in response to virus infection

Yoji Tsugawa, Hiroki Kato, Takashi Fujita, Kunitada Shimotohno, Makoto Hijikata