The 7th Awaji International Forum on Infection and Immunity

	Sep 1, Sat	Sep 2, Sun	Sep 3, Mon	Sep 4, Tue	Sep 5, Wed
9:00		9:00 Training course III Koyanagi	9:00 Immunology I Chair: Koyasu 1. Iwakura 2. Phillips 3. Koyasu 4. Penninger	9:00 Virology II Chair: Shioda 1. Moriishi 2. Jardetzky 3. Taniguchi 4. Craigie	9:00 Oral poster Virology Chair: Sakuragi
9:30					
10:00		Break (15min.)			Break (15min.)
10:30		10:15 Training course IV Hashimoto			10:15 Bacteriology II Chair: Nagai 1. Cox 2. Miyata 3. Steele-Mortimer
11:00					
11:30		Break (15min.)			
12:00		11:30 Young investigators' lunch-on-session	11:40 Lunch Break (own)	11:40 Lunch Break (own)	
12:30					Closing Remarks
13:00		Opening Remarks	13:00 Poster (odd #)	13:00 Poster (even #)	
13:30		13:15 Parasitology I Chair: Nozaki 1. Wellems 2. Kanuka 3. van Dooren 4. Kita			
14:00					
14:30					
15:00			15:00 Immunology II Chair: Arase 1. Kawai 2. Vidal 3. Murata	15:00 Oral poster Parasitology Chair: Tsuboi	
15:30					
16:00		Break (15min.)		16:00 Oral poster Bacteriology Chair: Fujinaga	
16:30	16:30 Training course I Horiguchi	16:10 Virology I Chair: Koyanagi 1. Hope 2. Adachi 3. Iwamoto			
17:00			Break (15min.)	Break (15min.)	
17:30	Break (15min.)		17:15 Bacteriology I Chair: Steele-Mortimer 1. Takada 2. Nelson 3. Hatakeyama	17:15 Parasitology II Chair: Hisaeda 1. Ishii 2. Fallon 3. Nakanishi	
18:00	17:45 Training course II Tanaka	Break (15min.)			
18:30		18:25 Oral poster Immunology Chair: Takeuchi			
19:00	Break (15min.)			Break (15min.)	
19:30	19:00 Dinner	19:30 Welcome Reception	Dinner (own)	19:30 Evening event (BBQ)	
20:00					
20:30					
21:00					

The 7th Awaji International Forum on Infection and Immunity

Scientific Program

September 1,　Saturday

16:30 - 17:30　**Training Course 1 (Bacteriology)**
Yasuhiko Horiguchi, Osaka, Japan

17:30 - 17:45　Break

17:45 - 18:45　**Training Course 2 (Immunology)**
Toshiyuki Tanaka, Hyogo, Japan

18:45 - 19:00　Break

19:00 - 20:30　Dinner

September 2,　Sunday

9:00 - 10:00　**Training Course 3 (Virology)**
Yoshio Koyanagi, Kyoto, Japan

10:00 - 10:15　Break

10:15 - 11:15　**Training Course 4 (Parasitology)**
Tetsuo Hashimoto, Tsukuba, Japan

11:15 - 11:30　Break

11:30 - 13:00　**Young investigators' lunch-on-session**

13:00 - 13:15 **Opening Remarks: Tatsuo Shioda**, Osaka, Japan

13:15 - 15:55 **Symposium I**
Parasitology I (Discussion Leader: **T. Nozaki**, Gunma, Japan)

Thomas E. Wellems, Bethesda, USA
"Malaria: Drug Resistance and Disease Virulence Determinants from Studies in the Laboratory and the Field"

Hirotaka Kanuka, Obihiro, Japan
"Mosquito and parasite interaction: friend or enemy?"

Giel van Dooren, Athens, USA
"A tale of two organelles: Functions of the endosymbiotic organelles of Apicomplexan parasites"

Kiyoshi Kita, Tokyo, Japan
"Diversity of parasite mitochondria"

15:55 - 16:10 Break

16:10 - 18:10 **Symposium II**
Virology I (Discussion Leader: **Y. Koyanagi**, Kyoto, Japan)

Thomas J. Hope, Chicago, USA
"Mechanism of TRIM5 alpha restriction of retroviral infection"

Akio Adachi, Tokushima, Japan
"Generation and characterization of monkey-tropic HIV-1: Evasion from anti-viral factors"

Aikichi Iwamoto, Tokyo, Japan
"A tale of HIV-1 epidemic among highly HLA-A24-positive Japanese population"

18:25 - 19:25 **Oral Poster 1**
Immunology (Discussion Leader, **O. Takeuchi, Osaka, Japan**)

Hisashi Arase, Osaka, Japn
"Herpes simplex virus type 1 (HSV-1) infection through inhibitory receptor, PILRα"

Hiroki Yoshida, Saga, Japan
"*Interleukin-17 is necessary for host protection against acute phase Trypanosoma cruzi infection.*"

Shin-Ichiroh Saitoh, Tokyo, Japan
"*Toll-like receptor 4 activates TRIF signaling in endosome/lysosome*"

Sachiko Akashi-Takamura, Tokyo, Japan
"A Protein associated with Toll-like receptor 4 (PRAT4A) is required for TLR-dependent innate immune responses"

19:30 - **Welcome Reception**

September 3, Monday

9:00 - 11:40 **Symposium III**
Immunology I (Discussion Leader: **S. Koyasu**, Tokyo, Japan)

Yoichiro Iwakura, Tokyo, Japan
"The roles of interleukin (IL)-17A and IL-17F in inflammatory and host defense responses"

Rodney E. Phillips, Oxford, UK
"Adaptation of HIV to host immunity"

Shigeo Koyasu, Tokyo, Japan
"Role of CD4 T cells primed in Peyer's patches for Helicobacter pylori-induced gastritis"

Josef Penninger, Vienna, Austria
"Learning from SARS – common injury pathways in lung infections?"

11:40 - 13:00 Lunch Break

13:00 – 15:00 **Poster Session I (Discussion for Odd-numbered Posters)**

15:00 - 17:00 **Symposium IV**
Immunology II (Discussion Leader: **H. Arase**, Osaka, Japan)

Taro Kawai, Osaka, Japan
"Roles of TLR-dependent and -independent pathways in antiviral immune responses"

Silvia M Vidal, Montreal, Canada
"Immunogenetics of host resistance to cytomegalovirus infection: from phenotypes to genes"

Shigeo Murata, Tokyo, Japan
"Regulation of positive selection of CD8 T cell by thymus-specific proteasomes"

17:00 - 17:15 Break

17:15 - 19:15 **Symposium V**
Bacteriology I (Discussion Leader: **O. Steele-Mortimer**, Hamilton, USA)

Haruhiko Takada, Sendai, Japan
"Enhancement of TLR-Mediated Innate Immune Responses by NOD1/2 Signaling"

David E. Nelson, Indiana, USA
"Polymorphism in the plasticity zone of chlamydial genomes correlates with tissue tropism and IFN-γ immune evasion in vivo"

Masanori Hatakeyama, Sapporo, Japan
"Molecular Mechanism for the disruption of epithelial cell polarity by the Helicobacter pylori virulence factor CagA"

September 4, Tuesday

9:00-11:40 **Symposium VI**
Virology II (Discussion Leader: **T. Shioda**, Osaka, Japan)

Kohji Moriishi, Osaka, Japan
"Critical role of PA28γ-proteasome pathway in hepatitis C virus-associated steatogenesis and hepatocarcinogenesis"

Theodore S. Jardetzky, Stanford, USA
"Structural basis of viral invasion: lessons from the paramyxovirus F protein"

Koki Taniguchi, Aichi, Japan
"Analysis of neutralization epitopes on an outer proteinVP4 of rotavirus with the aid of murine and human neutralizing antibodies and reverse genetics system"

Robert Craigie, Bethesda, USA
"Collaboration of viral and cellular proteins in retroviral DNA integration"

11:40 - 13:00 Lunch Break

13:00 – 15:00 **Poster Session II (Discussion for Even-numbered Posters)**

15:00 – 16:00 **Oral Poster 2**
Parasitology (Discussion Leader, **T. Tsuboi, Ehime, Japan**)

Shinya Fukumoto, Obihiro, Japan
"Pattern recongnition of Palasmodium parasite in mosquito"

Shiroh Iwanaga, Tottori, Japan
"Functional identification of the conserved centromere of Plasmodium"

Masahiro Yamamoto, Osaka, Japan
"Role of TIR domain-containing adaptors in Host Defense against Trypanosoma cruzi"

Kisaburo Nagamune, Osaka, Japan
"A plant-like pathway for calcium signaling controls egress and development in the parasiteToxoplasma gondii."

15:00 – 16:00 **Oral Poster 3**
Bacteriology (Discussion Leader, **Y. Fujinaga, Osaka, Japan**)

Atsuo Sakurai, Tokyo, Japan
"Recognition Mechanism and Autophagic Degradation of Intracellulary Invading Group A Streptococci"

Hiroki Iwai, Tokyo, Japan
"A bacterial effector targets Mad2L2, an APC inhibitor, to modulate host cell cycling"

Kunihiko Nishino, Osaka, Japan
"Regulatory network of multidrug transporters reveals their physiological role in Salmonella virulence"

Koji Hase, Yokohama, Japan
"GP2 expressed in the apical plasma membrane of M cells functions as a bacterial uptake receptor"

17:00 - 17:15 Break

17:15 - 19:15 **Symposium VII**
Parasitology II (Discussion Leader: **H. Hisaeda**, Fukuoka, Japan)

Ken J Ishii, Osaka, Japan
"Roles of TLR9 recognition of hemozoin and TLR9-independent recognition of DNA in innate and adaptive immunity."

Padraic G. Fallon, Dublin, Ireland
"Schistosome immune modulation: will a worm a day keep the doctor away?"

Kenji Nakanishi, Hyogo, Japan
"Regulation of host defense against helmiths and protozoa by IL-18 and IL-27."

19:30 - Evening event (BBQ)

September 5, Wednesday

9:00 – 10:00 **Oral Poster 4**
Virology (Discussion Leader, **J. Sakuragi, Osaka, Japan**)

Tsubasa Munakata, Tokyo, Japan
"Toll-like receptor 3 is a downstream target of Rb/E2F pathway activated during hepatitis C virus infection and replication"

Yohei Watanabe, Osaka, Japan
"An RNA-binding protein complex regulates translation of a BDV polycistronic mRNA through topological alteration of stem-loop structure in the 5'UTR"

Takeshi Noda, Tokyo, Japan
"Assembly and uptake of the influenza A virus genome"

Akinori Takaoka, Sapporo, Japan
"Identification of DAI (DLM-1/ZBP1) as a cytosolic DNA sensor and activator of innate immune response"

10:00 - 10:15 Break

10:15 - 12:15 **Symposium VIII**
Bacteriology II (Discussion Leader: **H. Nagai**, Osaka, Japan)

Jeffery S. Cox, San Francisco, USA
"Secretion of a DNA binding protein controls ESX-1 virulence factor export in *Mycobacterium tuberculosis"*

Makoto Miyata, Osaka, Japan
"Mycoplasmas glide with a novel mechanism"

Olivia Steele-Mortimer, Hamilton, USA
"Salmonella-induced ruffles: Analysis by quantitative Fluorescence microscopy."

12:15 - 12:30 **Closing Remarks: Kensuke Miyake,** Tokyo, Japan

P-001

Novel HIV-1 integrase interactor Gemin2 that supports reverse transcription in vivo.

◯Takao Masuda, Hironori Nishitsuji, Seiji Hamamoto, Mari Kannagi

P-002

Human sequence transduction: Novel mechanism for the acquisition of new pathogenic potential in HIV-1

◯Yutaka Takebe

P-003

MDM2 promotes the ubiquitination and degradation of HIV-1 Vif.

◯Akifumi Takaori-Kondo, Taisuke Izumi, Kotaro Shirakawa, Takashi Uchiyama

P-004

A single amino acid of the human immunodeficiency virus type 2 capsid affects its replication in the presence of cynomolgus monkey and human TRIM5as

◯Haihan Song, Emi Nakayama, Masaru Yokoyama, Hironori Sato, Jay Levy, Tatsuo Shioda

P-005

Brm, a catalytic subunit of the SWI/SNF complex is required for Tat-independent stable expression of HIV-1

◯Taketoshi Mizutani, Aya Ishizaka, Nobutake Yamamichi, Takuya Okazaki, Hideo Iba

P-006

Anti-retroviral drug resistance-associated mutations among non-subtype B HIV-1-infected Kenyan children with treatment failure

◯Hiroshi Ichimura, Raphael Lwembe, Azumi Ishizaki, Seiji Kageyama, Tatsuo Shioda

P-007

Identification of host cellular machinery for HIV Gag trafficking using yeast genetic mutants

◯Yuko Morikawa, Naomi Tsurutani

P-008

Induction of CD8 cell responses able to suppress CCR5-tropic SIVmac239 replication by controlled SHIV infection in rhesus macaques

◯Tetsuro Matano, Tetsuo Tsukamoto, Mitsuhiro Yuasa, Hiroyuki Yamamoto, Miki Kawada

P-009

High-throughput retroviral tagging for identification of the genes involved in mouse retrovirus induced lymphoma

◯Takeshi Suzuki

P-010

Identification of host factors involved in post-translational modifications of HIV-1 proteins using cell-free protein production system

◯Akihide Ryo, Tatsuya Sawasaki, Naoki Yamamoto

P-011

Regulation of Human Immunodeficiency Virus Type 1 Infectivity through Incorporation of CD63

◯Kei Sato, Eriko Daikoku, Kouichi Sano, Yoshio Koyanagi

P-012

Hrs, a master regulator of endosomal sorting, controls HIV Gag degradation

◯Nobuyuki Tanaka, Mariko Sato, Kayoko Semura, Kazuo Sugamura

P-013

Molecular Cloning of HIV-1 gp41 in Protease-Deficient *Pichia pastoris* Yeast and Antigenic Characterization

◯Monvalee Punlungka, Preeda Wutthinuntiwong, Duanthanorm Promkhatkaew

P-014

The Replication Mechanism of Herpes Simplex Virus-Role of Tegument Protein UL14 in the Early Phase of Infection-

◯Yohei Yamauchi, Yukihiro Nishiyama

P-015

AP-1 repressor JDP2 is histone chaperone to repress the viral promoter activity

◯Kazunari Yokoyama, Koji Nakade, Jianzhi Pan, Takehide Murata

P-016

Enhanced Phosphorylation of Transcription Factor Sp1 dependent on Ataxia Telangiectasia-Mutated (ATM) in response to Herpes Simplex Virus Type I Infection

◯Tatsuya Tsurumi, Satoko Iwahori

P-017

Identification of a functional phosphorylation site of the herpes simplex virus 1-encoded protein kianse Us3 that regulates its protein kinase activity

◯Yasushi Kawaguchi, Akihisa Kato

P-018

HHV-6 infection induces multivesicular body formation in T cells

◯Yasuko Mori, Masato Koike, Eiko Moriishi, Akiko Kawabata, Huamin Tang, Hiroko Oyaizu, Yasuo Uchiyama, Koichi Yamanishi

P-019

Interference of host mRNA metabolisms by Herpes simplex virus type 2

◯Takayuki Nojima, Takako Oshiro, Hidenobu Kawamura, Hiroshi Onogi, Masatoshi Hagiwara

P-020

The Multiplex-Polymerase Chain Reaction Test Kit Development for Eight Types of Human Herpesvirus Detection

◯Prapaipit Pumthong, Siriluk Sintupachee, Panadda Dhepakson, Suthida Methakijvaroon, Kruavon Balachandra, Pathom Sawanpanyalert

P-021

Identification of novel anti-HCV compounds using newly developed HCV infectivity/replication assay system

Yutaka Takebe, Rie Uenishi, Kyoko Nohtomi, Saiki Hase, Ryosuke Suzuki, Tetsuro Suzuki, Takaji Wakita

P-022

Toll-like receptor 3 is a downstream target of Rb/E2F pathway activated during hepatitis C virus infection and replication

◯Tsubasa Munakata, Akio Nomoto

P-023

Adaptive mutation of the J6/JFH-1 strain of hepatitis C virus and various forms of viral cytopathic effect (CPE)

◯Hak Hotta, Kikumi Kitayam, Yasuaki Bungyoku, Liin Deng, Motoko Nagano-Fujii

P-024

Critical roles of virion-associated cholesterol and sphingolipids in the viral infectivity

◯Takaji Wakita, Hideki Aizaki

P-025

Processing of Capsid Protein by Cathepsin L Plays a Crucial Role in Replication of the Japanese Encephalitis Virus in Neural and Macrophage Cells

◯Yoshiharu Matsuura, Yoshio Mori

P-026

Persistent infection of Hepatitis C Virus

◯Michinori Kohara, Satoshi Sekiguchi, Yoshimi Tobita

P-027

Role of IFN response in the pathogenicity of neurotropic picrnaviruses

◯Satoshi Koike

P-028

Molecular detection and characterization of a new bovine enteric calicivirus (so-called Becovirus) in South Korea

◯Sang-Ik Park, Cheol Jeong, Su-Jin Park, Ha-Hyun Kim, Young-Ju Jeong

P-029

Heptad repeat-derived peptides block the protease-mediated direct entry from cell surface of SARS coronavirus but not entry via endosomal pathway

◯Fumihiro Taguchi, Makoto Ujike, Hiroki Nishikawa, Akira Otaka, Naoki Yamamoto, Norio Yamamoto, Masao Matsuoka, Eiichi Kodama, Nobumitsu Fujii

P-030

Why can't the insect vector be killed by an arbovirus?

◯Tokiyasu Teramoto, Aki Miyauchi, Aya Yoshimura, Shinya Fukumoto, Hirotaka Kanuka

P-031

Tm-1, a tomato mosaic virus resistance gene of tomato, encodes a protein that binds to the viral replication proteins and inhibits in vitro RNA replication of the virus

◯Masayuki Ishikawa, Kazuhiro Ishibasi, Satoshi Naito, Tetsuo Meshi

P-032

An RNA-binding protein complex regulates translation of a BDV polycistronic mRNA through topological alteration of stem-loop structure in the 5'UTR

◯Yohei Watanabe, Yohei Hayashi, Tomoyuki Honda, Kazuyoshi Ikuta, Keizo Tomonaga

P-033

Glial dysfunction in the cerebellum of transgenic mice expressing Borna disease virus phosphoprotein

◯Tomoyuki Honda, Naohiro Ohtaki, Yohei Watanabe, Yohei Hayashi, Kazuyoshi Ikuta, Keizo Tomonaga

P-034

Efficient persistence of a negative-strand RNA virus, BDV, using chromosome dynamics

◯Yohei Hayashi, Masayuki Horie, Yohei Watanabe, Tomoyuki Honda, Takuji Daito, Kazuyoshi Ikuta, Keizo Tomonaga

P-035

Structural basis of measles virus hemagglutinin-receptor interactions

◯Yusuke Yanagi

P-036

Functional analysis of the measles virus C protein

◯Kaoru Takeuchi, Tomomi Nishie, Noriyo Nagata, Yasushi Ami, Kyosuke Nagata

P-037

Comparison of the glycoprotein functions among filoviruses: difference in C-type lectin- and antibody-mediated infection

◯Keita Matsuno, Noriko Kishida, Katsuaki Usami, Masayuki Shimojima, Ute Stroeher, Heinz Feldmann, Tatsuro Irimura, Yoshihiro Kawaoka, Ayato Takada

P-038

The measles virus C and V proteins inhibit apoptotic pathway independently

◯Shinji Ohno, Yuichirou Senba, Yusuke Yanagi

P-039

Recruitment of Alix/AIP1 to the Plasma Membrane by Sendai Virus C Protein Facilitates Budding of Virus-Like Particles

◯Takashi Irie, Natsuko Nagata, Tetsuya Yoshida, Takemasa Sakaguchi

P-040

Analysis of gene regulatory sequences of measles virus

◯Kentaro Fujita, Chieko Kai

P-041

Viral proteins that plays roles in canine distemper virus neurovirulence in mice

◯Akiko Takenaka, Misako Yoneda, Chieko Kai

P-042

Establishment of an influenza virus genome replication system in yeast cells

◯Tadasuke Naito, Yoshihiko Kiyasu, Kenji Sugiyama, Ayumi Kimura, Ryosuke Nakano, Akio Matsukage, Kyosuke Nagata

P-043

Pathogenesis of an H5N1 influenza virus isolated from a human in China in rhesus macaques

◯Yukiko Muramoto, Kyoko Shinya, Yuwei Gao, Guohua Deng, Shufang Fan, Qiyun Zhu, Takeshi Noda, Daisuke Tamura, Kiyoko Iwatsuki-Horimoto, Hiroshi Ito, Toshihiro Ito, Hualan Chen, Yoshihiro Kawaoka

P-044

Assembly and uptake of the influenza A virus genome

◯Takeshi Noda, HIrotaka Imai, Yasuko Hatta, Jin Hyun Kim, Yukiko Muramoto, Hiroshi Sagara, Yoshihiro Kawaoka

P-045

Plasmacytoid dendritic cell-derived interferon-α regulates dendritic cell homeostasis

◯Toshiaki Ohteki, Seiichi Kuwajima, Yuki Fujioka, Taku Sato, Nobuyuki Onai, Hitoshi Watanabe, Hideo Yagita, Kazuyuki Takeda

P-046

New players for regulation of MHC function

◯Satoshi Ishido, Mari Ohmura-Hoshino, Eiji Goto, Yohei Matsuki, Masami Aoki, Mari Mito-Yoshida, Mika Uematsu

P-047

Non-self RNA-sensing mechanism of RIG-I RNA helicase

◯Mitsutoshi Yoneyama, Reiko Hirai, Ryo Narita, Takashi Fujita

P-048

Critical roles of IkappaB kinase alpha in TLR7/9-stimulated dendritic cell subsets

◯Tsuneyasu Kaisho, Katsuaki Hoshino, Takahiro Sugiyama

P-049

Solution Structure of RIG-I CTD and its functional implications

◯Kiyohiro Takahasi, Mitsutoshi Yoneyama, Tatsuya Nishihori, Hiroyuki Kumeta, Ryo Narita, Reiko Hirai, Takashi Fujita, Fuyuhiko Inagaki

P-050

Identification of DAI (DLM-1/ZBP1) as a cytosolic DNA sensor and activator of innate immune response

◯Akinori Takaoka, Zhichao Wang, Myoung Kwon Choi, Tadatsugu Taniguchi

P-051

A new approach for protease substrate screening based on the wheat cell-free system.

◯Takashi Masaoka, Tatsuya Akagi, Nami Kamura, Tatsuya Sawasaki, Yaeta Endo

P-052

Pattern recongnition of Palasmodium parasite in mosquito

◯Shinya Fukumoto, Hiroka Aonuma, Hirotaka Kanuka

P-053

Malaria parasites require Toll-like receptor 9 signaling for immune evasion by activating regulatory T cells

◯Hajime Hisaeda, Kunisuke Himeno

P-054

Novel sporozoite antigen discovery of Plasmodium falciparum screened using human immunesera

◯Takafumi Tsuboi, Ling Jin, Satoru Takeo, Hideyuki Iriko, Osamu Kaneko, Jetsumon Sattabongkot, Motomi Torii

P-055

Functional identification of the conserved centromere of Plasmodium

◯Shiroh Iwanaga, Masao Yuda, Chris Janse, Andy Waters

P-056

Incipient rapid diversification in the evolution of extant malaria parasites

◯Toshiyuki Hayakawa, Richard Culleton, Toshihiro Horii, Kazuyuki Tanabe

P-057

Phylogenetic relationship of malaria parasites inferred from multiple gene data

◯Nobuko Arisue, Tetsuo Hashimoto, Toshiyuki Hayakawa, Hideya Mitsui, Naoko Sakihama, Mozhi Jia, Nirianne M. Q. Palacpac, Kazuyuki Tanabe, Toshihiro Horii

P-058

Gene disruption of flavoprotein subunit in the succinate-ubiquinone reductase from *Plasmodium falciparum* inhibits the growth of the intraerythrocytic stage parasite

◯Takeshi Q Tanaka, Yoh-ichi Watanabe, Kiyoshi Kita

P-059

Plasmodium falciparum rhoptry neck protein (PfRON2) expressed at both erythrocytic and pre-erythrocytic invasive parasites.

◯Jun Cao, Osamu Kaneko, Amporn Thongkukiatkul, Mayumi Tachibana, Hitoshi Otsuki, Jetsumon Sattabongkot, Takafumi Tsuboi, Motomi Torii

P-060

Plasmodium vivax in Africa

◯Richard Culleton, Toshihrio Mita, Mathieu Ndounga, Holger Unger, Pedro Cravo, Akira Kaneko, Milijaona Randrianarivelojosia, Shigeyuki Kano, Takafumi Tsuboi, Anjali Yadava, Anna Farnert, Anna Paula Arez, Virgilio do Rosario, Francine Ntoumi, Richard Carter and Kazuyuki Tanabe

P-061

Genetic make-up of *Plasmodium vivax* population in Mae Sot, Thailand

◯Nirianne Marie Q. Palacpac, Nobuko Arisue, Kazuyuki Tanabe, Jetsumon Sattabongkot, Takafumi Tsuboi, Motomi Torii, Rachanee Udomsangpetch, Toshihiro Horii

P-062

Analysis of naturally acquired antibody responses to 19-kDa C- terminal region of the merozoite surface protein-1 of Plasmodium vivax from individuals in Sanliurfa, Turkey

◯Yildiz Fadile Zeyrek, Aylin Babaoglu, Seda Demirel, Derya Dirim Erdogan, Mucide Ak, Metin Korkmaz

P-063

In vitro test for drug sensitivity of *Plasmodium vivax* in central China

Qi Gao, Feng Lu, Hui Xia, Jun Cao, Zhiyong Tao, Guoding Zhu, Xiaolin Jin, Huayun Zhou, Jetsumon Prachumsri, Ruchanee Udomsangpetch

P-064

First report of *P. falciparum* MDR1 copy number in West Sumba District, Sumba Island, East Nusa Tenggara, Indonesia

◯Agustina Ika Susanti, Puji B Asih, Ismail Eko, Din Syafruddin, Awalludin, Krisin, Iqbal E F, Rita Marleta, Sekar Tuti, Wini Kania ,Jeni, Gary T Brice, William O. Rogers

P-065

Novel *in vitro* culture of liver stage human malaria for screening of new anti-malarial compounds

◯Jetsumon Sattabongkot Prachumsri, Rachaneeporn Jenwithisuk, Rattawan Ubalee, Panadda Krairojananan, Wachira Suktawonjaroenpon, Bousaraporn Tippayachai, Nongnuch Yimamnuaychok, Nattawan Rachaphaew, Namtip Trongnipatt, Ampornpan Kengluecha, Surasak Leelaudomlipi, Kesinee Chotivanich, Rachanee Udomsangpetch

P-066

Structural insights into mechanisms of dihydroorotate oxidation and fumarate reduction catalyzed by Trypanosoma cruzi dihydroorotate dehydrogenase

◯Daniel Ken Inaoka, Kimitoshi Sakamoto, Hironari Shimizu, Tomoo Shiba, Genji Kurisu, Takeshi Nara, Takashi Aoki, Shigeharu Harada, Kiyoshi Kita

P-067

Molecular mechanisms of upregulation of the apoptosis inhibitor, cellular FLIP, in *Trypanosoma cruzi* infected host cells

◯Junko Shimada, Toshimitsu Hatabu

P-068

Role of TIR domain-containing adaptors in Host Defense against Trypanosoma cruzi

◯Masahiro Yamamoto, Ritsuko Koga, Koji Atarashi, Masahiro Ogawa, Shizuo Akira, Shinjiro Hamano, Hajime Hisaeda, Kiyoshi Takeda

P-069

Molecular properties of Trypanosome Alternative Oxidase (TAO) and its specific inhibitor, ascofuranone

◯Yasutoshi Kido, Kimitoshi Sakamoto, Kosuke Nakamura, Michiyo Harada, Sunao Fujioka, Takashi Suzuki, Yoshisada Yabu, Hiroyuki Saimoto, Daijiro Omori, Fumiyuki Yamakura, Shigeharu Harada, Kiyoshi Kita

P-070

Characterization of a novel succinate-ubiquinone reductase (SQR) with a split Ip subunit in *Trypanosoma cruzi*

Morales Jorge, Kimitoshi Sakamoto, Kiyoshi Kita

P-071

Toxoplasma gondii infection induces apoptosis in non-infected macrophages: role of nitric oxide and Programmed Cell Death 5 of the parasite

◯Yoshifumi Nishikawa, Hiroshi Bannai, Osamu Kawase, Xuenan Xuan

P-072

A plant-like pathway for calcium signaling controls egress and development in the parasiteToxoplasma gondii.

◯Kisaburo Nagamune, David Sibley, Eduardo Chini

P-073

Innate resistance of C57BL/6 mice to amoebiasis is mediated by nonhematopoietic cells but requires hematopoietic IL-10 production

◯Shinjiro Hamano, Asgharpour Amon, Stroup E. Suzanne, Wynn A. Thomas, Leiter H. Edward, Houpt Eric

P-074

Overexpression of SOCS3 in T cells resulted in severe progression of Leishmania major infection

◯Mako Nakaya, Shinjiro Hamano, Kunisuke Himeno, Masato Kubo, Akihiko Yoshimura, Takashi Kobayashi

P-075

Interaction between vectors and parasites: Filaria behavior at blood-feeding of mosquito

◯Aya Yoshimura, Shinya Fukumoto, Hirotaka Kanuka

P-076

Cloning and characterization of cathepsin L-like peptidases of Echinococcus multilocularis metacestodes

◯Yasuhito Sako, Kazuhiro Nakaya, Minoru Nakao, Akira Ito

P-077

Proteome Analysis of Schistosoma mansoni treat with new antiparasitic endoperoxide

◯Yusuke Wataya, Hye-Sook Kim, Akiko Hiramoto, Akira Satoh, Masatomo Nojima, Araki Masuyama, Takeshi Kumagai, Toshie Taniguchi, Rieko Shimogawara, Nobuo Ohta

P-078

Notch controls the development of a novel dendritic cell that produces IFN-gamma

◯Koji Yasutomo, Yoichi Maekawa

P-079

Metabolomic and transcriptomic analysis of sulfur-containing amino acid metabolism in the enteric protozoan parasite *Entamoeba histolytica*

◯Afzal Husain, Takako Hishiki, Carol A. Gilchrist, Vahab Ali, Makoto Suematsu, William A. Petri, Jr., and Tomoyoshi Nozaki

P-080

Genetic Analysis of the *Enterococcus* Vancomycin-Resistance Conjugative Plasmid pHTβ: Identification of the Region Involved in Cell Aggregation and the Regulator Genes for Plasmid Transfer and Cell Aggregation..

◯Haruyoshi Tomita, Yasuyoshi Ike

P-081

Contribution of the mannan backbone of cryptococcal glucuronoxylomannan and a glycolytic enzyme of *Staphylococcus aureus* to contact-mediated killing of *Cryptococcus neoformans*

Reiko Ikeda, Fumito Saito, Miki Matsuo, Kenji Kurokawa, Kazuhisa Sekimizu, Masashi Yamaguchi, ◯Susumu Kawamoto

P-082

Increased resistance to cationic antimicrobial peptide LL37 in methicillin-resistant Staphylococcus aureus

◯Hitoshi Komatsuzawa, Kazuhisa Ouhara, Toshihisa Kawai, Tamaki Fujiwara, Motoyuki Sugai

P-083

Role of the *Streptococcus pyogenes* FCT-region components in pilus assembly and virulence

◯Masanobu Nakata, Deborah A. Ribardo, Kevin S. Mciver, Andreas Podbielski, Bernd Kreikemeyer, Shigetada Kawabata

P-085

Recognition Mechanism and Autophagic Degradation of Intracellulary Invading Group A Streptococci

◯Atsuo Sakurai, Fumito Maruyama, Takashi Nozawa, Ichiro Nakagawa

P-086

CvfB protein, a virulence regulator, binds to 30S ribosomal protein S9 in *Staphylococcus aureus*

◯Yasuhiko Matsumoto, Chikara Kaito, Kazuhisa Sekimizu

P-087

Novel virulence-related phosphodiesterase CvfA identified in a silkworm infection model

◯Chikara Kaito, Makiko Nagata, Yasuhiko Matsumoto, Kazuhisa Sekimizu

P-088

A bacterial effector targets Mad2L2, an APC inhibitor, to modulate host cell cycling

◯Hiroki Iwai, Chihiro Sasakawa

P-089

Regulatory network of multidrug transporters reveals their physiological role in *Salmonella* virulence

◯Kunihiko Nishino, Eiji Nikaido, Hiroki Sakata, Tomoyuki Nakano, Manami Tanaka, Akihito Yamaguchi

P-090

Regulation mechanisms of the AcrAB multidrug efflux pump in *Salmonella enterica* in response to bacterial metabolites

◯Eiji Nikaido, Kunihiko Nishino, Akihito Yamaguchi

P-091

The regulation of PagC, a macrophage-induced Salmonella protein, by ClpXP protease

◯Mai Oya, Akiko Takaya, Hideto Ishikawa, Tomoko Yamamoto

P-092

Prevalence of Enterotoxigenic *Escherichia coli* Isolated from Children from Four Hospitals of Thailand

◯Sasitorn Rakyart, Orn-Anong Ratchtrachenchai, Krongkaew Supawat, Pathom Sawanpanyalert

P-093

Genomic and gene expression analysis of *V. parahaemolyticus* using DNA microarray

◯Kaori Izutsu, Ken Kurokawa, Kousuke Tashiro, Satoru Kuhara, Tetsuya Hayashi, Takeshi Honda, Tetsuya Iida

P-094

Helicobacter pylori VacA enhances PGE2 production through induction of COX-2 expression via a p38 MAP kinase/ATF-2 cascade in AZ-521 cells

◯Jyunzo Hisatsune, Masaaki Nakayama, Hajime Isomoto, Toshiya Hirayama

P-095

Structural analysis of the *Helicobacter pylori* CagA protein

◯Hideaki Higashi, Takeru Hayashi, Masafumi Horio, Fuyuhiko Inagaki, Masanori Hatakeyama

P-096

Heat shock cognate protein 70 mediates Brucella invasion into trophoblast giant cells that cause infectious abortion

◯Kenta Watanabe, Hiroshi Suzuki, Masahisa Watarai

P-097

Bordetella type III secreted proteins are virulence factors

◯Akio Abe, Mineo Watanabe, Kanna Nagamatsu

P-098

The extracellular matrix as a transient storage for Bordetella dermonecrotic toxin

◯Aya Fukui, Shigeki Kamitani, Masami Miyake, Yasuhiko Horiguchi

P-099

Disruption of the intestinal paracellular barrier by botulinum toxin complex

◯Takuhiro Matsumura, Yingji Jin, Yuko Kabumoto, Yuki Takegahara, Yo Sugawara, Keiji Oguma, Wayne Lencer, Yukako Fujinaga

P-100

Mutational analysis of botulinum neurotoxin type C and D for determination of receptor-binding site

◯Kentaro Tsukamoto, Takao Tsuji, Tomoko Kohda, Shunji Kozaki

P-101

GP2 expressed in the apical plasma membrane of M cells functions as a bacterial uptake receptor

Kazuya Kawano, ◯Koji Hase, Satoshi Waguri, Kikuji Itoh, Hiroshi Ohno

P-102

Molecular dissection of internalization of Porphyromonas gingivalis by cells using fluorescent Beads coated with bacterial membrane vesicle

◯Kayoko Tsuda, Atsuo Amano, Kyohei Umebayashi, Tamotsu Yoshimori

P-103

Expression and purification of Integron Integrase (IntI1) that is responsible for multiple antibiotic resistance in bacteria

◯Yoshihiro Yamaguchi, Haruka Yumoto, Jun-Ichi Wachino, Yuriko Yamagata, Yoshichika Arakawa, Hiromasa Kurosaki

P-104

Legionella translocates an E3 ubiquitin ligase that has multiple U-boxes with distinct functions

◯Tomoko Kubori, Hiroki Nagai

P-105

Involvement of PGRP-LE in the recognition of intracellular bacterial pathogens

◯Shoichiro Kurata

P-106

Influence of *Bifidobacterium infantis* on Host Defense and Longevity of *Caenorhabditis elegans* Strains with Mutations in p38 MAPK and Programmed Cell Death Pathways

◯Chikako Yasui, Ayumi Shibamura, Takanori Ikeda, Kaori Hoshino, Yoshikazu Nishikawa

P-107

A metalloendopeptidase nardilysin regulates ectodomain shedding as host response against bacterial virulence factors

◯Yoshinori Hiraoka, Mikiko Ohno, Kazuhiro Yoshida, Tatsuhiko Matsuoka, Toru Kita, Eiichiro Nishi

P-108

Characterization of the membrane-bound tri-heme *c* quinol peroxidase functionally connected to the respiratory chain

◯Eizo Takashima, Hiroyuki Yamada, Kiyoshi Konishi

P-109

Comparison of surface-exposed outer membrane proteins of *Brachyspira* species

◯Timothy D. Witchell, Dieter M. Bulach, Steve Driesen, Ben Adler

P-110

Short tandem repeat genotyping by fluorescence-based fragment length analysis: use in strain differentiation and tracking of leprosy transmission

◯Sopa Srisungngam, Sukanya Wattanpokayakit, Atchariya Lukebua, Pathom Sawanpanyalert, Supunee Pasadorn, Miyako Kimura, Varalakshmi D. Vissa, and Benjawan Phetsuksiri

P-111

Role of Mitogen-activated Protein Kinases in the Regulation of *Mycobacteria*-induced Proinflammatory Cytokine Responses by Microglia

◯Hye-Mi Lee, Chul-Su Yang, Jeong-Ah Kim, Sung-Joong Lee, Hwa-Jung Kim, Jeong-Kyu Park, Eun-Kyeong Jo

P-112

Identification of inducible Proteins in *Mycobacterium tuberculosis* H37Rv via Low pH or Hypoxia.

◯Kil-Soo Lee, Jung-Kyu Park, Su-Young Kim, A-Rum Shin, Chang-Hwa Song, Eun-Kyoung Jo, Hwa-Jung Kim

P-113

Identification of differentially expressed genes in *Mycobacterium tuberculosis* H37Rv via hypoxia and low pH

◯Su-Young Kim, Yu-Mi Kwon, Kil-Soo Lee, A-Rum Shin, Chul-Su Yang, Se-Jin An, Dong-MinShin, Chang-Hwa Song, Eun-Kyeong Jo, Hwa-Jung Kim, Jeong-Kyu Park

P-114

Construction and functional analysis of the fatty acid desaturase gene disruptants in *Candida albicans*

◯Somay Yamagata Murayama, Yumiko Negishi, Takashi Umeyama, Aki Kaneko, Takashiro Oura, Masakazu Niimi, Kimiko Ubukata, Susumu Kajiwara

P-115

Functional genomics in pathogenic fungi *Candida glabrata* achieved to prioritization of antifungal drug targets

◯Hiroji Chibana, Kanama Sasamoto, Keigo Ueno, Toshihiro Aoyama, Sachiko Kinoshita, Jun Uno, Hironobu Nakayama, Mikami Yuzuru

P-116

Transcriptional changes in Candida albicans genes by both farnesol and high cell density at an early stage of morphogenesis in N-acetyl-D-glucosamine medium

◯Tamaki Cho, Hirotoshi Aoyama, Mika Toyoda, Hironobu Nakayama, Richard Calderone

P-117

The *Candida glabrata* sterol transporter *CgAUS1* protects against azole toxicity in the presence of serum.

◯Hironobu Nakayama, Martin Bard, Koichi Tanabe, Toshihiro Aoyama, Daiki Takemori, Wesley Hodgson, Sung Wu, N. Kumaraswami, Laurel Metzler, Yukie Takano, Hiroji Chibana, Masakazu Niimi

P-118

Role of SIGNR1 in the recognition and response to pathogenic fungus

◯Kazuhiko Takahara, Koji Nagaoka, Yoko Yoshida, Kento Minamino, Kayo Inaba

P-119

Mechanisms of drug resistance in pathogenic fungi

◯Masakazu Niimi, Koichi Tanabe, Erwin Lamping, Kyoko Niimi, Ann R Holmes, Brian C Monk, Richard D Cannon

P-120

Activator protein 1 is triggered by Aspergillus fumigatus β-glucans that have been surface exposed during specific growth stages

◯Takahito Toyotome, Yoshiyuki Adachi, Akira Watanabe, Eri Ochiai, Naohito Ohno, Katsuhiko Kamei

P-121

Genetic analysis of caspase function in host defense

◯Erina Kuranaga, Masayuki Miura

P-122

Herpes simplex virus type 1 (HSV-1) infection through inhibitory receptor, PILR&alpha

◯Hisashi Arase, Jun Arii, Tadahiro Suenaga, Jing Wang, Amane Kogure, Junji Uehori, Noriko Arase, Ikuo Shiratori, Yasushi Kawaguchi, Lanier Lewis, Takeshi Satoh

P-123

Efficient antigen-specific CTL induction by a recombinant Sendai virus vector vaccine in rhesus macaques with pre-existing anti-vector antibodies

◯Chikaya Moriya, Satoshi Horiba, Tetsuro Matano

P-124

Polymorphisms in the loci for NKG2 receptors and their ligands in HIV/AIDS

◯Taeko Naruse, Hiroshi Terunuma, Jyun-Ichi Mimaya, Akinori Kimura

P-125

Partial Purification of Reverse-Genetics H5N1 Influenza Virus by Cross-Flow Filtration versus Density Gradient Ultracentrifugation for Avian Influenza Vaccine Processes

◯Preeda Wutthinuntiwong, Wilai Thongdeejaroen, Nadthanan Pinyosukhee, Manoch Posung, Jantima Teeka, Duanthanorm Promkhatkaew, and Pathom Sawanpanyalert

P-126

Interleukin-17 is necessary for host protection against acute phase *Trypanosoma cruzi* infection.

◯Hiroki Yoshida, Yohei Shimanoe, Sen Wang, Shinjiro Hamano, Yoichiro Iwakura

P-127

Direct binding of TLR9 to synthetic hemozoin and its role in immunomodulatory property of Plasmodium falciparum

◯Cevayir Coban, Ken J. Ishii, Toshihide Horii, Shizuo Akira

P-128

Deoxynucleic acids from Cryptococcus neoformans activate myeloid dendritic cells via a TLR9-dependent pathway

◯Kiwamu Nakamura, Akiko Miyazato, Xiao Gang, Masumitsu Hatta, Ken Inden, Tetsuji Aoyagi, Kiyoshi Takeda, Shizuo Akira, Shinobu Saijyo, Yoichiro Iwakura

P-129

Nasal immunization with recombinant pneumococcal surface protein A plus Flt3-Ligand cDNA provides protective immunity against pneumococcal pneumonia in mice.

◯Keita Oma, Kosuke Kataoka, Jizi Zhao, Kohtaro Fujihashi, Kazunori Oishi

P-130

Arginine-specific gingipain A from Porphyromonas gingivalis induces Weibel-Palade body exocytosisand enhanced activation of vascular endothelial cells through protease-activated receptors

◯Megumi Inomata, Takeshi Into, Misako Nakashima, Toshihide Noguchi, Kenji Matsushita

P-131

Efficacy of Recombinant BCG Vaccine Secreting IL-15/Ag85B fusion protein on Protection against Mycobacterium tuberculosis

◯Ce Tang, Yasunobu Yoshikai

P-132

Mycobacterium tuberculosis eis is critical for the macrophage survival via reactive oxygen species-mediated JNK-dependent signaling pathways

◯Dong-Min Shin, Ji-Yeon Lee, Chul-Su Yang, Jae-Min Yuk, Chang-Hwa Song, Richard L. Friedman, Eun-Kyeong Jo

P-133

Up-regulated interferon-inducible protein-10 (IP)-10/CXCL10 in Human Tuberculosis

◯Ki-Hye Kim, Ji-Sook Lee, Hong-Hee Choi, Ji Woong Son, Hwa-Jung Kim, Jung-Kyu Park, Tae-Hyun Paik, Eun-Kyeong Jo

P-134

Expression and Regulation of the CC-Chemokine Ligand 20 during Human Tuberculosis

◯J.-S. Lee, J.-Y. Lee, J.-H. Oh, J.-W. Son, D.-M. Shin, J.-M. Yuk, C.-H. Song, T.-H. Paik, E.-K. Jo

P-135

Mycobacterial Tuberculin PPD Antigen Plays an Essential Role in the Activation of ROS-induced p38 MAPK Pathway and Proinflammatory Responses via Toll-like Receptor 2

◯Chul-Su Yang, Dong-Min Shin, Hye-Mi Lee, Ki Hye Kim, Jae-Min Yuk, Ji-Sook Lee, Ji Woong Son, Hwa-Jung Kim, Jeong-Kyu Park, Tae-Hyun Paik, Eun-Kyeong Jo

P-136

Nitric oxide controls Toll-like receptor signal transduction through a redox-sensitive modification of MyD88

◯Takeshi Into, Megumi Inomata, Misako Nakashima, Ken-Ichiro Shibata, Kenji Matsushita

P-137

Surfactant protein A directly interacts with TLR4 and MD-2 and regulates inflammatory cellular response.

◯Chiaki Nishitani, Chieko Yamada, Hitomi Sano, Yoshio Kuroki

P-138

Overexpression of Wiskott-Aldrich syndrome protein N-terminal domain inhibits inflammatory responses in LPS-activated microglia

◯Mitsuru Sato, Ryoko Sawahata, Hiroshi Kitani

P-139

DOCK2 links TCR signals to IL-4 receptor downregulation to control lineage commitment of CD4+ T cells

◯Yoshihiko Tanaka, Yoshinori Fukui

P-140

Expression of Paneth cell α-defensins in the mouse small intestine

◯Rie Fukaya, Naoki Sakai, Tokiyoshi Ayabe

P-141

A protein associated with TLR4 (PRAT4A) is required for in vivo immune responses

◯Kensuke Miyake, Takuma Shibata, Sachiko Akashi-Takamura, Koichiro Takahashi, Toshihiko Kobayashi

P-142

Toll-like receptor 4 activates TRIF signaling in endosome/lysosome

◯Shin-Ichiroh Saitoh, Natsuko Tanimura, Caihua Xuan, Fumi Matsumoto, Ryutaro Fukui, Yuji Motoi, Koichi Fukase, Yutaka Kusumoto, Sachiko Akashi-Takamura, Mason W Freeman, Kensuke Miyake

P-143

Specificity of Dectin-1 on binding and innate immune response to physicochemically different fungal β-glucans

◯Yoshiyuki Adachi, Yoshihiko Ikeda, Toshie Harada, Ken-Ichi Ishibashi, Noriko N. Miura, Shinobu Saijo, Yoichiro Iwakura, Naohito Ohno

P-144

A Protein associated with Toll-like receptor 4 (PRAT4A) is required for TLR-dependent innate immune responses

◯Sachiko Akashi-Takamura, Takuma Shibata, Koichiro Takahashi, Kensuke Miyake

P-145

A distal cis-regulatory element, CNS-9, controls NFAT1 and IRF4- mediated IL-10 gene activation in T helper cells

Chung-Koo Lee, Kyu-Ho Kang, Jae-Seon So, Ho-Keun Kwon, Anupama Sahoo, Hwa-Joong Yi, Sin-Hyeog Im, Toshifumi Matsuyama, Katsuyuki Yui

P-146

The member of PKC family, PKN1 regulates B cell activation and the tolerance by regulating BCR signaling pathway

◯Kaori Yada, Teruhito Yasui, Mosialos George, Kieff Elliott, Hitoshi Kikutani

P-147

Intracellular trafficking of fungal DNA during activation of innate immune cells: a comparative analysis with CpG-ODN

◯Akiko Miyazato, Kiwamu Nakamura, Gang Xiao, Kazuo Suzuki, Mitsuo Kaku, Kazuyoshi Kawakami

P-148

Characterization of cysteine biosynthetic pathway: a potential drug target in Entamoeba histolytica

◯Vahab Ali, Afzal Husain, Tomoyoshi Nozaki

P-149

Characterizing and evaluating the role of serine O-acetyltransferase isoforms in cysteine biosynthetic pathway in *E. histolytica*

◯Hussain Sarwar, Ali Vahab, Nozaki Tomoyoshi