

*The Awaji International Forum
on Infection and Immunity*



August 24th - 27th, 2002

Awaji Yumebutai International Conference Center
in Awaji Island, Hyogo, Japan

Organized by

Institute of Medical Science, University of Tokyo
Research Institute for Microbial Diseases, Osaka University
Gant-in-Aid for Scientific Research on Priority Areas

Organizing Committee

Chihiro Sasakawa (Chair)

Toshihiro Horii (Vice-Chair)

Kiyoshi Takatsu

Yoshihiro Kawaoka

Hiroshi Kiyono

Kensuke Miyake

Hideo Iba

Hitoshi Kikutani

Yasuhiko Horiguchi

Kazuyoshi Ikuta

Supported by

Meiji Seika Kaisha Ltd.

The Research Foundation for Microbial Diseases of Osaka University

Gant-in-Aid for Scientific Research on Priority Areas

Japan Society for the Promotion of Science

Hyogo International Association

Japan Allergy Foundation

Institute of Medical Science, University of Tokyo

Research Institute for Microbial Diseases, University of Osaka

Scientific Program

Saturday, August 24th

17:00 - 18:20 **Poster Session I**

18:20 Opening remarks : **C. Sasakawa**, Tokyo, Japan

18:30 **Keynote Lecture**

Chairperson : **T. Horii**, Osaka, Japan

Yoshiyuki Nagai, Toyama, Japan

Revising and revitalizing the tale of sendai virus by reverse genetics

19:30 - Welcome mixer

Sunday, August 25th

Symposium I. Bacterial Infection 1

Discussion leader : **M. Mitsuyama**, Kyoto, Japan

9:00 **I-1. Denise Monack**, Stanford, USA

The use of microarray technology for investigation of host pathogen interactions

9:30 **I-2. Toshiya Hirayama**, Nagasaki, Japan

Helicobacter pylori VacA toxin in disease: Role of protein tyrosine phosphatase

10:00 **I-3. Rainer Haas**, München, Germany

Structure and function of the type IV secretion system in *Helicobacter pylori*

10:30 - Coffee break

Symposium I. Bacterial Infection 2

Discussion leader : **R. Haas**, München, Germany

10:45 **I-4. Hiroki Nagai**, New Haven, USA

Interplay of a vacuolar pathogen *Legionella pneumophila* and its host cells.

11:15 **I-5. Emanuel Hanski**, Jerusalem, Isreal

- A locus of group A streptococcus involved in invasive disease and DNA transfer
- 11:45 **I-6. Giampietro Schiavo**, London, UK
The journey of tetanus toxin in neurons
- 12:15 - 14:00 Free Time for Lunch
- 14:00 - 15:30 **Poster Session II**
- Symposium II. Parasites Infection 1**
Discussion leader : **T. Horii**, Osaka, Japan
- 15:30 **II-1. Yasuhiro Suzuki**, Blacksburg, USA
Host resistance against cerebral toxoplasmosis
- 16:00 **II-2. Toru Abo**, Niigata, Japan
Extrathymic T cells in malaria protection, including evidence for the onset of erythropoiesis in the liver during infection.
- 16:30 - Coffee break
- Symposium II. Parasites Infection 2**
Discussion leader : **K. Tanabe**, Osaka, Japan
- 16:45 **II-3. Thomas Wynn**, Bethesda, USA
Central role of IL-13 in the pathogenesis of schistosomiasis
- 17:15 **II-4. Kiyoshi Kita**, Tokyo, Japan
The role of parasite mitochondria in adaptation to low oxygen tension
- 17:45 **II-5. Yasuo Chinzei**, Tsu, Japan
Key molecules for malarial parasite invasion into the host cells of the mosquito midgut, salivary gland, and animal liver.
- 18:15 – 19:45 Free Time for Dinner

Oral Poster Presentation 1

Discussion leader : **Y. Horiguchi**, Osaka, Japan

Bacterial Infection

- 19:45 **P-073. Masanori Hatakeyama**: SHP-2 tyrosine phosphatase is a cellular target of the *Helicobacter pylori* virulence factor CagA
- 20:00 **P-087. Yukako Fujinaga**: Retrograde transport of fully assembled Cholera toxin to the ER of host cells: Dependence of ganglioside and lipid raft function

20:15 **P-095. Tokiyoshi Ayabe:** The role of human intestinal Paneth cells that express toll-like receptors in innate host defense

20:30 - Coffee break

Oral Poster Presentations 2

Discussion leader : **K. Ikuta**, Osaka, Japan

Viral Infection

20:45 **P-005. Yasuhiro Yasutomi:** Oral administration of DNA vaccine by using virus-like particle derived from orally transmissible virus.

21:00 **P-018. Yoko Aida:** Nuclear import of human immunodeficiency virus type-1 Vpr protein

21:15 **P-024. Shigeru Katamine:** Biological divergence among prion strains in cell culture models

Monday, August 26th

Symposium III. Viral Infection 1

Discussion leader : **Y. Matsuura**, Osaka, Japan

9:00 **III-1. Yasushi Kawaguchi**, Tokyo, Japan
Conserved protein kinases encoded by herpesviruses target the same phosphorylation site in cellular elongation factor 1 δ as cdc2: The viral protein kinases mimic the cellular protein kinase cdc2.

9:30 **III-2. Juan C. de la Torre**, La Jolla, USA
Deconstructing the prototypic arenavirus LCMV.

10:00 **III-3. Keizo Tomonaga**, Osaka, Japan
Bornavirus infection: The mechanism of virus-induced neuronal damage

10:30 - Coffee break

Symposium III. Viral Infection 2

Discussion leader : **T. Kawaoka**, Tokyo, Japan

10:45 **III-4. Ayato Takada**, Tokyo, Japan
Antibody-dependent enhancement of Ebola virus infection

11:15 **III-5. Robert A. Lamb**, Evanston, USA
Membrane fusion machines of paramyxoviruses: Capture of intermediates of fusion

11:45 **III-6. Yoshiharu Matsuura**, Osaka, Japan
Infection mechanisms of HCV

- 12:15 **III-7. Patrice Debre**, Paris, France
Genetic and therapeutic control of HIV infection
- 12:45 – 14:15 Free Time for Lunch

Oral Poster Presentations 3

Discussion leader : **K. Kita**, Tokyo, Japan

Parasitic Infection

- 14:15 **P-044. Junko Shimada:** *Trypanosoma cruzi* infection inhibits Fas-mediated apoptosis in host cells
- 14:30 **P-047. Shin-Ichiro Kawazu:** Targeted disruptions of the peroxiredoxin genes in the human malaria parasite *Plasmodium falciparum*
- 14:45 **P-055. Motomichi Matsuzaki:** A homolog of bacterial histone-like protein HU organizes large amounts of apicoplast DNA
- 15:00 **P-060. Yoshinori Moriyama:** Vacuolar H⁺-ATPase in *P. falciparum* and localization of vacuolar proton ATPase in *P. falciparum*, and cloning and functional complementation of proteolipid cDNA with yeast null mutant.
- 15:15 - Coffee break

Symposium IV. Host defense and Immunity 1

Discussion leader : **K. Takatsu**, Tokyo, Japan

- 15:45 **IV-1. Hisahiro Yoshida**, Yokohama, Japan
Peripheral lymphoid organ development
- 16:15 **IV-2. Paul Rennert**, Cambridge, USA
TNF family pathways in development, immunity, and disease.
- 16:45 **IV-3. Fred D. Finkelman**, Cincinnati, USA
Type 2 cytokine regulation of immunity to gastrointestinal worms.
- 17:15 **IV-4. Hiroshi Kiyono**, Tokyo, Japan
Uniqueness of NALT organogenesis for the development of mucosal vaccine
- 17:45 - Coffee break

Oral Poster Presentations 4

Discussion leader : **Y. Iwakura**, Tokyo, Japan

Host dedfense and Immunity

- 18:15 **P-108. Toshiaki Kikuchi:** Vaccination using dendritic cells genetically

modified to express the Th1 or Th2 attractant

- 18:30 **P-138. Toshitada Takemori:** The search for cell surface molecules associated with memory B cell maintenance
- 18:45 **P-139. Masahiko Sugita:** Failure of CD1-dependent presentation of microbial lipid antigens in AP-3-deficient cells.
- 19:00 - Buffet Party

Tuesday, August 27th

Symposium IV. Host defense and Immunity 2

Discussion leader : **P. Rennert**, Cambridge, USA

- 9:00 **IV-5. Tsuneyasu Kaisho** , Osaka, Japan
Regulation of dendritic cell function through Toll-like receptors
- 9:30 **IV-6. Naohiro Inohara**, Ann Arbor, USA
Nod, a novel cytosolic protein family which is involved in immunity and programmed cell death
- 10:00 **IV-7. Kensuke Miyake**, Tokyo, Japan
Roles of TLR4-MD-2 and RP105-MD-1 in lipopolysaccharide responsiveness in vivo

10:30 - Coffee break

Symposium IV. Host defense and Immunity 3

Discussion leader : **H. Kikutani**, Osaka, Japan

- 10:45 **IV-8. Satoshi Takaki**, Tokyo, Japan
Adaptor protein Lnk, a novel negative regulator of expansion of B-precursors and hematopoietic stem cells
- 11:15 **IV-9. Yoshinori Fukui**, Fukuoka, Japan
Critical roles of the CDM family protein DOCK2 in migration and function of lymphocytes
- 11:45 **IV-10. Nicos A. Nicola**, Parkville, Australia
The SOCS proteins as physiological inhibitors of cytokine signaling
- 12:15 Closing remarks : **T. Horii**, Osaka, Japan