The 13th Awaji International Forum on Infection and Immunity in Nara

Program

September 23, Tuesday

13:00 Opening Remarks

13:15 - 14:00 Review Talk 1
Chair: Yoshiharu Matsuura, Osaka University, Japan

RT1 Yusuke Yanagi, Kyushu University, Japan
Virus entry: receptor attachment and membrane fusion

14:00 - 17:35 Session 1: Invasion of Pathogens
Chairs: Wenhui Li, National Institute of Biological Sciences, Beijing, China
Masao Matsuoka, Kyoto University, Japan

S1-1 Wenhui Li, National Institute of Biological Sciences, Beijing, China
Viral entry of HBV and HDV: where are we now?

S1-2 Yasuko Mori, Kobe University, Japan
The mechanism of human herpesvirus-6 infection
– entry process into host cells –

S1-3 Bart L. Haagmans, The Erasmus Medical Center, the Netherlands
MERS: emergence of a novel coronavirus

S1-4 Pierre L. Goossens, Institut Pasteur, France
Imaging Bacillus anthracis infection

S1-5 Hirokazu Arimoto, Tohoku University, Japan
Endogenous nitrated nucleotide is a key mediator of autophagy and innate defense against bacteria

Oral Poster

18:30 – 20:30 Welcome Party - Hotel Nikko Nara

September 24, Wednesday

9:00 – 9:45 Review Talk 2
Chair: Yasuhiko Horiguchi, Osaka University, Japan

RT2 B. Brett Finlay, The University of British Columbia, Canada
Microbiota-pathogen interplay in enteric infectious diseases
9:45 - 12:35  **Session 2: Host and Pathogen Interaction I**  
**Chairs:** Herbert W. Virgin, Washington University School of Medicine, USA  
Hiroshi Kiyono, Tokyo University, Japan

S2-1  **Herbert W. Virgin**, Washington University School of Medicine, USA  
Gene-microbe interactions that regulate the virome, immunity and disease pathogenesis

S2-2  **Gregory F. Sonnenberg**, Weill Cornell Medical College, USA  
Regulation of host-commensal bacteria relationships in human health and disease

S2-3  **Kiyoshi Takeda**, Osaka University, Japan  
Regulation of gut homeostasis through segregation of microbiota and colonic epithelia

S2-4  **Hiroshi Ohno**, RIKEN, Japan  
The role of gut microbial short-chain fatty acids in host defense and the immune system

**Oral Poster**

12:35 - 14:30  **Lunch Break & Poster Session**

14:30 - 17:35  **Session 3: Innate Immunity**  
**Chairs:** Gabrielle Belz, Walter and Eliza Hall Institute, Australia  
Takashi Fujita, Kyoto University, Japan

S3-1  **Gabrielle Belz**, Walter and Eliza Hall Institute, Australia  
The wiring and maintenance of innate lymphoid cells

S3-2  **Shizuo Akira**, Osaka University, Japan  
Regnase-1, a ribonuclease essential to the inflammatory and immune responses

S3-3  **James Vince**, Walter and Eliza Hall Institute, Australia  
Regulation of apoptosis, necroptosis, NLRP3 inflammasome activation and systemic inflammation by IAP proteins

S3-4  **Ajay Chawla**, University of California, San Francisco, USA  
Type 2 immunity regulates acclimatization to environmental cold

S3-5  **Yumiko Imai**, Akita University, Japan  
Lipid metabolic pathways control the pathology of severe influenza virus infection

**Oral Poster**
September 25, Thursday

9:00 – 9:45  **Review Talk 3**  
Chair:  Hitoshi Kikutani, Osaka University, Japan

RT3  **David Tarlinton**, Walter and Eliza Hall Institute, Australia  
Plasma cell development and persistence; in sickness and in health

9:45 - 12:35  **Session 4: Acquired Immunity**  
Chairs:  Daniel Gray, Walter and Eliza Hall Institute, Australia  
Osamu Takeuchi, Kyoto University, Japan

S4-1  **Hitoshi Kikutani**, Osaka University, Japan  
Quality of humoral immune responses: selection of pathogen specific and self reactive antibodies

S4-2  **Yoshimasa Takahashi**, National Institute of Infectious Diseases, Japan  
B cell pathways for protective memory responses against influenza virus infection

S4-3  **Johannes F. Scheid**, The Rockefeller University, USA  
Isolation and application of HIV specific antibodies from patients with broadly neutralizing serum activity

S4-4  **Daniel Gray**, Walter and Eliza Hall Institute, Australia  
How apoptosis controls regulatory T cell differentiation and homeostasis

Oral Poster

12:35 - 14:30  **Lunch Break & Poster Session**

14:30 - 15:15  **Review Talk 4**  
Chair:  Shizuo Akira, Osaka University, Japan

RT4  **Tadamitsu Kishimoto**, Osaka University, Japan  
IL-6: a new era for the treatment of autoimmune inflammatory disease

15:15 - 17:35  **Session 5: Vaccines and Therapy**  
Chairs:  Barney S. Graham, National Institutes of Health, USA  
Jun Kunisawa, National Institute of Biomedical Innovation, Japan

S5-1  **Barney S. Graham**, National Institutes of Health, USA  
RSV Vaccine development: a new paradigm for rational immunogen design

S5-2  **Sujan Shresta**, La Jolla Institute for Allergy and Immunology, USA  
Influence of antibodies and T cells on dengue disease outcome

S5-3  **Tetsuro Matano**, National Institute of Infectious Diseases, Japan
Depletion of vaccine-induced CD107a$^+$CD4$^+$ T cells following AIDS virus infection

S5-4 Sho Yamasaki, Kyushu University, Japan
Recognition of bacterial adjuvants through C-type lectin receptors

19:00 - 21:30 Banquet - Restaurant “Half Time” (Nara National Museum)

September 26, Friday

9:00 – 9:45 Review Talk 5
Chair: Toshihiro Horii, Osaka University, Japan

RT5 Alan F. Cowman, Walter and Eliza Hall Institute, Australia
Moving in and renovating: invasion and remodeling of the human erythrocyte by the malaria parasite

9:45 - 12:35 Session 6: Host and Pathogen Interaction II
Chairs: John Boothroyd, Stanford University, USA
Osamu Kaneko, Nagasaki University, Japan

S6-1 Cevayir Coban, Osaka University, Japan
Imaging malaria immunopathology
S6-2 John C. Boothroyd, Stanford University, USA
Home-invaders with a party agenda: how some strains of Toxoplasma sedate the dog, rearrange the furniture and then turn up the music!
S6-3 Masahiro Yamamoto, Osaka University, Japan
NFAT4 activation by the Toxoplasma gondii polymorphic effector protein GRA6 maximizes the parasite virulence in a strain-specific manner
S6-4 Luis Enjuanes, Spanish National Centre for Biotechnology, Spain
SARS and MERS coronaviruses virulence and protection

Oral Poster

12:35 - 13:30 Lunch Break

13:30 – 15:15 Session 7: Escape from Host Defense
Chairs: Greg Towers, University College London, UK
Tatsuo Shioda, Osaka University, Japan

S7-1 Elizabeth L. Hartland, The University of Melbourne, Australia
Death receptors and bacterial diarrhoea
S7-2 Greg J. Towers, University College London, UK
HIV-1 evasion of innate immune detection and uncloaking as a new
paradigm for the prevention and treatment of viral infection

S7-3 Yasushi Kawaguchi, The University of Tokyo, Japan
Evasion of CD8$^+$ T cells mediated by proteins kinases encoded by herpes simplex virus 1

Oral Poster

15:15 Closing Remarks