

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 unclocking 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