Opening Remarks

Review Talk 1
Chair: Yoshiharu Matsuura, Osaka University, Japan

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

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

14:00 S1-1 Yasuko Mori, Kobe University, Japan
The mechanism of human herpesvirus-6 infection
– entry process into host cells –

14:30 S1-2 Wenhui Li, National Institute of Biological Sciences, Beijing, China
Viral entry of HBV and HDV: where are we now?

15:00 S1-3(P-09) Masami Wada, Osaka University, Japan
HCV infection inhibits autophagy through lipidation of LC3

15:15 S1-4 Hirokazu Arimoto, Tohoku University, Japan
Endogenous nitrated nucleotide is a key mediator of autophagy and innate defense against bacteria

15:45 – 16:05 Coffee Break

16:05 S1-5 Pierre L. Goossens, Institut Pasteur, France
Imaging Bacillus anthracis infection

16:35 S1-6(P-35) Eiko Matsuo, Kobe University, Japan
The essential interaction of VP6 protein with VP3 for recruitment of the replicase complex into orbivirus particle.

16:50 S1-7 Bart L. Haagmans, The Erasmus Medical Center, the Netherlands
MERS: emergence of a novel coronavirus

17:20 S1-8(P-29) Akihiro Ishii, Hokkaido University, Japan
Discovery of novel nairovirus, leopards hill virus, which causes hemorrhagic gastroenteritis and severe hepatic disease in mice.

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

9:45  S2-1  **Herbert W. Virgin**, Washington University School of Medicine, USA  
Gene-microbe interactions that regulate the virome, immunity and disease pathogenesis

10:15  S2-2  **Gregory F. Sonnenberg**, Weill Cornell Medical College, USA  
Regulation of host-commensal bacteria relationships in human health and disease

10:45 – 11:05  **Coffee Break**

11:05  S2-3  **Kiyoshi Takeda**, Osaka University, Japan  
Regulation of gut homeostasis through segregation of microbiota and colonic epithelia

11:35  S2-4  **Hiroshi Ohno**, RIKEN, Japan  
The role of gut microbial short-chain fatty acids in host defense and the immune system

12:05  S2-5(P-76)  **Kotaro Kiga**, The University of Tokyo, Japan  
Epigenetic silencing of miR-210 increases the proliferation of gastric epithelium during chronic *Helicobacter pylori* infection

12:20  S2-6(P-65)  **Mayo Yasugi**, Osaka Prefecture University, Japan  
Bile acids accelerate sporulation via Spo0A activation in *Clostridium perfringens*

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

14:30  S3-1  **Gabrielle Belz**, Walter and Eliza Hall Institute, Australia  
The wiring and maintenance of innate lymphoid cells

15:00  S3-2  **Shizuo Akira**, Osaka University, Japan  
Regnase-1, a ribonuclease essential to the inflammatory and
immune responses

15:30  S3-3(P-92) **Tartey Sarang**, Kyoto University, Japan
Akirin2 is critical for inducing inflammatory genes by bridging IκB-ζ; and the SWI/SNF complex

15:45 – 16:05  *Coffee Break*

16:05  S3-4  **James Vince**, Walter and Eliza Hall Institute, Australia
Regulation of apoptosis, necroptosis, NLRP3 inflammasome activation and systemic inflammation by IAP proteins

16:35  S3-5  **Ajay Chawla**, University of California, San Francisco, USA
Type 2 immunity regulates acclimatization to environmental cold

17:05  S3-6  **Yumiko Imai**, Akita University, Japan
Lipid metabolic pathways control the pathology of severe influenza virus infection

**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

9:45  S4-1  **Hitoshi Kikutani**, Osaka University, Japan
Generation and selection of virus-reactive and self-reactive B cells

10:15  S4-2  **Yoshimasa Takahashi**, National Institute of Infectious Diseases, Japan
B cell pathways for protective memory responses against influenza virus infection

10:45 – 11:05  *Coffee Break*

11:05  S4-3(P-88)  **Yasuyuki Tashiro**, Tokyo University of Science, Japan
The generation of high-affinity and low-affinity IgM+ memory B cells and their distinct roles in secondary IgM antibody response to T-dependent antigen

11:20  S4-4  **Johannes F. Scheid**, The Rockefeller University, USA
Isolation and application of HIV specific antibodies from patients with broadly neutralizing serum activity
11:50  S4-5  **Daniel Gray**, Walter and Eliza Hall Institute, Australia
How apoptosis controls regulatory T cell differentiation and homeostasis

12:20  S4-6(P-108)  **James B Wing**, Osaka University, Japan
Regulatory T-cells control antigen-specific Tfh expansion and humoral immune responses via CTLA-4

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

15:15  S5-1  **Barney S. Graham**, National Institutes of Health, USA
RSV Vaccine development: a new paradigm for rational immunogen design

15:45  S5-2  **Sujan Shresta**, La Jolla Institute for Allergy and Immunology, USA
Influence of antibodies and T cells on dengue disease outcome

16:15 – 16:35  **Coffee Break**

16:35  S5-3  **Tetsuro Matano**, National Institute of Infectious Diseases, Japan
Depletion of vaccine-induced CD107a⁺CD4⁺ T cells following AIDS virus infection

17:05  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

9:45  S6-1  **Cevayir Coban**, Osaka University, Japan  
Imaging malaria immunopathology

10:15  S6-2(P-45)  **Chisa Sasaoka**, Ehime University, Japan  
Characterization of Plasmodium falciparum MAS170 as novel malaria blood-stage vaccine candidate

10:30 – 10:50  *Coffee Break*

10:50  S6-3  **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!

11:20  S6-4  **Masahiro Yamamoto**, Osaka University, Japan  
NFAT4 activation by the *Toxoplasma gondii* polymorphic effector protein GRA6 maximizes the parasite virulence in a strain-specific manner

11:50  S6-5  **Luis Enjuanes**, Spanish National Centre for Biotechnology, Spain  
SARS and MERS coronaviruses virulence and protection

12:20  S6-6(P-24)  **Kouji Sakai**, National Institute of Infectious Diseases, Japan  
The host protease TMPRSS2 is essential for influenza A virus pathogenicity

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

13:30  S7-1  **Elizabeth L. Hartland**, The University of Melbourne, Australia  
Death receptors and bacterial diarrhoea

14:00  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

14:30  S7-3 (P-11)  **Leo Uchida**, Nagasaki University, Japan  
Dengue virus conceals double-stranded RNA in intracellular membrane to escape from interferon response.

14:45  S7-4  **Yasushi Kawaguchi**, The University of Tokyo, Japan  
Evasion of CD8+ T cells mediated by proteins kinases encoded by herpes simplex virus 1

15:15  **Closing Remarks**