

**ADAPTIVE AND INNATE IMMUNE RESPONSES TO
NEGLECTED TROPICAL DISEASES**

*Sponsored by
US-Japan Cooperative Medical Science Program (USJCMSP)
National Institute of Allergy and Infectious Diseases (NIAID)
Office of Rare Diseases
National Institutes of Health*

January 10-11, 2010
San Diego, CA, USA
Hilton San Diego Airport/Harbor Island Hotel

AGENDA

SUNDAY, JANUARY 10, 2010

NOTE that all presentations are in the **Marina Ballroom** (except the Poster Session)

08:00 – 08:30 a.m. **Registration – Marina Pre-Function Area**

08:30 – 08:45 a.m. **Welcome and Introduction**
Drs. Helen Quill and Malla Rao, NIAID

08:45 – 09:30 a.m. **KEYNOTE ADDRESS**
Pattern Recognition by the TLR4-MD-2 Complex
Dr. Jie-Oh Lee; Korea Advanced Institute of Science and Technology, Daejeon, Korea

SESSION 1: Malaria

09:30 – 09:50 a.m. *Complexity of Naturally Acquired Immunity to Plasmodium falciparum Blood Stage Infection in Children*
Dr. James Kazura; Case Western Reserve University, Cleveland, OH

09:50 – 10:10 a.m. *Hypermotagenesis in Plasmodium falciparum Populations*
Dr. Pradip Rathod; University of Washington, Seattle, WA

10:10 – 10:30 a.m. **BREAK**

10:30 – 10:50 a.m. *Immunological Interactions of HIV and Malaria: Immunology of Malaria Transmission*
Dr. Joseph Vinetz; University of California San Diego, La Jolla, CA

SESSION 2: Immune Receptors and Pathways

10:50 – 11:10 a.m. *Role of SIGNI Molecules in Innate Immune Responses*
Dr. Kayo Inaba; Kyoto University, Japan

11:10 – 11:30 a.m. *Pathways Regulating Innate and Adaptive Immune Responses to Viral Infections*
Dr. Christine Biron; Brown University, Providence, RI

11:30 – 11:50 a.m. *Dual Specificity Receptor for Damaged Cells and Pathogens*
Dr. Takashi Saito; RIKEN, Yokohama City, Japan

11:50 – 12:10 p.m. *Th1 Cells – Faithful, Fickle, Why and How*
Dr. Christopher Wilson; Bill and Melinda Gates Foundation, Seattle, WA

12:10 – 01:20 p.m. LUNCH (on your own)
Working Lunch for USJCMSP Parasitic Diseases Panel Members – Chart Room
Working Lunch for USJCMSP Immunology Board Members – Port Room

SESSION 3: Neglected Tropical Diseases

01:20 – 01:40 p.m. *Genetic Analyses of Host and Parasite Factors Influencing the Prognosis of Chagas Disease in Bolivia*
Dr. Kenji Hirayama; Nagasaki University, Japan

01:40 – 02:00 p.m. *Human Movement and Risk of Dengue Exposure*
Dr. Thomas Scott; University of California, Davis, CA

02:00 – 02:20 p.m. *Novel Mitochondrial Complex II from the Parasitic Protist Trypanosoma cruzi Consists of Twelve-subunit with Heterodimeric Iron-sulfur Subunit*
Dr. Kiyoshi Kita; The University of Tokyo, Japan

02:20 – 02:40 p.m. *Mechanism for Modulation of Host Innate Immune Responses by a Toxoplasma gondii Kinase*
Dr. Kiyoshi Takeda; Osaka University, Japan

SESSION 4: Mucosal Immunity and Mucosal Pathogens

02:40 – 03:00 p.m. *Immune Responses and Resistance in Human Schistosomiasis*
Dr. Daniel Colley; University of Georgia Research Foundation, Athens, GA

03:00 – 03:20 p.m. BREAK

03:20 – 03:40 p.m. *Mitosomes in the Enteric Protozoan Parasite Entamoeba histolytica Contain a Sulfate Activation Pathway*
Dr. Tomoyoshi Nozaki; National Institute of Infectious Diseases, Japan

03:40 – 04:00 p.m. *Leptin-mediated Innate Immunity to Infection of Children by the Mucosal Parasite Entamoeba histolytica*
Dr. William Petri; University of Virginia, Charlottesville, VA

- 04:00 – 04:20 p.m. *Uptake via Glycoprotein 2 by M Cells is Important for Mucosal Immunosurveillance of FimH+ Bacteria*
Dr. Hiroshi Ohno; RIKEN, Yokohama City, Japan
- 04:20 – 04:40 p.m. *Mutations that Cause Inflammatory Colitis Identified by Forward Genetic Screening*
Dr. Bruce Beutler; The Scripps Research Institute, La Jolla, CA
- 04:40 – 05:00 p.m. *Novel Strategy for Mucosal Vaccine Development: MucoRice and MucoNanogel*
Dr. Hiroshi Kiyono; The University of Tokyo, Japan
- 05:30 – 09:00 p.m. **POSTER SESSION and RECEPTION – Spinnaker Room and Patio**

MONDAY, JANUARY 11, 2010

NOTE that all presentations are in the **Marina Ballroom**

- 08:00 – 08:30 a.m. **Registration – Marina Pre-Function Area**
- 08:30 – 09:15 a.m. **PLENARY TALK**
Meta-analysis of Epitope Data and its Applications for Malarial Immunobiology and Vaccine-related Issues
Dr. Alessandro Sette; La Jolla Institute of Allergy and Immunology, La Jolla, CA
- SESSION 5: T Cell Development, Differentiation, and Survival**
- 09:15 – 09:35 a.m. *A Role for Pcd8 in T Cell Development and Function*
Dr. Satyajit Rath; National Institute of Immunology, New Delhi, India
- 09:35 – 09:55 a.m. *Requirement of OX40 Costimulatory Signals for Commitment and Generation of Memory CD8+ T Cells*
Dr. Kazuo Sugamura; Tohoku University School of Medicine, Sendai, Japan
- 09:55 – 10:15 a.m. **BREAK**
- 10:15 – 10:35 a.m. *Peripheral T-cell Homeostasis: the Role of Notch Signaling in the Regulation of T-cell Survival*
Dr. Apurva Sarin; National Center for Biological Sciences, Bangalore, India
- SESSION 6: T Cell Subsets**
- 10:35 – 10:55 a.m. *Role of CARD9-mediated Activation of Innate Immunity in Anti-protozoan Defense*
Dr. Hiroki Yoshida; Saga University, Japan
- 10:55 – 11:15 a.m. *Dual Negative Regulation of GATA3 Function by Sox4*
Dr. Toshinori Nakayama; Chiba University, Japan

- 11:15 – 11:35 a.m. *Newly Discovered Roles for Basophils in Allergy and Parasitic Infections*
Dr. Hajime Karasuyama; Tokyo Medical and Dental University Graduate School, Japan
- 11:35 – 12:45 p.m. LUNCH (on your own)
- 12:45 – 01:05 p.m. *Basophils are Potent Antigen-presenting Cells which Selectively Induce Th2 Cells*
Dr. Kenji Nakanishi; Hyogo University, Japan
- 01:05 – 01:25 p.m. *NKT Cells Sense Microbial Infection and Recognize Microbial Glycolipids*
Dr. Mitchell Kronenberg; La Jolla Institute for Allergy and Immunology, La Jolla, CA
- 01:25 – 01:45 p.m. *Interleukin-1 β Secreted by CD11b+Gr-1+ Myeloid Cells Drives
Hypergammaglobulinemia with Autoantibody in a MyD88-independent Manner*
Dr. Mi-Na Kweon; International Vaccine Institute, Seoul, Korea
- 01:45 – 02:05 p.m. *Follicular Helper T Cells Regulate Antigen-specific B Cell Immunity*
Dr. Michael McHeyzer-Williams; The Scripps Research Institute, La Jolla, CA

SESSION 7: Malaria Revisited

- 02:05 – 02:25 p.m. *Identification of Novel Blood-stage Vaccine Candidates against Plasmodium falciparum
by High-throughput Immunoscreening*
Dr. Takafumi Tsuboi; Ehime University, Japan
- 02:25 – 02:45 p.m. BREAK
- 02:45 – 03:05 p.m. *Identification of Plasmodium falciparum Blood-stage Potential Vaccine Candidates:
High-throughput Immunoscreening Approach with Burkina Faso Children's Sera*
Dr. Kazutoyo Miura; NIAID, NIH, Rockville, MD
- 03:05 – 03:25 p.m. *A Non-adjuvanted Polypeptide Nanoparticle Vaccine Targeting Plasmodium falciparum
Enolase Continues to Induce High Antibody Titers in Mice*
Dr. Shigeyuki Kano; International Medical Center of Japan, Tokyo, Japan
- 03:25 – 03:45 p.m. *Regulation of INF-gamma Production in CD4+ T Cells during Infection with
Plasmodium berghei*
Dr. Katsuyuki Yui; Nagasaki University, Japan
- 03:45 – 04:05 p.m. *Influence of Nematode Infection on Anti-malaria Immunity in Mice*
Dr. Hajime Hisaeda; Kyushu University, Japan
- 04:05 p.m. ADJOURN