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

SATURDAY, JANUARY 9, 2010
06:00 – 10:00 p.m. Dinner for Speakers and Invited Guests: Skyline Room
Dr. Stephanie James, Director of Science, Foundation for the NIH
“The Synergy Between Parasitology and Immunology”

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. Hypermutagenesis 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 SIGN1 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 Pdcd8 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-1β 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