

**DMID INTERNATIONAL RESEARCH IN INFECTIOUS DISEASES MEETING**  
**May 12–14, 2009**

***BETHESDA NORTH MARRIOTT HOTEL AND CONFERENCE CENTER***  
***BETHESDA, MARYLAND***

**Tuesday, May 12<sup>th</sup>**

**8:30 AM          Registration**

**10:00 AM          Welcome**  
***Polly Sager - Assistant Director for International Research in Infectious Diseases***  
***Division of Microbiology and Infectious Diseases NIAID, NIH, DHHS***

**Session I: Successes in Therapeutics**

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<b>10:15 AM          <i>Plenary: Frieda Behets –University of North Carolina at Chapel Hill, Chapel Hill, NC, USA</i></b> Linking Research and Surveillance Findings for Control and Prevention of Syphilis in Madagascar	<b>1</b>
<b>11:15 AM          <i>Jonathan Golub – Johns Hopkins Center for Tuberculosis Research, Baltimore, MD, USA</i></b> Active/Intensive Case Finding for Tuberculosis in Rio de Janeiro, Brazil: 9 Years of Experience	<b>2</b>
<b>11:35 AM          <i>Aldo Lima – Federal University of Ceará</i></b> Impact of Zinc, Glutamine and Vitamin A on Serum Nutrikinines, Leptin, IGF-1, Adiponectin and Cortisol, and Their Association with Growth in Young Children from Northeast of Brazil	<b>3</b>
<b>11:55 AM          <i>Daniel Tisch – Department of Epidemiology Case Western Reserve University, Cleveland, OH USA</i></b> Transmission Intensity and Biomarkers of Wuchereria Bancrofti Infection 10 Years after Cessation of Mass Drug Administration to Eliminate Lymphatic Filariasis in Papua New Guinea	<b>4</b>
<b>12:15 PM          <i>LUNCH</i></b>	

**Session II: Pathogenesis**

<b>1:15 PM          <i>Plenary: Joseph Vinetz – University of California at San Diego, San Diego, CA, USA</i></b> Determinants of Clinical Outcome of Leptospira Infection	<b>5</b>
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**Session II: Pathogenesis (cont.)**

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<b>2:00 PM</b> <b><i>Pimmada Jeamwattanaalert</i> – Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand</b> Genetic Diversity of Orientia Tsutsugamushi Isolates Obtained from Rural Thailand	<b>6</b>
<b>2:20 PM</b> <b><i>Sharone Green</i> – Center for Infectious Disease and Vaccine Research, University of Massachusetts Medical School, Worcester, MA, USA</b> Classification of Severe Dengue Illness and Value of Regression Tree (CART) Analysis to Predict Early Disease Classification	<b>7</b>
<b>2:40 PM</b> <b><i>Nancy G. Saravia</i> – Centro Internacional de Entrenamiento e Investigaciones Medicas CIDEIM</b> Parasitemia and the Presence of Leishmania Viannia in Apparently Healthy Skin and Mucosa of Patients with Cutaneous Leishmaniasis	<b>8</b>
<b>3:00 PM</b> <b><i>BREAK</i></b>	
<b>3:20 PM</b> <b><i>Jeffrey Bethony</i> – Department of Microbiology, Immunology and Tropical Medicine, George Washington University, Washington, DC, USA</b> Parasite Specific Il-6 Increases the Risk of Advanced Periductal Fibrosis During Infection with the Carcinogenic Human Liver Fluke, Opisthorchis Viverrini	<b>9</b>
<b>3:40 PM</b> <b><i>Jason Mulvenna</i> – Division of Infectious Diseases, Queensland Institute of Medical Research, Australia</b> Proteomic Analysis of the Surface and Secreted Proteomes of the Carcinogenic Human Liver Fluke Opisthorchis Viverrini	<b>10</b>
<b>4:00 PM</b> <b><i>Alex Loukas</i> – Division of Infectious Diseases, School of Population Studies, Queensland Institute of Medical Research, Australia</b> A Granulin-like Growth Factor Secreted by the Carcinogenic Liver Fluke, Opisthorchis Viverrini, Promotes Proliferation of Host Cells	<b>11</b>
<b>4:20 PM</b> <b><i>Alphonse Ouedraogo</i> – Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso</b> Malaria Morbidity in a High and Seasonal Malaria Transmission Assessed Through Different Methods	<b>12</b>

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<b><i>Rodrigo Ribeiro-Rodrigues</i> – Núcleo de Doenças Infecciosas, Universidad Federal do Espírito Santo, Brazil</b>	
Evaluation of Interferon- $\gamma$ Release Assay for Tuberculin Skin Test Conversion in Recently Exposed Household Contacts	
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<b><i>Adjourn</i></b>	

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**Session III: Therapeutics and Potential Eradication**

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9:15 AM	<b><i>Chandy John – University of Minnesota Medical School, Minneapolis, Minnesota, USA</i></b> Interruption of Malaria Transmission in Two Highland Areas of Kenya	15
9:35 AM	<b><i>Ruth Owusu – Kintampo Health Research Centre, Kintampo, Ghana</i></b> Severe Malaria in Children in the Kintampo North and South Districts of Ghana	16
9:55 AM	<b><i>Jianbing Mu – National Institute of Allergy and Infectious Diseases, Bethesda, MD, USA</i></b> Genome-Wide Positive Selection and Loci Associated with Plasmodium Falciparum Resistance to Antimalarial Drugs	17
10:15 AM	<b><i>BREAK</i></b>	
10:35 AM	<b><i>Shahana U. Kazmi – Immunology and Infectious Disease Research Laboratory Department of Microbiology, University of Karachi, Karachi, Pakistan</i></b> Anti-Tuberculosis Activities of Medicinal Plant Constituents and Newly Synthesized Organotin Compounds	18
10:55 AM	<b><i>Biao Xu – School of Public Health, Fudan University, Shanghai, China</i></b> Genetic Characterization of Drug Resistant Mycobacterium Tuberculosis in Eastern Rural China: A Population-based Investigation	19
11:15 AM	<b><i>Sandra J. Laney – Smith College, Northampton, Massachusetts, USA</i></b> Stage-Specific Molecular Assays for Detecting Filarial L3 Larvae in Mosquitoes	20
11:35 AM	<b><i>Manoj Gambhir – Imperial College London, UK</i></b> Complex Dynamics in Parasite Ecology and Control	21
11:55 AM	<b><i>Cesar Náquira Velarde – Universidad Peruana Cayetano Heredia</i></b> Chagas Disease Transmission in Urban and Rural Communities: Arequipa, Peru	22
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**Session IV: Genomics/Molecular Biology**

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2:20 PM	<b>Fatma Z Guerfali – Institute Pasteur of Tunis, Tunisia</b> Human Surrogate Markers Defining Intra-Species Leishmania Major Parasites' Diversity	25
2:40 PM	<b>Amelia Ribeiro de Jesus – Serviço de Imunologia-UFBA, Salvador, Brazil, Department of Medicine, Universidade Federal de Sergipe, Aracaju, Brazil</b> Genetic Studies Demonstrate an Association Between Functional Polymorphisms in Genes that Influences the Immune Response with Cutaneous and Mucosal Leishmaniasis in Bahia, Brazil	26
3:00 PM	<b>BREAK</b>	
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3:40 PM	<b>Regina LaRocque – Massachusetts General Hospital, Boston, MA, USA</b> A Variant in Long Palate, Lung and Nasal Epithelium Clone 1 is Associated with Cholera in a Bangladeshi Population	28
4:00 PM	<b>Issiaka Soulama - Centre National de Recherche et de Formation sur le Paludisme Ouagadougou, Burkina Faso</b> Low-High Season Variation in <i>P.falciparum</i> Erythrocyte Binding Antigen 175 (EBA-175) Allelic Forms in Malaria Endemic Area of Burkina Faso	29

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**Session IV: Genomics/Molecular Biology (cont.)**

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<b>4:20 PM</b>	<b><i>Maganizo Chagomerana</i> – Blantyre Malaria Project, College of Medicine, University of Malawi, Blantyre, Malawi; Department of Internal Medicine, College of Osteopathic Medicine, Michigan State University, East Lansing MI, USA</b> Inter-rater Agreement in Malaria Retinopathy Findings Between Trained Clinicians and an Experienced Ophthalmologist	<b>30</b>
<b>4:40 PM</b>	<b><i>Blas Armién</i> – Instituto Conmemorativo Gorgas de Estudios de la Salud (ICGES)</b> Early Detection of Acute Hantavirus Infection in Tonosi, Panama 2007-2008	<b>31</b>
<b>5:00 PM</b>	<b><i>Adjourn</i></b>	
<b>6:00-8:00 PM</b>	<b><i>Poster Session</i> – Set up between 10:30 am and 4:30 pm. Dismount before 8:30 pm</b> The Poster Session abstracts begin on page 45	

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**Session V: Immunology and Vaccines**

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<b>8:30 AM</b> <b><i>Plenary: Linqi Zhang</i></b> – Institute of Human Virology, Comprehensive AIDS Research Center, Tsinghua University, Beijing, China AIDS Research Center, Chinese Academy of Medical Sciences, Peking Union Medical College, Beijing, China Genetic and Immunologic Characterization of H5N1 in Humans in China	<b>32</b>
<b>9:15 AM</b> <b><i>Benjawan Khuntirat</i></b> – Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand Avian Influenza Infections Among Villagers Living in Rural Cambodia and Thailand	<b>33</b>
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<b>9:55 AM</b> <b><i>Jason Harris</i></b> – Division of Infectious Diseases, Massachusetts General Hospital, Boston Massachusetts, USA Vibrio Cholerae in Patients Co-infected with Intestinal Parasites in Bangladesh	<b>35</b>
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<b>10:35 AM</b> <b><i>BREAK</i></b>	
<b>10:55 AM</b> <b><i>Shannon L. Takala</i></b> –Center for Vaccine Development, University of Maryland School of Medicine, Baltimore, Maryland, USA Extensive Diversity in Plasmodium Falciparum Apical Membrane Antigen 1: Implications for Vaccine Development	<b>37</b>

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**Session V: Immunology and Vaccines (cont.)**

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<b>11:15 AM</b> <b><i>Mahamadou A. Thera</i> – University of Bamako Faculty of Medicine, Bamako, Mali</b> Randomized, Controlled, Dose Escalation Phase 1 Clinical Trial to Evaluate the Safety and Immunogenicity of Wrair’s Ama-1 Malaria Vaccine Fmp2.1 Adjuvanted in Gsk Biologicals’ As02a Vs. Rabies Vaccine in Children Aged 1-6 Years in Bandiagara, Mali	<b>38</b>
<b>11:35 AM</b> <b><i>Diarra Amidou</i> – Centre National de Recherche et de Formation sur le Paludisme, Ouagadougou, Burkina Faso</b> Immunological Profile of Two Synthetics Constructs of the Cs Protein and Protection Against Clinical Malaria in Malaria Endemic Setting in Burkina Faso (West Africa)	<b>39</b>
<b>11:55 AM</b> <b><i>Edgar Carvalho</i> – Federal University of Bahia</b> Host and Parasite Determinants In Human Leishmaniasis	<b>40</b>
<b>12:15 PM</b> <b><i>Hechmi Louzir</i> – Institut Pasteur de Tunis, Tunisia</b> Functional and Structural Definition of a Novel H5-Specific Ctl Epitope Restricted by Hla-A*0201 Derived from H5n1 Influenza Virus	<b>41</b>
<b>12:35 PM</b> <b><i>Adjourn</i></b>	

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<b>2.</b>	<b>Epidemiology of Malaria Among a Cohort of Pregnant Women and Their Infants in the Middle Belt of Ghana</b> Kwaku Poku Asante <sup>1</sup> , Kwadwo A. Koram <sup>2</sup> , Justice Ajaari <sup>1</sup> , Ben Gyan <sup>2</sup> , David Dosoo <sup>1</sup> , Ellen Boamah <sup>1</sup> , George Adjei, Mohamed Adams <sup>1</sup> , Shalom Abokyi <sup>1</sup> , Seth Owusu-Agyei <sup>1</sup> <sup>1</sup> Kintampo Health Research Centre (KHRC), Ghana Health Service, Kintampo, Ghana; <sup>2</sup> Noguchi Memorial Institute for Medical Research, LG 581, Legon-Accra, Ghana	<b>43</b>
<b>3.</b>	<b>Congenital Malarial Parasitaemia in the Kassena -Nankana District of Northern Ghana</b> Frank Atuguba <sup>1</sup> , Kwadwo Koram <sup>2</sup> , Abraham Hodgson <sup>1</sup> , Martin Adjuik <sup>1</sup> , Thomas Anyorigiya <sup>1</sup> , Timothy Awine <sup>1</sup> , Abraham Oduro <sup>1</sup> , Patrick Ansah <sup>1</sup> , Nana Akosua Ansah <sup>1</sup> , Victor Asoala <sup>1</sup> , Lucas Amenga-Etego <sup>1</sup> , William Rogers <sup>4</sup> , David Fryauff <sup>3</sup> , Francis Nkrumah <sup>2</sup> <sup>1</sup> Navrongo Health Research Centre, (NHRC) Navrongo, Ghana; <sup>2</sup> Noguchi Memorial Institute for Medical Research, (NMIMR) Legon, Accra Ghana; <sup>3</sup> Naval Medical Research Center, Silver Spring, MD, USA; <sup>4</sup> Naval Medical Research Unit No.2 Jakarta Indonesia	<b>44</b>
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<sup>1</sup> University of Maryland School of Medicine, Baltimore, Maryland, United States; <sup>2</sup> University of Bamako Faculty of Medicine, Bamako, Mali; <sup>3</sup> Walter Reed Army Institute of Research, Silver Spring, MD, United States; <sup>4</sup> Howard Hughes Medical Institute, Baltimore, Maryland, United States	
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