

## Young Investigator Award Session D

Sunday, November 13, 2016, 10:00 am - 3:00 pm

Marriott - Room A704

The Young Investigator Award is presented to outstanding young researchers during the Annual Meeting. This award encourages developing young scientists to pursue careers in various aspects of tropical disease research. Support these young scientists by attending their presentations during this session.

Presentation Number	Title	Author Block
	Judge	Peter Crompton NIH, Rockville, MD, United States.
	Judge	Ann M Moormann University of Massachusetts, Worcester, MA, United States.
	Judge	Miranda Oakley FDA, Silver Spring, MD, United States.
	Judge	Ann Stewart Walter Reed Army Institute of Research, Silver Spring, MD, United States.
38	Plasmodium falciparum PHISTc proteins are required for antigen delivery to the infected erythrocyte surface	<b>Deepali B. Ravel</b> , Pierre-Yves Mantel, Kathleen W. Dantzler, William C. Beyer, Nicolas M. Brancucci, Manoj T. Duraisingh, Matthias Marti <i>Harvard School of Public Health, Boston, MA, United States</i>
362	High Total IgG levels and IgG1 Subclass against MSP10 Protein are Associated to Protection in Asymptomatic Sera from P. falciparum Infected Patients from the Peruvian Amazon Region	<b>Katherine Garro</b> <sup>1</sup> , Katherine Torres <sup>1</sup> , Gabriel Carrasco <sup>1</sup> , Dionicia Gamboa <sup>1</sup> , Joseph Vinetz <sup>2</sup> <sup>1</sup> <i>Peruvian University Cayetano Heredia, Lima, Peru</i> , <sup>2</sup> <i>University of California San Diego, San Diego, CA, United States</i>
696	Thrombospondin Related Sporozoite Protein is important for the establishment of P. falciparum liver stage infection	<b>Charlie Jennison</b> <sup>1</sup> , Matthew T. O'Neill <sup>1</sup> , Jennifer S. Armistead <sup>1</sup> , Annie S. Yang <sup>1</sup> , Sash Lopaticki <sup>1</sup> , Norman M. Kneteman <sup>2</sup> , Justin A. Boddey <sup>1</sup> <sup>1</sup> <i>Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia</i> , <sup>2</sup> <i>University of Alberta, Edmonton, AB, Canada</i>
841	Molecular dissection of the Plasmodium sporozoite surface GAPDH for malaria liver invasion	<b>Sung-Jae Cha</b> , Marcelo Jacobs-Lorena <i>Johns Hopkins University, Baltimore, MD, United States</i>
846	Developmental cycle and tissue sequestration of P. vivax transmission stages in the non-human primate model	<b>Elamaran Meibalan</b> <sup>1</sup> , Nicanor Obaldia III <sup>2</sup> , Juliana Sa <sup>3</sup> , Siyuan Ma <sup>1</sup> , Pedro Mejia <sup>1</sup> , Roberto Moraes Barros <sup>3</sup> , William Otero <sup>2</sup> , Manoj T. Duraisingh <sup>1</sup> , Danny Milner <sup>1</sup> , Curtis Huttenhower <sup>1</sup> , Dyann F.

		<p>Wirth<sup>1</sup>, Tom Wellem<sup>3</sup>, Matthias Marti<sup>1</sup>  <sup>1</sup>Harvard T.H. Chan School of Public Health, Boston, MA, United States, <sup>2</sup>Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama City, Panama, <sup>3</sup>National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States</p>
912	High level of submicroscopic infections of four Plasmodium species during pre-elimination phase in North Sumatera, Indonesia	<p>Inke N. Lubis<sup>1</sup>, Hendri Wijaya<sup>2</sup>, Munar Lubis<sup>2</sup>, Khalid Beshir<sup>1</sup>, Chairuddin P. Lubis<sup>2</sup>, Colin J. Sutherland<sup>1</sup>  <sup>1</sup>London School of Hygiene &amp; Tropical Medicine, London, United Kingdom, <sup>2</sup>University of North Sumatera, Medan, Indonesia</p>
926	Association between Carriage of Asymptomatic Infections and Time to Clinical Malaria in Malawi: Data from a Longitudinal Cohort Study	<p>Andrea G. Buchwald<sup>1</sup>, Alick Sixpence<sup>2</sup>, Millius Damson<sup>2</sup>, Mabvuto Chimanya<sup>2</sup>, Andy Bauleni<sup>2</sup>, Syze Gama<sup>2</sup>, John D. Sorkin<sup>1</sup>, Karl Seydel<sup>3</sup>, Don Mathanga<sup>4</sup>, Terrie E. Taylor<sup>3</sup>, Miriam K. Laufer<sup>1</sup>  <sup>1</sup>University of Maryland School of Medicine, Baltimore, MD, United States, <sup>2</sup>Blantyre Malaria Project, Blantyre, Malawi, <sup>3</sup>Michigan State University College of Osteopathic Medicine, East Lansing, MI, United States, <sup>4</sup>University of Malawi, College of Medicine, Blantyre, Malawi</p>
966	Longitudinal assessment of PfSPZ-specific T cell responses in malaria-naïve adults vaccinated with PfSPZ Vaccine	<p>Andrew S. Ishizuka<sup>1</sup>, Kirsten E. Lyke<sup>2</sup>, Sumana Chakravarty<sup>3</sup>, Andrea A. Berry<sup>2</sup>, Adam DeZure<sup>1</sup>, Eric R. James<sup>3</sup>, Thomas L. Richie<sup>3</sup>, Adam J. Ruben<sup>3</sup>, Tao Li<sup>3</sup>, B Kim Lee Sim<sup>3</sup>, Julie E. Ledgerwood<sup>1</sup>, Stephen L. Hoffman<sup>3</sup>, Robert A. Seder<sup>1</sup>  <sup>1</sup>National Institutes of Health, Bethesda, MD, United States, <sup>2</sup>Institute for Global Health, University of Maryland School of Medicine, Baltimore, MD, United States, <sup>3</sup>Sanaria Inc., Rockville, MD, United States</p>
1243	Population genomics of Plasmodium falciparum to inform the design and efficacy of whole organism malaria vaccines	<p>Kara A. Moser<sup>1</sup>, Amed Ouattara<sup>1</sup>, Elliott F. Drabek<sup>1</sup>, Sergey Koren<sup>2</sup>, Adam Phillippy<sup>2</sup>, Matt Adams<sup>1</sup>, Amadou Niangaly<sup>3</sup>, Karim Traore<sup>3</sup>, Abdoulaye K. Kone<sup>3</sup>, Drissa Coulibaly<sup>3</sup>, Mahamadou A. Thera<sup>3</sup>, Ogobara K. Doumbo<sup>3</sup>, Miriam K. Laufer<sup>1</sup>, Matthew B. Laurens<sup>1</sup>, Krisada Jongsakul<sup>4</sup>, Chanthap Lon<sup>5</sup>, David Saunders<sup>4</sup>, Kay Thwe Han<sup>6</sup>, Myaing M. Nyunt<sup>1</sup>, Robert W. Sauerwein<sup>7</sup>, B. Kim Lee Sim<sup>8</sup>, Toa Li<sup>8</sup>, Mark A. Travassos<sup>1</sup>, Shannon Takala Harrison<sup>1</sup>, Stephen L. Hoffman<sup>8</sup>, Christopher V. Plowe<sup>1</sup>, Joana C. Silva<sup>1</sup>  <sup>1</sup>University of Maryland School of Medicine, Baltimore, MD, United States, <sup>2</sup>National Human Genome Research Institute, Bethesda, MD, United</p>

		<p><i>States, <sup>3</sup>University Science, Techniques and Technologies, Bamako, Mali, <sup>4</sup>Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand, <sup>5</sup>Armed Forces Research Institute of Medical Sciences, Phnom Penh, Cambodia, <sup>6</sup>Ministry of Health, Yangon, Myanmar, <sup>7</sup>Radboud University Medical Center, Nijmegen, Netherlands, <sup>8</sup>Sanaria Inc., Rockville, MD, United States</i></p>
1257	Validation of Ultrasensitive Detection of Asymptomatic Malaria Using Dried Blood Spots	<p><b>Kayvan Zainabadi</b><sup>1</sup>, Matthew Adams<sup>1</sup>, Zay Yar Han<sup>2</sup>, Hnin Wai Lwin<sup>2</sup>, Kay Thwe Han<sup>2</sup>, Myaing Nyunt<sup>1</sup>, Christopher Plowe<sup>1</sup></p> <p><sup>1</sup><i>Institute for Global Health, Division of Malaria Research, University of Maryland School of Medicine, Baltimore, MD, United States,</i>  <p><sup>2</sup><i>Department of Medical Research, Ministry of Health, Yangon, Myanmar</i></p> </p>
1307	Characterization of the Trypanosomatid Secondary Alternative Oxidase - A Novel Potential Drug Target	<p><b>Stefanie Kate Menzies</b>, Lindsay B. Tulloch, Andrew L. Fraser, Eoin R. Gould, Elizabeth F. King, Marija K. Zacharova, Gordon J. Florence, Terry K. Smith</p> <p><i>University of St Andrews, St Andrews, United Kingdom</i></p>
1317	Gametocyte-specific immunity provides a rationale for novel transmission blocking interventions in <i>P. falciparum</i>	<p><b>Kathleen Dantzler</b><sup>1</sup>, Sanna Rijpma<sup>2</sup>, Siyuan Ma<sup>1</sup>, Dingying Tao<sup>3</sup>, Will Stone<sup>2</sup>, Karl Seydel<sup>4</sup>, Miriam Laufer<sup>5</sup>, Huw Davies<sup>6</sup>, Phil Felgner<sup>6</sup>, Rhoel Dinglasan<sup>3</sup>, Terrie Taylor<sup>4</sup>, Curtis Huttenhower<sup>1</sup>, Teun Bousema<sup>2</sup>, Matthias Marti<sup>1</sup></p> <p><sup>1</sup><i>Harvard T.H. Chan School of Public Health, Boston, MA, United States</i>, <sup>2</sup><i>Radboud University Nijmegen Medical Center, Nijmegen, Netherlands</i>, <sup>3</sup><i>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States</i>, <sup>4</sup><i>Michigan State University, E. Lansing, MI, United States</i>, <sup>5</sup><i>University of Maryland School of Medicine, Baltimore, MD, United States</i>, <sup>6</sup><i>University of California Irvine, Irvine, CA, United States</i></p>
1476	Characterization of antibodies against <i>P. falciparum</i> invasion protein pfMSP10.	<p><b>Elizabeth M. Villasis</b>, Jorge Bendezu, Katherine Garro, Oscar Nolasco, Katherine Torres, Beronica Infante, Dionicia Gamboa, Joseph Vinetz</p> <p><i>Universidad Peruana Cayetano Heredia, Lima, Peru</i></p>
1606	Placental malaria is associated with altered fetal cytokine profiles	<p><b>Sarah Boudova</b><sup>1</sup>, Titus Divala<sup>2</sup>, Randy Mungwira<sup>2</sup>, Patricia Mawindo<sup>2</sup>, Tamiwe Tamoka<sup>3</sup>, Marcelo B. Sztein<sup>4</sup>, Kirsten E. Lyke<sup>1</sup>, Cristiana Cairo<sup>5</sup>, Miriam K. Laufer<sup>1</sup></p> <p><sup>1</sup><i>Institute for Global Health, Division of Malaria</i></p>

		<p><i>Research, University of Maryland School of Medicine, Baltimore, MD, United States, <sup>2</sup>Blantyre Malaria Project, Blantyre, Malawi, <sup>3</sup>University of Malawi College of Medicine, Blantyre, Malawi, <sup>4</sup>Institute for Global Health, Center for Vaccine Development, University of Maryland School of Medicine, Baltimore, MD, United States, <sup>5</sup>Institute of Human Virology, University of Maryland School of Medicine, Baltimore, MD, United States</i></p>
1748	Artemisinin dimers as promising new drug leads for visceral leishmaniasis	<p><b>Surendra K. Jain<sup>1</sup>, Waseem Gul<sup>2</sup>, Mahmoud A. Elsohly<sup>2</sup>, Babu L. Tekwani<sup>1</sup></b>  <sup>1</sup><i>National Center for Natural Products Research, Department of BioMolecular Sciences, School of Pharmacy, University of Mississippi, University, MS, United States, <sup>2</sup>ElSohly Laboratories, Inc., Oxford, MS, United States</i></p>
1750	Proteomic analysis of plasma-derived extracellular vesicles in natural infections of Plasmodium vivax, Trypanosoma cruzi and Fasciola hepatica	<p><b>Joan Segui Barber<sup>1</sup>, Alicia Galiano<sup>2</sup>, Isabel Diaz<sup>3</sup>, Emanuella Fajardo<sup>4</sup>, Antonio Marcilla<sup>5</sup>, Igor C. Almeida<sup>4</sup>, Antonio Osuna<sup>3</sup>, Hernando A. del Portillo<sup>6</sup></b>  <sup>1</sup><i>Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain, <sup>2</sup>Area de Parasitología, Departament de Biología Celular i Parasitología, Universitat de València, Valencia, Spain, <sup>3</sup>Institute of Biotechnology, Biochemistry and Molecular Parasitology, University of Granada, Granada, Spain, <sup>4</sup>Border Biomedical Research Center, Department of Biological Sciences, University of Texas, El Paso, TX, United States, <sup>5</sup>Area de Parasitología, Departament de Biología Celular i Parasitología, Universitat de València, Joint Research Unit on Endocrinology, Nutrition and Clinical Dietetics, Universitat de València-Health Research Institute La Fe, Valencia, Spain, <sup>6</sup>ICREA at ISGlobal Institute for Global Health, Hospital Clínic, Universitat de Barcelona, and Institut d'Investigació Germans Trias i Pujol (IGTP), Badalona, Spain</i></p>
1844	Whole genome sequencing used to distinguish Plasmodium vivax relapse from reinfection and primaquine resistance in Peru	<p><b>Annie Cowell<sup>1</sup>, Hugo Valdivia<sup>2</sup>, Sesh Sundararaman<sup>3</sup>, Elizabeth Loy<sup>3</sup>, Andres G. Lescano<sup>4</sup>, Christian Baldeviano<sup>5</sup>, Salomon Durand<sup>5</sup>, Vince Gerbasi<sup>5</sup>, Beatrice Hahn<sup>3</sup>, Elizabeth Winzeler<sup>1</sup></b>  <sup>1</sup><i>UC San Diego, La Jolla, CA, United States, <sup>2</sup>Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, <sup>3</sup>University of Pennsylvania, Philadelphia, PA, United States, <sup>4</sup>Universidad</i></p>

		<i>Peruana Cayetano Heredia, Lima, Peru, <sup>5</sup>U.S. Naval Medical Research Unit Six, Lima, Peru</i>
1904	HLA DR expressing Low Density Neutrophil subsets expand during Human Visceral Leishmaniasis and can contribute to T cell proliferation.	<b>Smriti Sharma</b> <sup>1</sup> , Richard Davis <sup>2</sup> , Susanne Nylen <sup>3</sup> , David L. Sacks <sup>4</sup> , Shyam Sundar <sup>1</sup> , Mary E. Wilson <sup>2</sup> <sup>1</sup> <i>Institute of Medical Sciences, Banaras Hindu University, Varanasi, India, <sup>2</sup>University of Iowa, Iowa City, IA, United States, <sup>3</sup>Karolinska Institutet, Stockholm, Sweden, <sup>4</sup>NIH, Bethesda, MD, United States</i>
1907	Involvement of Nucleotide-binding domain leucine-rich repeat protein 12 (Nlrp12) in visceral leishmaniasis (VL)	<b>Diogo Valadares</b> , Gwendolyn Clay, Richard E. Davis, Bayan Sudan, Yani Chen, Breanna Scorza, Fayyaz Sutterwala, Mary E. Wilson <i>University of Iowa, Iowa City, IA, United States</i>