## WORLD MALARIA DAY POSTER PRESENTATIONS – APRIL 25, 2017 – FEINSTONE HALL/E2030

1. **Antigenicity of a full length *Plasmodium vivax* recombinant *Pvs*48/45 protein**
Myriam Arévalo-Herrera[1,2], Ángela Valencia[1], Angélica Castellanos[3], Nora Cespedes[1,] Sonia Marcela Herrera[1], Andrés Vallejo[1], Kelly Rubiano[1] and Sócrates Herrera[1,4*]
[4]Caucaseco Scientific Research Center, Cali, Colombia, [1]Malaria Vaccine and Drug Development Center, Cali, Colombia, [3]Primates Center Foundation, Cali, Colombia, [2]School of Health, Universidad del Valle, Cali, Colombia.

2. **Antibody-dependent NK cell control of *Plasmodium falciparum* infection**
Gunjan Arora,[1] Javier Manzella-Lapeira,[1] David L. Narum,[2] Patrick E. Duffy,[2] Louis H. Miller,[3] Susan K. Pierce,[1] Sanjay A. Desai,[3] Geoffrey T. Hart,*[1,4] Eric O. Long*[1]
[1]Laboratory of Immunogenetics, NIAID, NIH, Rockville, Maryland, [2]Laboratory of Malaria and Vaccine Immunology, NIAID, NIH, Rockville, Maryland, [3]Laboratory of Malaria and Vector Research, NIAID, NIH, Rockville, Maryland, [4]Division of Infectious Disease and International Medicine, Department of Medicine, University of Minnesota, Minneapolis, Minnesota *Co-senior authors

3. **Repeat region of the circumsporozoite protein has a functional role in sporozoite motility**
Amanda E. Balaban[1], Natasha Vartak[1], Ariadne Sinnis-Bourozikas[1], Melanie Shears[1], and Photini Sinnis[1]
[1]Johns Hopkins Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

4. ***Plasmodium falciparum* Calcium Dependent Protein Kinase 2 (*Pf*CDPK2) is critical for male gametocyte exflagellation but not essential for asexual proliferation**
Abhisheka Bansal[1], Alvaro Molina-Cruz[1] Joseph Brzostowski[2], Louis H. Miller[1]
[1]Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, NIH, USA; [2]LIG Imaging Facility, National Institute of Allergy and Infectious Diseases, NIH, USA.

5. **Development of a multiplex avidity assay for *Plasmodium falciparum* malaria antibodies**
Shanai Browne, Kingsley Jarrett, James Moon, Jennifer Kooken, Christian Darko
Walter Reed Army Institute of Research, Silver Spring, Maryland, U.S.A.

7. **Targeting *Plasmodium* sporozoite liver invasion with a phage display library**
Sung-Jae Cha, Marcelo Jacobs-Lorena
Molecular Microbiology and Immunology and Malaria Research Institute, Johns Hopkins School of Public Health, Baltimore, MD, US

8. **The biological function of antibodies induced by the RTS,S/AS01 malaria vaccine candidate is determined by their fine specificity**
Sidhartha Chaudhury[1], Christian F. Ockenhouse[2], Jason A. Regules[3], Sheetij Dutta[4], Anders Wallqvist[1], Erik Jongert[5], Norman C. Waters[4], Franck Lemiale[2], Elke Bergmann-Leitner[4]
[1]Biotechnology High Performance Computing Software Applications Institute, Telemedicine and Advanced Technology Research Center, U.S. Army Medical Research and Materiel Command, Fort Detrick, MD, USA, [2]PATH Malaria Vaccine Initiative, Washington DC, USA, [3]Department of Clinical Research, United States Army Medical Research Institute of Infectious Diseases, Ft. Detrick, MD, USA, [4]Malaria Vaccine Branch, U.S. Military Malaria Research Program, Walter Reed Army Institute of Research, Silver Spring, MD, USA, [5]GSK Vaccine, Rixensart, Belgium

9. **IgG proteomics and BCR sequencing to assess humoral responses to malaria transmission blocking vaccine Pfs25 in Malian adults**
Camila Coelho[1], Patricia Gonzales Hurtado[1], Yai Doritchamou[1], Allison Schwartz[2], Justin Taylor[2], Bob Morrison[1], Olga Muratova[1], Issaka Sagara[3], Ogobara K. Doumbo[3], Julie Rytlewski[4], Marissa Vignali[4], Catherine Sanders[4], Michal Fried[1], Charles Anderson[1] and Patrick Duffy[1]
[1]Laboratory of Malaria Immunology and Vaccinology - NIAID, NIH – Rockville, MD, [2]Vaccine and Infectious Disease Division - Fred Hutchinson Cancer Research Center – Seattle, WA, [3]Malaria Research and Training Center – Bamako, Mali, [4]Adaptive Biotechnologies Corp – Seattle, WA.

10. ***Plasmodium* spp Enolase: A protein with multiple moonlighting functions and a target of potent growth inhibitory antibodies**
Sneha Dutta[1], Aneesha Tiwari[1], Mamta Yadav[2], Prakhar Agrawal[2], Reena Verma[1], Ch. Balaji[1], Dinkar Sahal[2] and Gotam K. Jarori[1]
[1]Tata Institute of Fundamental Research, Homi Bhabha Road, Colaba, Mumbai 400005, and [2]International Center for Genetic Engineering and Biotechnology, Aruna Asif Ali Road, New Delhi, India.

11. **Robust antibody and CD8+ T-cell responses induced by *P. falciparum* CSP adsorbed to cationic liposomal adjuvant CAF09 confer sterilizing immunity against experimental rodent malaria infection**
Diego A. Espinosa[1,5], Dennis Christensen[2], Christian Muñoz[1], Sanjay Singh[3], Emily Locke[4], Peter Andersen[2] and Fidel Zavala[1]
[1]Department of Molecular Microbiology and Immunology, Johns Hopkins Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, USA; [2]Department of Infectious Disease Immunology, Statens Serum Institut, Copenhagen, Denmark; [3]Gennova Biopharmaceuticals Ltd., Pune, India and [4]PATH Malaria Vaccine Initiative, Washington, DC, USA, Correspondence: Fidel Zavala (fzavala1@jhu.edu) [5]Present address: Division of Infectious Diseases and Vaccinology, School of Public Health, University of California, Berkeley, Berkeley, CA, USA

12. **Protective anti-sporozoite antibodies inhibit motility of sporozoites in the skin**
Yevel Flores-Garcia, Christine Hopp, Christian Munoz, Gibran Nasir, Amanda Balaban, Photini Sinnis and Fidel Zavala.
Johns Hopkins Bloomberg School of Public Health

13. **CCR4-1 acts as a translational repressor and helps to regulate malarial transmission from host to vector**
Kevin J. Hart[1], Michael P. Walker[1,] Elyse E. Munoz[1], Mark Kennedy[1], and Scott E. Lindner[1]
[1]Center for Malaria Research, Department of Biochemistry and Molecular Biology, The Pennsylvania State University, University Park, Pennsylvania 16802

14. **Evaluating three years of a targeted IRS campaign in a high transmission area of northern Zambia**
Marisa A. Hast[1], Mike Chaponda[2], James Lupiya[2], Mbanga Muleba[2], Jean-Bertin Kabuya[2], Tamaki Kobayashi[1], Tim Shields[1], Frank C. Curriero[1], Justin Lessler[1], Modest Mulenga[2], Jennifer C. Stevenson[3], Douglas E. Norris[1], William J. Moss[1] for the Southern Africa International Centers of Excellence for Malaria Research (ICEMR)
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD; [2]Tropical Diseases Research Centre, Ndola, Zambia; [3]Macha Research Trust, Choma, Zambia

15. **The Effect of Drought Associated Indicators on Malaria in the Choma District of Zambia**
Anton Kvit[1], Bill Moss[1], Clive Shiff[1], Doug Norris[1], Tim Shields[1], and Frank Curriero[1]
[1]Johns Hopkins Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

16. **Extended protection capabilities of an immature dendritic-Cell targeting malaria sporozoite vaccine**
Kun Luo, Fidel Zavala, James Gordy, Hong Zhang, Richard Markham
Department of Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

17. **Effects and responses of the brain microenvironment to *Plasmodium falciparum* infected red blood cells in cerebral malaria**
Midrelle E. Nandjou[1] and Monique Stins[1]
[1]Johns Hopkins Bloomberg School of Public Health

18. **Antibody in the Skin: Do Antibodies Have Their Greatest Impact at the Inoculation Site?**
Gibbs Nasir, Fidel Zavala and Photini Sinnis
*Molecular Microbiology & Immunology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD*

19. **The USAID/Leidos malaria vaccine development program collaboration**
Amy R. Noe[1], Timothy W. Phares[1], Vinayaka Kotraiah[1], Kenneth D. Tucker[1], Stephanie L. Ford-Scheimer[1], Jessica L. Smith[1], Susan Youll[2], Lorraine Soisson[2], Carter Diggs[2], Gabe M. Gutierrez[1],
[1]Leidos Life Sciences, Inc., [2]Malaria Vaccine Development Program, USAID

20. **Vector Biology, Ecology and Genetics – Malaria Transmission and Control**
Douglas E Norris[1], Giovanna Carpi[1], Christine M Jones[1], Julia C Pringle[1], Tamaki Kobayashi[1], Jennifer C Stevenson[1,2]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, USA; [2]Macha Research Trust, Choma, Zambia

21. **Identification of two CD4 T cell subsets that protect and survive long-term in Malaria infection**
Michael M. Opata[1], Samad A. Ibitokou[1], Victor H. Carpio[2], Karis M. Marshall[2], Kyle D. Wilson[2], Brian E. Dillon[1], Jordan C. Carl[1], and Robin Stephens[1, 2]*
[1]Departments of Internal Medicine, Division of Infectious Diseases, University of Texas Medical Branch at Galveston, Texas USA, [2]Department of Microbiology and Immunology, University of Texas Medical Branch at Galveston, Texas USA

22. **Production of full-length *Plasmodium falciparum* circumsporozoite protein in a *Halobacterium* expression system**
Wolf. T. Pecher[1,4], Jong-Myoung Kim[1,3], Priya DasSarma[1], Ram Karan[1], Photini Sinnis[2], and Shiladitya DasSarma[1]
[1]Institute of Marine and Environmental Technology, University of Maryland School of Medicine, University System of Maryland, [2]Johns Hopkins Bloomberg School of Public Health, [3]PuKyong National University, Pusan, Republic of Korea, [4]University of Baltimore

23. **Proximity-dependent biotin labeling for proteomics in *Plasmodium***
Kelly T. Rios, Kevin J. Hart, and Scott E. Lindner
Center for Malaria Research, Department of Biochemistry and Molecular Biology, The Pennsylvania State University, University Park, Pennsylvania 16802

24. **Evaluating the efficiency of reactive case detection to achieve malaria elimination in rural southern Zambia using follow-up household visits and parasite genotyping**
Kelly M. Searle, Julia Pringle, Harry Hamapumbu, Michael Musonda, Ben Katowa, Tamaki Kobayashi, Jennifer C. Stevenson, Douglas E. Norris, Philip E. Thuma and William J. Moss for the Southern Africa International Centers of Excellence for Malaria Research

25. **A single nucleotide polymorphism in an AP2 transcription factor encoded in the malaria-causing *Plasmodium berghei* alters the development of host immunity**
Patrick Sheehan[1], Munir Akkaya[1], Abhisheka Bansal[1], Gunjan Arora[1], Alvaro Molina-Cruz[1], Chen-Feng Qi[1], Mirna Pena[1], Takele Yazew[1], Louis Miller[1], Susan Pierce[1]
[1]National Institute of Allergy and Infectious Diseases, National Institute of Health

26. ***Plasmodium falciparum* Gamete-Surface Reactive Monoclonal Antibodies**
Lacy Simons[1], Knashka Underwood[2], Nita Gombakomba[2], Kazutoyo Miura[3], Carole Long[3], and Kim C. Williamson[1,2]
[1]Loyola University Chicago, [2]Uniformed Services University of the Health Sciences, [3]National Institute of Allergy and Infectious Diseases, National Institutes of Health

27. **Malaria Transmission and the Impact of Control Efforts in Southern and Central Africa**
Southern and Central Africa International Centers of Excellence for Malaria Research
Johns Hopkins Bloomberg School of Public Health (USA), Macha Research Trust (Zambia), Tropical Diseases Research Centre (Zambia), National Institute of Health Research (Zimbabwe), Biomedical Research and Training Institute (Zimbabwe), Université Protestante au Congo (DRC), University of North Carolina (USA) and University of Massachusetts (USA)

28. **Estimating contributions to residual malaria transmission in Zambia**
Jennifer C. Stevenson[1,2], Mbanga Muleba[3], Limonty Simubali[2], Twig Mudenda[2], Esther Cardol[4], James Lupiya[3], David Mbewe[3], Christine Jones[1], Giovanna Carpi[1], and Douglas E. Norris[1] for the Southern Africa International Centers of Excellence for Malaria Research (ICEMR)
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29. **Malaria, Moderate to Severe Anaemia, and Malarial Anaemia in Children at Presentation to Hospital in the Mount Cameroon Area: A Cross-Sectional Study**
Irene U. N. Sumbele,[2] Sharon O. Sama,[2] Helen K. Kimbi,[1,2] and Germain S. Taiwe[2]
[1]Department of Medical Laboratory Sciences, University of Bamenda, Bamenda, Cameroon, [2]Department of Zoology and Animal Physiology, University of Buea, Buea, Cameroon

30. **Development of a novel virus-like particle vaccine platform that mimics immature form of alphavirus**
Akane Urakami[a], Atsuko Sakurai[a], Momoko Ishikawa[a], Moh Lan Yap[b], Yevel Flores-Garcia[c], Yasunari Haseda[d], Taiki Aoshi[d], Fidel P. Zavala[c], Michael G. Rossmann[b], Sachiko Kuno[a], Ryuji Ueno[a] and Wataru Akahata[a]#
VLP Therapeutics, Gaithersburg, MD, USA[a]; Department of Biological Sciences, Purdue University, West Lafayette, IN, USA[b]; Department of Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, USA[c]; Vaccine Dynamics Project, BIKEN Innovative Vaccine Research Alliance Laboratories, Research Institute for Microbial Diseases (RIMD), Osaka University, Suita, Osaka, Japan[d]

31. **Development of a fluorescence intensity assay to assess gliding motility of *Plasmodium* sporozoites**
Natasha Vartak[1], Amanda E. Balaban[1], and Photini Sinnis[1]
[1]*Johns Hopkins Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD*

32. **Towards a lymph node targeting nanoparticle based vaccine delivery platform**
Garima Verma[1,2] ,Gregory Howard [3], Xiyu Ke[3], Elena Lepekhina[3], Jose Luis Santos[3], Tori Baxter[2], Dillon Muth[2], Magdalena Plebanski[4], Margarita-Herrera-Alonso[3], Hai-Quan Mao[3], Rhoel David Ramos Dinglasan[1,2]
[1]The University of Florida Emerging Pathogens Institute, Department of Infectious Diseases & Pathology, Gainesville FL 32611, USA. [2] W. Harry Feinstone Department of Molecular Microbiology & Immunology, The Johns Hopkins Malaria Research Institute, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland 21205, USA. [3]Department of Materials Science and Engineering, Johns Hopkins University, Baltimore, MD 21218, USA.[4]Vaccine and Infectious Diseases Unit. Department of Immunology and Pathology, Monash University, Melbourne, Victoria 3052, Australia.

33. **Sex predicts the efficacy of immunization with irradiated *Plasmodium* Sporozoites.**
Landon G. vom Steeg[1], Yevel Flores-Garcia[1], Kimberly E. Rousseau[3], Fidel P. Zavala[1], and Sabra L. Klein[1,2]
[1]W. Harry Feinstone Department of Molecular Microbiology and Immunology, [2]Department of Biochemistry and Molecular Biology, The Johns Hopkins Bloomberg School of Public Health; [3]Department of Molecular and Comparative Pathobiology, The Johns Hopkins School of Medicine, Baltimore, Maryland

34. **Defining Gene Regulatory Systems in Malaria Parasites with Single-Plasmid, Ribozyme-Guide-Ribozyme CRISPR Interference**
Michael P. Walker[1], Scott E. Lindner[1]
[1]Department of Biochemistry and Molecular Biology, Center for Malaria Research, Pennsylvania State University, University Park, PA.

35. **Investigation of cellular interactions between *Plasmodium* parasites and *Anopheles* salivary glands**
Michael B. Wells, Jordan Villamor, and Deborah J. Andrew
Department of Cell Biology, Johns Hopkins University School of Medicine, Baltimore, MD 21205

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*Late-Breaker*

36. **Comparative Assessment of Viral Vectored and Protein-in-Adjuvant Platforms for Delivery of Transmission-Blocking Vaccine Candidates against *Plasmodium falciparum***
Daria Nikolaeva[1,2], Iona Brian[1], Hugh Johnson[1], Alex Fyfe[1], Melissa C. Kapulu[1], Rebecca Dabbs[1], Darren Leneghan[1], Adrian V. S. Hill[1], Kazutoyo Miura[2], Carole A. Long[2], Simon J. Draper[1], and Sumi Biswas[1]
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