## **Young Investigator Award Session C**

Sunday, October 28, 2018, 10:00 am - 3:00 pm Sheraton - Rhythms III (2nd Floor)

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<br>Number | Title   | Author Block   |
|------------------------|---|--|
|                        | Judge   | Sasisekhar Bennuru<br>National Institutes of Health, Bethesda, MD,<br>United States  |
|                        | Judge   | Nicholas A. Bergren<br>Colorado State University, Fort Collins, CO,<br>United States   |
|                        | Judge   | Nicole Gottdenker<br>Odum School of Ecology, University of<br>Georgia, ATHENS, GA, United States   |
|                        | Judge   | Prakash Srinivasan<br>Johns Hopkins School of Public Health,<br>Baltimore, MD, United States   |
| 16                     | Introducing <i>S. mansoni</i> AMP-<br>activated Protein Kinase (AMPK):<br>Developmental Regulation,<br>Activity, and Role in Schistosome<br>Energy Metabolism           | Kasandra S. Hunter<br>Uniformed Services University, North<br>Bethesda, MD, United States  |
| 264                    | Selection of seven-mutation<br>Pfcrt-Pfmdr1 genotype after<br>scaling seasonal malaria<br>chemoprevention with<br>sulphadoxine-pyrimethamine<br>and amodiaquine in Mali | Hamma I. Maiga <sup>1</sup> , Amadou Bamadio <sup>2</sup> , Aliou Traore <sup>2</sup> , Nouhoum Diallo <sup>2</sup> , Modibo Diarra <sup>2</sup> , Issaka Sagara <sup>2</sup> , Samba Coumare <sup>2</sup> , Soma Bahonan <sup>3</sup> , Boubou Sangare <sup>2</sup> , Hamidou Niangaly <sup>2</sup> , Aboubecrine Haidara <sup>2</sup> , Yeyia Dicko <sup>2</sup> , Aly Tembely <sup>2</sup> , Francois Daou <sup>2</sup> , Djibril Traore <sup>2</sup> , Michel Vaillant <sup>4</sup> , Alassane Dicko <sup>2</sup> , Estrela Lasry <sup>3</sup> , Ogobara K. Doumbo <sup>2</sup> , Abdoulaye A. Djimde <sup>2</sup> <sup>1</sup> INRSP-Mali/MRTC, Bamako, Mali, <sup>2</sup> MRTC, Bamako, Mali, <sup>3</sup> MSF, Bamako, Mali, <sup>4</sup> LIH, Luxembourg, Luxembourg |
| 350                    | Whole genome sequencing to measure complexity of infection and genetic diversity in   | <b>Sonia Agrawal</b> <sup>1</sup> , Fang Huang <sup>2</sup> , Biraj Shrestha <sup>1</sup> , Matthew Adams <sup>1</sup> , Sandra Ott <sup>3</sup> , Lisa Sadzewicz <sup>3</sup> , Hui Lui <sup>4</sup> , David Serre <sup>3</sup> , Shannon   |

|     | Plasmodium vivax clinical isolates<br>from the China-Myanmar<br>border  | Takala-Harrison <sup>1</sup> , Myaing Nyunt <sup>5</sup> , Joana Carneiro Da Silva <sup>3</sup> , Christopher Plowe <sup>5</sup> <sup>1</sup> Institute for Global Health, University of Maryland School of Medicine, Baltimore, Baltimore, MD, United States, <sup>2</sup> National Institute of Parasitic Diseases, Chinese Centre for Disease Control and Prevention, Shanghai, China, <sup>3</sup> Institute for Genome Sciences, University of Maryland School of Medicine, Baltimore, Baltimore, MD, United States, <sup>4</sup> Yunnan Institute of Parasitic Diseases, Puer, China, <sup>5</sup> Global Health Institute, Duke University, Durham, NC, United States |
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| 866 | Genome-wide association study identifies genes underlying dengue virus susceptibility in wild-type Aedes aegypti fed on viremic human blood | Laura B. Dickson <sup>1</sup> , Albin Fontaine <sup>1</sup> , Sarah H. Merkling <sup>1</sup> , Benjamin R. Evans <sup>2</sup> , Andrea Gloria- Soria <sup>2</sup> , Mo Li <sup>2</sup> , Xiaoqing Yu <sup>2</sup> , Kuang-Yao Lee <sup>2</sup> , Lauren B. Carrington <sup>3</sup> , Cameron P. Simmons <sup>4</sup> , Hongyu Zhao <sup>2</sup> , Jeffrey R. Powell <sup>2</sup> , Louis Lambrechts <sup>1</sup> <sup>1</sup> Pasteur Institute, Paris, France, <sup>2</sup> Yale University, New Haven, CT, United States, <sup>3</sup> Oxford University Clinical Research Unit, Ho Chi Minh City, Viet Nam, <sup>4</sup> Monash University, Monash, Australia             |
| 878 | Upgrade of a physical genome map for <i>Aedes aegypti</i>   | Atashi Sharma <sup>1</sup> , Vladimir Timoshevskiy <sup>2</sup> , Wu<br>Yang <sup>1</sup> , Igor Sharakhov <sup>1</sup> , Zhijian (Jake) Tu <sup>1</sup> ,<br>Maria Sharakhova <sup>1</sup><br><sup>1</sup> Virginia Tech, Blacksburg, VA, United States,<br><sup>2</sup> University of Kentucky, Lexington, KY, United<br>States  |
| 927 | Structural proteins prME dictate<br>sexual transmission potential of<br>ZIKV in an immunocompetent<br>mouse model                           | Erin M. McDonald <sup>1</sup> , Nisha K. Duggal <sup>2</sup> , Jana M. Ritter <sup>3</sup> , Aaron C. Brault <sup>1</sup> <sup>1</sup> Division of Vector-Borne Diseases, Centers for Disease Control and Prevention, Fort Collins, CO, United States, <sup>2</sup> Department of Biomedical Sciences & Pathobiology, Virginia-Maryland College of Veterinary Medicine, Blacksburg, VA, United States, <sup>3</sup> Division of High-Consequence Pathogens and Pathology, Centers for Disease Control and Prevention, Atlanta, GA, United States   |

| 1053 | Genome-wide differences in <i>P. falciparum</i> parasites in Malawian children and adults  | Zalak Shah <sup>1</sup> , Kara Moser <sup>1</sup> , Matthew Adams <sup>1</sup> , Andrea Buchwald <sup>1</sup> , Karl Seydel <sup>2</sup> , Don Mathanga <sup>3</sup> , David Serre <sup>1</sup> , Miriam K. Laufer <sup>1</sup> , Joana C. Silva <sup>1</sup> , Shannon Takala-Harrison <sup>1</sup> <sup>1</sup> University of Maryland School of Medicine, Baltimore, MD, United States, <sup>2</sup> Michigan State University College of Osteopathic Medicine, East Lansing, MI, United States, <sup>3</sup> University of Malawi College of Medicine, Blantyre, Malawi  |
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| 1170 | Minimal genetic diversity and spatial clustering of cholera cases in the Kathmandu Valley: Implications for a ring-vaccination strategy  | Mellisa Roskosky, Mohammad Ali, Jyoti<br>Acharya, Amanda Debes, Colin Stine, David<br>Sack<br>Johns Hopkins University, Baltimore, MD,<br>United States  |
| 2018 | Study of changes in the transcriptome of mouse bladder following bladder wall injection of Schistosoma haematobium eggs  | Kenji Ishida, Evaristus Mbanefo, Loc Le,<br>Michael Hsieh<br>Biomedical Research Institute, Rockville, MD,<br>United States  |
| 2051 | Extreme diversity and population structure of var genes can explain why immunity to the blood stages of Plasmodium falciparum is non-sterilizing                                 | Shazia Ruybal-Pesántez <sup>1</sup> , Kathryn E. Tiejde <sup>1</sup> , Gerry Tonkin-Hill <sup>2</sup> , Shai Pilosof <sup>3</sup> , Abraham R. Oduro <sup>4</sup> , Michael F. Duffy <sup>1</sup> , Kwadwo A. Koram <sup>5</sup> , Mercedes Pascual <sup>3</sup> , Karen P. Day <sup>1</sup> <sup>1</sup> University of Melbourne, Melbourne, Australia, <sup>2</sup> Walter and Eliza Hall Institute, Melbourne, Australia, <sup>3</sup> University of Chicago, Chicago, IL, United States, <sup>4</sup> Navrongo Health Research Centre, Navrongo, Ghana, <sup>5</sup> Noguchi Memorial Institute for Medical Research, Legon, Ghana |
| 2069 | Transcriptome profiling unravels<br>novel ligands required for<br>Plasmodium vivax infections in<br>Saimiri monkey - Implications on<br>Plasmodium vivax infections in<br>Africa | Karthigayan Gunalan <sup>1</sup> , Juliana M. Sa <sup>1</sup> , Roberto R. de Moraes Barros <sup>1</sup> , Kishore Kanakabandi <sup>2</sup> , Sarah L. Anzick <sup>2</sup> , Ramoncito L. Caleon <sup>1</sup> , J. Patrick Mershon <sup>1</sup> , Craig Martens <sup>2</sup> , Thomas E. Wellems <sup>1</sup> , Louis H. Miller <sup>1</sup> <sup>1</sup> National Institutes of Health, Rockville, MD, United States, <sup>2</sup> National Institutes of Health, Hamilton, MT, United States   |
| 2081 | Characterization of Genetic<br>Variation Between Host-specific<br><i>Theileria parva</i> Populations   | <b>Nicholas C. Palmateer</b> <sup>1</sup> , Claudia A.<br>Daubenberger <sup>2</sup> , Richard P. Bishop <sup>3</sup> , Joana C.<br>Silva <sup>1</sup>  |

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