

# 2020 ANNUAL ANNUAL METRO TORONTO CONVENTION CENTRE TORONTO ONTARIO CANADA

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# LATE-BREAKER ABSTRACTS PRESENTATION SCHEDULE

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#### Late-Breaker Abstract Session 42 Late-Breakers in Basic Sciences Oral Presentations Tuesday, November 17, 9 am - 10:45 am

Meeting Room 11

#### CHAIR

Katherine R. Dobbs Case Western Reserve University, Cleveland, OH, United States

Wei-Kung Wang University of Hawaii at Manoa, Honolulu, HI, United States

#### LB-5062

# Analysis of a novel fluorescence and DNA combination for complex, long-term marking of mosquitoes in the field

**Benjamin J. Krajacich**<sup>1</sup>, Roy Faiman<sup>1</sup>, Leland Graber<sup>1</sup>, Adama Dao<sup>2</sup>, Alpha Yaro<sup>2</sup>, Ousmane Yossi<sup>2</sup>, Zana Lamissa Sonogo<sup>2</sup>, Moussa Diallo<sup>2</sup>, Djibril Samaké<sup>2</sup>, Daman Sylla<sup>2</sup>, Moribo Coulibaly<sup>2</sup>, Salif Kone<sup>2</sup>, Sekou Goita<sup>2</sup>, Mamadou B. Coulibaly<sup>2</sup>, Olga Muratova<sup>3</sup>, Ashley McCormack<sup>3</sup>, Bronner P. Gonçalves<sup>3</sup>, Jennifer Hume<sup>3</sup>, Patrick Duffy<sup>3</sup>, Tovi Lehmann<sup>1</sup>

<sup>1</sup>National Institute of Allergy and Infectious Disease, Rockville, MD, United States, <sup>2</sup>Malaria Research and Training Center (MRTC)/ Faculty of Medicine, Pharmacy and Odonto-stomatology, University of Sciences, Techniques and Technologies, Bamako, Mali, <sup>3</sup>National Institute of Allergy and Infectious Disease, Bethesda, MD, United States

#### LB-5063

#### **Bioinformatic and cell-based CRISPR tools for functional genomics in mosquitos**

**Enzo Mameli**<sup>1</sup>, Raghuvir Viswanatha<sup>1</sup>, Jonathan Rodiger<sup>1</sup>, Fabiana Feitosa-Suntheimer<sup>2</sup>, Tonya M. Colpitts<sup>2</sup>, Stephanie E. Mohr<sup>1</sup>, Yanhui Hu<sup>1</sup>, Norbert Perrimon<sup>3</sup>

<sup>1</sup>Harvard Medical School, Boston, MA, United States, <sup>2</sup>Boston University School of Medicine, Boston, MA, United States, <sup>3</sup>Harvard Medical School, Howard Hughes Medical Institute, Boston, MA, United States

#### LB-5064

# The Mosquito borne diseases of Africa: A continental diseasosome-vectorome incorporating the One Health paradigm

**Tovi Lehmann**<sup>1</sup>, Cedric Kouam<sup>1</sup>, Joshua Woo<sup>2</sup> <sup>1</sup>NIAID/NIH, Rockville MD, MD, United States, <sup>2</sup>Johns Hopkins University, Baltimore MD, MD, United States

#### LB-5065

# CRISPR-cas9 based single copy Ss-act2P::GFP knock-in integration at safe genomic locus in*S. stercoralis*produced stable transgenic line

**Tegegn G. Jaleta**, Xinshe Li, James B. Lok University of Pennsylvania, Philadelphia, PA, United States

#### LB-5066

# Extreme loss of heterozygosity on chromosome X in natural and laboratory populations of *Brugia* nematodes

John S. Mattick<sup>1</sup>, SIlva Libro<sup>2</sup>, Robin Bromley<sup>1</sup>, Wanpen Chaicumpa<sup>3</sup>, Matthew Chung<sup>1</sup>, Darren Cook<sup>4</sup>, Mohammed B. Khan<sup>5</sup>, Nikhil Kumar<sup>1</sup>, Yee-Ling Lau<sup>5</sup>, Shailja Misra-Bhattacharya<sup>6</sup>, Ramakrishna Rao<sup>7</sup>, Lisa Sadzewicz<sup>1</sup>, Atiporn Saeung<sup>3</sup>, Mohd Shahab<sup>6</sup>, Andrew Steven<sup>4</sup>, Joseph Turner<sup>4</sup>, Luke J. Tallon<sup>1</sup>, Mark Taylor<sup>4</sup>, Andrew Moorhead<sup>8</sup>, Michelle Michalski<sup>9</sup>, Jeremy M. Foster<sup>2</sup>, Julie C. Dunning Hotopp<sup>1</sup>

<sup>1</sup>University of Maryland Baltimore, Baltimore, MD, United States, <sup>2</sup>New England Biolabs, Ipswich, MA, United States, <sup>3</sup>Chiang Mai University, Chiang Mai, Thailand, <sup>4</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom, <sup>5</sup>University of Malaya, Kuala Lumpur, India, <sup>6</sup>CSIR-Central Drug Research Institute, Lucknow, India, <sup>7</sup>Washington University School of Medicine, St Louis, MO, United States, <sup>8</sup>University of Georgia, Athens, GA, United States, <sup>9</sup>University of Wisconsin Oshkosh, Oshkosh, WI, United States Late-Breaker Abstract Session 42 Late-Breakers in Basic Sciences

#### **Oral Presentations**

Tuesday, November 17, 9 am - 10:45 am

Meeting Room 11

#### LB-5067

# A novel method for the longitudinal determination of individual mosquito transmission potential

**E. Handly Mayton,** Rebecca C. Christofferson Louisiana State University, Baton Rouge, LA, United States

#### LB-5068

A machine learning approach to NTD genomics research

Kyle Tretina Meenta, Inc., Somerville, MA, United States Late-Breaker Abstract Session 70 Late-Breakers in Malaria Oral Presentations Wednesday, November 18, 9 am - 10:45 am Meeting Room 8

#### CHAIR

Miranda Oakley FDA, Silver Spring, MD, United States

Silvia M. Di Santi São Paulo University, São Paulo, Brazil

#### LB-5138

## *Plasmodium vivax* strains use alternative pathways for invasion

**Usheer Kanjee**<sup>1</sup>, Christof Grüring<sup>1</sup>, Prasad Babar<sup>2</sup>, Anosha Meyers<sup>1</sup>, Rashmi Dash<sup>2</sup>, Ligia Pereira<sup>2</sup>, Anjali Mascarenhas<sup>2</sup>, Mudit Chaand<sup>1</sup>, Gabriel W. Rangel<sup>1</sup>, Martha A. Clark<sup>1</sup>, Laura Chery<sup>2</sup>, Edwin Gomes<sup>3</sup>, Pradipsinh K. Rathod<sup>2</sup>, Manoj T. Duraisingh<sup>1</sup> <sup>1</sup>Harvard TH Chan School of Public Health, Boston, MA, United States, <sup>2</sup>University of Washington, Seattle, WA, United States, <sup>3</sup>Department of Medicine, Goa Medical College Hospital, Bambolim, Goa, India

#### LB-5139

#### Boil & Spin Malachite Green Loop Mediated Isothermal Amplification (LAMP) for rapid malaria detection in the Peruvian Amazon

Keare A. Barazorda<sup>1</sup>, **Carola J. Salas**<sup>2</sup>, Greys Braga<sup>2</sup>, Leonila Ricopa<sup>3</sup>, Ljolje Dragan<sup>4</sup>, Sonia Ampuero<sup>2</sup>, Crystyan Siles<sup>5</sup>, Stephen E. Lizewski<sup>2</sup>, Christie A. Joya<sup>2</sup>, Danett K. Bishop<sup>2</sup>, Naomi Lucchi<sup>4</sup>, Hugo O. Valdivia<sup>2</sup> <sup>1</sup>PRISMA, Lima, Peru, <sup>2</sup>NAMRU-6, Lima, Peru, <sup>3</sup>PRISMA, Iquitos, Peru, <sup>4</sup>CDC, Atlanta, GA, United States, <sup>5</sup>NAMRU-6, Iquitos, Peru

#### LB-5140

# High efficacy of the malaria vaccine candidate R21/Matrix-M (R21/MM) in Burkina Faso children

Hamtandi Magloire Natama<sup>1</sup>, Mehreen S. Datoo<sup>2</sup>, Ousmane Traoré<sup>1</sup>, Athanase M. Somé<sup>1</sup>, Toussaint Rouamba<sup>1</sup>, Duncan Bellamy<sup>2</sup>, Prisca S. Yaméogo<sup>1</sup>, Moubarak Tegneri<sup>1</sup>, Daniel Valia<sup>1</sup>, Florence D. Ouédraogo-Yerbanga<sup>1</sup>, Rachidatou Soma-Kyélem<sup>1</sup>, Karim Derra<sup>1</sup>, Eli Rouamba<sup>1</sup>, Faizatou Sorgho<sup>1</sup>, Fernando Ramos-Lopez<sup>2</sup>, Amy Flaxman<sup>2</sup>, Alisson Lawrie<sup>2</sup>, Rachel Roberts<sup>2</sup>, Innocent Valéa<sup>1</sup>, Hermann Sorgho<sup>1</sup>, Katie J. Ewer<sup>2</sup>, Umesh Shaligram<sup>3</sup>, Adrian V. Hill<sup>2</sup>, Halidou Tinto<sup>1</sup>

<sup>1</sup>Clinical Research Unit of Nanoro, Ouagadougou, Burkina Faso, <sup>2</sup>The Jenner Institute, University of *Oxford, Oxford, United Kingdom, <sup>3</sup>Serum Institute of India, Pune, India* 

#### LB-5141

## Clearance of *Plasmodium falciparum*-infected red blood cells by NK cells and monocytes

**Padmapriya Sekar**, Gunjan Arora, Eric O. Long National Institutes of Health, Rockville, MD, United States

#### LB-5142

## Deciphering immune hyporesponsiveness in malaria-endemic countries

**Anton Goetz**<sup>1</sup>, Charles Arama<sup>2</sup>, Aissata Ongoiba<sup>2</sup>, Safiatou Doumbo<sup>2</sup>, Didier Doumtabé<sup>2</sup>, Kassoum Kayentao<sup>2</sup>, Jeff Skinner<sup>1</sup>, Shanping Li<sup>1</sup>, Boubacar Traore<sup>2</sup>, Peter D. Crompton<sup>1</sup> <sup>1</sup>NIH/NIAID, Rockville, MD, United States, <sup>2</sup>Malaria Research and Training Centre, Bamako, Mali Late-Breaker Abstract Session 70 Late-Breakers in Malaria

#### **Oral Presentations**

Wednesday, November 18, 9 am - 10:45 am

Meeting Room 8

#### LB-5143

Kinetics of cytokine profiles during asymptomatic malaria parasite carriage in an area with high stable transmission of *Plasmodium falciparum* in Cameroon, and the effect of antimalarial treatment

**Balotin Fogang**<sup>1</sup>, Mathieu Schoenhals<sup>2</sup>, Franklin Maloba<sup>3</sup>, Estelle Essangui<sup>4</sup>, Christiane Donkeu<sup>2</sup>, Marie Abite<sup>5</sup>, Glwadys Cheteug<sup>6</sup>, Marie Kapen<sup>7</sup>, Rodrigue Keumoe<sup>2</sup>, Sylvie Kemleu<sup>2</sup>, Rosette Megnekou<sup>8</sup>, Tracey Lamb<sup>9</sup>, Lawrence Ayong<sup>7</sup> <sup>1</sup>University of Yaounde I/Centre Pasteur Cameroon, YAOUNDE, Cameroon, <sup>2</sup>University of Yaounde I/Centre Pasteur Cameroon, Yaounde, Cameroon, <sup>3</sup>Department of Pathology, Salt Lake City, UT, United States, <sup>4</sup>University of Douala / Centre Pasteur Cameroon, Yaounde, Cameroon, <sup>5</sup>University of Douala/Centre Pasteur Cameroon, Yaounde, Cameroon, <sup>6</sup>University of Buea / Centre Pasteur Cameroon, Yaounde, Cameroon, <sup>8</sup>University of Yaounde, I, YAOUNDE, Cameroon, <sup>9</sup>University of Utah, Salt Lake City, UT, United States

#### LB-5144

*Plasmodium falciparum* genetic diversity is regenerated during the wet season in the Upper River Region of The Gambia

Marc-Antoine Guery CNRS, Montpellier, France

## Late-Breaker Abstract Session 101 Late-Breakers in Clinical and Applied Sciences

#### **Oral Presentations**

Wednesday, November 18, 3:45 pm - 5:30 pm Meeting Room 3

#### CHAIR

Miguel M. Cabada University of Texas Medical Branch, Galveston, TX, United States

Jason D. Maguire *Pfizer, White Plains, NY, United States* 

#### LB-5208

PREVAIL IV: A Randomized, Double-Blind, Two-Phase, Phase 2 Trial of Remdesivir versus Placebo for Acute and Longer-Term Reduction of Ebola virus RNA in the Semen of Male Survivors

**Dehkontee Gayedyu-Dennis**<sup>1</sup>, William Fischer<sup>2</sup>, Abdoul H. Beavogui<sup>3</sup>, Elizabeth Higgs<sup>4</sup> <sup>1</sup>Partnership for Research on Vaccines and Infectious Diseases, Paynesville, Liberia, <sup>2</sup>University of North Carolina, Chapel Hill, NC, United States, <sup>3</sup>Centre National et de Recherche en Sante Rurale de Maferenya, Maferenya, Guinea, <sup>4</sup>National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

#### LB-5209

A Phase I Clinical Trial Demonstrates Safety and Immunogenicity of a Western, Eastern, Venezuelan equine encephalitis (WEVEE) Viruslike Particle Vaccine in Healthy Adults

**Grace L. Chen Phillips**<sup>1</sup>, Srilatha Edupuganti<sup>2</sup>, Emily E. Coates<sup>1</sup>, Alicia Widge<sup>1</sup>, Myroslawa Happe<sup>1</sup>, Josephine Cox<sup>1</sup>, Jason Liang<sup>3</sup>, Sarah Plummer<sup>1</sup>, Ingelise Gordon<sup>1</sup>, Abidemi Ola<sup>1</sup>, Sharon Curate-Ingram<sup>2</sup>, Shashi Nagar<sup>2</sup>, Matthew Collins<sup>2</sup>, Thuy A. Nguyen<sup>1</sup>, Maria Burgos Florez<sup>1</sup>, Charla Andrews<sup>1</sup>, Galina Yamshchikov<sup>1</sup>, Sandra Vazquez<sup>1</sup>, Kevin Carlton<sup>1</sup>, John Mascola<sup>1</sup>, Julie E. Ledgerdood<sup>1</sup> <sup>1</sup>Vaccine Research Center/NIAID/NIH, Bethesda, MD, United States, <sup>2</sup>The Hope Clinic of the Emory Vaccine Center/Emory University, Atlanta, GA, United States, <sup>3</sup>Biostatistics Research Branch/NIAID/NIH, Bethesda, MD, United States

#### LB-5210

#### Identification Of Key Gene Signatures Using Machine Learning Visual Recognition In Environmental Enteropathy

**Sana Syed**<sup>1</sup>, Yael Haberman<sup>2</sup>, Najeeha T. Iqbal<sup>3</sup>, Kamran Sadiq<sup>3</sup>, Lubaina Ehsan<sup>4</sup>, Aman Shrivastava<sup>4</sup>, Saad Mallick<sup>5</sup>, Sheraz Ahmed<sup>3</sup>, Fayaz Umrani<sup>5</sup>, Christopher A. Moskaluk<sup>4</sup>, Lee A. Denson<sup>2</sup>, Donald E. Brown<sup>4</sup>, Sean R. Moore<sup>4</sup>, Syed Asad Ali<sup>3</sup> <sup>1</sup>Aga Khan University and University of Virginia, Charlottesville, VA, United States, <sup>2</sup>Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States, <sup>3</sup>Aga Khan University, Karachi, Pakistan, <sup>4</sup>University of Virginia, Charlottesville, VA, United States, <sup>5</sup>Aga Khan University, karachi, Pakistan

#### LB-5211

# Efficacy of *Wolbachia*-infected mosquito deployments for the control of dengue in Yogyakarta, Indonesia

Citra Indriani<sup>1</sup>, **Katherine L. Anders**<sup>2</sup>, AWED Study Group<sup>3</sup>

<sup>1</sup>University of Gadjah Mada, Yogyakarta, Indonesia, <sup>2</sup>Monash University, Clayton, Australia, <sup>3</sup>, Indonesia

#### LB-5212

#### First Line Antimicrobials among Children with Complicated Severe Acute Malnutrition (FLACSAM) - a randomized controlled trial

James A. Berkley<sup>1</sup>, The FLACSAM-RCT Study Group<sup>2</sup> <sup>1</sup>University of Oxford, Oxford, United

*Kingdom, <sup>2</sup>KEMRI/Wellcome Trust Research Programme, Kilifi, Kenya*  Late-Breaker Abstract Session 101

Late-Breakers in Clinical and Applied Sciences

#### **Oral Presentations**

Wednesday, November 18, 3:45 pm - 5:30 pm Meeting Room 3

#### LB-5213

## Field Effectiveness of a Typhoid Conjugate Vaccine — Navi Mumbai (India), 2018-2020

Kashmira A. Date<sup>1</sup>, Pauline Harvey<sup>2</sup>, Pankaj Bhatnagar<sup>2</sup>, Qian An<sup>1</sup>, Jason Andrews<sup>3</sup>, Rahul Shimpi<sup>2</sup>, Pradeep Haldar<sup>4</sup>, Niniya Jayaprasad<sup>2</sup>, Arun Katkar<sup>2</sup>, Abhishek Kunwar<sup>2</sup>, Kirsten Fagerli<sup>1</sup>, Lily Horng<sup>3</sup>, Vijay Yewale<sup>5</sup>, Chenhua Zhang<sup>1</sup>, Debjit Chakraborty<sup>6</sup>, Priyanka Borhade<sup>2</sup>, Chris Leboa<sup>3</sup>, Shanta Dutta<sup>6</sup>, Stephen Luby<sup>3</sup> <sup>1</sup>Centers for Disease Control and Prevention (CDC), Atlanta, GA, United States, <sup>2</sup>World Health Organization, India Country Office, New Delhi, India, <sup>3</sup>Stanford University, San Francisco, CA, United States, <sup>4</sup>Ministry of Health and Family Welfare, Government of India, India, New Delhi, India, <sup>5</sup>Dr. Yewale Multispecialty Hospital, Navi Mumbai, India, <sup>6</sup>National Institute of Cholera and Enteric Diseases (ICMR-NICED), Kolkata, India

### Late-Breaker Abstract Session 103 Late-Breakers in Coronavirus

#### **Oral Presentations**

Wednesday, November 18, 3:45 pm - 5:30 pm Meeting Room 5

#### CHAIR

Noreen A. Hynes Johns Hopkins School of Medicine, Baltimore, MD, United States

Katherine R. Dobbs Case Western Reserve University, Cleveland, OH, United States

#### LB-5214

A comparative recombination analysis of SARS-CoV-2 and other human coronaviruses: epidemiological and evolutionary implications

**Irina Maljkovic Berry**, Simon Pollett, Mark Sanborn Walter Reed Army Institute of Research, Silver Spring, MD, United States

#### LB-5215

A systematic review of surface contamination, stability, and disinfection data on SARS-CoV-2 (January 1 - July 10, 2020)

Noah Bedrosian, Elizabeth Mitchell, Elsa Rohm, Miguel Rothe, Christine Kelly, **Gabrielle String**, Daniele Lantagne *Tufts University, Medford, MA, United States* 

#### LB-5216

## Survey-mediated assessment of COVID-19 and health care workers across Africa

Nasreen Syeda Quadri<sup>1</sup>, Amir Sultan<sup>2</sup>, Mirghani Yousif<sup>3</sup>, Johnstone Kayandabila<sup>4</sup>, Ifeorah Ijeoma<sup>5</sup>, Sophia Ibrahim Ali<sup>6</sup>, Abdelmajeed Moussa<sup>7</sup>, Sahar M. Hassany<sup>7</sup>, Mark Jacobson<sup>4</sup>, Kenneth Ssebambulidde<sup>8</sup>, Lucy Ochola<sup>9</sup>, Martha Binta Bah<sup>10</sup>, Jose D. Debes<sup>11</sup> <sup>1</sup>Allina Health, Minneapolis, MN, United States, <sup>2</sup>Addis Ababa University, Addis Ababa, Ethiopia, <sup>3</sup>University of Gezira, Gezira, Sudan, <sup>4</sup>Arusha Lutheran Medical Centre, Arusha, Tanzania, United Republic of, <sup>5</sup>University of Nigeria, Nsukka, Nigeria, <sup>6</sup>University of Minnesota School of Public Health, Minneapolis, MN, United States, <sup>7</sup>Aswan University Hospital, Aswan, Egypt, <sup>8</sup>Makerere University, Kampala, Uganda, 9Institute for Primate Research, Nairobi, Kenya, <sup>10</sup>University of Sierra Leone, Sierra Leone, Sierra Leone, <sup>11</sup>University of Minnesota; Department of Gastroenterology and Hepatology, Hennepin Healthcare; Arusha Lutheran Medical Center, Minneapolis, MN, United States

#### LB-5217

#### Development of a SARS-CoV2 vaccine: detailed analysis of the immune response after ChAdOx1 nCoV19 (AZD1222) vaccination

**Teresa Lambe**<sup>1</sup>, Oxford COVID Vaccine Trial Group<sup>2</sup> <sup>1</sup>The Jenner Institute, University of Oxford, oxford, United Kingdom, <sup>2</sup>University of Oxford, Oxford, United Kingdom

#### LB-5218

## Usage of Facemasks During the COVID-19 Pandemic in Thailand

**Richard J. Maude**<sup>1</sup>, Worarat Khuenpetch<sup>1</sup>, Nattwut Ekapirat<sup>1</sup>, Panarasri Khonputsa<sup>1</sup>, Chawarat Rotejanaprasert<sup>1</sup>, Anchalee Jatapai<sup>1</sup>, Kulchada Pongsoipetch<sup>1</sup>, Borworn Panklang<sup>1</sup>, Monnaphat Jongdeepaisal<sup>1</sup>, Orathai Prasert<sup>1</sup>, Ratchaneewan Sinitkul<sup>1</sup>, Suphitsara Maneenet<sup>1</sup>, Rapeephan Maude<sup>2</sup> <sup>1</sup>Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand, <sup>2</sup>Faculty of Medicine Ramathibodi Hospital, Bangkok, Thailand

#### LB-5219

#### Serial population based serosurvey of antibodies to Severe acute respiratory syndrome coronavirus 2 in a high and low transmission area of Karachi, Pakistan

**Fyezah Jehan**, Imran Nisar, Nadia Ansari, Aneeta Hotwani, Mashal Amin, Farah Khalid *Aga Khan University, Karachi, Pakistan* 

#### LB-5220

#### Variation in COVID-19 Excess Mortality by Age, Sex, and Province within Italy

#### Nathaniel Henry

Institute for Health Metrics and Evaluation, Seattle, WA, United States

#### Poster Session 17 Poster Session A Late-Breakers in Basic Sciences

Monday, November 16, 1:30 pm - 3 pm Poster Hall

Arthropods/Entomology	#LB-5000 through LB-5010
Bacteriology and Diarrhea	#LB-5011
Helminths - Nematodes	#LB-5012 through LB-5014
Kinetoplastida	#LB-5015

#### LB-5000

#### Joint Operational Entomology Capacity Building for the Ghana Armed Forces and Ghana Police Services

**Lydia D. Alphonse**<sup>1</sup>, Edward O. Nyarko<sup>2</sup>, Samuel Otu-Nyarko<sup>3</sup>, Andrew G. Letizia<sup>4</sup>, Edward D. Kosterman<sup>5</sup>, Samuel Dadzie<sup>6</sup>, Joseph W. Diclaro, II<sup>1</sup> <sup>1</sup>US Navy, Jacksonville, FL, United States, <sup>2</sup>Public Health Department, Ghana Armed Forces, Accra, Ghana, <sup>3</sup>Public Health Department, Ghana Police Services, Accra, Ghana, <sup>4</sup>Naval Medical Research Center, Silver Spring, MD, United States, <sup>5</sup>AFRICOM, Command Surgeon Office, Stuttgart, Germany, <sup>6</sup>Noguchi Memorial Institute for Medical Research, Accra, Ghana

#### LB-5001

#### The effect of rainfall and mosquito collection methods on vector density surveillance in Liberia, West Africa

**Ibrahima Baber**<sup>1</sup>, Chrispin Williams<sup>2</sup>, Julius Gilayeneh<sup>2</sup>, Tuwuyor Belleh<sup>1</sup>, Georges Gweh<sup>2</sup>, Harris Momo<sup>3</sup>, Mamadou O. Diallo<sup>4</sup>, Jessica Kafuko<sup>5</sup>, Tiffany Clark<sup>6</sup>, Tony H. Hughes<sup>7</sup>, Sarah Burnett<sup>8</sup>, Yemane Yihdego<sup>9</sup>, Jennifer Armistead<sup>10</sup>

<sup>1</sup>U.S. President's Malaria Initiative (PMI) VectorLink (VL) Project, Abt Associates Inc, Monrovia, Liberia, <sup>2</sup>National Malaria Control Program, Ministry of Health, Monrovia, Liberia, <sup>3</sup>University of Liberia, Faculty of Sciences, Monrovia, Liberia, <sup>4</sup>Malaria Branch, Division of Parasitic Diseases and Malaria, Centers for Disease Control and Prevention, and U.S. President's Malaria Initiative, Monrovia, Liberia, <sup>5</sup>U.S. PMI, U.S. Agency for International Development (USAID), Monrovia, Liberia, <sup>6</sup>U.S. PMI VectorLink (VL) Project, Abt Associates Inc, Monrovia, Liberia, <sup>7</sup>Navy and Marine Corps Public Health Center Detachment, Entomology Branch/Division of Parasitic Diseases and Malaria, Centers for Disease Control and Prevention, and U.S. President's Malaria Initiative, Atlanta, GA, United States, <sup>8</sup>U.S. PMI VectorLink (VL) Project, PATH, Washington, DC, United States, <sup>9</sup>U.S. PMI VectorLink (VL) Project, Abt Associates Inc, Accra, Ghana, <sup>10</sup>U.S. PMI, USAID, Washington, DC, United States

#### LB-5002

#### URBAN MALARIA VECTOR BIONOMICS AND POPULATION BEHAVIOR IN THREE CITIES OF SENEGAL

**Abdoulaye Diop** *Abt Associates, Dakar, Senegal* 

#### LB-5003

## Whole Genome Sequencing of the Polynesian Tiger Mosquito, *Aedes polynesiensis*.

Jessica Grant<sup>1</sup>, Renna Bushko<sup>1</sup>, Allison Ahern<sup>1</sup>, Andrew Gonzalez<sup>1</sup>, Sara Halili<sup>1</sup>, Rachael Newhall<sup>1</sup>, Rachel Pietrow<sup>1</sup>, Jordan Stauduhar<sup>1</sup>, Hannah Wang<sup>1</sup>, Luo Sun<sup>2</sup>, Richard Morgan<sup>3</sup>, Barton Slatko<sup>3</sup>, Hervé Bossin<sup>4</sup>, Steven Williams<sup>5</sup> <sup>1</sup>Smith College, Northampton, MA, United States, <sup>2</sup>New England BioLabs, Inc., Ipswitch, MA, United States, <sup>3</sup>New England BioLabs, Inc., Ipswitch, MA, United States, <sup>4</sup>Institut Louis Malardé, Tahiti, French Polynesia, <sup>5</sup>University of Massachusetts, Amherst, MA, United States

#### LB-5004

## Genetically engineered endosymbionts of mosquitoes for use in paratransgenesis

**Emma Harris**<sup>1</sup>, Magdalena Franco<sup>2</sup>, Mimi Cho Yung<sup>2</sup>, Victoria Lao<sup>2</sup>, Erin Borland<sup>1</sup>, Tek Hyung Lee<sup>2</sup>, Nicole Collette<sup>2</sup>, Brad Borlee<sup>1</sup>, Tony Schountz<sup>1</sup>, Rebekah Kading<sup>1</sup>, Monica Borucki<sup>2</sup> <sup>1</sup>Colorado State University, Fort Collins, CO, United States, <sup>2</sup>Lawrence Livermore National Laboratory, Livermore, CA, United States

Suppression of the gene encoding oxidoreductin-like protein increases the ovarian degeneration and lower the survival rate of diapausing adult females of the mosquito *Culex pipiens* 

Bryan P. King, Cheolho Sim Baylor University, Waco, TX, United States

#### LB-5006

A database of mosquito borne diseases in Africa: Goals, structure, data, and preliminary queries

**Cedric Kouam**<sup>1</sup>, Joshua Woo<sup>2</sup>, Tovi Lehmann<sup>3</sup> <sup>1</sup>NIAID/NIH, Rockville, MD, United States, <sup>2</sup>Johns Hopkins, Baltimore, MD, United States, <sup>3</sup>NIAID/NIH, rockville, MD, United States

#### LB-5007

Effects of seasonality and land use on the diversity, relative abundance, and distribution of mosquitoes on St. Kitts, West Indies

**Courtney Murdock**<sup>1</sup>, Matthew Valentine<sup>2</sup>, Brenda Ciraola<sup>2</sup>, Gregory Jacobs<sup>3</sup>, Charlie Arnot<sup>2</sup>, Patrick Kelly<sup>2</sup>

<sup>1</sup>Cornell University, Ithaca, NY, United States, <sup>2</sup>Ross University School of Veterinary Medicine, Basseterre, Saint Kitts and Nevis, <sup>3</sup>University of Georgia, Athens, GA, United States

#### LB-5008

#### *Trypanosoma rangeli* affects vector in dosedependent manner when co-infecting with *Trypanosoma cruzi*

**Jennifer Kate Peterson**<sup>1</sup>, Omar Triana-Chavez<sup>2</sup>, Andrew P. Dobson<sup>3</sup>, Andrea L. Graham<sup>3</sup> <sup>1</sup>Portland State University, PORTLAND, OR, United States, <sup>2</sup>Universidad de Antioquia, Medellin, Colombia, <sup>3</sup>Princeton University, Princeton, NJ, United States

#### LB-5009

## The effect of roads on the population genetic structure of the dengue vector *Aedes aegypti*

**Maria Angenica Fulo Regilme**<sup>1</sup>, Thaddeus Carvajal<sup>1</sup>, Ann-Christin Honnen<sup>2</sup>, Divina Amalin<sup>3</sup>, Kozo Watanabe<sup>1</sup> <sup>1</sup>Ehime University, Matsuyama, Japan, <sup>2</sup>Swiss Tropical and Public Health Institute / University of Basel, Basel, Switzerland, <sup>3</sup>De La Salle University, Manila, Philippines

#### LB-5010

#### Vector competence of North American *Culex pipiens, Culex quinquefasciatus,* and *Aedes albopictus* for Usutu virus

**Christian L. Young**<sup>1</sup>, Yan-Jang S. Huang<sup>1</sup>, Amy C. Lyons<sup>1</sup>, Barry W. Alto<sup>2</sup>, Isik Unlu<sup>3</sup>, Stephen Higgs<sup>1</sup>, Dana L. Vanlandingham<sup>1</sup> <sup>1</sup>Kansas State University, Manhattan, KS, United States, <sup>2</sup>University of Florida, Vero Beach, FL, United States, <sup>3</sup>Miami Dade Department of Solid Waste Management, Miami, FL, United States

#### LB-5011

Generation and selection ofanti-chaperone antibodies against the essential exposed elements of *Listeria monocytogenes* and *Streptococcus pneumoniae* using ribosome display

**Adinarayana Kunamneni**<sup>1</sup>, Alsawi Mohammed<sup>1</sup>, Ravi Durvasula<sup>1</sup>, Laty A. Cahoon<sup>2</sup> <sup>1</sup>Loyola University Chicago, Maywood, IL, United States, <sup>2</sup>University of Pittsburgh, Pittsburgh, PA, United States

#### LB-5012

#### Predicting the impact of disruptions in lymphatic filariasis elimination programmes due to the outbreak of coronavirus disease (COVID-19) and possible mitigation strategies

**Emma L. Davis**<sup>1</sup>, Joaquin M. Prada<sup>2</sup>, Wilma A. Stolk<sup>3</sup>, Panayiota Touloupou<sup>4</sup>, Swarnali Sharma<sup>5</sup>, Johanna Munoz<sup>3</sup>, Rocio M. Caja Rivera<sup>5</sup>, Lisa J. Reimer<sup>6</sup>, Edwin Michael<sup>5</sup>, Sake J. de Vlas<sup>3</sup>, T Deirdre Hollingsworth<sup>1</sup> <sup>1</sup>University of Oxford, Oxford, United

Kingdom, <sup>2</sup>University of Surrey, Guildford, United Kingdom, <sup>3</sup>Erasmus MC, Rotterdam, Netherlands, <sup>4</sup>University of Warwick, Coventry, United Kingdom, <sup>5</sup>University of South Florida, Tampa, FL, United States, <sup>6</sup>Liverpool School of Tropical Medicine, Liverpool, United Kingdom

#### LB-5013

#### Models of Ascaris egg production and detection by Kato Katz diagnostic and their effectiveness for inference

James Truscott<sup>1</sup>, Alice V. Easton<sup>2</sup>, Roy M. Anderson<sup>1</sup> <sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>National Institutes of Health, Bethesda, MD, United States

Optimising drug use to develop sustainable control strategies for soil-transmitted helminths beyond the World Health Organization 2030 goals

**Carolin Vegvari**<sup>1</sup>, Federica Giardina<sup>2</sup>, Veronica Malizia<sup>2</sup>, Luc Coffeng<sup>2</sup>, Roy Anderson<sup>1</sup> <sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>Erasmus MC, Rotterdam, Netherlands

#### LB-5015

Bioinformatics Analysis Identifies Gene Homologies between *Trypanosoma cruzi* Antigen 36 and Mammalian Ro5

Martin A. Winkler Biotech Advisor, LAWRENCE, KS, United States

#### Poster Session 17 Poster Session A Late-Breakers in Clinical and Applied Sciences

*Monday, November 16, 1:30 pm - 3 p.m. Poster Hall* 

Global Health Integrated Control Measures for Neglected Tropical Diseases Kinetoplastida	.#LB-5029	through LB-5046
Viruses (all other viruses) Coronavirus	.#LB-5048	through LB-5053

#### LB-5016

Use of mHealth technology to improve quality of care and child health services in Kibra slum in Nairobi city, Kenya

**Abraham Afeworki**<sup>1</sup>, Sahra Mohamed<sup>2</sup>, Rashed Shah<sup>3</sup>, Lydia Nyamwange<sup>2</sup>, Elsie Sang<sup>1</sup>, Ezra Finette<sup>4</sup>, Domtila Ogaro<sup>2</sup>, Megan McLaughlin<sup>4</sup>, Barry Finette<sup>4</sup>, David Oot<sup>3</sup>

<sup>1</sup>Save the Children International, Nairobi, Kenya, <sup>2</sup>Ministry of Health, Langata and Kibra Subcounty, Kenya, <sup>3</sup>Save the Children US, Washington DC, DC, United States, <sup>4</sup>ThinkMd, Burlington, VT, United States

#### LB-5017

The impact of *solanum torvum* (turkey berry)fortified biscuit on haemoglobin level and cognitive performance of adolescent females in school: A randomized control trial.

**Abigail Owusuaa Appiah**<sup>1</sup>, Marina Aferiba Tandoh<sup>1</sup>, Anthony Kwaku Edusei<sup>2</sup>

<sup>1</sup>Department of Biochemistry and Biotechnology, College of Science, Kwame Nkrumah University of Science and Technology, PMB, Kumasi, Ghana., Kumasi, Ghana, <sup>2</sup>Department of Health Promotion and Disability Studies, School of Public Health, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana., Kumasi, Ghana

#### LB-5018

#### Evaluating the potential indirect impact of COVID-19 on seven neglected tropical diseases: a modelling study of programme interruptions

**Anna Borlase**<sup>1</sup>, Epke A. Le Rutte<sup>2</sup>, Soledad Castaño<sup>3</sup>, David J. Blok<sup>2</sup>, Jaspreet Toor<sup>4</sup>, Federica Giardina<sup>2</sup>, Emma L. Davis<sup>1</sup> <sup>1</sup>University of Oxford, Oxford, United Kingdom, <sup>2</sup>Erasmus MC, Rotterdam, Netherlands, <sup>3</sup>University of Basel, Basel, Switzerland, <sup>4</sup>Imperial College London, London, United Kingdom

#### LB-5019

#### Probabilistic dengue forecasting using Earth observations and seasonal climate models, a case study in Vietnam

**Felipe J Colón-González**<sup>1</sup>, Leonardo Soares Bastos<sup>1</sup>, Rory Gibb<sup>1</sup>, Barbara Hofmann<sup>2</sup>, Quillon Harpham<sup>2</sup>, Thomas Crocker<sup>3</sup>, Rosanna Amato<sup>3</sup>, Mark Harrison<sup>3</sup>, Daren Lumbroso<sup>2</sup>, Gina Tsarouchi<sup>2</sup>, Oliver Brady<sup>1</sup>, Rachel Lowe<sup>1</sup> <sup>1</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom, <sup>2</sup>HR Wallingford, Wallingford, United Kingdom, <sup>3</sup>Met Office, Exeter, United Kingdom

#### LB-5020

#### Building Supply Chain Expertise in the Angolan Ministry of Health to Improve Malaria and other Health Programs

**Ana Eusébio**<sup>1</sup>, Ladi Stephen<sup>2</sup>, Júlio Leite<sup>3</sup>, Boaventura Moura<sup>3</sup> <sup>1</sup>PSI, Luanda, Angola, <sup>2</sup>Chemonics, Luanda, Angola, <sup>3</sup>ENSP-MOH Angola, Luanda, Angola

#### LB-5021

#### Determining the drivers and disease burden of Lassa Fever outbreaks: an opportunity for a One Health informed public health response.

Sarah Ella Hill<sup>1</sup>, Catherine Machalaba<sup>2</sup>, Carlos Zambrana-Torrelio<sup>2</sup> <sup>1</sup>Albert Einstein College of Medicine, Bronx, NY, United States, <sup>2</sup>EcoHealth Alliance, New York, NY, United States

Monday, November 16, 1:30 pm - 3 p.m.

#### LB-5022

A mobile enabled high-throughput point-ofcare diagnostic device for malaria achieves limit of detection in the pre-symptomatic parasitemia levels.

**Espoir M. Kyubwa**, Agnes I. Lukaszewicz, Johnathan Knecht, Shelly Mechery, Dmitriy V. Zhukov, Thomas Miller, Naresh Menon *ChromoLogic, Monrovia, CA, United States* 

#### LB-5023

# Effectiveness of text message reminders on maternal health outcomes in post conflict regions

**Alexia W. Mshambala**<sup>1</sup>, Dr Josephat M. Nyagero<sup>2</sup>, Dr Betty O. Ogange<sup>3</sup>, Dr Louisa Ndunyu<sup>1</sup> <sup>1</sup>Maseno University, Kisumu, Kenya, <sup>2</sup>Amref International University, Kisumu, Kenya, <sup>3</sup>Commonwealth of Learning, Burnaby, BC, Canada

#### LB-5024

# Using head-mounted display technology (ICAPS) to document the prevalence of trachoma

**Fahd Naufal**<sup>1</sup>, Harran Mkocha<sup>2</sup>, Christopher Bradley<sup>1</sup>, Robert W. Massof<sup>1</sup>, Sheila K. West<sup>1</sup>, Christopher J. Brady<sup>3</sup>

<sup>1</sup>Johns Hopkins Wilmer Eye Institute, Baltimore, MD, United States, <sup>2</sup>Kongwa Trachoma Project, Kongwa, Tanzania, United Republic of, <sup>3</sup>UVM Medial Center, Burlington, VT, United States

#### LB-5025

#### Health System Strengthening: Integration of the fight against malaria in the integrated package of community relays in Guinea.

**Donatien NTAMBUE**<sup>1</sup>, Dr Yattara Facinet<sup>2</sup>, Jeremi Goita<sup>1</sup>, Aliou Ayaba<sup>1</sup>, Chrestien Yemeni<sup>1</sup> <sup>1</sup>Catholic Relief Services, Conakry, Guinea, <sup>2</sup>Direction Nationale de la Sante Communautaire et de la Médecine Traditionnelle, Conakry, Guinea

#### LB-5026

Community health workers' sex and variation in uptake of malaria in pregnancy services in Ebonyi State, Nigeria **Bartholomew Odio**<sup>1</sup>, Onyinye Udenze<sup>1</sup>, Chinyere Nwani<sup>1</sup>, Herbert Onuoha<sup>1</sup>, Elizabeth Njoku<sup>1</sup>,

Lawrence Nwankwo<sup>2</sup>, Oniyire Adetiloye<sup>1</sup>, Bright Orji<sup>1</sup> <sup>1</sup>Jhpiego, Nigeria, Abuja, Nigeria, <sup>2</sup>State Ministry of Health, Nigeria, Abuja, Nigeria

#### LB-5027

#### Improving community health worker capacity through the peer system in Mananjary, Madagascar

**Solofo Razakamiadana**, Eliane Razafimandimby, Jean-Pierre Rakotovao, Elmard RabotovaoSolo *Jhpiego, Antananarivo, Madagascar* 

#### LB-5028

#### Remote mentoring to ensure continuity of malaria service delivery during the COVID-19 pandemic in Zimbabwe, Cote d'Ivoire, and Cameroon

Katherine Wolf<sup>1</sup>, Chantelle Allen<sup>2</sup>, Gilson Mandigo<sup>3</sup>, Leocadia Mangwanya<sup>3</sup>, Cyprien Noble<sup>1</sup>, Eric Tchinda<sup>4</sup>, Mathurin Dodo<sup>5</sup>, Arthur Konan<sup>1</sup>, Jacques Kouakou<sup>6</sup>, Lolade Oseni<sup>1</sup> <sup>1</sup>Jhpiego/Impact Malaria, Baltimore, MD, United States, <sup>2</sup>Jhpiego, Baltimore, MD, United States, <sup>3</sup>ZAPIM/Jhpiego, Harare, Zimbabwe, <sup>4</sup>Jhpiego/Impact Malaria, Kribi, Cameroon, <sup>5</sup>Jhpiego/Impact Malaria, Ouagadougou, Burkina Faso, <sup>6</sup>Jhpiego/Impact Malaria, Abidjan, Côte D'Ivoire

#### LB-5029

## Infiltrins as Novel Putative Vaccine Candidates AgainstLeishmaniasis

#### Abdulaziz S. Alouffi

King Abdulaziz City for Science and tecnology, Riyadh, Saudi Arabia

#### LB-5030

#### Observational Assessment of Azithromycin and Safety During Mass Drug Administration for Trachoma in Ethiopia

Allan Ciciriello<sup>1</sup>, Teshome Gebre<sup>2</sup>, Tesfaye Teferi<sup>2</sup>, Paul Emerson<sup>3</sup>, Birgit Bolton<sup>3</sup>, PJ Hooper<sup>3</sup>, Sheila West<sup>1</sup>, David Addiss<sup>4</sup>, Menbere Alemu<sup>2</sup> <sup>1</sup>Johns Hopkins University, Baltimore, MD, United States, <sup>2</sup>International Trachoma Initiative, Addis Ababa, Ethiopia, <sup>3</sup>International Trachoma Initiative, Decatur, GA, United States, <sup>4</sup>Focus Area for Compassion and Ethics, Decatur, GA, United States

Monday, November 16, 1:30 pm - 3 p.m.

#### LB-5031

# Visceral Leishmaniasis-HIV coinfection as a predictor of increased leishmania transmission at the village level in Bihar, India

**Kristien Cloots**<sup>1</sup>, Pia Marino<sup>2</sup>, Sakib Burza<sup>3</sup>, Naresh Gill<sup>4</sup>, Marleen Boelaert<sup>1</sup>, Epco Hasker<sup>1</sup> <sup>1</sup>Institute of Tropical Medicine Antwerp, Antwerp, Belgium, <sup>2</sup>Université de Tours, Tours, France, <sup>3</sup>Médecins Sans Frontières, New Delhi, India, <sup>4</sup>National Vector Borne Disease Control Programme, Delhi, India

#### LB-5032

Identifying large-scale relationships between vector surveillance and human disease: local West Nile mosquito surveillance data predicts human risk far afield

Justin K. Davis, Michael C. Wimberly University of Oklahoma, Norman, OK, United States

#### LB-5033

MMDP Situation Analysis for Lymphatic Filariasis and Trachoma

**Melissa L. Edmiston**, Solomon Atinbire American Leprosy Missions- AIM Initiative, Greenville, SC, United States

#### LB-5034

Performance evaluation of Baermann techniques: the quest for developing a microscopy reference standard for the diagnosis of *Strongyloides stercoralis* 

Woyneshet Gelaye<sup>1</sup>, Nana Aba Williams<sup>2</sup>, Stella Kepha<sup>3</sup>, Augusto Messa Junior<sup>4</sup>, Pedro Emanuel Fleitas<sup>5</sup>, Helena Marti-Soler<sup>2</sup>, Destaw Damtie<sup>1</sup>, Sissay Menkir<sup>1</sup>, Alejandro J. Krolewiecki<sup>5</sup>, Lisette van Lieshout<sup>6</sup>, Wendemagegn Enbiale<sup>1</sup> <sup>1</sup>Bahir Dar University, Bahir Dar, Ethiopia, <sup>2</sup>Barcelona Institute for Global Health (ISGlobal), Hospital Clínic - Universitat de Barcelona, Barcelona, Spain, <sup>3</sup>Kenya Medical Research Institution, Nairobi, Kenya, <sup>4</sup>Centro de Investigação em Saúde da Manhiça (CISM), Maputo, Mozambique, <sup>5</sup>Universidad Nacional de Salta, Instituto de Investigaciones de Enfermedades Tropicales/CONICET, Oran, Salta, Argentina, <sup>6</sup>Department of Parasitology, Centre of Infectious Diseases, Leiden University Medical Centre (LUMC), Leiden, Netherlands

#### LB-5035

#### Disruptions to schistosomiasis programmes due to COVID-19: an analysis of potential impact and mitigation strategies

**Klodeta Kura**<sup>1</sup>, Diepreye Ayabina<sup>2</sup>, Jaspreet Toor<sup>2</sup>, T. Deirdre Hollingsworth<sup>2</sup>, Roy M. Anderson<sup>1</sup> <sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>University of Oxford, Oxford, United Kingdom

#### LB-5036

Exploring Barriers in Community Mass Drug Administration for Lymphatic Filariasis in Selected Pre-Transmission Assessment Failed Endemic Districts, Myanmar

Nay Yi Yi Linn<sup>1</sup>, Poe Poe Aung<sup>2</sup>, Aung Khant Thu<sup>3</sup>, Aung Mon<sup>1</sup>, Thae Maung Maung<sup>4</sup>, Aung Min Htut<sup>2</sup>, Htet Naung<sup>2</sup>, Thiha Thiha<sup>1</sup>, Khin Mon Mon<sup>2</sup>, Ni Ni Aye<sup>2</sup>, Badri Thapa<sup>3</sup> <sup>1</sup>Vector Borne Disease Control Program, Ministry of Health and Sports, Naypyitaw, Myanmar, <sup>2</sup>Independent Researcher, Yangon, Myanmar, <sup>3</sup>World Health Organization Country Office for Myanmar, Yangon, Myanmar, <sup>4</sup>Department of Medical Research, Ministry of Health and Sports,

#### LB-5037

Yangon, Myanmar

#### Discovery of lymphatic filariasis transmission in nine of ten districts originally declared nonendemic in baseline mapping, Ethiopia

Aderajew Mohammed<sup>1</sup>, Mohammed Hassen<sup>1</sup>, Mossie Tamiru<sup>2</sup>, Abebual Yilak<sup>1</sup>, Tekola Endeshaw<sup>1</sup>, Yohannes Eshetu<sup>3</sup>, Fanta Nigussi<sup>3</sup>, Fetene Mihretu<sup>1</sup>, Bacha Mekonnen<sup>4</sup>, Fikre Seife<sup>2</sup>, Emily Griswold<sup>5</sup>, Moses Katabarwa<sup>5</sup>, Frank Richards<sup>5</sup>, Zerihun Tadesse<sup>1</sup>, Gregory Noland<sup>5</sup> <sup>1</sup>The Carter Center, Addis Ababa, Ethiopia, <sup>2</sup>Federal Ministry of Health, Addis Ababa, Ethiopia, <sup>3</sup>The Carter Center, Mettu, Ethiopia, <sup>4</sup>Ethiopian Public Health Institute, Addis Ababa, Ethiopia, <sup>5</sup>The Carter Center, Atlanta, GA, United States

Monday, November 16, 1:30 pm - 3 p.m.

#### LB-5038

#### Serology as a Tool for Surveillance in a Trachoma-Reemergent District

**Michelle N. Odonkor**<sup>1</sup>, Fahd Naufal<sup>1</sup>, Beatriz Munoz<sup>1</sup>, Harran Mkocha<sup>2</sup>, Mabula Kasubi<sup>3</sup>, Meraf

Wolle<sup>1</sup>, Sheila K. West<sup>1</sup>

<sup>1</sup>Dana Center for Preventive Ophthalmology, Wilmer Eye Institute, Johns Hopkins School of Medicine, Baltimore, MD, United States, <sup>2</sup>Kongwa Trachoma Project, Kongwa, Tanzania, United Republic of, <sup>3</sup>Department of Microbiology, Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania, United Republic of

#### LB-5039

## Trends in adherence to treatment in the Geshiyaro project

**Alison K. Ower**<sup>1</sup>, Robert Hardwick<sup>1</sup>, Adugna Tamiru<sup>2</sup>, Ufaysa Anjulo<sup>3</sup>, Ewnetu Firdawek<sup>4</sup>, Habtamu Belay<sup>4</sup>, Kalkidan Mekete<sup>4</sup>, Melkie Chernet<sup>4</sup>, Tujuba Enderias<sup>4</sup>, Fikre Seife<sup>2</sup>, Birhan Mengistu<sup>5</sup>, Nebiyu Nigussu<sup>5</sup>, Ebba Abata<sup>4</sup>, Anna Phillips<sup>1</sup>, Roy Anderson<sup>1</sup> <sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>Federal Ministry of Health, Addis Ababa, Ethiopia, <sup>3</sup>Federal Ministry of Health, Sodo, Ethiopia, <sup>4</sup>Ethiopian Public Health Institute, Addis Ababa, Ethiopia, <sup>5</sup>Children's Investment Fund Foundation, Addis Ababa, Ethiopia

#### LB-5040

#### Developing a conceptual framework for trachoma mapping desk reviews in the context of nearing elimination targets: a participatory multi-country exercise

Mouctar Dieng Badiane<sup>1</sup>, Amadou A. Bio<sup>2</sup>, Emilienne Epee<sup>3</sup>, Rose Monteil<sup>4</sup>, Ines Dossa<sup>5</sup>, Julie Akame<sup>6</sup>, Benoit Dembele<sup>7</sup>, Kisito Ogoussan<sup>8</sup>, **Stephanie L. Palmer**<sup>8</sup>

<sup>1</sup>1. Programme National de Sante Oculaire, Ministère de la Santé et Action Social, Dakar, Senegal, <sup>2</sup>2. Programme National de Lutte Contre les Maladies Tropicales Négligées, Contonou, Benin, <sup>3</sup>Université de Yaoundé, Yaoundé, Cameroon, <sup>4</sup>FHI 360, Dakar, Senegal, <sup>5</sup>FHI 360, Contonou, Benin, <sup>6</sup>Helen Keller International, Yaoundé, Cameroon, <sup>7</sup>Helen Keller International, Dakar, Senegal, <sup>8</sup>FHI 360, Washington, DC, United States

#### LB-5041

#### When control hits the wall for Chagas disease: A cluster randomized control trial of *Triatoma dimidiata*using an eco-bio-social approach

Jose G. Juarez<sup>1</sup>, Elizabeth Pellecer-Rivera<sup>1</sup>, Teresa Aguilar<sup>1</sup>, Hugo Perdomo<sup>1</sup>, Gabriela Samayoa<sup>1</sup>, Rosie Maddren<sup>2</sup>, Laura Cook<sup>2</sup>, Heather Steele<sup>2</sup>, Louisa A. Messenger<sup>2</sup>, Celia Cordon-Rosales<sup>1</sup>, Sandra De Urioste-Stone<sup>3</sup>, **Pamela Pennington**<sup>1</sup> <sup>1</sup>Universidad del Valle de Guatemala, Guatemala, Guatemala, <sup>2</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom, <sup>3</sup>University of Maine, Orono, ME, United States

#### LB-5042

#### Overcoming the challenges of COVID-19: lessons learnedfrom recent MDAcampaignsin Guinea

**Fatoumata Sakho**<sup>1</sup>, André Géopogui<sup>1</sup>, Lamah Lamine<sup>2</sup>, Mamadou Siradiou Baldé<sup>1</sup>, Aissatou Diaby<sup>1</sup>, Christelly Badila Flore<sup>2</sup>, Steven D. Reid<sup>3</sup>, Brian Fuller<sup>3</sup>, Benoit Dembele<sup>4</sup>, Yaobi Zhang<sup>4</sup>, Angela Weaver<sup>3</sup>

<sup>1</sup>*Ministry of Health, Conakry, Guinea, <sup>2</sup>Helen Keller International, Conakry, Guinea, <sup>3</sup>Helen Keller International, New York, NY, United States, <sup>4</sup>Helen Keller International, Regional Office for Africa, Dakar, Senegal* 

#### LB-5043

#### Species abundance and insecticide resistance profile of Aedes aegypti mosquitoes in the Applying Wolbachia to Eliminate Dengue (AWED) trial

**Warsito Tantowijoyo**<sup>1</sup>, Stephanie K. Tanamas<sup>2</sup>, AWED Study Group --<sup>3</sup> <sup>1</sup>Universitas Gadjah Mada, Yogyakarta, Indonesia, <sup>2</sup>Monash University, Melbourne, Australia, <sup>3</sup>--, --, Indonesia

#### LB-5044

#### Chagas prevalence in mothers with COVID-19 and congenital transmission at the Percy Boland Women's Hospital, Santa Cruz, Bolivia

**Freddy Tinajeros**<sup>1</sup>, Maria del Carmen Menduiña<sup>2</sup>, Virginia Cooper<sup>3</sup>, Jean Karla Velarde<sup>1</sup>, Shirley Equilia<sup>1</sup>, Robert Gilman<sup>3</sup>

<sup>1</sup>*PRISMA* - John Hopkins University, Santa Cruz, Bolivia, Plurinational State of, <sup>2</sup>*Percy Boland* Maternity, Ministry of Health, Santa Cruz, Bolivia, Plurinational State of, <sup>3</sup>John Hopkins University, Bloomberg School of Public Health, Baltimore, MD, United States

Monday, November 16, 1:30 pm - 3 p.m.

#### LB-5045

#### No bite is alike: mixed immune responses to *Phlebotomus duboscqi* saliva among experimentally-exposed persons

Ju Lin Weng<sup>1</sup>, Maha Abdeladhim<sup>2</sup>, Saule Nurmukhambetova<sup>1</sup>, Ines Elakhal-Naouar<sup>3</sup>, Clarissa Teixeira<sup>4</sup>, Kelly Hummer<sup>1</sup>, Regis Gomes<sup>4</sup>, Claudio Meneses<sup>2</sup>, Roseanne Ressner<sup>5</sup>, George W. Turiansky<sup>1</sup>, Fabiano Oliveira<sup>2</sup>, Jesus G. Valenzuela<sup>2</sup>, Shaden Kamhawi<sup>2</sup>, Naomi Aronson<sup>1</sup> <sup>1</sup>Uniformed Services University, Bethesda, MD, United States, <sup>2</sup>VMBS, LMVR NIAID, Rockville, MD, United States, <sup>3</sup>Walter Reed Army Institute of Research, Silver Spring, MD, United States, <sup>4</sup>Fundacao Oswaldo Cruz, Fortaleza, Brazil, <sup>5</sup>Walter Reed National Military Medical Center, Bethesda, MD, United States

#### LB-5046

# The distribution of human onchocerciasis vectors in Ethiopia: a longitudinal study of anthropophilic *Simulium*species

**Abebual Yilak**<sup>1</sup>, Aderajew Mohammed<sup>1</sup>, Tekola Endeshaw<sup>1</sup>, Fikresilasie Samuel<sup>1</sup>, Yihenew Wubet<sup>2</sup>, Adane Yayeh<sup>2</sup>, Jemal Moges<sup>1</sup>, Henok Tesfaye<sup>3</sup>, Tewodros Seid<sup>1</sup>, Yewondwossen Bitew<sup>1</sup>, Firdaweke Bekele<sup>1</sup>, Kadu Meribo<sup>4</sup>, Sindew Mekasha<sup>5</sup>, Zerihun Tadesse<sup>1</sup>, Emily Griswold<sup>6</sup>, Moses Katabarwa<sup>6</sup>, Frank Richards<sup>6</sup>

<sup>1</sup>The Carter Center, Addis Ababa, Ethiopia, <sup>2</sup>The Carter Center, Bahir Dar, Ethiopia, <sup>3</sup>The Carter Center, Mettu, Ethiopia, <sup>4</sup>Federal Ministry of Health, Addis Ababa, Ethiopia, <sup>5</sup>Ethiopian Public Health Institute, Addis Ababa, Ethiopia, <sup>6</sup>The Carter Center, Atlanta, GA, United States

#### LB-5047

#### Thermotherapy as an alternative treatment for cutaneous leishmaniasis patients failing to cure with intra-lesional sodium stibogluconate

**Hermali Silva**<sup>1</sup>, Achala Liyanage<sup>2</sup>, Theja Deerasinghe<sup>3</sup>, Buthsiri Sumanasena<sup>4</sup>, Deepani Munidasa<sup>4</sup>, Hiromel de Silva<sup>2</sup>, Sudath Weerasingha<sup>1</sup>, Rohini Fernandopulle<sup>5</sup>, Nadira Karunaweera<sup>1</sup> <sup>1</sup>Faculty of Medicine, University of Colombo, Colombo 8, Sri Lanka, <sup>2</sup>Base Hospital Tangalle, Tangalle, Sri Lanka, <sup>3</sup>District General Hospital Hambantota, Hambantota, Sri Lanka, <sup>4</sup>Teaching Hospital Anuradhapura,, Anuradhapura, Sri Lanka, <sup>5</sup>General Sir John Kotelawala Defence University, Rathmalana, Sri Lanka

#### LB-5048

#### A model-based investigation of the impacts of COVID-19 mitigation on dengue virus transmission

**Sean M. Cavany**<sup>1</sup>, Guido España<sup>1</sup>, Gonzalo Vazquez-Prokopec<sup>2</sup>, Amy C. Morrison<sup>3</sup>, Thomas W. Scott<sup>3</sup>, T. Alex Perkins<sup>1</sup>

<sup>1</sup>University of Notre Dame, South Bend, IN, United States, <sup>2</sup>Emory University, Atlanta, GA, United States, <sup>3</sup>University of California, Davis, Davis, CA, United States

#### LB-5049

#### CYD-TDV Dengue Vaccine: Persistence of immunogenicity and effect of a booster 1 or 2 years after alternative vaccination schedules with reduced number of doses, in Healthy Individuals aged 9 to 50 years in Latin America and Asia-Pacific Regions

**Diana Coronel**<sup>1</sup>, Juliana Park<sup>2</sup>, Eduardo López-Medina<sup>3</sup>, María Rosario Capeding<sup>4</sup>, Andrés Cadena<sup>5</sup>, María Cecilia Montalban<sup>6</sup>, Isabel Ramírez<sup>7</sup>, María Liza Antoinette Gonzales<sup>8</sup>, Carlos A. Díaz-Granados<sup>9</sup>, Betzana Zambrano<sup>10</sup>, Gustavo Dayan<sup>9</sup>, Stephen Savarino<sup>9</sup>, Zhenghong Chen<sup>11</sup>, Hawk Wang<sup>11</sup>, Sunny Sun<sup>11</sup>, Matthew Bonaparte<sup>9</sup>, Andrey Rojas<sup>12</sup>, Jenny Carolina Ramírez<sup>12</sup>, Mae Ann Verdan<sup>13</sup>, Fernando Noriega<sup>9</sup>

<sup>1</sup>Sanofi Pasteur, Mexico City, Mexico, <sup>2</sup>Sanofi Pasteur, Singapore, Singapore, <sup>3</sup>Centro de Estudios en Infectología Pediátrica (CEIP), and Universidad del Valle, Cali, Colombia., Cali, Colombia, <sup>4</sup>Research Institute for Tropical Medicine (RITM), Philippines, Manila, Philippines, <sup>5</sup>Clinica de la Costa, Baranquilla, Colombia, Barranguilla, Colombia, <sup>6</sup>Manila Doctors Hospital (MDH), Philippines, Manila, Philippines, <sup>7</sup>Unidad de Investigaciones y Docencia Hospital Pablo Tobón Uribe, Medellín Universidad de Antioquía-Colombia, Medellín, Colombia, <sup>8</sup>University of the Philippines Manila - Philippine General Hospital (UP-PGH), Philippines, Manila, Philippines, <sup>9</sup>Sanofi Pasteur, Swiftwater, PA, United States, <sup>10</sup>Sanofi Pasteur, Montevideo, Uruguay, <sup>11</sup>Sanofi Pasteur, Beijing, China, 12 Sanofi Pasteur, Bogotá, Colombia, <sup>13</sup>Sanofi Pasteur, Manila, Philippines

#### LB-5050

#### Understanding the influence of climatic and socio-environmental factors on long-term dengue fever trends in Vietnam

**Rory Gibb**, Felipe J. Colón-González, Oliver J. Brady, Rachel Lowe London School of Hygiene and Tropical Medicine, London, United Kingdom

Monday, November 16, 1:30 pm - 3 p.m.

#### LB-5051

#### Clinical performance of a dengue IgG rapid diagnostic test designed to determine dengue serostatus as part of pre-vaccination screening

**Vasco Liberal**<sup>1</sup>, Remi Forrat<sup>2</sup>, Cong Zhang<sup>3</sup>, Charles Pan<sup>4</sup>, Matthew Bonaparte<sup>5</sup>, Wushan Yin<sup>3</sup>, Lingyi Zheng<sup>5</sup>, Valeria Viscardi<sup>6</sup>, Yukun Wu<sup>5</sup>, Yasemin Ataman-Önal<sup>2</sup>, Stephen J. Savarino<sup>5</sup>, Catherine Chen<sup>6</sup>

<sup>1</sup>CTK Biotech, Inc., Poway, CA, United States, <sup>2</sup>Sanofi Pasteur, Marcy l'Etoile, France, <sup>3</sup>Beijing Genesee Biotech, Beijing, China, <sup>4</sup>CTK Biotech, Beijing, China, <sup>5</sup>Sanofi Pasteur, Switfwater, PA, United States, <sup>6</sup>CTK Biotech, Poway, CA, United States

#### LB-5052

#### Laboratory parameters as biomarkers for clinicians to distinguish dengue infection from other febrile illnesses

**Kayra Michelle Rosado-Ortiz**<sup>1</sup>, Yaidelice Van Daalen-Morales<sup>1</sup>, Robert Rodriguez-Gonzalez<sup>2</sup>, Luisa I. Alvarado-Domenech<sup>1</sup>, Vanessa Rivera-Amill<sup>1</sup> <sup>1</sup>Ponce Health Sciences University, Ponce, Puerto Rico, <sup>2</sup>Ponce Health Sciences University, Ponce, PR, United States

#### LB-5053

#### Persistence of musculoskeletal symptoms in Ebola survivors in Eastern Sierra Leone

**Anna Sanford**<sup>1</sup>, Nell G. Bond<sup>1</sup>, Emily J. Engel<sup>1</sup>, Lansana Kanneh<sup>2</sup>, Michael A. Gbakie<sup>2</sup>, Fatima K. Kamara<sup>2</sup>, Donald S. Grant<sup>2</sup>, John S. Schieffelin<sup>1</sup> <sup>1</sup>Tulane University, New Orleans, LA, United States, <sup>2</sup>Kenema Government Hospital, Kenema, Sierra Leone

#### LB-5054

#### Income and COVID-19-related health disparities among U.S. workers: findings from a national survey

**Ariadna Capasso**, Ralph J. DiClemente, Shahmir H. Ali, Abbey M. Jones, Joshua Foreman, Yesim Tozan *New York University, New York, NY, United States* 

#### LB-5055

## COVID-19 pandemic in Mali: low transmission and low infectiousness of SARS-CoV-2

**Bassirou Diarra**<sup>1</sup>, Yeya dit Sadio Sarro<sup>1</sup>, Ibrehim Guindo<sup>2</sup>, Fah Gaoussou Traore<sup>1</sup>, Dramane Diallo<sup>1</sup>, Antieme Combo Togo<sup>1</sup>, Fatimata Diallo<sup>1</sup>, Sidy Bane<sup>1</sup>, Moumine Sanogo<sup>1</sup>, Mohamed Diallo<sup>2</sup>, Yacouba Toloba<sup>3</sup>, Michael Belson<sup>4</sup>, Chuen-Yen Lau<sup>5</sup>, Seydou Doumbia<sup>1</sup>

<sup>1</sup>University of Sciences, Techniques and Technologies of Bamako, Bamako, Mali, <sup>2</sup>National Institute of Public Health, Bamako, Mali, <sup>3</sup>University Teaching Hospital of Point-G, Bamako, Mali, <sup>4</sup>Collaborative Clinical Reserach Branch, Rockville, MD, United States, <sup>5</sup>Collaborative Clinical Research Branch, Rockville, MD, United States

#### LB-5056

#### Epidemio-clinical characteristics of patients and role of the University Clinical Research Center's biosafety level 3 laboratory in the COVID-19 global response in Mali.

Hawa Baye Drame<sup>1</sup>, Mohamed TOLOFOUDIE<sup>1</sup>, Gagni COULIBALY<sup>1</sup>, Dramane Diallo<sup>1</sup>, Amadou SOMBORO<sup>1</sup>, Bocar Baya<sup>1</sup>, Mahamadou Kone<sup>1</sup>, Antieme Combo Georges TOGO<sup>1</sup>, Boureima DEGOGA<sup>1</sup>, Amadou KONE<sup>1</sup>, Sounkalo DAO<sup>1</sup>, Michael BELSON<sup>2</sup>, Yacouba TOLOBA<sup>1</sup>, Bassirou Diarra<sup>1</sup>, Seydou DOUMBIA<sup>1</sup> <sup>1</sup>University of Sciences, Techniques and Technologies of Bamako, Bamako, Mali, <sup>2</sup>Collaborative clinical Research Branch, DCR/NIAID/NIH, Bethesda, MD, USA, Maryland, MD, United States

#### LB-5057

# Three-dimensional model of clinical trial treatment that shows effective response against SARS-CoV-2

#### **Mohamed Jama Gelle**

Jama Science and Research foundation for Somalia, Mogadishu, Somalia

#### LB-5058

#### Active epidemiological surveillance network against COVID-19 in the Departament of Bolívar-Colombia, April-August 2020

Ramiro Pereira-Lentino<sup>1</sup>, Fabian Espitia-Almeida<sup>2</sup>, Juan Quintero-Soto<sup>2</sup>, **Doris Gomez-Camargo**<sup>2</sup> <sup>1</sup>Departmental Laboratory of Public Health of Bolivar, Cartagena de Indias 130001, Colombia, <sup>2</sup>UNIMOL Research Group, Faculty of Medicine, University of Cartagena, Cartagena de Indias 130001, Colombia

Monday, November 16, 1:30 pm - 3 p.m.

#### LB-5059

Thymosin Alpha 1 Induced Improved Outcome in COVID-19 Attributed to the Restoration of Lymphocytopenia- A Case Study

**Ankur Gupta**<sup>1</sup>, Vivek Joshi<sup>2</sup> <sup>1</sup>Apollo Hospitals, Indore, India, <sup>2</sup>Shalby Hospitals, Indore, India

#### LB-5060

Clinical Spectrum of SARS-CoV-2: A pilot cohort study in Central New York

**Megan A. Harris**<sup>1</sup>, Daniel A. Lichtenstein<sup>1</sup>, Ayorinde Soipe<sup>1</sup>, Maheen F. Hussaini<sup>2</sup>, Stephen Thomas<sup>1</sup>, Timothy Endy<sup>1</sup>, Harry E. Taylor<sup>1</sup>, Frank Middleton<sup>1</sup>, Kathryn A. Anderson<sup>1</sup> <sup>1</sup>SUNY Upstate Medical University, Syracuse, NY,

United States, <sup>2</sup>Dow University of Health Sciences, Dow Medical College, Karachi, Pakistan

#### LB-5061

#### Population movement and social distancing patterns during the COVID-19 pandemic in Thailand

Kulchada Pongsoipetch<sup>1</sup>, Borworn Panklang<sup>1</sup>, Rapeephan Maude<sup>2</sup>, Yongjua Laosiritaworn<sup>3</sup>, **Richard** J. Maude<sup>1</sup>

<sup>1</sup>Mahidol-Oxford Tropical Medicine Research Unit, Bangkok, Thailand, <sup>2</sup>Faculty of Medicine Ramathibodi Hospital, Bangkok, Thailand, <sup>3</sup>Department of Disease Control, Ministry of Public Health, Bangkok, Thailand

#### Poster Session 49 Poster Session B Late-Breakers in Basic Sciences

*Tuesday, November 17, 11:45 am - 1:15 pm Poster Hall* 

Malaria	#LB-5069 through LB-5082
Viruses (all other viruses)	#LB-5083 through LB-5088
Coronavirus	#LB-5089 through LB-5092

#### LB-5069

Factors contributing to the gap in consistent net use between Abidjan and other locations in Cote d'Ivoire: A nonlinear decomposition analysis.

**Stella O. Babalola**<sup>1</sup>, Abdul Dosso<sup>2</sup>, Monne Therese Bomin Bleu<sup>3</sup>, Tanoh Antoine Kouame<sup>2</sup>, Mieko McKay<sup>2</sup>, Diarra Kamara<sup>2</sup>

<sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States, <sup>2</sup>Center for Communication Programs, Abidjan, Côte D'Ivoire, <sup>3</sup>National Malaria Control Program, Abidjan, Côte D'Ivoire

#### LB-5070

High prevalence of asymptomatic malaria in the South-East of Senegal (Bandafassi, Kedougou): challenge for malaria elimination

**Aida Sadikh Badiane**, Tolla Ndiaye, Alphonse Thiaw, Awa Bineta Deme, Mamadou Alpha Diallo, Khadim Diongue, Mame Cheikh Seck, Mouhamadou Ndiaye, Daouda Ndiaye *universite cheikh anta diop de dakar, dakar, Senegal* 

#### LB-5071

Use of Earth observations to investigate environmentally-driven malaria surges in southern Venezuela

#### Isabel K. Fletcher

London School of Hygiene & Tropical Medicine, London, United Kingdom

#### LB-5072

*Plasmodium berghei* hemozoin bound to DNA confers partial protection against liver stage infection in BALB/c mice

**Adriano Franco**, David J. Sullivan Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

#### LB-5073

Routine malaria prevalence and intervention coverage estimates obtained by surveying antenatal care (ANC) attendees in Chadiza District, Eastern Province, Zambia: progress and lessons learned

**Chabu Kangale**<sup>1</sup>, Maximillian Musunse<sup>1</sup>, Caroline Phiri-Chibawe<sup>1</sup>, Busiku Hamainza<sup>2</sup>, Paul Psychas<sup>3</sup>, Elizabeth Heilmann<sup>4</sup>, John M. Miller<sup>5</sup>, Julie R. Gutman<sup>6</sup>

<sup>1</sup>PATH Program for the Advancement of Malaria Outcomes (PAMO), Lusaka, Zambia, <sup>2</sup>National Malaria Elimination Centre, Zambia Ministry of Health, Lusaka, Zambia, <sup>3</sup>US President's Malaria Initiative, Centers for Disease Control and Prevention,, Lusaka, Zambia, <sup>4</sup>US President's Malaria Initiative, Centers for Disease Control and Prevention, Lusaka, Zambia, <sup>5</sup>PATH Malaria Control and Elimination Partnership in Africa (MACEPA), Lusaka, Zambia, <sup>6</sup>Malaria Branch, Centers for Disease Control and Prevention, Atlanta, GA, United States

#### LB-5074

## Identifying environmental risk factors for malaria in different geographic contexts

Andrea McMahon<sup>1</sup>, Justin K. Davis<sup>1</sup>, Dawn M. Nekorchuk<sup>1</sup>, Adem Agmas Ahmed<sup>2</sup>, Abere Mihretie<sup>3</sup>, Mastewal Worku Lake<sup>4</sup>, Worku Awoke<sup>5</sup>, Aklilu Getinet<sup>3</sup>, Michael C. Wimberly<sup>1</sup> <sup>1</sup>University of Oklahoma, Norman, OK, United States, <sup>2</sup>Malaria Control and Elimination partnership in Africa, Bahir Dar, Ethiopia, <sup>3</sup>Health, Development, and Anti-Malaria Association, Addis Ababa, Ethiopia, <sup>4</sup>Amhara Public Health Institute, Bahir Dar, Ethiopia, <sup>5</sup>University of Bahir Dar, Bahir Dar, Ethiopia

Population-level distributions of Plasmodium antigens among Nigerian children under 15 years old: results from a nationwide household survey

**Adan Oviedo**<sup>1</sup>, Ado Abubaker<sup>2</sup>, Perpetua Uhomoibhi<sup>3</sup>, Mark Maire<sup>1</sup>, Uwem Inyang<sup>4</sup>, Stacie Greby<sup>5</sup>, Orji Bassey<sup>5</sup>, Emeka Ndodo<sup>6</sup>, Ryan Wiegand<sup>1</sup>, Bala Audu<sup>3</sup>, McPaul Okoye<sup>5</sup>, Matthias Alagi<sup>5</sup>, Nnaemeka Irienamen<sup>5</sup>, Mahesh Swaminathan<sup>5</sup>, Chikwe Ihekweazu<sup>6</sup>, Laura C. Steinhardt<sup>1</sup>, Eric Rogier<sup>1</sup>

<sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>2</sup>Institute of Human Virology, Abuja, Nigeria, <sup>3</sup>National Malaria Elimination Programme, Abuja, Nigeria, <sup>4</sup>US President's Malaria Initiative, United States Agency for International Development, Abuja, Nigeria, <sup>5</sup>Centers for Disease Control and Prevention, Abuja, Nigeria, <sup>6</sup>Nigerian Centre Disease Control, Abuja, Nigeria

#### LB-5076

## Effects of Immune cell subsets during *P. coatneyi* infection in rhesus macaques.

#### **Isha Pandey**

National Institute of Health, Bethesda, MD, United States

#### LB-5077

Frequency of the *kdr* mutation in the voltagegated sodium channel (*vgsc*) gene in East Ethiopian *Anopheles stephensi* 

Jeanne N. Samake<sup>1</sup>, Peter Mumba<sup>2</sup>, Dereje Dengela<sup>3</sup>, Solomon Yared<sup>4</sup>, Dejene Getachew<sup>5</sup>, Gedeon Yohannes<sup>2</sup>, Sheleme Chibsa<sup>6</sup>, Matthew Murphy<sup>6</sup>, Gunawardena Dissanayake<sup>6</sup>, Kristen George<sup>7</sup>, Sae Hee Choi<sup>1</sup>, Joseph Spear<sup>1</sup>, Seth R. Irish<sup>8</sup>, Sarah Zohdy<sup>8</sup>, Meshesha Balkew<sup>3</sup>, Tamar E. Carter<sup>1</sup>

<sup>1</sup>Baylor University, Waco, TX, United States, <sup>2</sup>Abt Associates, PMI VectorLink Ethiopia Project, Addis Ababa, Ethiopia, <sup>3</sup>Abt Associates, PMI VectorLink Project, Rockville, MD, United States, <sup>4</sup>Jigjiga University, Jigjiga, Ethiopia, <sup>5</sup>Dire Dawa University, Dire Dawa, Ethiopia, <sup>6</sup>PMI U.S. Agency for International Development (USAID), Addis Ababa, Ethiopia, <sup>7</sup>PMI, USAID, Washington, DC, United States, <sup>8</sup>PMI, U.S. Centers for Disease Control and Prevention (CDC), Atlanta, GA, United States

#### LB-5078

Antimalarial activity of traditional medicine Coptis Rhizome & its major active compounds Awet A. Teklemichael<sup>1</sup>, Shusaku Mizukami<sup>2</sup>, Kazufumi Toume<sup>3</sup>, Farhana Mosaddeque<sup>2</sup>, Mohamed Gomaa Kamel<sup>4</sup>, Osamu Kaneko<sup>2</sup>, Katsuko Komatsu<sup>3</sup>, Juntra Karbwang<sup>2</sup>, Nguyen Tien Huy<sup>2</sup>, Kenji Hirayama<sup>2</sup>

<sup>1</sup>Program for Nurturing Global Leaders in Tropical and Emerging Infectious Diseases, Graduate School of Biomedical Sciences, Nagasaki University, 1-12-4 Sakamoto, Nagasaki 852-8523, Japan, Nagasaki City, Japan, <sup>2</sup>Nagasaki University Institute of Tropical Medicine, Nagasaki City, Japan, <sup>3</sup>Section of Pharmacognosy, Institute of Natural Medicine, University of Toyama, Toyama, Japan, <sup>4</sup>Faculty of Medicine, Minia University, Minia 61519, Egypt, Minia City, Egypt

#### LB-5079

#### Exploring awareness and coverage of state health insurance scheme in Nigeria towards improving funding for malaria

**Chinazo Ujuju**, Veronica Momoh, Dawit Getachew, Isaac Muonanu, Nihinlola Mabogunje, Maxwell Kolawole *Malaria Consortium, Abuja, Nigeria* 

#### LB-5080

#### Genomic surveillance of *Plasmodium falciparum* and *Plasmodium vivax* in the Peruvian Amazon

Carlos A. Fernandez<sup>1</sup>, Fredy E. Villena<sup>2</sup>, Juan F. Sanchez<sup>3</sup>, Oscar P. Nolasco<sup>3</sup>, Stephen E. Lizewski<sup>3</sup>, Christie A. Joya<sup>3</sup>, Dionicia Gamboa<sup>1</sup>, Christopher Delgado<sup>4</sup>, **Hugo O. Valdivia**<sup>3</sup> <sup>1</sup>Universidad Peruana Cayetano Heredia, Lima, Peru, <sup>2</sup>NGO PRISMA, Lima, Peru, <sup>3</sup>NAMRU-6, Lima, Peru, <sup>4</sup>Antwerp University, Amberes, Belgium

#### LB-5081

#### Combination of Various Malaria Tests and Estimation of Prevalence Using Latent Class Modeling in a Low Malaria Transmission Area, Ethiopia 2015 MIS

**Brian S. Wakeman**<sup>1</sup>, John Williamson<sup>1</sup>, Ashenafi Assefa<sup>2</sup>, Zhiyong Zhou<sup>1</sup>, Sheila Sergent<sup>1</sup>, Maroun Sassine<sup>1</sup>, Amha Kebede<sup>3</sup>, Hussein Mohammed<sup>2</sup>, Hiwot Teka<sup>4</sup>, Matthew Murphy<sup>5</sup>, Jimee Hwang<sup>5</sup>, Ya Ping Shi<sup>1</sup>

<sup>1</sup>Malaria Branch, Division of Parasitic Diseases and Malaria, Center for Global Health, Centers for Disease Control and Prevention, Atlanta, GA, United States, <sup>2</sup>Ethiopian Public Health Institute, Addis Ababa, Ethiopia, <sup>3</sup>African Society for Laboratory Medicine, Addis Ababa, Ethiopia, <sup>4</sup>U.S. President's Malaria Initiative, United States Agency for International Development, Addis Ababa, Ethiopia, <sup>5</sup>U.S. President's Malaria Initiative, Malaria Branch, Division of Parasitic Diseases and Malaria, Center for Global Health, Centers for Disease Control and Prevention, Atlanta, GA, United States **Poster Session B** Late-Breakers in Basic Sciences Tuesday, November 17, 11:45 am – 1:15 pm

#### LB-5082

## Investigation of antibody-mediated immune mechanisms in pregnancy-associated malaria

**Madeleine C. Wiebe**, Michael Hawkes, Sedami Gnidehou, Stephanie K. Yanow *University of Alberta, Edmonton, AB, Canada* 

#### LB-5083

Experimental evolution in mosquitoes demonstrates adaptive potential of Zika virus in U.S. *Aedes aegypti* and *Aedes albopictus* 

**Elyse M. Banker**<sup>1</sup>, Lili Kuo<sup>1</sup>, Jessica L. Stout<sup>1</sup>, Laura D. Kramer<sup>1</sup>, Laura D. Kramer<sup>2</sup>, Alexander T. Ciota<sup>1</sup>, Alexander T. Ciota<sup>2</sup>

<sup>1</sup>Wadsworth Center, Arbovirology Laboratory, Slingerlands, NY, United States, <sup>2</sup>State University of New York at Albany School of Public Health, Department of Biomedical Sciences, Albany, NY, United States

#### LB-5084

## Genome Sequences of West Nile virus Isolates from Oklahoma

**Callie Campbell**<sup>1</sup>, Hailie Fellers<sup>1</sup>, Macey Lively<sup>2</sup>, Alyssa Wheeler<sup>1</sup>, Raul Iglesias<sup>1</sup>, Tre Williams<sup>3</sup>, Cynthia Bates<sup>3</sup>, Matthew Miller<sup>4</sup>, Caio Martinelle B. França<sup>1</sup>

<sup>1</sup>Southern Nazarene University, Bethany, OK, United States, <sup>2</sup>Texas A&M University School of Public Health, College Station, TX, United States, <sup>3</sup>Oklahoma City County Health Department, Oklahoma City, OK, United States, <sup>4</sup>Pennsylvania State University, State College, PA, United States

#### LB-5085

#### Comparative characterization of the reassortant Orthobunyavirus Ngari with putative parental viruses, Bunyamwera and Batai:*in vitro*characterization and*ex vivo*stability

M. Fausta Dutuze, E. Handly Mayton, Joshua D. Macalulso, **Rebecca Christofferson** *Louisiana State University, Baton Rouge, LA, United States* 

#### LB-5086

SARS-CoV-2 infection, neuropathogenesis, and transmission among deer mice: Implications for spillback into New World rodent populations **Anna C. Fagre**, Juliette Lewis, Miles Eckley, Shijun Zhan, Savannah M. Rocha, Nicole R. Sexton, Bradly Burke, Brian Geiss, Olve Peersen, Rebekah C. Kading, Joel Rovnak, Gregory D. Ebel, Ron Tjalkens, Tawfik Aboellail, Tony Schountz *Colorado State University, Fort Collins, CO, United States* 

#### LB-5087

# Age-specific case notification data provides insight on past dengue virus infection in US territories

Sarah Kada, Gabriela Paz-Baily, Laura E. Adams, Michael A. Johansson *CDC, San Juan, PR, United States* 

#### LB-5088

#### Depletion of CD4-T cells modulates DENV-2 viremia and neutralization despite previous DENV-ZIKV immunity in Rhesus macaque model

**Nicole Marzán-Rivera**<sup>1</sup>, Crisanta Serrano-Collazo<sup>1</sup>, Petraleigh Pantoja<sup>1</sup>, Alexandra Ortiz-Rosa<sup>1</sup>, Lorna Cruz<sup>1</sup>, Erick X. Pérez-Guzmán<sup>1</sup>, Idia V. Rodríguez<sup>2</sup>, Teresa Arana<sup>1</sup>, Melween Martínez<sup>2</sup>, Carlos A. Sariol<sup>3</sup> <sup>1</sup>Department of Microbiology and Medical Zoology, University of Puerto Rico-Medical Sciences Campus, San Juan, PR, United States, <sup>2</sup>Unit of Comparative Medicine, Caribbean Primate Research Center, University of Puerto Rico-Medical Sciences Campus, San Juan, PR, United States, <sup>3</sup>Department of Internal Medicine, University of Puerto Rico-Medical Sciences Campus, San Juan, PR, United States

#### LB-5089

Community health worker knowledge, attitudes and practices (KAP) towards COVID-19: learnings from an online KAP survey using a digital health platform (UpSCALE) in Mozambique

#### Kevin Baker

Malaria Consortium, London, United Kingdom

#### LB-5090

#### Modeling the impact of tropical disease medications on SARS-CoV-2 kinetics

**Charlotte Kern**<sup>1</sup>, Verena Schöning<sup>1</sup>, Carlos Chaccour<sup>2</sup>, Felix Hammann<sup>1</sup> <sup>1</sup>University Hospital Bern, Bern, Switzerland, <sup>2</sup>ISGlobal, Hospital Clínic - Universitat de Barcelona, Barcelona, Spain

Cross-neutralizing scFv antibodies for COVID-19 therapies

**Adinarayana Kunamneni**<sup>1</sup>, Steven Bradfute<sup>2</sup>, Ravi Durvasula<sup>1</sup>

<sup>1</sup>Loyola University Chicago, Maywood, IL, United States, <sup>2</sup>University of New Mexico, Albuquerque, NM, United States

#### LB-5092

FLARE, a USSD/SMS-based Surveying and Messaging Application: a Digital Response to COVID-19

Belendia A. Serda, Asefaw Getachew

PATH Malaria Control and Elimination Partnership in Africa (MACEPA), Addis Ababa, Ethiopia

#### Poster Session 49 Poster Session B Presentations Late-Breakers in Clinical and Applied Sciences

*Tuesday, November 17, 11:45 am - 1:15 pm Poster Hall* 

Arthropods/Entomology#LB-	5093 through LB-5098
Bacteriology and Diarrhea#LB-	
Global Health#LB-	5102 through LB-5114
Helminths - Nematodes#LB-	5115 through LB-5120
HIV and Tropical Co-Infections#LB-	5121 through LB-5122
Malaria#LB-	5123 through LB-5133
Trematodes#LB-	5134 through LB-5135
Water, Sanitation, Hygiene and Environmental Health#LB-	5136 through LB-5137

#### LB-5093

Inside Out: Stable isotopes vs SmarTag - Two novel, complementing mosquito marking methods

**Roy Faiman**, Benjamin J. Krajacich National Institutes of Health, NIAID/LMVR, Rockville, MD, United States

#### LB-5094

#### Developing a less time-consuming and costeffective monitoring approach using 3Dprinting and environmental DNA techniques

**Hiroki Hashizume**<sup>1</sup>, Suguru Taga<sup>2</sup>, Mami Hitachi<sup>3</sup>, Satoshi Kaneko<sup>4</sup>, Kazuhiko Moji<sup>1</sup>, Tomonori Hoshi<sup>4</sup> <sup>1</sup>School of Tropical Medicine and Global Health, Nagasaki University, Nagasaki, Japan, <sup>2</sup>Division of Global Epidemiology Research Center for Zoonosis Control, Hokkaido University, Sapporo, Japan, <sup>3</sup>Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki, Japan, <sup>4</sup>Department of Eco-epidemiology Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan

#### LB-5095

#### Molecular-based identification of the blood meal source in field-collected female *Phlebotomus argentipes* sand flies in Sri Lanka

**R. W. C. Kalpani Kumarasiri**<sup>1</sup>, S.A.S.C. Senanayaka<sup>2</sup>, M.F.R. Siraj<sup>3</sup>, D. Sunil Shantha<sup>3</sup>, B.G.D.N.K. De Silva<sup>4</sup>, N. D. Karunaweera<sup>3</sup> <sup>1</sup>Post Graduate Institute of Medicine, University of Colombo, Colombo, Sri Lanka, <sup>2</sup>Faculty of Medicine, University of Colombo, Colombo, Sri Lanka, <sup>3</sup>Department of Parasitology, Faculty of Medicine, University of Colombo, Colombo, Sri Lanka, <sup>4</sup>Department of Zoology, Faculty of Applied Sciences, University of Sri Jayawardanapura, Srijayawardanapura, Sri Lanka

#### LB-5096

## Dengue in Cartagena de Indias D.T during and epidemic year, 2019

MARGARITA M. OCHOA-DIAZ, Daniela Orozco-García, Ronald Fernández-Vásquez, Leris S. Ruíz-Ocampo Universidad del Sinú seccional Cartagena, Cartagena, Colombia

#### LB-5097

## Discovery and development of natural products for mosquito control

**Cecilia Springer Engdahl**, George Dimopoulos Johns Hopkins University, Baltimore, MD, United States

#### **Poster Session B** Late-Breakers in Clinical and Applied Sciences Tuesday, November 17, 11:45 am – 1:15 pm

#### LB-5098

Evaluation of the risk of arbovirus transmission using the immuno-epidemiological biomarker of human exposure to *Aedes* bites

#### **BI ZAMBLE HUBERT ZAMBLE**<sup>1</sup>, ANDRE

BAREMBAYE SAGNA<sup>1</sup>, AKRE MAURICE ADJA<sup>2</sup>, Négnorogo Guindo COULIBALY<sup>3</sup>, FRANÇOISE MATHIEU-DAUDE<sup>4</sup>, FRANCK REMOUE<sup>4</sup> <sup>1</sup>French Institute of Rechearch for Developpment/ Pierre Richet Institute/National Institute of Public Health, BOUAKÉ, Côte D'Ivoire, <sup>2</sup>French Institute of Rechearch for Developpment/ Pierre Richet Institute/National Institute of Public Health/University of Felix Houphouët Boigny, Abidjan, Côte D'Ivoire, <sup>3</sup>Pierre Richet Institute/National Institute of Public Health;University of Felix Houphouët Boigny, Abidjan, Côte D'Ivoire, <sup>4</sup>French Institute of Rechearch for Developpment, Montpellier, France

#### LB-5099

## Systematic Review of Rapid Diagnostic Tests for the Diagnosis of Melioidosis

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#### LB-5100

Clinical predictors for differentiating cholera from enterotoxigenic Escherichia coli (ETEC) and rotavirus in children with moderate-tosevere diarrhea

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#### LB-5101

#### Efficacy of Typhoid Conjugate Vaccine in Nepal: A Participant-Observer-Blind Phase III Randomized Controlled Trial

**Mila Shakya**<sup>1</sup>, Dikshya Pant<sup>2</sup>, Merryn Voysey<sup>3</sup>, Kathleen M. Neuzil<sup>4</sup>, Shrijana Shrestha<sup>2</sup>, Buddha

Basnyat<sup>1</sup>, Andrew J. Pollard<sup>3</sup> <sup>1</sup>Oxford University Clinical Research Unit-Nepal, Patan Academy of Health Sciences, Lalitpur, Nepal, <sup>2</sup>Patan Academy of Health Sciences, Lalitpur, Nepal, <sup>3</sup>Oxford Vaccine Group, Department of Paediatrics, University of Oxford, Oxford, United Kingdom, <sup>4</sup>University of Maryland School of Medicine, Baltimore, MD, United States

#### LB-5102

#### Modelling trachoma post 2020: Opportunities for mitigating the impact of COVID-19 and accelerating progress towards elimination.

**Anna Borlase**<sup>1</sup>, Seth Blumberg<sup>2</sup>, E. Kelly Callahan<sup>3</sup>, Michael S. Deiner<sup>2</sup>, Scott D. Nash<sup>3</sup>, Travis C. Porco<sup>2</sup>, Anthony W. Solomon<sup>4</sup>, Thomas M. Lietman<sup>2</sup>, Joaquin M. Prada<sup>5</sup>, T. Dèirdre Hollingsworth<sup>1</sup> <sup>1</sup>University of Oxford, Oxford, United Kingdom, <sup>2</sup>UCSF, San Francisco, CA, United States, <sup>3</sup>The Carter Center, Atlanta, GA, United States, <sup>4</sup>World Health Organisation, Geneva, Switzerland, <sup>5</sup>University of Surrey, Guilford, United Kingdom

#### LB-5103

#### Natural language processing for automatic sentence summarization of dengue report from ProMED-mail database

**Ting Wu Chuang** *Taipei Medical University, Taipei, Taiwan* 

#### LB-5104

#### Association of Diarrhea, Respiratory Infections, and Growth with Geospatial Environmental Factors in Rural Pakistan

**Elise Corden**<sup>1</sup>, Saman Hasan Siddiqui<sup>2</sup>, Muhammad Faraz Raghib<sup>1</sup>, Yash Sharma<sup>1</sup>, Will Adorno<sup>1</sup>, Lubaina Ehsan<sup>1</sup>, Aman Shrivastava<sup>1</sup>, Sheraz Ahmen<sup>2</sup>, Fayaz Umrani<sup>2</sup>, Najeeb Rahman<sup>2</sup>, Rafey Ali<sup>2</sup>, Najeeha T. Iqbal<sup>2</sup>, Sean R. Moore<sup>1</sup>, Syed Asad Ali<sup>2</sup>, Sana Syed<sup>3</sup> <sup>1</sup>University of Virginia, Charlottesville, VA, United States, <sup>2</sup>Aga Khan University, Karachi, Pakistan, <sup>3</sup>Aga Khan University and University of Virginia, Charlottesville, VA, United States

What could hinder IPTp uptake? Findings from a qualitative study on the acceptability of a community-based approach to IPTp delivery in 4 sub-Saharan countries

**Cristina Enguita-Fernàndez**<sup>1</sup>, Yara Alonso<sup>1</sup>, Wade Lusengi<sup>2</sup>, Alain Mayembe<sup>2</sup>, Aimée M. Rasoamananjaranahary<sup>3</sup>, Estêvão Mucavele<sup>4</sup>, Ogonna Nwankwo<sup>5</sup>, Elaine Roman<sup>6</sup>, Franco Pagnoni<sup>1</sup>, Clara Menéndez<sup>1</sup>, Khátia Munguambe<sup>4</sup> <sup>1</sup>ISGlobal - Barcelona Institute for Global Health, Barcelona, Spain, <sup>2</sup>Bureau d'Étude et de Gestion de l'Information Statistique, Kinshasa, Congo, Democratic Republic of the, <sup>3</sup>Malagasy Associates for Numerical Information and Statistical Analysis, Antananarivo, Madagascar, <sup>4</sup>Centro de Investigação em Saúde de Manhiça, Maputo, Mozambique, <sup>5</sup>University of Calabar, Calabar, Nigeria, <sup>6</sup>Jhpiego, affiliate of Johns Hopkins University, Baltimore, MD, United States

#### LB-5106

#### Lack of laboratory diagnosis associated with an increased mortality in a prospective acute febrile illness cohort in Uganda

**Kenneth Kobba**<sup>1</sup>, Francis Kakooza<sup>1</sup>, Emmanuel Candia<sup>1</sup>, Paul W. Blair<sup>2</sup>, Mathew Robinson<sup>2</sup>, Abraham Kandathil<sup>2</sup>, Jonathan Mayito<sup>1</sup>, Alphonse Matovu<sup>3</sup>, Gilbert Aniku<sup>4</sup>, Yukari C. Manabe<sup>2</sup>, Mohammed Lamorde<sup>1</sup>

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#### LB-5107

## Environmental and socio-economic drivers of dengue fever expansion in 21st century Brazil

**Sophie Lee**<sup>1</sup>, Theodoros Economou<sup>2</sup>, Christovam Barcellos<sup>3</sup>, Rafael Catão<sup>4</sup>, Leonardo Bastos<sup>3</sup>, Oswaldo G. Cruz<sup>3</sup>, Cláudia Codeço<sup>3</sup>, John Edmunds<sup>1</sup>, Marilia Carvalho<sup>3</sup>, Rachel Lowe<sup>1</sup>

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#### LB-5108

Implications of extreme hydrometeorological events for dengue control and preparedness in Brazil **Rachel Lowe**<sup>1</sup>, Sophie Lee<sup>1</sup>, Kathleen M. O'Reilly<sup>1</sup>, Oliver J. Brady<sup>1</sup>, Leonardo Bastos<sup>2</sup>, Gabriel Carrasco-Escobar<sup>3</sup>, Rafael De Castro Catão<sup>4</sup>, Felipe J. Colon-González<sup>1</sup>, Christovam Barcellos<sup>2</sup>, Marilia Sá Carvalho<sup>2</sup>, Marta Blangiardo<sup>5</sup>, Håvard Rue<sup>6</sup>, Antonio Gasparrini<sup>1</sup>

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#### LB-5109

#### Assessing COVID-19 infection prevention and control measures implemented during a mass ITN campaign in Sierra Leone

**Ifeanyi-Stanley Muoghalu**<sup>1</sup>, Agneta Mbithi<sup>1</sup>, Musa Sillah-Kanu<sup>2</sup>, Anitta Kamara<sup>2</sup>, Jim Thomas<sup>1</sup>, Ramlat Jose<sup>3</sup>, Samuel Smith<sup>2</sup>, Yazoumé Yé<sup>1</sup> <sup>1</sup>U.S. President's Malaria Initiative Measure Malaria, University of North Carolina at Chapel Hill and ICF, Rockville, MD, United States, <sup>2</sup>National Malaria Control Program, Ministry of Health and Sanitation, Freetown, Sierra Leone, <sup>3</sup>U.S. President's Malaria Initiative, Freetown, Sierra Leone

#### LB-5110

## The impact of COVID-19 on African health care workers: rising depression and social stigma

Nasreen Syeda Quadri<sup>1</sup>, Sophia Ibrahim Ali<sup>2</sup>, Amir Sultan<sup>3</sup>, Mirghani Yousif<sup>4</sup>, Johnstone Kayandabila<sup>5</sup>, Allison Benjamin<sup>1</sup>, Abdelmajeed Moussa<sup>6</sup>, Sahar Hassany<sup>6</sup>, Ifeorah Ijeoma<sup>7</sup>, Kenneth Ssebambulidde<sup>8</sup>, Lucy Ochola<sup>9</sup>, Jose Daniel Debes<sup>1</sup> <sup>1</sup>University of Minnesota, Minneapolis, MN, United States, <sup>2</sup>University of Minnesota School of Public Health, Minneapolis, MN, United States, <sup>3</sup>Addis Ababa University, Addis Ababa, Ethiopia, <sup>4</sup>University of Gezira, Gezira, Sudan, <sup>5</sup>Arusha Lutheran Medical Centre, Arusha, Tanzania, United Republic of, <sup>6</sup>Aswan University Hospital, Aswan, Egypt, <sup>7</sup>University of Nigeria, Nsukka, Nigeria, <sup>8</sup>Makerere University, Kampala, Uganda, <sup>9</sup>Institute for Primate Research, Nairobi, Kenya

#### Assessing laboratory capacity for antimicrobial resistance detection in sentinel sites in Ethiopia, Kenya, Tanzania, and Cameroon, 2019–2020

Lindsey McCrickard Shields<sup>1</sup>, Siril Kullaya<sup>2</sup>, Rogers Kisame<sup>3</sup>, Mohamed Moctar Mouiche<sup>4</sup>, David Mutonga<sup>5</sup>, Emmanuel Magembe<sup>6</sup>, Reuben Abednego<sup>6</sup>, Gebrie Alebachew<sup>7</sup>, Estifanos Tsige<sup>7</sup>, Etogo Ondigiu Bienvenu<sup>8</sup>, Tseuko Toghoua Dorine Godelive<sup>8</sup>, Evelyn Wesangula<sup>9</sup>, Susan Githii<sup>10</sup>, Anicet Georges Dahourou<sup>1</sup>

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#### LB-5112

#### Improving the Understanding and Use of Food Label Information among College Students in the Sefwi Wiawso Municipality, Ghana

**Regina Turkson**, Marina A. Tandoh, Charles Apprey *Kwame Nkrumah University of Science and Technology, Kumasi, Ghana* 

#### LB-5113

#### Building Bioinformatics Research Capacity in West Africa through training programs

**Mamadou Wele**<sup>1</sup>, Darrell Hurt<sup>2</sup>, Jian Li<sup>3</sup>, Mahamadou Diakite<sup>4</sup>, Christopher Whalen<sup>2</sup>, Ezekiel Adebiyi<sup>5</sup>, Jeffrey Shaffer<sup>3</sup>, Seydou Doumbia<sup>1</sup> <sup>1</sup>African Center of Excellence in Bioinformatics (ACE-B), University of Sciences, Techniques and Technologies of Bamako, Bamako, Mali, <sup>2</sup>USA National Institute of Health, North Bethesda, MD, United States, <sup>3</sup>Tulane University, New Orleans, LA, United States, <sup>4</sup>Faculty of Medicine and Odontostomatology, University of Sciences, Techniques and Technologies of Bamako, Bamako, Mali, <sup>5</sup>Covenant University, Ota, Nigeria

#### LB-5114

#### Advantages of Virtual Technical and Skills Training Courses on Malaria During COVID-19 in Myanmar

**Aung K. Zaw**<sup>1</sup>, May Khin<sup>1</sup>, Thiha Soe<sup>1</sup>, Khin Zin<sup>1</sup>, Ni Ni Aye<sup>1</sup>, May Aung Lin<sup>2</sup>, Thin Chit<sup>2</sup>, Naung Naung<sup>2</sup>, Paing Lin<sup>2</sup>, Soe Tun<sup>2</sup>, Wai Paing<sup>2</sup>, Arkar Thant<sup>2</sup> <sup>1</sup>Jhpiego, Myanmar/PMI Defeat Malaria, Yangon, Myanmar, <sup>2</sup>University Research Co., Myanmar/PMI Defeat Malaria, Yangon, Myanmar

#### LB-5115

A detailed method to detect six soil-transmitted helminths in human stools using two multiplex quantitative real-time polymerase chain reactions

**Kristy I. Azzopardi**, Ciara Baker, Rhian Bonnici, Myra Hardy, Andrew C. Steer *Tropical Diseases Research Group, Murdoch Children's Research Institute, Parkville, Australia* 

#### LB-5116

#### Modelling the predictive value of monitoring thresholds post cessation of MDA for Lymphatic Filariasis

**Benjamin S. Collyer**<sup>1</sup>, Michael A. Irvine<sup>2</sup>, Deirdre Hollingsworth<sup>3</sup>, Mark Bradley<sup>4</sup>, Roy M. Anderson<sup>1</sup> <sup>1</sup>Imperial College London, London, United Kingdom, <sup>2</sup>Institute of Applied Mathematics, Vancouver, BC, Canada, <sup>3</sup>University of Oxford, Oxford, United Kingdom, <sup>4</sup>Global Health Program, GlaxoSmithKline, Brentford, United Kingdom

#### LB-5117

#### Exploring the persistence of *Trichuris trichiura* infection in a high transmission setting

Stella Kepha KEMRI, Nairobi, Kenya

#### LB-5118

#### Is it high time to decrease the size of survey areas for evaluation of Lymphatic Filariasis programs?: Lessons learned from Nepal

**Sudip Raj Khatiwada**<sup>1</sup>, Lila Bahadur Thapa<sup>2</sup>, Prakash Prasad Shah<sup>2</sup>, Achut Babu Ojha<sup>1</sup>, Dharmpal Prasad Raman<sup>1</sup>, Molly Brady<sup>3</sup>, Nandini Pillai<sup>3</sup> <sup>1</sup>RTI International-Nepal, Lalitpur, Nepal, <sup>2</sup>Epidemiology and Disease Control Division/MoHP Nepal, Kathmandu, Nepal, <sup>3</sup>RTI International, Washington, DC, United States

#### Modelling the impact of Covid-19-related control programme interruptions on progress towards the WHO 2030 target for soiltransmitted helminths

**Veronica Malizia**<sup>1</sup>, Federica Giardina<sup>1</sup>, Carolin Vegvari<sup>2</sup>, Sumali Bajaj<sup>3</sup>, Kevin McRae-McKee<sup>3</sup>, Roy M. Anderson<sup>2</sup>, Sake J. de Vlas<sup>1</sup>, Luc E. Coffeng<sup>1</sup> <sup>1</sup>Department of Public Health, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands, <sup>2</sup>London Centre for Neglected Tropical Disease Research, Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom, <sup>3</sup>Department of Infectious Disease Epidemiology, School of Public Health, Imperial College London, London, United Kingdom

#### LB-5120

#### Angiostrongylus cantonensisInfection Presenting as Small Fiber Neuropathy

**Johnnie Yates**<sup>1</sup>, Todd Devere<sup>1</sup>, Sharin Sakurai-Burton<sup>1</sup>, Kiana Frank<sup>2</sup>

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#### LB-5121

#### Understanding the role of interpersonal violence in assisted partner notification for HIV: a mixed-methods study in refugee settlements in West Nile Uganda

**Robin E. Klabbers**<sup>1</sup>, Timothy R. Muwonge<sup>2</sup>, Emmanuel Ayikobua<sup>2</sup>, Diego Izizinga<sup>2</sup>, Ingrid V. Bassett<sup>3</sup>, Andrew Kambugu<sup>2</sup>, Alexander C. Tsai<sup>4</sup>, Miranda Ravicz<sup>5</sup>, Gonnie Klabbers<sup>6</sup>, Kelli N. O'Laughlin<sup>7</sup>

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#### LB-5122

The efficacy and cost-effectiveness of a familybased economic empowerment intervention (Suubi+Adherence) on suppression of HIV viral loads among adolescents living with HIV: Results from a Cluster Randomized Controlled Trial in southern Uganda

**Yesim Tozan**<sup>1</sup>, Ariadna Capasso<sup>1</sup>, Sicong Sun<sup>2</sup>, Torsten B. Neilands<sup>3</sup>, Christopher Damulira<sup>4</sup>, Flavia Namuwonge<sup>4</sup>, Gertrude Nakigozi<sup>5</sup>, Ozge Sensoy Bahar<sup>2</sup>, Proscovia Nabunya<sup>2</sup>, Claude A. Mellins<sup>6</sup>, Mary M. McKay<sup>2</sup>, Irwin Garfinkel<sup>6</sup>, Fred M. Ssewamala<sup>2</sup> <sup>1</sup>New York University, New York, NY, United States, <sup>2</sup>Brown School, Washington University, Saint Louis, MO, United States, <sup>3</sup>Center for AIDS Prevention Studies, School of Medicine, University of California, San Francisco, CA, United States, <sup>4</sup>International Center for Child Health and Development, Washington University, Masaka, Uganda, <sup>5</sup>Rakai Health Sciences Program, Uganda, Rakai, Uganda, <sup>6</sup>Columbia University, New York, NY, United States

#### LB-5123

#### Contributing factors to false-negative rapid diagnostic tests in Malaria surveys in 48 Districts of Uganda: Implications for Selection and use of HRP2-Based Antigen RDTs

**BOSCO B. AGABA**<sup>1</sup>, Joan K. Nankabirwa<sup>2</sup>, A. Yeka<sup>2</sup>, Sam Nsobya<sup>2</sup>, Karryn Gresty<sup>3</sup>, Karen Anderson<sup>3</sup>, Smith David<sup>3</sup>, Rhoda Namubiru<sup>4</sup>, Emmanuel Arinaitwe<sup>5</sup>, Chae Seung Lim<sup>6</sup>, Charles Karamagi<sup>2</sup>, Qin Cheng<sup>7</sup>, Joan K. Nakayaga<sup>2</sup>, Moses Kamya<sup>2</sup> <sup>1</sup>DEPARTMENT OF DISEASE CONTROL, MINISTRY OF HEALTH, kampala, Uganda, <sup>2</sup>Makerere University, kampala, Uganda, <sup>3</sup>Australian Defence Force Malaria and Infectious Disease Institute, Brisbane, Australia, <sup>4</sup>Australian Defence Force Malaria and Infectious Disease Institute, kampala, Uganda, <sup>5</sup>Infectious Diseases Research Collaboration, kampala, Uganda, <sup>6</sup>Korea University, Seoul, Korea, Republic of, <sup>7</sup>Australian Defence Force Malaria and Infectious Disease Institute, kampala, Australia

## Towards a "malaria breathalyzer": Validation of breath biomarkers

**Amalia Berna**<sup>1</sup>, Lucy B. Bollinger<sup>2</sup>, Josephine P. Banda<sup>3</sup>, Patricia Mawindo<sup>3</sup>, Anastasia Evanoff<sup>4</sup>, Diana Culbertson<sup>5</sup>, X. Rosalind Wang<sup>6</sup>, Karl Seydel<sup>7</sup>, Audrey R. Odom John<sup>1</sup>

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#### LB-5125

The role of CSP in sterile immunity induced by Radiation-Attenuated Sporozoite vaccines in the natural host

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#### LB-5126

#### Understanding heterogeneity of malaria infection at the village and household level in two serial cross-sectional surveys in Papua New Guinea

**Desmond Gul**<sup>1</sup>, Daniela Rodriguez-Rodriguez<sup>2</sup>, Elma Nate<sup>3</sup>, Alma Auwan<sup>3</sup>, Javier Rosado Sandoval<sup>4</sup>, Natalie Hofmann<sup>2</sup>, Christian Koepfli<sup>5</sup>, Mary Salib<sup>3</sup>, Stephan Karl<sup>6</sup>, Manuel Hetzel<sup>2</sup>, Ivo Mueller<sup>7</sup>, Archie Clements<sup>8</sup>, Freya Fowkes<sup>1</sup>, Moses Laman<sup>3</sup>, Leanne J. Robinson<sup>1</sup>

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#### LB-5127

#### Destination Based Errors in Malaria Chemoprophylaxis Vary Based on Provider Specialty and Credentials

**Alison M. Helfrich**<sup>1</sup>, Jamie Fraser<sup>2</sup>, Patrick W. Hickey<sup>1</sup>

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#### LB-5128

#### Safety and Immunogenicity of High and Low Doses of Two First-in Human Malaria Vaccines Formulated in ALFQ Adjuvant

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#### LB-5129

#### Using active case detection to reduce malaria morbidity in hard to reach communes in Madagascar

**Saraha Rabeherisoa**<sup>1</sup>, Maurice Ye<sup>2</sup>, Urbain Rabibizaka<sup>1</sup>, Brune E. Ramiranirina<sup>1</sup>, Mauricette N. Andriamananjara<sup>1</sup>, Jean Marie N'Gbichi<sup>2</sup>, Brittany Iskarpatyoti<sup>2</sup>, Laurent Kapesa<sup>3</sup>, Yazoume Ye<sup>2</sup> <sup>1</sup>National Malaria Control Program, Antananarivo, Madagascar, <sup>2</sup>U.S. President's Malaria Initiative Measure Malaria, University of North Carolina at Chapel Hill, USA, NC, United States, <sup>3</sup>U.S. President's Malaria Initiative, Antananarivo, Madagascar

#### LB-5130

#### Antenatal care as a platform for malaria surveillance: Investigating the correlation between prevalence measures from the New Nets Project cross-sectional surveys and ANC surveillance in Burkina Faso and Mozambique

**Molly Robertson**<sup>1</sup>, Christelle Gogue<sup>1</sup>, Julia Mwesigwa<sup>1</sup>, Julie Gutman<sup>2</sup>, Adama Gansané<sup>3</sup>, Baltazar Candrinho<sup>4</sup>, Gizela Azambuja<sup>5</sup>, Rose Zulliger<sup>6</sup>

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#### Vaccination of rhesus macaques with Pfs230D1-EPA conjugate in liposomal adjuvant with TLR-4 agonist and QS21 induces durable immune response

**Puthupparampil V. Scaria**<sup>1</sup>, Charles F. Anderson<sup>1</sup>, Nada Alani<sup>1</sup>, Olga V. Muratova<sup>1</sup>, Emma K. Barnafo<sup>1</sup>, Lynn E. Lambert<sup>1</sup>, Hung Trinh<sup>2</sup>, Zoltan Beck<sup>2</sup>, Christopher G. Rowe<sup>1</sup>, Beth B. Chen<sup>1</sup>, Kelly Rausch<sup>1</sup>, Gary R. Matyas<sup>2</sup>, Mangala Rao<sup>2</sup>, David L. Narum<sup>1</sup>, Patrick E. Duffy<sup>1</sup> <sup>1</sup>NIH, Bethesda, MD, United States, <sup>2</sup>WRAIR, Silver Spring, MD, United States

#### LB-5132

## Systems Analysis of Immune Response to PfSPZ Vaccine in African Infants

**Leetah Senkpeil**<sup>1</sup>, Michael Macklin<sup>1</sup>, Aditi Upadhye<sup>1</sup>, Kephas Otieno<sup>2</sup>, Xiaoling Xuei<sup>1</sup>, Yunlong Liu<sup>1</sup>, Edward Simpson<sup>1</sup>, Simon Kariuki<sup>2</sup>, Stephen Hoffman<sup>3</sup>, Martina Oneko<sup>2</sup>, Robert Seder<sup>4</sup>, Tuan Tran<sup>1</sup> <sup>1</sup>Indiana University School of Medicine, Indianapolis, IN, United States, <sup>2</sup>Kenya Medical Research Institute, Centre for Global Health Research, Kisumu, Kenya, <sup>3</sup>Sanaria Inc., Rockville, MD, United States, <sup>4</sup>Vaccine Research Center (VRC), National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

#### LB-5133

#### Seasonal malaria chemoprevention therapies in children aged under 10 years in Koulikoro, Mali: A cluster-randomized trial study protocol

**Mahamoudou Toure**<sup>1</sup>, Jeffrey G. Shaffer<sup>2</sup>, Daouda Sanogo<sup>1</sup>, Soumba Keita<sup>1</sup>, Sekou F. Traore<sup>1</sup>, Joseph A. Keating<sup>2</sup>, Joshua O. Yukich<sup>2</sup>, Michael Alifrangis<sup>3</sup>, Alyssa Barry<sup>4</sup>, Mahamadou Diakite<sup>1</sup>, Donald J. Krogstad<sup>2</sup>, Seydou O. Doumbia<sup>1</sup> <sup>1</sup>University of Sciences, Techniques and Technologies of Bamako, Mali, Bamako, Mali, <sup>2</sup>Tulane University, New Orleans, LA, United States, <sup>3</sup>University of Copenhagen, Copenhagen, Denmark, <sup>4</sup>Walter+Eliza Hall Institute for Medical Research, Parkville, Australia

#### LB-5134

Gender related differences in infection intensity, prevalence and risk of *Schistosoma mansoni* and *Schistosoma haematobium*: a systematic review **Diepreye V. Ayabina**<sup>1</sup>, Jessica Clark<sup>2</sup>, Jaspreet Toor<sup>3</sup>

<sup>1</sup>University of Oxford, LONDON, United Kingdom, <sup>2</sup>University of Glasgow, Glasgow, United Kingdom, <sup>3</sup>Imperial College London, LONDON, United Kingdom

#### LB-5135

#### Effect of maternal praziquantel treatment for *Schistosoma japonicum* infection on the offspring susceptibility and immunologic response to infection at age six

**Susannah Colt**<sup>1</sup>, Mario A. Jiz<sup>2</sup>, Palmera I. Baltazar<sup>2</sup>, Blanca R. Jarilla<sup>2</sup>, Veronica L. Tallo<sup>2</sup>, Remigio M. Olveda<sup>2</sup>, Hannah W. Wu<sup>1</sup>, Jonathan D. Kurtis<sup>1</sup>, Jennifer F. Friedman<sup>1</sup> <sup>1</sup>Lifespan Center for International Health Research, Providence, RI, United States, <sup>2</sup>Research Institute for Tropical Medicine, Manilla, Philippines

#### LB-5136

#### Baseline Hospital Hand Hygiene Behavior, Supplies, and Infrastructure in Liberia

**Ronan Arthur**<sup>1</sup>, Lily Horng<sup>1</sup>, Andrew Letizia<sup>2</sup>, Lucy Tantum<sup>1</sup>, Fatorma Bolay<sup>3</sup>, Steve Luby<sup>1</sup>, John Gilstad<sup>2</sup> <sup>1</sup>Stanford University, Stanford, CA, United States, <sup>2</sup>Uniformed University of the Health Sciences, Bethesda, MD, United States, <sup>3</sup>National Public Health Institute of Liberia, Monrovia, Liberia

#### LB-5137

#### Presence of antibiotic resistant bacteria in human consumption water in three rural populations of Cartagena, Colombia

**Roger Valle-Molinares**<sup>1</sup>, Doris Gómez<sup>2</sup> <sup>1</sup>Universidad del Atlántico, Barranquilla, Colombia, <sup>2</sup>Universidad de Cartagena, Cartagena, Colombia

#### Poster Session 81 Poster Session C Presentations Late-Breakers in Basic Sciences

Wednesday, November 18, 11:45 am - 1:15 pm Poster Hall

Malaria#LB-5145 through LB-5158
One Health: Interface of Human Health/Animal Diseases#LB-5159 through LB-5160
Pneumonia, Respiratory Infections and Tuberculosis#LB-5161
Protozoa#LB-5162 through LB-5163

#### LB-5145

Detection of differential gene flow between locations in malaria genomic surveillance studies

**Tyler Steven Brown**<sup>1</sup>, Aimee Taylor<sup>2</sup>, Caroline Buckee<sup>2</sup>, Hsiao-Han Chang<sup>2</sup> <sup>1</sup>Massachusetts General Hospital, Boston, MA, United States, <sup>2</sup>Harvard T.H. Chan School of Public Health, Boston, MA, United States

#### LB-5146

#### PLASMA CONCENTRATION OF FIBRINOGEN AND INTERLEUKIN 6 IN MALARIA VIVAX.

Miriam E. Cantero, Yuranis Garcia, Jonathan Peña, Maria Camila Velasco, Gustavo Quintero, Ena L. Torres, Maria F. Yasnot *GIMBIC, Universidad de Cordoba, Monteria, Colombia* 

#### LB-5147

## *Plasmodium vivax* infection compromises the osmotic stability of the host reticulocyte.

**Martha A. Clark**<sup>1</sup>, Usheer Kanjee<sup>1</sup>, Gabriel W. Rangel<sup>2</sup>, Laura Chery<sup>3</sup>, Anjali Mascarenhas<sup>4</sup>, Edwin Gomes<sup>4</sup>, Pradipsinh K. Rathod<sup>3</sup>, Carlo Brugnara<sup>5</sup>, Marcelo U. Ferreira<sup>6</sup>, Manoj T. Duraisingh<sup>1</sup> <sup>1</sup>Harvard TH Chan School of Public Health, Boston, MA, United States, <sup>2</sup>Pennsylvania State University University Park : Penn State, University Park, PA, United States, <sup>3</sup>University of Washington, Seattle, WA, United States, <sup>4</sup>Goa Medical College, Bambolim, India, <sup>5</sup>Boston Children's Hospital and Harvard Medical School, Boston, MA, United States, <sup>6</sup>Institute of Biomedical Sciences, University of, Sao Paulo, Brazil

#### LB-5148

Dimethyl fumarate FDA approved drug provides a survival advantage and reduction in

## neurological deterioration in the experimental model of cerebral malaria.

**Tarun Keswani**, Johanna Daily Albert Einstein College of Medicine, Bronx, NY, United States

#### LB-5149

#### Survival, Oviposition, and Blood-Feeding of the African Malaria Mosquito, Anopheles gambiae s.l. Diptera: Culicidae

Alpha ZLS Lehmann, **Alpha ZLS Lehmann** ICER Mali/USTTB, Bamako, Mali

#### LB-5150

#### Integral gene drives for malaria elimination in a highly seasonal, high transmission setting

**Shirley Leung**, Prashanth Selvaraj Institute for Disease Modeling, Seattle, WA, United States

#### LB-5151

#### Performance evaluation of RDT, light microscopy, and PET-PCR for malaria diagnosis and surveillance during the 2018 Zambia Malaria Indicator Survey

**Mulenga Mwenda**<sup>1</sup>, Abebe A. Fola<sup>2</sup>, Ilinca I. Ciubotariu<sup>2</sup>, Conceptor Mulube<sup>1</sup>, Brenda Mambwe<sup>1</sup>, Rachael Kasaro<sup>1</sup>, Hawela Moonga<sup>3</sup>, Busiku Hamainza<sup>3</sup>, John M. Miller<sup>1</sup>, Giovanna Carpi<sup>2</sup>, Daniel J. Bridges<sup>1</sup> <sup>1</sup>PATH Malaria Control and Elimination Partnership in Africa (MACEPA), Lusaka, Zambia, <sup>2</sup>Department of Biological Sciences, Purdue University, West Lafayette, IN, United States, <sup>3</sup>Ministry of Health, Lusaka, Zambia

#### Neuregulin-1 (NRG-1) Mediates Attenuation of Heme Induced Apoptosis in BeWo Cells

**Annette Nti**<sup>1</sup>, Mingli Liu<sup>1</sup>, Adriana Harbuzariu<sup>1</sup>, Naomi Lucchi<sup>2</sup>, Winston Thompson<sup>1</sup>, Jonathan K. Stiles<sup>1</sup>

<sup>1</sup>Morehouse School of Medicine, Atlanta, GA, United States, <sup>2</sup>Center for Disease Control and Prevention, Atlanta, GA, United States

#### LB-5153

#### A novelMachine Learning Synergy PredictorTool(MLSynPred)toassesssynergisticd rugscombinationsininfectious diseases

**Abiel Roche Lima**<sup>1</sup>, Angélica Rosado Quiñones<sup>2</sup>, Jennifer Díaz Rivera<sup>2</sup>, María del Mar Figueroa Gispert<sup>2</sup>, Roberto G. Díaz González<sup>2</sup>, Brenda G. Nieves Rodríguez<sup>1</sup>, Kelvin Carrasquillo Carrion<sup>1</sup>, Pedro Fernández Gochez<sup>1</sup>, Roberto A. Feliu Maldonado<sup>1</sup>, Emilee E. Colón-Lorenzo<sup>2</sup>, Adelfa E. Serrano<sup>2</sup>

<sup>1</sup>CCRHD, UPR-Medical Sciences Campus, San Juan, PR, United States, <sup>2</sup>Department of Microbiology, UPR-School of Medicine, San Juan, PR, United States

#### LB-5154

# The changing spatiotemporal dynamics of malaria in Mozambique caused by COVID-19 related travel reductions

**Nick Warren Ruktanonchai**<sup>1</sup>, Jessica R. Floyd<sup>1</sup>, Pedro Rente Lourenco<sup>2</sup>, Andrew J. Tatem<sup>1</sup> <sup>1</sup>University of Southampton, Southampton, United Kingdom, <sup>2</sup>Vodafone, London, United Kingdom

#### LB-5155

#### Flow cytometry Evaluation of Dormant *Plasmodium falciparum* Parasites Against Artemisinin-based Combination Therapy

**Rosa Del Carmen Vargas Rodriguez** National University of the Peruvian Amazon, Iquitos, Peru

#### LB-5156

Cytokines, chemokines and antiphosphatidylserine autoantibodies associated with anemia and thrombocytopenia in vivax malaria. **Maria Camila Velasco**<sup>1</sup>, Catalina Tovar<sup>2</sup>, Juan L. Rivera-Correa<sup>3</sup>, Miriam E. Cantero<sup>1</sup>, Gustavo Quintero<sup>1</sup>, Rossana Villegas<sup>1</sup>, Ana Rodriguez-Fernandez<sup>3</sup>, Maria F. Yasnot<sup>1</sup> <sup>1</sup>*GIMBIC, Universidad de Cordoba, Monteria, Colombia,* <sup>2</sup>*GIMBIC, Universidad de Cordoba; Universidad del Sinú, Universidad de Cartagena, Monteria, Colombia,* <sup>3</sup>*Department of Microbiology, School of Medicine, New York University, New York, NY, United States* 

#### LB-5157

#### Evaluation of the Durability of PermaNet 3.0 in an Internally Displaced People's Camp, South Sudan.

**Olivia L. Wetherill**<sup>1</sup>, Fatima Ahmed<sup>1</sup>, Sarah Wharton<sup>1</sup>, Harriet Pasquale<sup>2</sup>, Valetina Buj<sup>3</sup>, Richard Allan<sup>1</sup>

<sup>1</sup>The MENTOR Initiative, Haywards Heath, United Kingdom, <sup>2</sup>South Sudan National Malaria Control Programme, Juba, South Sudan, <sup>3</sup>UNICEF, New York, NY, United States

#### LB-5158

## Scaling Malaria Forecasts to the National Level in Ethiopia

**Michael C. Wimberly**<sup>1</sup>, Dawn M. Nekorchuk<sup>1</sup>, Mulugeta Assefa<sup>2</sup>, Justin K. Davis<sup>1</sup>, Hiwot Teka<sup>3</sup>, Adugna Woyessa<sup>2</sup>

<sup>1</sup>University of Oklahoma, Norman, OK, United States, <sup>2</sup>Ethiopian Public Health Institute, Addis Ababa, Ethiopia, <sup>3</sup>President's Malaria Initiative/United States Agency for International Development, Addis Ababa, Ethiopia

#### LB-5159

## A Systematic Review of Water-Related Disease in the Florida Environment

**McKinley Chapman**, Amber Nicole Barnes University of North Florida, Jacksonville, FL, United States

#### LB-5160

#### SARS-CoV-2 fails to infect and replicate in Aedes aegypti, Ae. albopictus and Culex quinquefasciatus mosquitoes

**Stephen Higgs**, Yan-Jang S. Huang, Dana L. Vanlandingham, Ashley N. Bilyeu, Haelea M. Sharp, Susan M. Hettenbach *Kansas State University, Manhattan, KS, United States*  Poster Session C Late-Breakers in Basic Sciences Wednesday, November 18, 11:45 am – 1:15 pm

#### LB-5161

Adherence to use of face masks as a preventive measure against Covid 19 in Eldoret, Kenya.

#### Arthur M. Kwena

Moi University, Eldoret, Kenya

#### LB-5162

Identification of mouse and human cerebral malaria determinants

**Sung-Jae Cha** Johns Hopkins University, Baltimore, MD, United States

#### LB-5163

#### PREVALENCE OF *Babesia spp.* IN BOVINE OF LIVESTOCK FARMS INCÓRDOBA, COLOMBIA 2019

**Gustavo Quintero**, Kelly Torres, Luisa Taboada, Maria Camila Velasco, Maria F. Yasnot *GIMBIC, Universidad de Cordoba, Monteria, Colombia* 

#### Poster Session 81 Poster Session C Late-Breakers in Clinical and Applied Sciences

Wednesday, November 18, 11:45 am - 1:15 pm Poster Hall

Global Health Malaria One Health: Interface of Human Health/Animal Diseases	#LB-5176 through LB-5198
Pneumonia, Respiratory Infections and Tuberculosis Protozoa	

#### LB-5164

#### When screening won't detect it- who should?

Devin VanWanzeele, Colin Stone, Molly Frank, Klint Schwenk, **Tania Condurache** 

University of Louisville School of Medicine, Louisville, KY, United States

#### LB-5165

#### Severe Acute Malnutrition: Evaluating the BedsidePEWS score as a means to save those most likely to die

**Nancy M. Dale**<sup>1</sup>, Christopher Parshuram<sup>1</sup>, Susan Shepherd<sup>2</sup>, Mohammed Ashir Garba<sup>3</sup>, Bukar Maryah Lawan<sup>3</sup>, André Briend<sup>4</sup>, George Tomlinson<sup>5</sup>, Stanley Zlotkin<sup>1</sup>

<sup>1</sup>The Hospital for Sick Children, Toronto, ON, Canada, <sup>2</sup>Alliance Alliance for International Medical Action, Dakar, Senegal, <sup>3</sup>University of Maiduguri Teaching Hospital, Maiduguri, Nigeria, <sup>4</sup>Tampere Centre for Child Health Research, University of Tampere and Tampere University Hospital, Tampere, Finland, <sup>5</sup>University Health Network, University of Toronto, Toronto, ON, Canada

#### LB-5166

#### Background Rates of Maternal and Neonatal Outcomes to Inform Maternal Immunization Clinical Trials

**Gabriel Gomide**<sup>1</sup>, Dave Mix<sup>2</sup>, Eileen C. Farnon<sup>3</sup>, Iona Munjal<sup>4</sup>, Negar Aliabadi<sup>4</sup> <sup>1</sup>Columbia University Vagelos College of Physicians and Surgeons, New York, NY, United States, <sup>2</sup>Columbia University Mailman School of Public Health, New York, NY, United States, <sup>3</sup>Pfizer Vaccine Clinical Research and Development, Collegeville, PA, United States, <sup>4</sup>Pfizer Vaccine Clinical Research and Development, Pearl River, NY, United States

#### LB-5167

#### Impacts of a household air pollution intervention on dipteran vector density and vector-borne disease exposure risk in Eastern Province, Rwanda

**Ian P. Hennessee**<sup>1</sup>, Miles Kirby<sup>2</sup>, Xavier Misago<sup>3</sup>, Jackie Umupfasoni<sup>3</sup>, Thomas Clasen<sup>1</sup>, Uriel Kitron<sup>4</sup>, Emmanuel Hakizimana<sup>3</sup>, Joshua Rosenthal<sup>5</sup> <sup>1</sup>Emory University, Rollins School of Public Health, Atlanta, GA, United States, <sup>2</sup>Harvard TH Chan School of Public Health, Boston, MA, United States, <sup>3</sup>Rwanda Biomedical Center, Malaria and Other Parasitic Diseases Division, Kigali, Rwanda, <sup>4</sup>Emory University, Department of Environmental Sciences, Atlanta, GA, United States, <sup>5</sup>Fogarty International Center, National Institutes of Health (NIH), Bethesda, MD, United States

Multilevel Correlates Influencing Provider Adherence to Pediatric Treatment Guidelines in Low- and Middle- Income Countries: A Systematic Review and Meta-analysis

**Dorothy I. Mangale**, Shadae S. Paul, Kirk D. Tickell, Chantal Donahue, Hannah Atlas, Donna Denno, Judd Walson, Arianna Means *University of Washington, Seattle, WA, United States* 

#### LB-5169

Post-MDA reverse logistics of NTD medicine: experiences and lessons-learnt in Cross River State, Nigeria

#### Ben Nwobi

RTI International, Durham, NC, United States

#### LB-5170

Prevention and Treatment of Autism- A Call to Action

#### **Colin Ohrt**

Consortium for Health Action, Savage, MN, United States

#### LB-5171

Multi-country Lassa fever epidemiological program in West Africa to support vaccine development - the importance of capacity strengthening and country ownership

#### Adebola Olayinka

WHO Nigeria, Nigeria Centre for Disease Control, Abuja, Nigeria

#### LB-5172

# Operationalising GRID3 maps to support vector control resource planning and precision implementation

**Derek Pollard**<sup>1</sup>, Olena Barkovska<sup>2</sup>, Anna Winters<sup>1</sup>, Anne Martin<sup>1</sup>, Emmanuel Kooma<sup>3</sup>, Ketty Ndhlovu<sup>3</sup>, Heather Chamberlain<sup>4</sup>, John Miller<sup>5</sup> <sup>1</sup>Akros, Lusaka, Zambia, <sup>2</sup>CIESIN, Columbia University, New York, NY, United States, <sup>3</sup>National Malaria Elimination Centre, Ministry of Health, Lusaka, Zambia, <sup>4</sup>University of South Hampton, South Hampton, United Kingdom, <sup>5</sup>PATH Malaria Control and Elimination Partnership in Africa (MACEPA), Lusaka, Zambia

#### LB-5173

#### Implementation of a local COVID-19 convalescent plasma program: Implications for implementation in resource limited settings

**Heather B. Root**, Brian Gurney, JoAnn Kuruc, Alena Markmann, David van Duin, Michael Herce, David Wohl, David Margolis, Yara Park, Susan Weiss, Luther Bartelt *University of North Carolina School of Medicine, Chapel Hill, NC, United States* 

#### LB-5174

#### A HOUSEHOLD SURVEY TO ASSESS RISK FACTORS ASSOCIATED WITH MALARIA INFECTION IN THREE HEALTH DISTRICT OF THE KOULIKORO REGION, MALI

**Mahamoudou Toure**<sup>1</sup>, Sophie Sarrassat<sup>2</sup>, Drissa Konate<sup>1</sup>, Fousseyni Doucoure<sup>1</sup>, Abdoul Zamilou<sup>1</sup>, Immo Kleinschmidt<sup>2</sup>, Seydou Doumbia<sup>1</sup> <sup>1</sup>FMOS/USTTB, Bamako, Mali, <sup>2</sup>LSTMH, London, United Kingdom

#### LB-5175

Title of the summary Health System Strengthening: Collection and analysis of the geolocation coordinates of the villages, the road and hydrographic network for the modeling of the location of the Community Relays (RECO) in eighteen (18) Rural Communes of the health districts of Kindia and Telimélé.

**Facinet Yattara**<sup>1</sup>, Chrestien Yemeni<sup>2</sup>, Aliou Ayaba<sup>3</sup>, Jeremi Goita<sup>3</sup>, Donatien Ntambue<sup>3</sup> <sup>1</sup>Direction Nationale de la Santé Communautaire et de la Médecine Traditionnelle (DNSCMT), Conakry, Guinea, <sup>2</sup>Catholic Relief Services, Dakar, Senegal, <sup>3</sup>Catholic Relief Services, Conakry, Guinea

#### Molecular surveillance reveals the presence of *pfhrp2* and *pfhrp3* gene deletions in *Plasmodium falciparum* parasite populations in Uganda, 2017-2019

**BOSCO B. AGABA**<sup>1</sup>, Karen Anderson<sup>2</sup>, Karryn Gresty<sup>3</sup>, Christiane Prosser<sup>3</sup>, Smith David<sup>3</sup>, Joaniter Nankabirwa<sup>4</sup>, Sam Nsobya<sup>5</sup>, Adoke Yeka<sup>5</sup>, Samuel Gonahasa<sup>4</sup>, Rhoda Namubiru<sup>5</sup>, Emmanuel Arinaitwe<sup>4</sup>, Paul Mbaka<sup>6</sup>, John Kissa<sup>7</sup>, Chae Seung Lim<sup>8</sup>, Charles Karamagi<sup>5</sup>, Jane Cunningham<sup>9</sup>, Joan K. Nakayaga<sup>5</sup>, Moses Kamya<sup>5</sup>, Qin Cheng<sup>3</sup>

<sup>1</sup>DEPARTMENT OF DISEASE CONTROL, MINISTRY OF HEALTH, kampala, Uganda, <sup>2</sup>Australian Defence Force Malaria and Infectious Disease Institute, kampala, Australia, <sup>3</sup>Australian Defence Force Malaria and Infectious Disease Institute, Brisbane, Australia, <sup>4</sup>Infectious Diseases Research Collaboration, kampala, Uganda, <sup>5</sup>Makerere University, kampala, Uganda, <sup>6</sup>World Health Organisation, kampala, Uganda, <sup>7</sup>13National Health Information Division, kampala, Uganda, <sup>8</sup>Korea University, Seoul, Korea, Republic of, <sup>9</sup>World Health Organisation, Geneva, Switzerland

#### LB-5177

#### Malaria and healthcare professionals: the views of Francophone sub-Saharan African Immigrants living in western Canada.

**Ali Ahmed**, Kongnon Coulibaly, Taylor Hanna, Ryland Petrick, Michael Hawkes, Srilata Ravi, Sedami Gnidehou *University of Alberta, Edmonton, AB, Canada* 

#### LB-5178

#### Towards a vaccine for *Plasmodium vivax*

#### Beena Bhamani

ISGlobal Bareclona, Bareclona, Spain

#### LB-5179

Optimizing and updating spatial enumeration datasets for disease burden decision support, in planning and implementation: A case study from IRS for malaria in Zambia

**Frazer Bwalya**<sup>1</sup>, Anne Martin<sup>1</sup>, James Nyirenda<sup>1</sup>, Ernest Mulenga<sup>1</sup>, Anna Winters<sup>1</sup>, John Miller<sup>2</sup>, Derek Pollard<sup>1</sup>

<sup>1</sup>Akros, Lusaka, Zambia, <sup>2</sup>PATH Malaria Control and Elimination Partnership in Africa (MACEPA), Lusaka, Zambia

#### LB-5180

#### Evaluation of an automated microscope using machine learning for the detection of malaria in travelers returned to the UK

Roxanne Rees-Channer<sup>1</sup>, Christine M. Bachman<sup>2</sup>, Lynn Grignard<sup>3</sup>, Stephen Burkot<sup>4</sup>, Matthew P. Horning<sup>2</sup>, Charles B. Delahunt<sup>2</sup>, Liming Hu<sup>2</sup>, Courosh Mehanian<sup>2</sup>, Clay M. Thompson<sup>5</sup>, Paul Lansdell<sup>1</sup>, Sonal Shaw<sup>3</sup>, **Peter L. Chiodini**<sup>1</sup>

<sup>1</sup>Hospital for Tropical Diseases, London, United Kingdom, <sup>2</sup>Global Health Laboratories, Bellevue, WA, United States, <sup>3</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom, <sup>4</sup>Global Health Laboratories, Bellvue, WA, United States, <sup>5</sup>Creative Creek LLC, Camano Island, WA, United States

#### LB-5181

#### Efficacy and safety of artemether lumefantrine and dihydroartemisinin piperaquine for the treatment of uncomplicated *Plasmodium falciparum* malaria in Ugandan children, 2018-9

**Chris Ebong**<sup>1</sup>, Asadu Sserwanga<sup>1</sup>, Jane Francis Namuganga<sup>1</sup>, James Kapisi<sup>1</sup>, Arthur Mpimbaza<sup>1</sup>, Samuel Gonahasa<sup>1</sup>, Sam Gudoi<sup>2</sup>, Ruth Kigozi<sup>2</sup>, John Bosco Bwanika<sup>2</sup>, Bosco Agaba<sup>3</sup>, Denis Rubahika<sup>3</sup>, Daniel Kyabayinze<sup>3</sup>, Jimmy Opigo<sup>3</sup>, Damian Rutazana<sup>3</sup>, Gloria Sebikaari<sup>4</sup>, Kassahun Belay<sup>4</sup>, Mame Niang<sup>4</sup>, Eric S. Halsey<sup>5</sup>, Leah F Moriarty<sup>5</sup>, Naomi W Lucchi<sup>5</sup>, Sam Nsobya<sup>6</sup>, Moses R. Kamya<sup>6</sup>, Adoke Yeka<sup>6</sup>

<sup>1</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>2</sup>USAID's Malaria Action Program for Districts, Kampala, Uganda, <sup>3</sup>National Malaria Control Division, Ministry of Health Uganda, Kampala, Uganda, <sup>4</sup>President's Malaria Initiative, Uganda, Kampala, Uganda, <sup>5</sup>Malaria Branch, Centers for Disease Control and Prevention & President's Malaria Initiative, Atlanta, GA, United States, <sup>6</sup>College of Health Science, Makerere University, Kampala, Uganda

#### LB-5182

#### Use of mosquito repellent impregnated coils and lotion in two settings of variable malaria endemicities in Rwanda:Perceptions on effects&implementation challenges and recommendations

**Chantal Marie Ingabire**<sup>1</sup>, Fredrick Kateera<sup>2</sup>, Manasseh Wandera<sup>3</sup>, Aimable Mbituyumuremyi<sup>4</sup>, Emmanuel Hakizimana<sup>4</sup> <sup>1</sup>Family Care and Health Development Organisation,

Kigali, Rwanda, <sup>2</sup>Partners in Health-Inshuti mu Buzima, Kigali, Rwanda, <sup>3</sup>Society for Family Health, Kigali, Rwanda, <sup>4</sup>Rwanda Biomedical Center, Kigali, Rwanda

## Updated results on new assessment of malaria transmission in the Brazilian Amazon

**Igor Cavallini Johansen**, Marcelo U. Ferreira, Priscila T. Rodrigues *University of São Paulo, Sao Paulo, Brazil* 

#### LB-5184

#### Rapid, Accurate, and Automated Red Blood Cell Detection in Malaria Microscopy Smears

Yasmin M. Kassim<sup>1</sup>, Feng Yang<sup>1</sup>, Richard J. Maude<sup>2</sup>, Stefan Jaeger<sup>1</sup>

<sup>1</sup>Lister Hill National Center for Biomedical Communications/ National Library of Medicine, Bethesda, MD, United States, <sup>2</sup>Nuffield Department of Medicine, University of Oxford, Oxford, United Kingdom

#### LB-5185

#### Field evaluation of highly sensitive diagnostic methods for detection of malaria infections in pregnancy in Papua New Guinea

**Benishar Kombut**<sup>1</sup>, Shazia Ruybal-Pesántez<sup>2</sup>, Pele Melepia<sup>3</sup>, Ruth Fidelis<sup>3</sup>, Elma Nate<sup>1</sup>, Lina Lorry<sup>1</sup>, Maria Ome Kaius<sup>1</sup>, Livingstone Tavul<sup>1</sup>, Rachael Farquhar<sup>4</sup>, Michelle JL Scoullar<sup>4</sup>, Philipe Boeuf<sup>4</sup>, Michaela Riddell<sup>1</sup>, Lisa Vallely<sup>5</sup>, Andrew Vallely<sup>5</sup>, Christopher Morgan<sup>4</sup>, Freya Fowkes<sup>4</sup>, James G Beeson<sup>4</sup>, Jack Richards<sup>4</sup>, William Pomat<sup>6</sup>, Ewurama Owusu<sup>7</sup>, Sandra Incardona<sup>7</sup>, Xavier Ding<sup>7</sup>, Sternard Hiasihri<sup>3</sup>, Moses Laman<sup>8</sup>, Leanne Robinson<sup>4</sup> <sup>1</sup>Papua New Guinea Institue of Medical Research, East New Britain, Papua New Guinea, <sup>2</sup>Walter and Eliza Hall Institute, Melbourne, Australia, Melbourne, Australia, <sup>3</sup>Burnet Institute, East New Britain, Papua New Guinea, <sup>4</sup>Burnet Institute, Melbourne, Australia, <sup>5</sup>Kirby Institute, Sydney, Australia, <sup>6</sup>Papua New Guinea Institue of Medical Research, Goroka, Papua New Guinea, <sup>7</sup>FIND, Geneva, Switzerland, <sup>8</sup>Papua New Guinea Institue of Medical Research, Madang, Papua New Guinea

#### LB-5186

#### Estimating the malaria prevention impact of new nets: Observational analyses to evaluate the evidence generated during piloted new nets distribution in Rwanda

**Aimable Mbituyumuremyi**<sup>1</sup>, Emmanuel Hakizimana<sup>1</sup>, Aline Uwimana<sup>1</sup>, Albert Tuyishime<sup>2</sup>, Chantal M. Ingabire<sup>3</sup>, Kenzie Tynuv<sup>4</sup>, Joseph Wagman<sup>4</sup>, Jenny Shannon<sup>5</sup>, Federica Guglielmo<sup>6</sup>, Molly Robertson<sup>4</sup> <sup>1</sup>*Rwanda Biomedical Center, Malaria and Other Parasitic Diseases Division, Kigali, Rwanda,* <sup>2</sup>*Rwanda Biomedical Center, Planning, Monitoring & Evaluation and Business Strategy Division, Kigali, Rwanda,* <sup>3</sup>*University of Rwanda, Kigali, Rwanda,* <sup>4</sup>*PATH, Washington, DC, United States,* <sup>5</sup>*PATH, Seattle, WA, United States,* <sup>6</sup>*Liverpool School of Tropical Medicine, Liverpool, United Kingdom* 

#### LB-5187

#### Performance Of New Quansys Test As A Reference For Development Of Sensitive Rapid Diagnostic Tests For Malaria

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#### LB-5188

#### Scaling Operational Malaria Forecasts to National Level in Ethiopia Using the Open Source EPIDEMIA Forecasting System

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#### Investigation of Molecular Markers of Antimalarial Resistance During a Therapeutic Efficacy Study Conducted in Uganda, 2018-2019

Sam L. Nsobya<sup>1</sup>, Victor Asua<sup>1</sup>, Chris Ebong<sup>1</sup>, Moses Kiggundu<sup>1</sup>, Samuel Gonahasa<sup>1</sup>, Sam Gudoi<sup>2</sup>, James Tibenderana<sup>2</sup>, Bosco Agaba<sup>3</sup>, Dennis Rubahika<sup>3</sup>, Daniel Kyabayinze<sup>3</sup>, Jimmy Opigo<sup>3</sup>, Damian Rutazana<sup>3</sup>, Gloria Sebikaari<sup>4</sup>, Kassahun Belay<sup>4</sup>, Mame Niang<sup>4</sup>, Eric S. Halsey<sup>5</sup>, Leah F. Moriarty<sup>5</sup>, Samaly S. Svigel<sup>5</sup>, Naomi W. Lucchi<sup>5</sup>, Adoke Yeka<sup>1</sup>, Moses R. Kamya<sup>6</sup>, Venkatachalam Udhayakumar<sup>5</sup> <sup>1</sup>Infectious Diseases Research Collaboration, Kampala, Uganda, <sup>2</sup>USAID, MAPD, Kampala, Uganda, <sup>3</sup>National Malaria Control Division, Ministry of Health Uganda, Kampala, Uganda, <sup>4</sup>President's Malaria Initiative, Kampala, Uganda, Kampala, Uganda, <sup>5</sup>Malaria Branch, Centers for Disease Control and Prevention, Atlanta, Georgia, USA, Atlanta, GA, United States, 6 Infectious Diseases Research Collaboration, Kampala, Uganda, Kampala, Uganda

#### LB-5190

Estimating the malaria prevention impact of new nets: Observational analyses to evaluate the evidence generated during piloted new nets distribution in Nigeria

**Okefu Oyale Okoko**<sup>1</sup>, Peder Digre<sup>2</sup>, Christelle Gogue<sup>3</sup>, Perpetua Uhomoibhi<sup>1</sup>, Ibrahim Maikore<sup>1</sup>, Emmanuel Obi<sup>1</sup>, Adedapo Adeogun<sup>4</sup>, Dele Babarinde<sup>5</sup>, Hannah Koenker<sup>6</sup>, Molly Robertson<sup>3</sup>, Audu Bala Mohammed<sup>1</sup>

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#### LB-5191

#### Robotic Plasmodium sporozoite extraction from Anopheles mosquito salivary glands

**Zephyr Pitre**, Tess Seltzer, Alexis Kaushansky Seattle Children's Hospital, Seattle, WA, United States

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#### Reducing transmission risk of COVID-19 during an observational study of the effectiveness of next-generation insecticide-treated nets

**Molly Robertson**<sup>1</sup>, Kyra Arnett<sup>2</sup>, Adama Gansané<sup>3</sup>, Moussa Guelbeogo<sup>3</sup>, NFalé Sagnon<sup>3</sup>, Baltazar Candrinho<sup>4</sup>, Aimable Mbituyumuremyi<sup>5</sup>, Audu Bala Mohammed<sup>6</sup>, Christelle Gogue<sup>1</sup>, Kenzie Tynuv<sup>1</sup>, Joseph Wagman<sup>1</sup>, Peder Digre<sup>2</sup>, Jenny Shannon<sup>2</sup>, Emily Beylerian<sup>2</sup> <sup>1</sup>PATH, Washington, DC, United States, <sup>2</sup>PATH,

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#### LB-5193

#### Asymptomatic and submicroscopic malaria infections in a low-endemicity area in Loreto, Peru

Juan F. Sanchez<sup>1</sup>, Hugo O. Valdivia<sup>1</sup>, Maria J. Saenz<sup>2</sup>, Karla T. Tafur<sup>2</sup>, Greys Braga<sup>3</sup>, Carmen M. Lucas<sup>1</sup>, Carola J. Salas<sup>1</sup>, Nilton Risso<sup>4</sup>, Christie A. Joya<sup>1</sup>, Danett K. Bishop<sup>1</sup>, Silvia M. Montano<sup>1</sup> <sup>1</sup>U.S. Naval Medical Research Unit No.6 (U.S. NAMRU-6), Lima, Peru, <sup>2</sup>Asociacion Benefica PRISMA, Lima, Peru, <sup>3</sup>U.S. Naval Medical Research Unit No.6 (U.S. NAMRU-6), Iquitos, Peru, <sup>4</sup>Padrecocha Health Center, Iquitos, Peru

#### LB-5194

Post vaccination pregnancies follow up of Radiation Attenuated *Plasmodium falciparum* Sporozoites (PfSPZ Vaccine) in Pregnant Women in Ouelessebougou, Mali

#### Aye Diallo Sousa

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## Development of the*P. vivax*life cycle in*Aotus* nancymaaenon-human primates

**Lisa Sperling**, Julio A. Ventocilla, Laura L. Tapia, Liz Espada, Carmen Flores, Diana Cedamanos, Christian Loza, Reynaldo Ponce, Keare Barazorda, Fredy Villena, Danett Bishop, Robin Burke, Gissella Vasquez, Brandon K. Wilder *Navy Medical Research Unit No. 6, Lima, Peru* 

#### Evaluation of a novel point-of-care haemozoin assay (Gazelle<sup>™</sup>) for rapid detection of *Plasmodium knowlesi* malaria in Sabah, East Malaysia

**Angelica Fiona Tan**<sup>1</sup>, Priyaleela Thota<sup>2</sup>, Sitti Saimah B. Sakam<sup>3</sup>, Noorazela b. Mohamed Yassin<sup>3</sup>, Timothy William<sup>4</sup>, Bridget E. Barber<sup>1</sup>, Giri S. Rajahram<sup>4</sup>, Nicholas M. Anstey<sup>1</sup>, David Bell<sup>2</sup>, Matthew J. Grigg<sup>1</sup> <sup>1</sup>Menzies School of Health Research, Darwin, Australia, <sup>2</sup>Hemex Health, Portland, OR, United States, <sup>3</sup>Infectious Diseases Society Kota Kinabalu, Sabah, Malaysia, <sup>4</sup>Clinical Research Centre, Queen Elizabeth Hospital, Ministry of Health, Sabah, Malaysia

#### LB-5197

# Blazing the Trail for Novel Malaria RDTs: A dual, systematic approach to diagnostic biomarker discovery

**Seda Yerlikaya**, Ewurama DA Owusu, Augustina Frimpong, Robert Kirk DeLisle, Xavier C. Ding *FIND, Geneva, Switzerland* 

#### LB-5198

# Using segmented mixed model to evaluate parasite clearance profile in M5717 treated malaria challenge models

Xiaoyan Yin<sup>1</sup>, James McCarthy<sup>2</sup>, Wilhelmina Bagchus<sup>3</sup>, Oezkan Yalkinoglu<sup>3</sup>, Deon Bezuidenhout<sup>3</sup>, Aliona Tappert<sup>3</sup>, Claude Oeuvray<sup>3</sup> <sup>1</sup>EMD Serono, Billerica, MA, United States, <sup>2</sup>QIMR Berghofer medical Research Institute, Herston, Australia, <sup>3</sup>Merck Healthcare KGaA, Darmstadt, Germany

#### LB-5199

#### Characterizing Live Poultry Contact and Risk of Exposure to Avian Influenza Viruses in Dhaka City Corporation, Bangladesh

**Isha Berry**<sup>1</sup>, Punam Mangtani<sup>2</sup>, Mahbubur Rahman<sup>3</sup>, Amy L. Greer<sup>4</sup>, Shaun K. Morris<sup>5</sup>, Iqbal Ansary Khan<sup>3</sup>, Sudipta Sarkar<sup>3</sup>, Tanzila Naureen<sup>3</sup>, Monalisa M<sup>3</sup>, Meerjady Sabrina Flora<sup>3</sup>, David N. Fisman<sup>1</sup> <sup>1</sup>Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada, <sup>2</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom, <sup>3</sup>Institute of Epidemiology, Disease Control and Research, Dhaka, Bangladesh, <sup>4</sup>Ontario Veterinary College, University of Guelph, Guelph, ON, Canada, <sup>5</sup>Division of Infectious Diseases and Center for Global Child Health, The Hospital for Sick Children, Toronto, ON, Canada

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#### Respiratory syncytial virus infections identified through enhanced surveillance for acute febrile illness in southern Puerto Rico, 2018-2019

**Veronica M. Frasqueri-Quintana**<sup>1</sup>, Liliana Sanchez-Gonzalez<sup>2</sup>, Carene A. Oliveras-Garcia<sup>1</sup>, Robert Rodriguez-Gonzalez<sup>1</sup>, Luisa I. Alvarado-Domenech<sup>1</sup>, Vanessa Rivera-Amill<sup>1</sup> <sup>1</sup>Ponce Health Sciences University, Ponce, Puerto Rico, <sup>2</sup>Centers for Disease Control and Prevention, San Juan, Puerto Rico

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# Prevalence and geospatial determinants of asthma and chronic bronchitis in Senegal in 2010

Peter S. Larson University of Michigan, Ann Arbor, MI, United States

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**Gonzalo Cesar**<sup>1</sup>, Huifeng Shen<sup>2</sup>, María A. Natale<sup>1</sup>, Brooke E. White<sup>2</sup>, María G. Alvarez<sup>3</sup>, Bruno E. Lococo<sup>3</sup>, Rick L. Tarleton<sup>2</sup>, Susana A. Laucella<sup>1</sup> <sup>1</sup>Instituto Nacional de Parasitología Dr. Mario Fatala Chaben, Buenos Aires, Argentina, <sup>2</sup>Center for Tropical and Emerging Global Diseases, University of Georgia, Athens, GA, United States, <sup>3</sup>Hospital Interzonal General de Agudos Eva Peron, San Martin, Argentina

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#### Climate Change and *Borrelia burgdorferi* Seroprevalence 1991-2019, Block Island, RI.

**Scott Espich**, Dan Weinberger, Peter Krause Yale School of Public Health, New Haven, CT, United States

#### Humoral responses in patients with cutaneous leishmaniasis due to *Leishmania donovani* :a preliminary study

**H.s.b. Piyasiri**<sup>1</sup>, T.N. Samarnayake<sup>1</sup>, N.H. Silva<sup>1</sup>, N. Manamperi<sup>2</sup>, N.D. Karunaweera<sup>1</sup> <sup>1</sup>Department of Parasitology, Faculty of Medicine, University of Colombo, Colombo 08, Sri Lanka, <sup>2</sup>Department of Parasitology, Faculty of Medicine, University of Kelaniya, Kelaniya, Sri Lanka

#### LB-5205

#### Dermal & epidermal changes and its association with parasite load in cutaneous leishmaniasis caused by *Leishmania donovani* in Sri Lanka

**FH Riyal**<sup>1</sup>, TN Samaranayake<sup>1</sup>, J. Ganeshalingam<sup>2</sup>, AAH Priyani<sup>2</sup>, D. Munidasa<sup>3</sup>, ND Karunaweera<sup>1</sup> <sup>1</sup>Department of Parasitology, Faculty of Medicine, University of Colombo, Colombo 08, Sri Lanka, <sup>2</sup>Department of Pathology, Faculty of Medicine, University of Colombo, Colombo 08, Sri Lanka, <sup>3</sup>Teaching Hospital, Anuradhapura, Sri Lanka

#### LB-5206

#### Launch of a new Faecal Molecular EQA scheme by UK NEQAS Parasitology

Jaya Shrivastava<sup>1</sup>, Agatha Christie Saez<sup>1</sup>, Peter L. Chiodini<sup>2</sup> <sup>1</sup>Public Health England, London, United Kingdom, <sup>2</sup>UK NEQAS Parasitology, London, United Kingdom

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A novel cytopathogenic assay yields insight in to drug mechanism of action in the brain-eating amoeba, *Naegleria fowleri*.

**Emma V. Troth**, Dennis E. Kyle University of Georgia, ATHENS, GA, United States

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