IV Florida Malaria Consortium Meeting

Biomedical Sciences

UNIVERSITY OF CENTRAL FLORIDA

UCF

March 12th, 2021

Link: https://ucfmed.zoom.us/j/9683677545

09:00 AM Opening Remarks - Debopam Chakrabarti, UCF

Session 1: Parasite Biology & Transmission

CHAIR: RHOEL DINGLASAN

- 1. 09:05 AM Unique GCN5 Complex in Plasmodium falciparum JUN MIAO, USF
- 2. 09:30 AM Translational Regulation during Malaria Parasite Development LIWANG CUI, USF
- 3. 09:55 AM A Double-edged Sword of the Role of Heme in Malaria Infection RAYS JIANG, USF
- 4. 10:20 AM Insights into the Cellular Organization of *Plasmodium* Gametocyte using Transmission Electron Microscopy **PRADEEP SUBRAMANI**, USF
- 5. 10:35 AM High-throughput Phenotypic Screen Unravels *Plasmodium falciparum* genes essential to Malaria Transmission **JYOTSNA CHAWLA,** USF

BREAK

- 6. 10:50 AM Malaria Parasite Modulates Mosquito Metabolic Pathways to Promote its Sporogenic Development - VINCENT NYASEMBE, UF
- 7. 11:05 AM Interaction between Plasmodium-Anopheles Midguts for Malaria Transmission- JUN LI, FIU
- 8. 11:30 AM Chemosensory-Dependent Social Behavior in Female Mosquitoes- ANDRE DA SILVA, FIU

LUNCH

Session 2: Drug Resistance and Discovery

CHAIR: LIWANG CUI

- 1. 12:30 PM The Apicoplast Link to Fever-Survival and Artemisinin-Resistance in the Malaria Parasite-JOHN ADAMS, USF
- 2. 12:55 PM Artemisinin-related Parallel Phenotyping Screens of Plasmodium falciparum Piggybac Mutants - **CAMILLA PIRES**, USF
- 3. 1:10 PM Characterization of Genes in Plasmodium falciparum Mutants Associated with Altered Sensitivity to Artemisinin- **CAROLINE SIMMONS**, USF
- 4. 1:20 PM Role of Plasmodium falciparum Kelch 13 Protein Mutations in *P. falciparum* Populations from Northeastern Myanmar in Mediating Artemisinin Resistance **FAIZA SIDDIQUI**, USF
- 5. 1:35 PM Antimalarial Efficacy of 6-Chloro-2-Arylvinylquinolines CLARIBEL MURILLO-SOLANO, UCF
- 6. 1:50 PM Leveraging Peptaibol Biosynthetic Promiscuity for Next-Generation Antiplasmodials **JENNIFER COLLINS**, UCF
- 7. 2:05 PM Exploration of Type II Protein Kinase Inhibitors as Antimalarials MONICA BOHMER, UCF
- 8. 2:20 PM DFDT (p-p'-difluoro-DDT) as an antimalarial mosquitocide EDMUND NORRIS, USDA

BREAK

Session 3: Immune Response, Pathogenesis & Diagnostics

CHAIR: JOHN ADAMS

- 1. 2:50 PM Defining the Role of the Heme-regulated BACH-1 Transcription Factor in Safeguarding Inflammation Dynamics LASZLO NAGY, Johns Hopkins All Children's Hospital
- 2. 3:15 PM Immunofocusing Humoral Immunity Potentiates the Functional Efficacy of the AnAP1 Malaria Transmission-Blocking Vaccine Antigen **NICOLE BENDER**, UF
- 3. 3:30 PM A potential Role for Antibody-Mediated Immunothrombosis in Pediatric Cerebral Malaria ISAT VERA, USF
- 4. 3:55 PM New Directions in Studies of Malaria Pathogenesis in Pregnancy JULIE MOORE, UF
- 5. 4:20 PM Tackling the Diagnostic Challenges to Malaria Elimination RHOEL DINGLASAN, UF
- 6. 4:45 PM High Resolution Mass Spectrometry-based Multiomics Delineates Rapid Detection of Malaria, Zika, Dengue, and Corona virus **IQBAL MAHMUD**, UF
- 7. 5:00 PM Chemical Biology Approaches to Understanding the Biology of Malaria Pathogenesis and Transmission **TIM HAMERLY**, UF

Closing Remarks

5:15-6:00 PM Separate Virtual Social hours for Faculty and Postdocs/Graduate Students