Program

Registration and Poster Set-up
Opening Remarks: Dennis Kyle , Director of CTEGD
SESSION 1 — Moderators:
Justine Shiau, Dept of Infectious Diseases, CTEGD, & Precision One Health, UGA
Plasmodium spp. differential susceptibility to antimalarials targeting parasite mitochondria
during the vector stages
Sabrina Pizarro , EPIC & Department of Genetics and Biochemistry, Clemson University Exploration of putative sodium/proton exchangers in <i>Trypanosoma brucei</i>
Nana Charles-Chess, CTEGD & Department of Cellular Biology, UGA Memory regulatory T cells protect against recurrent malaria by differentiating into follicular T helper-like cells
BREAK — POSTER VIEWING (even posters)
SESSION 2 — Moderators:
Saniya Sabnis, CTEGD, CVI, & Dept. of Infectious Diseases, UGA Humoral immunity leads to control of chronic <i>Plasmodium</i> infections
INTRODUCTION OF EARLY CAREER SCHOLAR
Fernanda Novais, Dept. of Microbial Infection and Immunity, The Ohio State University
College of Medicine
Hypoxia and CD8 T cells in cutaneous leishmaniasis
LUNCH — POSTER VIEWING
SESSION 3 — Moderators:
Kaelynn Parker , CTEGD & Dept. of Cellular Biology, UGA Same difference: An apicomplexan-specific extension in ATP synthase subunit f in <i>Toxoplasma gondii</i>
Joseph Dainis, CTEGD & Department of Infectious Diseases, UGA
Infection in the Collaborative Cross reveals differential susceptibility and resistance to <i>N. fowleri</i>
Derek Huck, CTEGD & Department of Entomology, UGA
Field-isolated bacteria support larval mosquito development under nutrient-limited conditions
Fiifi Agyabeng-Dadzie , Department of Genetics, UGA Exploring the genome of a global pathogen: New insights into <i>Cryptosporidium parvum</i>
BREAK — POSTER VIEWING (odd posters)
SESSION 4 — Moderators:
Gonzalo Seminario-Mondejar , Center for Tropical and Emerging Global Diseases, UGA Unraveling the enigmatic feeding apparatus of <i>Trypanosoma cruzi</i>
Alejandra Villegas Lopez, University of Georgia A putative glycosyltransferase is required for <i>Plasmodium falciparu</i> m asexual development
INTRODUCTION OF THE KEYNOTE SPEAKER
Terrie Taylor , Department of Osteopathic Medical Specialties, Michigan State University TBA

Poster Presentations

- **Toya Tanner,** University of Georgia Resistance unraveled: Dissecting drug sensitivity and resistance mechanisms in *Cryptococcus* neoformans
- Surya Sekhar Pal, Center for Inflammation, Immunity and Infection, Institute for Biomedical Science, Georgia State University
 Enhanced neutralizing antibodies and protection against RSV by new pre-fusion mRNA and subunit protein combination vaccines in mice
- P3 **Jillian McKeon**, EPIC & Department of Genetics and Biochemistry, Clemson University Enolase inhibitors as therapeutic agents for *Naegleria fowleri* infection
- P4 Kenna Berg, CTEGD & Department. of Infectious Diseases, CVM, UGA Modulation of host cell apoptosis by secreted effectors during *Toxoplasma gondii* infection
- P5 Mayara Bertolini, CTEGD & Department of Cellular Biology, UGA
 Essential roles of vacuolar transporter chaperones 1 and 4 in polyphosphate metabolism and *T. cruzi* infectivity
- P6 **Emily Bremers**, CTEGD & Department of Biochemistry and Molecular Biology, UGA Stereospecific resistance to N2-acyl tetrahydro-β-carboline antimalarials is mediated by a PfMDR1 mutation that confers collateral drug sensitivity
- Perla Vazquez, Center for Tropical and Emerging Global Diseases, UGA
 Conditioned media from differently virulent *Naegleria fowleri* differentially induces cytopathic effects over mammalian cell lines
- P8 Watcharatip Dedkhad, University of Georgia
 A *Plasmodium* transmembrane protein is essential for asexual segmentation of *Plasmodium* falciparum
- Pg Clyde Schmidt-Silva, University of Georgia Mechanism of antigen-presenting cell recruitment during liver-stage malaria
- P10 Hannah Teddleton, Department of Animal Science, University of Tennessee, Knoxville Parasite-resistant sheep exhibit metabolic efficiency after a *Haemonchus contortus* priming infection
- P11 Samantha Gunasekera, Center for Tropical and Emerging Global Diseases, UGA Uncovering the potential role of dsRNAs in *Cryptosporidium* gene regulation
- P12 Anissa Waller Del Valle, CTEGD & Department of Cellular Biology, UGA Development of a cell synchronization protocol for the brain-eating amoeba, *Naegleria fowleri*
- P13 Abu Obyda, Department of Molecular and Cellular Biology, Kennesaw State University Identification of targets, optimization and molecular pharmacology of NEU-4438 a quinolinimine lead against Trypanosoma brucei
- P14 Reagan Haney, CTEGD & Department of Biochemistry and Molecular Biology, UGA Identifying the mechanism of action of a novel antimalarial with collateral drug sensitivity associated with PfKelch13 C580Y mutation
- P15 **Guozhong Huang**, CTEGD & Department of Cellular Biology, UGA Chemical and genetic validation of an essential calcium entry channel of *Trypanosoma brucei* as a therapeutic target
- P16 Victoria Mendiola, Center for Tropical and Emerging Global Diseases, UGA Visualization and quantification of ART-induced dormant *P. falciparum* using cytoplasmic markers
- P17 Corey Rennolds, CTEGD & Department of Genetics, UGA
 Potency, plasticity, and diversity of stem cells in the rat tapeworm, *Hymenolepis diminuta*
- P18 Baihetiya Baierna, CTEGD & Department of Cellular Biology UGA
 Unique interactions between the succinate dehydrogenase and the ubiquinone biosynthesis complex in *Toxoplasma gondii*

- P19 Rafeed Turjya, Institute of Bioinformatics UGA
 The enigmatic mitochondrial genome of Sarcocystis neurona
- P20 **Colm Roster**, EPIC & Department of Genetics and Biochemistry, Clemson University Generating an episomally maintained transgene vector in *Naegleria fowleri*
- P21 Aidan May, Center for Tropical and Global Diseases, UGA
 Utilizing the ATP FRET sensor ATeam3.10 to quantify mitochondrial ATP concentration changes in
 Toxoplasma qondii
- P22 **Samuel Nyarko**, CTEGD & Department of Cellular Biology, UGA Exploring dedaquiline as an apicomplexan ATP synthase inhibitor
- P23 Anthony Ruberto, Center for Tropical and Emerging Global Diseases UGA Lead optimization and target identification of a new series of antimalarial compounds targeting Plasmodium vivax hypnozoites: opportunities and challenges
- P24 Zhe Cheng, CTEGD & Department of Cellular Biology, UGA
 Discovery and characterization of overlapping chromosome 10 copy number variance in multiple in vitro selected artemisinin resistant *Plasmodium falciparum*
- P25 Nathan Chasen, Department of Cellular Biology UGA Nested genes of apicomplexan parasites and a potential 'Tag-in-Place' strategy
- P26 Wayne Cheng, CTEGD & Center for Vaccines and Immunology, CVM, UGA Increased Duffy binding protein 1 expression correlates with *Plasmodium cynomolgi* growth in continuous culture
- P27 Magdalena Argomaniz, CTEGD & Center for Vaccines and Immunology, CVM, UGA A *Plasmodium vivax* strain that expresses fluorescent proteins throughout the life cycle
- P28 Hannah Abbey, EPIC & Department of Genetics and Biochemistry, Clemson University Resolving the function of the SET domain protein lysine methyltransferase in *Trypanosoma brucei*
- P29 Katherine Moen, CTEGD & Department of Cellular Biology, UGA Redox regulation of calcium homeostasis in *Toxoplasma gondii* for optimal lytic cycle progression
- P30 Mackenzie Sievert, Center for Tropical and Emerging Global Diseases, UGA Comprehensive QTL mapping in a Kelch13 wildtype *Plasmodium falciparum* genetic cross
- P31 Ganesh Babu Malli Mohan, Center for Tropical and Emerging Global Diseases, UGA Stage-specific and temperature-responsive control of protein stability in *Trypanosoma cruzi* using a DHFR destabilizing domain system
- P32 Melissa Sleda, Center for Tropical and Emerging Global Diseases, UGA
 Two historical 4(1H)-quinolone scaffolds have potent efficacy against acute and chronic stages of
 Toxoplasma gondii
- P33 Benjamin Phipps, Department of Genetics UGA
 Additional blood meals after infection increase fitness of malaria parasites and their mosquito host
- P34 **Chandler Lowe**, CTEGD & Department of Genetics, UGA Investigating Notch signaling in *Hymenolepis diminuta* segmentation
- P35 **James Oristian**, CTEGD & Department of Infectious Diseases, UGA Induced in vitro sexual commitment of *Plasmodium cynomolgi*
- P36 Aylla von Ermland, Center for Tropical and Emerging Global Diseases, UGA Investigating antigen diversification of *Trypanosoma cruzi* within a single-host infection
- P37 **Benjamin Hoffman**, Department of Cellular Biology, UGA A nuclear protein with YqgF1 and SH2 domains regulates S-phase in *Trypanosoma bruce*i
- P38 Cierra Gladfelter, CTEGD and Dept. of Genetics, UGA
 Understanding the role of *nanos* in germ cell development and regeneration in *Hymenolepis*diminuta

- P39 **Jose Saenz**, Center for Tropical and Emerging Global Diseases, UGA Understanding how *T. cruzi* infection is controlled in muscle
- P40 Melissa Rogers, CTEGD & Department of Cellular Biology, UGA Investigating the role of putative membrane contact site proteins in *Toxoplasma gondii*
- P41 Nupur Kittur, Center for Tropical and Emerging Global Diseases, UGA VEuPathDB: Tools for genomic-scale data exploration, analysis, integration and discovery
- P42 Abdul Malik Hussein, CTEGD & Department of Cellular Biology, UGA
 Membrane contact site assembly is required for VDAC-dependent mitochondrial calcium uptake In
 Toxoplasma gondii
- P43 **Ruby Harrison**, Center for Tropical and Emerging Global Diseases, UGA Preliminary characterization of two *Trypanosoma cruz*i isolates from northern Florida, U.S., suggests the potential for human infection
- P44 **Gaurav Kumar**, Department of Molecular and Cellular Biology, Kennesaw State Universit Tb927.8.2820, a target of NEU-4438, is important for endocytosis of transferrin and cell shape maintenance in *Trypanosoma brucei*
- P45 **Grace Vick**, CTEGD & Department of Infectious Diseases, UGA A SNARE-like *Plasmodium* rhoptry neck protein is required for sealing of the parasitophorous vacuole during merozoite invasion
- P46 Katie Dillon, Institute of Bioinformatics UGA
 Tick Genomes: Overcoming the limitations of tick biology with advancements in sequencing technology
- P47 Amadis Vivas, CTEGD & CVI, UGA Immunogenicity of a protein nanoparticle vaccine encoding the *Plasmodium falciparum* MIF protein in *Aotus nancymaae*
- P48 **Caroline Palmentiero**, EPIC & Department of Genetics and Biochemistry, Clemson University Establishment of transfection approaches in *Naegleria fowleri*
- P49 **Jose Maravi-Jaime**, Universidad Peruana Cayetano Heredia, Lima, Peru Differentially expressed genes in the in vitro activation of *Taenia solium* larvae by taurocholic acid
- P50 Lamin Dibba, Africa Centre of Excellence for Neglected Tropical Diseases & Forensic Biotechnology and Dept of Biochemistry, Faculty of Life Sciences, Ahmadu Bello University, Nigeria, Dept of Physical & Natural Sciences, University of the Gambia Development of a molecular detection and genotyping method for *Toxoplasma gondii*