Program

8:15 AM Registration and Poster Set-up

9:00 AM Opening Remarks: Dennis Kyle, Director of CTEGD

SESSION 1 — Msano Mandalasi & Ruby Harrison

9:10 AM **Stephen Vella**, Center for Tropical & Emerging Global Diseases, UGA
Calcium Signaling and *Toxoplasma* Motlity

9:30 AM **Brian S. Mantilla**, Center for Tropical & Emerging Global Diseases, UGA
InsP7 Protein Targets Reveal Distinct Roles in Proliferative Stages of *Trypanosoma cruzi*

9:50 AM **Catherine D. Morffy Smith**, CTEGD and Dept. of Infectious Diseases, UGA
Composition of the Gut Microbiota Influences Infection Severity and Pregnancy Outcome in *Plasmodium chabaudi*-infected Pregnant Mice

10:10 AM **BREAK — POSTER VIEWING**

SESSION 2 — Stephen Vella & Catherine Smith

10:50 AM **Wei Wang**, Center for Tropical & Emerging Global Diseases, UGA
First Glimpse at a High-quality, Evidence-based and Chromosome-level Reference Genome Assembly for *Trypanosoma cruzi*

11:10 AM **Elisabet Gas Pascual**, CTEGD and Dept. of Biochemistry & Molecular Biology, UGA
A Glycobiology Toolkit for Parasitologist: *Toxoplamsa gondii* Glycogene Genome Editing System

11:30 AM **Peiwei Liu**, Dept. of Cellular Biology, UGA
The Bardet-Biedl Syndrome Protein Complex is an Adapter Expanding the Cargo Range of Intraflagellar Transport Trains for Ciliary Export

11:50 AM **Heather M. Kudyba**, CTEGD and Dept. of Cellular Biology, UGA
PfGRP170 is an Essential ER Protein in the Human Malaria Parasite, *Plasmodium falciparum*

12:10 PM **LUNCH — POSTER VIEWING**

SESSION 3 — Karla Marie Marquez-Nogueras & Manuel Fierro

1:30 PM **Brock Thornton**, Dept. of Biological Sciences, Clemson University
Altered Physiology and Function of the Vacuolar Compartment Ultimately Lead to Reduced Invasion and Microneme Secretion within *Toxoplasma gondii* Parasites

1:50 PM **Christine M. Reitmayer**, Dept. of Infectious Diseases, UGA
Female Mate CHoice Impacts Offspring Immune Performance in *Aedes aegypti* Mosquitoes

2:10 PM **Msano Mandalasi**, CTEGD and Dept. of Biochemistry & Molecular Biology, UGA
A Glycogenin Homolog in *Toxoplasma gondii* Glycosylates an E3 Ubiquitin Ligase and Controls Parasite Growth

2:30 PM **BREAK — POSTER VIEWING**

SESSION 4 — Evgeniy Potapenko & Molly Bunkofske

3:00 PM **Rodrigo P. Baptista**, CTEGD and Institute of Bioinformatics, UGA
Consistent, Comparative and Evidence-based Genome Annotation and Re-annotation for the Closely-related Species, *Cryptosporidium parvum*, *C. hominis* and *C. tyzzeri*

3:20 PM **Amanda Hott**, CTEGD, UGA and National Institutes of Health
Drug Surveillance Study in Mali Reveals Emergence of Quinine Resistance

3:40 PM **INTRODUCTION OF THE KEYNOTE SPEAKER**

3:45 PM **Patricia Johnson**, UCLA Molecular Biology Institute
Trichomonas vaginalis: Human Host and Parasite Interactions

Poster Presentations

P1 **Viktória Čabanová**, Institute of Parasitology, Slovak Academy of Sciences
PCR Xenomonitoring of Filarial Parasites in Mosquitoes from Cryptic Groups *Anopheles maculipennis* and *Culex pipiens*

P2 **Natacha Karambizi**, EPIC and Dept. of Biological Sciences, Clemson University
Role of eIF2-alpha Kinases in *Entamoeba histolytica* Stress Control

P3 **Flavia M. Zimbres**, CTEGD and Dept. of Biochemistry & Molecular Biology, UGA
Polyisoprenoid Metabolism in *Plasmodium falciparum*

P4 **Susanne Warrenfeltz**, Center for Tropical & Emerging Global Diseases, UGA
EuPathDB: Free, Online Omics Resources for Eukaryotic Pathogens

P5 **Alona Botnar**, Center for Tropical & Emerging Global Diseases, UGA
Arrested Development: Gibberellin and Its Mechanism of Action on Dormant *Plasmodium* Parasites

P6 **Katherine L. Floyd**, Dept. of Biological Sciences, UGA
Function of Protoporphyrinogen IX Oxidase (PPO) of *Toxoplasma* in the Pathogenesis of Toxoplasmosis

P7 **Hannah P. McQueen**, Dept. of Biochemistry & Molecular Biology, UGA
Microscopy Analysis of Trypanosome Nanotubes and Extracellular Vesicles

P8 **Ciro Cordeiro**, CTEGD and Dept. of Cellular Biology, UGA
Identification and Characterization of Glycosomal and Cytosolic Nudix Hydrolases with Polyphosphate Hydrolyzing Activity in *Trypanosoma brucei*

P9 **Logan Crowe**, EPIC and Dept. of Genetics & Biochemistry, Clemson University
Characterization of TbPex13.2 and Its Role in Glycosome Protein Import

P10 **Tessa Berrafato**, Dept. of Infectious Diseases, UGA
The Effects of Ivermectin and Moxidectin on Canine Leukocyte Attachment to Drug-resistant and –sensitive Strains of *Dirofilaria immitis*

P11 **Manuel Fierro**, CTEGD and Dept. of Cellular Biology, UGA
An ER-resident Calcium Binding Protein is Required for Egress and Invasion of *Plasmodium*

P12 **Nicolle Barbieri**, Dept. of Population & Health, College of Veterinary Medicine, UGA
Bacterial Endosymbionts in *Acanthamoeba* Isolates from the Nasal Mucosa and Cutaneous Lesions of Dogs

P13 **Benjamin I. Hoffman**, CTEGD and Dept. of Cellular Biology, UGA
Kinetoplast Scission is Regulated by Accessory Proteins in the African Trypanosome

P14 **Christina Wilkinson**, Dept. of Genetics & Biochemistry, Clemson University
Mapping the Trafficking Route of a Trypanosome Peroxin

P15 **Alicer K. Andrew**, CTEGD and Dept. of Infectious Diseases, UGA
Investigating the Crosstalk Between Host Responses in a Rodent Model of Malaria-induced Pregnancy Loss

P16 **Amrita Sharma**, Dept. of Cellular Biology, UGA
Efficacy and Mode of Action of NEU-4438, a Lead Drug for Human African Trypanosomiasis

P17 **Jillian Milanes**, Eukaryotic Pathogens Innovation Center, Clemson University
Targeting the *Naegleria* Glucokinase as a Therapeutic Target: an Amoeba Achilles Heel?

P18 **Heather A. Walters**, EPIC and Dept. of Biological Sciences, Clemson University
Evaluation of eIF2-α Phosphorylation in *Entamoeba histolytica* in Response to Nitrosative or ER Stress

P19 **Alec T. Thompson**, Southeastern Cooperative Wildlife Disease Study, UGA
The New Rat Lungworms?: The Occurrence OF *Physaloptera hispida* and a *Mastophorus* sp. in Pulmonary Vessels of the Hispid Cotton Rat (*Sigmodon hispidus*) from Georgia, USA

P20 **Lisa M Shollenberger**, Center for Vaccines and Immunology, UGA
Optimizing VacSIM® Delivery of Malaria CelTOS and CSP Antigens to Enhance Vaccine Efficacy

P21 **Maren Smith**, School of Chemical & Biomolecular Engineering, Georgia Institute of Technology and MaHPIC, Emory University
Network Analysis of *Plasmodium cynomologi* Infection and Re-infection Challenge

P22 **Jessica Jones**, Eukaryotic Pathogen Innovation Center, Clemson University
Exploring the Role of a Potential Glucose Sensor in *Trypanosoma brucei*

P23 **Kerri Miazgowicz**, CTEGD, Dept. of Infectious Diseases, and Center of the Ecology of Infectious Diseases, UGA
Rate Summation Fails to Estimate *Anopheles stephensi* Trait Performance under Thermal Fluctuation, Which Alters Predictions of Malaria Transmission

P24 **Christian Cochrane**, Clemson University
Putative Lysosomal Chloride Transporters in *Toxoplasma gondii*

P25 **Rachel Hannah**, Dept. of Genetics & Biochemistry, Clemson
TrypSpotting: Identifying Lipid Droplet Proteins in *Trypanosoma brucei*

P26 **Beatrice L. Colon**, CTEGD and Dept. of Infectious Diseases, UGA
Repurposing FDA-approved Compounds to Identify a Treatment Against the Brain-eating Amoeba

P27 **Pablo D. Jimenez Castro**, Dept. of Infectious Diseases, UGA and Grupo de Parasitolgía Veterinaria, Universidad Nacional de Colombia
Macrocyclic Lactone (ML) Anthelmintics Lack Meaningful in vitro Activity Against L3 and L4 Stages of Both ML-susceptible and ML-resistant *Dirofilaria immitis*

P28 **Anat Florentin**, CTEGD and Dept. of Cellular Biology, UGA
A Bacterial Complex is Required for Plastid Integrity in *P. falciparum*

P29 **O. Agata Walkowiak**, EPIC and Dept. of Genetics & Biochemistry, Clemson University
Effect of Fatty Acid Synthesis Inhibitor Cerulenin on Bloodstream Form *T. brucei*

P30 **Joshua H. Butler**, CTEGD and Dept. of Biochemistry & Molecular Biology, UGA
Natural Products as a Source to Discover Novel Drug Targets in *P. falciparum*

P31 **Ana Lisa Valenciano**, CTEGD and Dept. of Biochemistry & Molecular Biology, UGA
Metabolic Dependency of Chorismate in *Plasmodium falciparum*

P32 **Rudo Kieft**, Dept. of Biochemistry & Molecular Biology, UGA
Identification of a Novel Protein Complex Involved in RNA Polymerase II Transcription Termination in Kinetoplastids

P33 **Justin Wiedeman**, CTEGD and Dept. of Cellular Biology, UGA
A Fixable probe for Visualizing Flagella and Plasma Membranes of the African Trypanosome

P34 **Nicole Holderman-Munro**, CTEGD and Dept. of Biochemistry & Molecular Biology, UGA
Using High-resolution Mass Spectrometry to Decipher the Isoprenome in *Plasmodium falciparaum*

P35 **Blanka Tesla**, CTEGD and Dept. of Infectious diseases, UGA
Impacts of Temperature on Zika Virus Transmission Potential

P36 **Ruby Harrison**, CTEGD and Dept. of Entomology, UGA
The Gut Microbiota is Required for Normal Egg Formation in the Yellow Fever Mosquito, *Aedes aegypti* L. (Diptera: Culicidae)

P37 **Nuria W. Negrão**, CTEGD and Dept. of Cellular Biology,UGA
Characterization of a Phospholipase C-like Protein (TbPI-PLC2) from *Trypanosoma brucei*

P38 **David W. Cobb**, CTEGD and Dept. of Cellular Biology, UGA
An ER-resident Hsp40 is Required for the Asexual Development of the Malaria Parasite *P. falciparum*

P39 **Scott B. Green**, Dept. of Natural Sciences, University of South Carolina - Beaufort
Structure-activity Relationship (SAR) Investigation of Monosaccharide Derivatives: Discovery of Biologically Active and Competitive *Trypanosoma cruzi* Glucokinase Inhibitors

P40 **Angel Padilla**, Center for Tropical & Emerging Global Diseases, UGA
Spontaneous Dormancy Protects *Trypanosoma cruzi* During Extended Drug Exposure

P41 **Yiran Li**, Institute of Bioinformatics, UGA
Strand-specific RNA Sequencing in Zoonotic Protozoan Pathogen *Cryptosporidium parvum* Suggests Widespread and Developmentally Regulated Long Non-coding RNA Transcription

P42 **Kyle Pazzo**, Dept. of Genetics & Biochemistry, Celmson University
Dramatic Morphological Changes in *T. brucei* upon Over-expression of Lipid Droplet Targeting Proteins

P43 **Nicole M. Arroyo Diaz**, Dept. of Infectious Disases, UGA
Development of Parainfluenza Virus 5 (PIV5) Based Zika Virus Vaccine

P44 **Christopher A. Rice**, CTEGD and Dept. of Cellular Biology, UGA
Discovery and Development of Trophocidal and Cysticidal Compounds for the Treatment of *Acanthamoeba* infections

P45 **Kathryn Purple**, Comparative & Experimental medicine, University of Tennessee
Investigating the Molecular Epidemiology and Transmission Potential of *Trichomonas* spp. from Hunter-killed Columbiformes in California

P46 **Nikki M. Meyer**, Dept. of Infectious Diseases, UGA
Expression, Purification of Recombinant Guinea Pig Cytokines and Chemokines for Monoclonal Antibody Production

P47 **Jocelyn Sotolongo Gomez**, Southeastern Cooperative Wildlife Disease Study, UGA
Protective Neutralizing Antibodies to Highly Pathogenic Avian Influenza H5N8 and H5N2 in Blue-winged Teal (*Anas discors*)

P48 **BreeAnna Dell**, College of Veterinary Medicine, Univeristy of Tennessee
Retrospective Investigation of Translocated Elk in Tennessee (USA) and Examination of Canid Definitive Hosts for *Echinococcus granulosus*

P49 **Carlie A. Neiswanger**, Center for Vaccines & Immunology, UGA
Pathogenesis of a Novel Avian Influenza Virus, A/New York/108/2016 (H7N2)

P50 **Miryam A. Hortua Triana**, Center for Tropical & Emerging Global Diseases, UGA
Phosphoinositide Phospholipase C and Calcium Signaling in *Toxoplasma gondii*

P51 **Natasha Perumal**, Center for Tropical & Emerging Global Diseases, UGA
The Impact of STING Pathway Activation During *Trypanosoma cruzi* Infection

P52 **Karla M. Márquez Nogueras**, Center for Tropical & Emerging Global Diseases, UGA
Regulation of Calcium Entry by Calcium-binding Proteins

P53 **Margot P. Palmer**, Dept. of Biochemistry & Molecular Biology, UGA
Extracellular Vesicles Produced by African Trypanosomes a Potential Tool for Diagnostics

P54 **Juan M. Bustamante**, Center for Tropical & Emerging Global Diseases, UGA
Curative Effect of Modified Benznidazole Dosing Regimens in Chronic *Trypanosoma cruzi* Infection

P55 **Logan Ballard**, Dept. of Biochemistry & Molecular Biology, UGA
Developmental Changes in Extracellular Vesicles from African Trypanosomes (*Trypanosoma brucei brucei*)

P56 **Edwin Pierre Louis**, CTEGD and Dept. of Cellular Biology, UGA
Role of a Secreted Effector of *Toxoplasma gondii* in Modulating the Host Cell Cycle

P57 **Trisha Dalapati**, Center for Tropical & Emerging Global Diseases, UGA
Effects of *Plasmodium falciparum* on Placental Expression of Inflammatory and Coagulation Factors

P58 **Abigail Calixto**, CTEGD and Dept. of Microbiology, UGA
Using Forward Genetics to Identify Calcium Channels in *Toxoplasma gondii*

P59 **Alma G. Mendoza**, Dept. of Infectious Diseases, UGA
Identification of Macrophage Cell Surface Receptors with Binding Affinity for the Helminth Glycan, LNFP3