Young Investigator Award Session E

Convention Center - Room 716 (Level 7)

The Young Investigator Award is presented to outstanding young researchers during the Annual Meeting. This award encourages developing young scientists to pursue careers in various aspects of tropical disease research. Support these young scientists by attending their presentations during this session.

Title	Author Block	Presentation #	Start Time	End Time
Global Characterization of Diversity and Selective Pressures in Five Loci Identified by Whole-Genome Sieve Analysis as Putative Antigens	**Ryan Joseph Scalsky**, Kirsten Lyke, Joana Carneiro da Silva *University of Maryland School of Medicine, Baltimore, MD, United States*	6372	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM
Widespread Gene Fusion Artifacts in Helminth Genomes	**Emma L. Collington**, Andrew C. Doxey, Brendan J. McConkey, D. Moira Glerum *University of Waterloo, Waterloo, ON, Canada*	6629	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM
Powassan Virus Elicits Differential Host Immune Responses During Natural Tick-Mediated Transmission	**Dakota N. Paine**, Jessica Crooker, Saravanan Thangamani *State University of New York Upstate Medical University, Syracuse, NY, United States*	6650	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

***Plasmodium falciparum*Ubiquitin-proteasome system (UPS) modulating antimalarial resistance**	**Adriana Faria Gonçalves**[1], Ana Lima-Pinheiro[1], Gustavo Capatti Cassiano[2], Pedro Cravo[2], Pedro Eduardo Ferreira[1] *[1]Life and Health Sciences Research Institute (ICVS)/ Biomaterials, Biodegradables and Biomimetics Research Group (3B's)-PT Government Associate Laboratory, 4710-057 Braga, Portugal, Braga, Portugal, [2]Global Health and Tropical Medicine (GHTM), Associate Laboratory in Translation and Innovation Towards Global Health (LA-REAL), Instituto de Higiene e Medicina Tropical (IHMT), Universidade Nova de Lisboa (UNL), Lisbon, Portugal, Lisboa, Portugal*	7137	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM
Predicting novel molecular markers associated with reduced sensitivity of *Plasmodium falciparum* to dihydroartemisinin in Uganda	**Andrew Walakira**[1], Martin Okitwi[2], Stephen Orena[3], Patrick K. Tumwebaze[4], Thomas Katairo[3], Yoweri Taremwa[3], Oswald Byaruhanga[3], Stephen Tukwasibwe[5], Roland A. Cooper[6], Emmanuel Arinaitwe[3], Joaniter Nankabirwa[7], Moses R. Kamya[8], Melissa Conrad[9], Ronald Galiwango[10], Daudi Jjingo[11], Philip Rosenthal[12], Samuel Lubwama Nsobya[3] *[1]Makerere University, College of Health Sciences, Kampala, Uganda, [2]Infectious Diseases Research Collaboration, Uganda, Kampala, Uganda, [3]Infectious Diseases Research Collaboration, Kampala, Uganda, [4]Infectious Disease Research Collaboration,*	7194	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

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Genomic surveillance reveals geographical heterogeneity and differences in known and novel insecticide resistance mechanisms in *Anopheles arabiensis* across Kenya	**Brian Polo**[1], Kelly L. Bennett[2], Sonia Barasa[3], Jon Brenas[2], Silas Okoth Agumba[1], Joseph Mwangangi[4], Lucy Wachira[5], Stanley Kitur[5], Damaris Matoke-Muhia[5], David Mburu[6], Edith Ramaita[7], Elijah Juma[3], Charles M. Mbogo[3], Eric Ochomo[1], Christopher Clarkson[2], Alistair Miles[2], Luna Kamau[5] *[1]Centre for Global Health Research (CGHR), Kenya Medical Research Institute, Kisumu, Kenya, [2]Vector Genomic Surveillance Unit, Wellcome Trust Sanger Institute, Hinxton, Cambridge, United Kingdom, [3]Pan-Africa Mosquito Control Association (PAMCA), Nairobi, Kenya, [4]Centre for Geographic Medicine Research-Coast (CGMR-C), Kenya Medical Research Institute,*	7288	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

	Kilifi, Kenya, [5]Center for Biotechnology Research and Development (CBRD), Kenya Medical Research institute, Nairobi, Kenya, [6]Pwani University, Biosciences Research Centre (PUBReC), Kilifi, Kenya, [7]Ministry of Health - National Malaria Control Programme (NMCP), Nairobi, Kenya			
Genomic characterization of *Plasmodium falciparum* transmission networks across Angola's diverse malaria endemic zones	**Wilson Tavares**[1], Ankit Dwivedi[2], Rammé Nathalia[3], José Franco Martins[4], Filomeno Fortes[5], Ana Paula Arez[1], Joana Morais[6], Joana C. Silva[7] *[1]The Portuguese Institute of Hygiene and Tropical Medicine (IHMT), Lisbon, Portugal, [2]IGS, University of Maryland Baltimore, Baltimore, MD, United States, [3]Universidade de São Paulo, São Paulo, Brazil, [4]Ministry of Health Angola, Luanda, Angola, [5]PSI-ANGOLA, Washington, DC, United States, [6]Instituto Nacional de Investigação em Saúde, Luanda, Angola, [7]Univ of Maryland School of Medicine, Silver Spring, MD, United States*	7544	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM
Break	**Break**	Break	Break	Break
Structure of Malaria Sporozoite-Stage Antibody 3C1 and Potential Therapeutic Applications	**Jordan E. Becker**[1], Eswar R. Reddem[2], Phinikoula S. Katsamba[1], Nicholas C. Morano[1], Fabiana Bahna[1], Seetha Mannepalli[1], Peter D. Kwong[1], Lawrence	7609	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

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Investigation of Micronutrient and Energy Metabolism Differences in Latent and Clinical Leprosy in Minas Gerais, Brazil Using High-Resolution Plasma Metabolomics	**Alia R. Bly**[1], Maisa Pereira Vieira[2], Lorena B.P. de Oliveira[2], Heloine M. Leite[2], Pedro H.F. Marçal[2], Audra Bass[3], Marcos D.S. Pinheiro[2], Erica B.M. Silva[2], Julie A. Clennon[4], Thomas R. Ziegler[5], Lance A. Waller[6], José A. Ferreira[7], Lucia A.O. Fraga[2], Jessica K. Fairley[3], Jeffery M. Collins[3] *[1]Department of Epidemiology, Rollins School of Public Health, Atlanta, GA, United States, [2]Department of Health Sciences, Universidade Federal de Juiz de Fora, Governador Valadares, Minas Gerais, Brazil, [3]Division of Infectious Diseases, Department of Medicine, Emory University School of Medicine, Atlanta, GA, United States, [4]Department of Environmental Sciences, Emory University, Atlanta, GA, United States, [5]Division of Endocrinology, Metabolism and Lipids, Department of Medicine, Emory University School of Medicine, Atlanta, GA, United States, [6]Department of Biostatistics and Bioinformatics, Rollins School of Public Health,*	7626	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

	Atlanta, GA, United States, [7]Faculdade da Saúde e Ecologia Humana, Vespasiano, Brazil			
Characterization of Circulating Viral Isolates of Powassan Virus Lineage II	**Jessica Crooker**, Dakota Paine, Xinru Wang, Saravanan Thangamani *State University of New York Upstate Medical University, Syracuse, NY, United States*	7777	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM
Conserved Residues in the Orthoflavivirus Envelope Protein Serve a Dual Purpose: to Control Membrane Fusion and Promote Evasion of Antibody-Mediated Neutralization	**Emily Mantlo**[1], Chad Gebo[1], Adam Waickman[1], Claire Huang[2], Yan-Jang Huang[1] *[1]Department of Microbiology & Immunology, SUNY Upstate Medical University, Syracuse, NY, United States, [2]Division of Vector-Borne Diseases, Centers for Disease Control & Prevention, Fort Collins, CO, United States*	7829	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM
Deep learning-guided cartography method for analyzing patterns and molecular determinants of antigenic evolution in influenza A virus	**Lin Wang**[1], Bingyi Yang[2], Yifan Yin[2], Noemie Lefrancq[3], Henrik Salje[4] *[1]University of Cambridge, Cambridge, United Kingdom, [2]School of Public Health, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, Hong Kong, [3]Department of Biosystems Science and Engineering, ETH Zürich, Basel, Switzerland, [4]University of Cambridge, CAMBRIDGE, United Kingdom*	7874	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

*Pf*ApiAT2 mediates proline transport and is essential for oocyst development and transmission of *Plasmodium falciparum*.	**Malhar Khushu**[1], Charles Kissel[2], Lola Fagbami[3], Jaime Kauffman[1], Robert Summers[1], Amanda Lukens[1], Leigh Plant[2], Flaminia Catteruccia[1], Dyann F. Wirth[1], Selina Bopp[1] *[1]Harvard T. H. Chan School of Public Health/Infectious Disease and Microbiome Program, Broad Institute, Boston, MA, United States, [2]Bouvé College of Health Sciences, Northeastern University, Boston, MA, United States, [3]University of Georgia, Athens, GA, United States*	7955	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM