

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 <i>University of Maryland School of Medicine, Baltimore, MD, United States</i>	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 <i>University of Waterloo, Waterloo, ON, Canada</i>	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 <i>State University of New York Upstate Medical University, Syracuse, NY, United States</i>	6650	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

<i>Plasmodium falciparum</i> Ubiquitin-proteasome system (UPS) modulating antimalarial resistance	Adriana Faria Gonçalves¹, Ana Lima-Pinheiro¹, Gustavo Capatti Cassiano², Pedro Cravo², Pedro Eduardo Ferreira¹ <i>¹Life and Health Sciences Research Institute (ICVS)/ Biomaterials, Biodegradables and Biomimetics Research Group (3B's)-PT Government Associate Laboratory, 4710-057 Braga, Portugal, Braga, Portugal, ²Global 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</i>	7137	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM
Predicting novel molecular markers associated with reduced sensitivity of <i>Plasmodium falciparum</i> to dihydroartemisinin in Uganda	Andrew Walakira¹, Martin Okitwi², Stephen Orena³, Patrick K. Tumwebaze⁴, Thomas Katairo³, Yoweri Taremwa³, Oswald Byaruhanga³, Stephen Tukwasibwe⁵, Roland A. Cooper⁶, Emmanuel Arinaitwe³, Joaniter Nankabirwa⁷, Moses R. Kamya⁸, Melissa Conrad⁹, Ronald Galiwango¹⁰, Daudi Jjingo¹¹, Philip Rosenthal¹², Samuel Lubwama Nsobya³ <i>¹Makerere University, College of Health Sciences, Kampala, Uganda, ²Infectious Diseases Research Collaboration, Uganda, Kampala, Uganda, ³Infectious Diseases Research Collaboration, Kampala, Uganda, ⁴Infectious</i>	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 <i>Anopheles arabiensis</i> across Kenya	Brian Polo¹, Kelly L. Bennett², Sonia Barasa³, Jon Brenas², Silas Okoth Agumba¹, Joseph Mwangangi⁴, Lucy Wachira⁵, Stanley Kitur⁵, Damaris Matoke-Muhia⁵, David Mburu⁶, Edith Ramaita⁷, Elijah Juma³, Charles M. Mbogo³, Eric Ochomo¹, Christopher Clarkson², Alistair Miles², Luna Kamau⁵ ¹Centre for Global Health Research (CGHR), Kenya Medical Research Institute, Kisumu, Kenya, ²Vector Genomic Surveillance Unit, Wellcome Trust Sanger Institute, Hinxton, Cambridge, United Kingdom, ³Pan-Africa Mosquito Control Association	7288	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

	(PAMCA), Nairobi, Kenya, ⁴Centre for Geographic Medicine Research-Coast (CGMR-C), Kenya Medical Research Institute, Kilifi, Kenya, ⁵Center for Biotechnology Research and Development (CBRD), Kenya Medical Research institute, Nairobi, Kenya, ⁶Pwani University, Biosciences Research Centre (PUBReC), Kilifi, Kenya, ⁷Ministry of Health - National Malaria Control Programme (NMCP), Nairobi, Kenya			
High-density temporal and spatial surveillance in Rwanda reveals increasing validated <i>Plasmodium falciparum</i> <i>kelch13</i> mutations and complex patterns of recent emergence and spread 2022-2024	Neeva Wernsman Young¹, Pierre Gashema², Jenna Zuromski¹, Vincent Iradukunda², Ntwari Jean Bosco², Rebecca Crudale¹, Felicien Maisha³, Fred Mwebembezi⁴, Seth Misago⁵, Tharcisse Munyaneza⁶, Edgar Mulogo⁴, Deusdedith R.S. Ishengoma⁷, Stan Hangi³, Corine K. Karema⁸, Jean-Baptiste Mazarati⁹, Jeffrey A. Bailey¹, Jonathan J. Juliano¹⁰ ¹Brown University, Providence, RI, United States, ²INES-Ruhengeri, Ruhengeri, Rwanda, ³Heal Africa, Goma, Congo, Democratic Republic of the, ⁴Mbarara University of Science and Technology, Mbarara, Uganda, ⁵National Institute for Medical Research, Dar es Salaam, Tanzania, United Republic of, ⁶National Reference Laboratory, Rwanda Biomedical Center, Kigali, Rwanda, ⁷NIMR-TANGA Centre, Dar Es Salaam, Tanzania, United Republic	7488	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

	of, ⁸ Quality & Equity Healthcare, Kigali City, Rwanda, ⁹ Rwanda Biomedical Center, Kigali, United States, ¹⁰ Univ of North Carolina, Chapel Hill, NC, United States			
Genomic characterization of <i>Plasmodium falciparum</i> 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 Shapiro ¹ ¹ ADARC, Columbia University, New York, NY, United	7609	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

	<i>States, ²Columbia University, New York, NY, United States</i>			
Investigation of Micronutrient and Energy Metabolism Differences in Latent and Clinical Leprosy in Minas Gerais, Brazil Using High-Resolution Plasma Metabolomics	Alia R. Bly¹, Maisa Pereira Vieira², Lorena B.P. de Oliveira², Heloíne M. Leite², Pedro H.F. Marçal², Audra Bass³, Marcos D.S. Pinheiro², Erica B.M. Silva², Julie A. Clennon⁴, Thomas R. Ziegler⁵, Lance A. Waller⁶, José A. Ferreira⁷, Lucia A.O. Fraga², Jessica K. Fairley³, Jeffery M. Collins³ <i>¹Department of Epidemiology, Rollins School of Public Health, Atlanta, GA, United States, ²Department of Health Sciences, Universidade Federal de Juiz de Fora, Governador Valadares, Minas Gerais, Brazil, ³Division of Infectious Diseases, Department of Medicine, Emory University School of Medicine, Atlanta, GA, United States, ⁴Department of Environmental Sciences, Emory University, Atlanta, GA, United States, ⁵Division of Endocrinology, Metabolism and Lipids, Department of Medicine, Emory University School of Medicine, Atlanta, GA, United States, ⁶Department of Biostatistics and Bioinformatics, Rollins School of Public Health, Atlanta, GA, United States, ⁷Faculdade da Saúde e Ecologia Humana, Vespasiano, Brazil</i>	7626	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

Characterization of Circulating Viral Isolates of Powassan Virus Lineage II	Jessica Crooker , Dakota Paine, Xinru Wang, Saravanan Thangamani <i>State University of New York Upstate Medical University, Syracuse, NY, United States</i>	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 <i>¹Department of Microbiology & Immunology, SUNY Upstate Medical University, Syracuse, NY, United States, ²Division of Vector-Borne Diseases, Centers for Disease Control & Prevention, Fort Collins, CO, United States</i>	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 <i>¹University of Cambridge, Cambridge, United Kingdom, ²School of Public Health, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, Hong Kong, ³Department of Biosystems Science and Engineering, ETH Zürich, Basel, Switzerland, ⁴University of Cambridge, CAMBRIDGE, United Kingdom</i>	7874	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM

<i>PfApiAT2</i> mediates proline transport and is essential for oocyst development and transmission of <i>Plasmodium falciparum</i> .	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 <i>¹Harvard T. H. Chan School of Public Health/Infectious Disease and Microbiome Program, Broad Institute, Boston, MA, United States, ²Bouvé College of Health Sciences, Northeastern University, Boston, MA, United States, ³University of Georgia, Athens, GA, United States</i>	7955	11/9/2025 9:00:00 AM	11/9/2025 2:00:00 PM
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