

Oral Presentations:

“Using Language Models to Predict Zoonotic Escape in Hepatitis-E Virus” TM Murali, Professor, Computer Science

“Making old drugs new: Development of thermorubin and other neglected antibiotics” Andrew Lowell, Assistant Professor, Chemistry

“Global Monkeypox Spread Due to Increased Air Travel” Luis Escobar, Assistant Professor, Fish and Wildlife Conservation

“Genomic diversification of *Listeria monocytogenes* isolated from natural and food-associated environments” Jingqiu Liao, Assistant Professor, Civil Environmental Engineering

“Impact of Data Structure, Availability, and Noise Distribution on Practical and Structural Identifiability of an SEIR Model” Omar Saucedo, Assistant Professor, Mathematics

“Noble Metal Organometallic Complexes Display Antiviral Activity against SARS-CoV-2” Joseph Merola, Professor, Chemistry

“Discovery of two inhibitors of the type IV pilus assembly ATPase, PilB, as antivirulence compounds” Keane Dye, Postdoc

“Interactions between bacteriophage χ and the flagellum of pathogenic *Salmonella enterica*” Nathaniel Esteves, ID-IGEP

“Humoral and T-cell-mediated responses to a pre-clinical Zika vaccine candidate that utilizes a unique insect-specific flavivirus platform” Danielle Porier, ID-IGEP

“Investigating climatic influences on dengue transmission in emerging and endemic regions through mathematical modeling” Michael Robert, Assistant Professor, Mathematics

“GenomeRxiv: A genome similarity-based approach for precise and accurate pathogen identification” Reza Mazloom, ID-IGEP

“Modeling Vibrio cholerae transmission risk in aquatic ecosystems using a density-based clustering algorithm” Mariana Castaneda Guzman, ID-IGEP

“Defining “Spillover Transmission” and Future Avenues of Research” Paige Van de Vuurst, ID-IGEP

“Initial Findings from Two Prospective Cohort Studies in Rural Southwest Virginia: Microbiological and Chemical Contaminants in Drinking Water and Associated Health Outcomes” Alasdair Cohen, Assistant Professor, Population Health Sciences

“Genome size distributions in bacteria and archaea are strongly linked to evolutionary history at broad phylogenetic scales” Carolina Alejandra Martinez Gutierrez, ID-IGEP

“Loop-mediated isothermal amplification (LAMP) and nanopore sequencing for SARS-CoV-2 wastewater surveillance” Seju Kang, ID-IGEP

“Using metagenomics sequencing to investigate Xylella fastidiosa population and phylogeny within Virginia” Sahar Abdelrazek, ID-IGEP

“Research equity in climate change and disease research” Paige Van de Vuurst, ID-IGEP

“Histotripsy Treatment of Microbial Biofilms in Clinical Urinary Catheters” Elizabeth Nowak, Assistant Professor, VTC

“The Role of Sympathetic Neuronal Pathways in Regulating HSV1 and HSV2 Genital Infection” Greyson Moore, ID-IGEP

"The Attenuation Mechanism of Interferon Gamma on Chikungunya Virus." Christina Chuong, ID-IGEP

"Phages as commensal entities in the mammalian gut" Bryan Hsu, Assistant Professor, Biological Sciences

"Identification of LC3-interacting region (LIR) motifs within the NSs protein of Rift Valley fever virus as a method to discover host protein-viral protein interaction for therapeutic targeting" Kaylee Petraccione, ID-IGEP

"Host interactors of the E1 glycoprotein of Venezuelan equine encephalitis virus as targets for antiviral Drugs" Lauren Panny, ID-IGEP

"Development of animal models for the study of Cache Valley Virus" Krisangel López, ID-IGEP

"Sex and habitat drive hantavirus prevalence in marsh rice rat populations impacted by the Deepwater Horizon oil spill" Anna Perez-Umphrey, ID-IGEP

"Enzymes responsible for the hydrolysis of fatty acids from exogenous lysophosphatidylcholine by asexual Plasmodium falciparum" Jiapeng Liu, ID-IGEP

"Multi-threaded approach to understanding links between mosquito ecology and hostseeking Behavior" Karthikeyan Chandrasegaran, Postdoc

"Seasonality of three human-biting ixodid ticks in western Virginia" Alexandra Cumbie, Postdoc

"Modeling the effects of environmental temperature on vectors of African trypanosomiasis" Paul Huxley, Postdoc