

Medical Microbiology and Immunology

MMI 291 Seminar Series

Emerging Challenges in Microbiology and Immunology



MMI 291 Seminar Series

Current Theme: Collaborations Spring Quarter 2023 – CRN 51609

Friday Seminar – 12:10-1 p.m. Hybrid – GBSF 1005 auditorium and Zoom

"Monkey in the Middle: Within-Host Dynamics and Transmission of Dengue and Zika Virus in Native and Novel Non-Human Primate Hosts"

Research / Bio

The Hanley lab has been at the forefront of research on the ecology and evolution of viruses transmitted by *Aedes* mosquitoes, including dengue, Zika, chikungunya and yellow fever virus. They have conducted groundbreaking field research on the ecology, spillover, and spillback of sylvatic arboviruses and their vectors around the world. They have also made significant advances via laboratory studies on arbovirus evolution and on the interaction between arboviruses and the mosquito RNA interference response. More recently they have launched a study of the ecology and emergence of vesicular stomatitis virus.

Publications

Althouse, B.M., **K.A. Hanley**. "The Tortoise or the Hare? Impacts of withinhost dynamics on transmission success of arthropod-borne viruses". 2015. *Philosophical Transactions of the Royal Society B: Biological Sciences* (Theme Issue on Within-Host Dynamics of Infection: From Ecological Insights to Evolutionary Predictions) 1675: 20140299.

Hanley, K.A., S.R. Azar, R.K. Campos, N. Vasilakis, S.L. Rossi. 2019. "Support for the transmission-clearance trade-off hypothesis from a study of Zika virus delivered by mosquito bite to mice". *Viruses* 11:E1072

Hanley, K.A., T.M. Monath, S.C. Weaver, S. L. Rossi, R.L. Richman, N. Vasilakis. 2013. "Fever versus Fever: the role of host and vector susceptibility and interspecific competition in shaping the current and future distribution of the sylvatic cycles of dengue virus and yellow fever virus". *Infection, Genetics and Evolution* 19:292-311.

May 19



Kathryn A. Hanley, Ph.D.
Regents Professor
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New Mexico State University

May 19, 2023 12:10 – 1 p.m. Hybrid Meeting

Medical Microbiology and Immunology School of Medicine

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We hope to see you there!