

Kathryn Alyce Hanley
Curriculum Vitae

Department of Biology
New Mexico State University
Las Cruces, NM 88003
email:khanley@nmsu.edu

Office phone: (575) 646-4583
Fax: (575) 646-4791
Lab phone: (575) 646-3291
<http://hanleyviruslab.nmsu.edu>

Education

1994 Ph.D. University of California, San Diego, La Jolla, CA (Biology)
1989 B.A. Amherst College, Amherst, MA (Biology, *magna cum laude*)
1987 Semester Abroad University of Edinburgh, Scotland

Academic Positions

2018 - present	Regents Professor, Biology	New Mexico State University
2018 - present	Visiting Scientist	Cary Institute of Ecosystem Studies, NY
2016 - present	Professor, Biology	New Mexico State University
2017	Visiting Sabbatical Fellow	Cary Institute of Ecosystem Studies, NY
2010 - 2016	Associate Professor of Biology	New Mexico State University
2011	Visiting Researcher (sabbatical)	Dept. Entomology, UC Davis
2004 - 2010	Assistant Professor of Biology	New Mexico State University
1999 - 04	Research Associate	Lab. of Infectious Diseases, NIH
1997 - 99	Postdoctoral Fellow	Biology Dept, U. Maryland
1996 - 97	Visiting Assistant Professor	Biology Dept, Pomona College
1994 - 96	Postdoctoral Fellow	Evolution&Ecology, UC Davis
1989 - 94	Ph.D. Candidate	Biology Dept, UC San Diego

Publications

Peer-reviewed journal articles

Google scholar: <https://scholar.google.com/citations?user=BqvlvVkAAAAJ&hl=en&oi=ao>; **h-index = 53**

- 120.** Morinaga, G., A. Gloria-Soria, **K.A. Hanley**, A. Ponlawat, J.R. Powell, J. Soghigian. 2026. Two chromosome-scale genomes of wild *Aedes aegypti aegypti* mosquitoes from North America and South-East Asia. *Journal of Heredity*, accepted
- 119.** Carrera J.P., C. Lezcano-Coba, J. Galue, W. M. de Souza, A. Hendy, N. M. Weng, J. Muncy, B. Gutierrez, S. R. Azar, Y. Juarez, X. Rodríguez, R. Torres-Cosme, A. G. Lezcano, S. Montero-Trujillo, M. L. Santolalla, R. Rodríguez, C. Soto-Garita, K.E. Sloyer, N. Burkett-Cadena, S. Lopez-Verges, Y. Pittí, L. Abrego, L. Cáceres-Carrera, A. Y. Vittor, L. F. Rivera, Z. Capitan-Barrios, S. G. Widen, V. L. Popov, P. J. Walker, J. M. Pascale, S. Hernandez, H. Guzman, S. C. Weaver, R. B. Tesh, P. V. Aguilar, T. A. Bowden, J. Waggoner, O. Pybus, **K. A. Hanley**, C. A. Donnelly, A Valderrama, Nikos Vasilakis N. R. Faria. 2026, in revision. Proactive One-Health a surveillance reveals novel orthobunyaviruses and their potential vectors and reservoirs. *Nature Communications*.
- 118.** Cincovich, S.C., B.M. Althouse, M.D.T. Hitchings, P. Bonnaire-Fils, O.M. Diop, O. Faye, E.H.A. Faye, D. Diallo, B. D. Sadio, A. Sow, O. Faye, M. Diallo, B. Benefit, D. M. Watts, A.A. Sall, S.C. Weaver, **K. A. Hanley**, D.A.T. Cummings. 2026. Seroprevalence of dengue virus

antibodies among multiple species of non-human primates in Senegal suggests that sylvatic dengue virus is maintained in non-primate reservoirs in this region. *PLoS Neglected Tropical Diseases* 20:e0013946.

117. Corrales R., Y. Días, V. Pineda, Y. Pitti, L. Saenz, J.-P. Carrera, C. Aguilar, A. Martínez, M. Chen-Germán, **K.A. Hanley**, N. Vasilakis, R.B. Tesh, A. Saldaña, S. López-Vergès. 2025. Seroprevalence of arboviruses and genetic characterization of orbiviruses in sloths from Western Panama. *Viruses* 17:1507
116. Weary, T.E., L.H. Zhou, L. MacDonald, D. Ibañez IV, C. Jaramillo, C.D. Dunn, T.F. Wright, **K.A. Hanley***, T.L. Goldberg *, T.J. Orr *. 2025. Novel bat adenovirus closely related to canine adenoviruses identified via fecal virome surveillance of North American bats, 2020-2021. *Viruses* 17:1349 *Co-corresponding authors
115. Cecilia, H., B. M. Althouse, S.R. Azar, S.L. Rossi, N. Vasilakis, **K.A. Hanley**. Inside-Out: Modeling the link between Zika virus viral dynamics within hosts and transmission to vectors across host species and virus strains. 2025. *Proceedings of the Royal Society: Interface* 22: 20250365
114. Arruda, M.S., T. A. Costa, G. D. Moreira, D. Jacob, M. A. Oliveira, M.F. Biccás, A.M.O. Paschoal, A.C.D.S. Guimarães, S.S.F.M. Viegas, G.F. Garcia-Oliveira, A.L.C. Cruz, L.T. Almeida, M.F.A. Souza e Silva, D.A.R. Vilela, T.M. Mendes, P.A. Alves, **K.A. Hanley**, N. Vasilakis, M. do Vale Beirão, B.P. Drumond. 2025. Uncovering Hidden Transmission: Active Surveillance Reveals Cryptic Circulation of Yellow Fever Virus in Urban Marmosets in Belo Horizonte, Brazil, 2024. *Pathogens* 14:866
113. M. Steck, C. Banho;, V. Popov, H. Hao, **K.A. Hanley**, M. Nogueira, N. Vasilakis. 2025. Hiding in plain sight: genomic and phenotypic characterization of mosquito-borne Bussuquara virus clarifies its emergence potential. *PLoS Neglected Tropical Diseases* 19(12):e0013774
112. Garcia-Oliveira, G. F., M.F. Biccás , D. Jacob , M.A. de Oliveira , A.M. de Oliveira Paschoal, P. A. Alves , C. Barreto , D.A. da Rocha Vilela 3, E.P.T. Teixeira , T.L. Stehling, T.M. Mendes, M.C. Silva, M.G. Almeida, I.V. Sonoda, E.M. de Mello, F.E.N. da Gama , **K.A. Hanley**, N. Vasilakis, B.P. Drumond. 2025. Human Herpesvirus 1 Associated with Epizootics in Belo Horizonte, Minas Gerais, Brazil. *Viruses* 17:660.
111. Lee, R., J.J. Hemingway-Foday, N. Batsuli , D. Wagner , A. Macoubray , R. Garry , C.K. Johnson , **K.A. Hanley**, N. Vasilakis , S. Mboup , H. Li , C. A. Sánchez , P. M. Rabinowitz , R. Breiman , N. Vandergrift , E. Earle , H. Bouton-Verville , C. Beaubien , G. Van Vliet , S. Woodson , M.A. Moody , G.D Sempowski, R. Reithinger. 2025. Use of a Pathogen X tabletop exercise to assess the operational response preparedness of an emerging infectious diseases research network. *Frontiers in Public Health* 13:1551996.
110. Breiman, R.F., E. Osoro, R. Reithinger, D. Wang, M. Diamond, W. Van Voorhis, J.N. Wasserheit, P. Rabinowitz, S. Mboup, J.J. Hemingway-Foday, T. de Oliveira, A.C.M. Boon, J.S. Schieffelin, G.D. Sempowski, M.A. Moody, N. Vasilakis, **K.A. Hanley**, C. Nasimiyu, S. Situma, I. Ngere, H. Kyobe Bosa, L. Nyakarahuka, B. Bakamutumaho, S.E. Woodson, M.K. Njenga. 2025. Importance of outbreak response research in bridging knowledge gaps on emerging infectious diseases. *BMJ Public Health* 10: e018297.
109. Jacob, D.M.A. Oliveira, M.F. Testa, A.M.O. Paschoal, S. S. F. M. Viegas, A.C.D. S. Guimarães, T.A. Costa, G.F. Garcia-Oliveira, G.D. Moreira, M.S. Arruda, N.S. Hemetrio, **K.A. Hanley**, N. Vasilakis, M.V. Beirão, B.P. Drumond. 2025. CREATE and CONNECT: arboviruses at the intersection of research and outreach activities. *Viruses* 19: e0013436
108. Gubler, D.J., **K.A. Hanley**, T.P. Monath, D.M. Morens, M.L. Nogueira, N. Vasilakis, S.C. Weaver and the Yellow Fever Advisory Group. 2025. Yellow Jack: the modern threat of yellow fever virus to Asia-Pacific countries. *NPJ Viruses*. 3:34
107. Bernardi, V., L. Sacchetto. A. Hendy, N.F. Fé, I. Texeira, B. d.C. Marques, **K.A. Hanley**, M.P.G. Mourão, M.V.G. Lacerda, N. Vasilakis, M. L. Nogueira. 2025. Yellow fever in *Haemagogus*

- mosquitoes captured in an Amazonian rainforest reserve bordering Manaus, Brazil. *Emerging Infectious Diseases*. 31:851-854.
106. Hendy, A., N.F. Fé, I. Pedrosa, A. Girão, T.N.F. dos Santos, C.R. Mendonça, J. Tenaçol, A. Júnior. F.P. Assunção, E.R. Costa, V. Sluydts, M. Gordo, V.M. Scarpassa, M. Buenemann, M.V.G. de Lacerda, M.P.G. Mourão, N. Vasilakis, **K.A. Hanley**. 2024. Forest edge landscape context affects mosquito community composition and risk of pathogen emergence. *iScience* 28:111576
105. Zhou, L. H., F. Valdez, I. Lopez-Gonzalez, W.F. Urbina, A. Ocaña, C. Tapia, A. Zambrano, E.H. Solis, D.P.C. Peters, C.E. Mire, R. Navarro, R.R. Rodriguez, **K.A. Hanley**. 2024. Vesicular stomatitis virus transmission dynamics within its endemic range in Chiapas, Mexico. *Viruses* 16:1742.
104. Valdez, F. L. Zhou, G. Smoliga, I. Fish, R. Navarro-Lopez, I. Lopez-Gonzalez, **K.A. Hanley**, C. Mire, L.L. Rodriguez, J. Arzet. 2024. Near full-length genome sequence of a vesicular stomatitis New Jersey virus isolate collected from a naturally infected cow in the endemic state of Chiapas, Mexico. *Microbiology Resource Announcements* 13:e0100724
103. Costa, T.A., M.S. Arruda, G. F. Garcia-Oliveira, E.V.d.S. Reis, A.C.D.S. Guimarães, G.D. Moreira, N.E.C. Arias, M.d.V. Beirão, N. Vasilakis, **K.A. Hanley**, B. P. Drumond. 2024. Detection of neutralizing antibodies against arboviruses from liver homogenates. *PLoS Neglected Tropical Diseases* 18:e0012740
102. Hill, V., S. Cleemput, J. S. Pereira, R. J. Gifford, V. Fonseca, H. Tegally, A. F. Brito, G. Ribeiro, V.C. de Souza, I.C. Brcko, I.S. Ribeiro, I.T.T. De Lima, S. N. Slavov, S.C. Sampaio, M.C. Elias, V.T. Tran, D.T.H. Kien, T. Huynh, S. Yacoub, I. Dieng, R. Salvato, G.L. Wallau, T. S. Gregianini, F. M.S. Godinho, C.B.F. Vogels, M. I. Breban, M. Leguia, S. Jagtap, R. Roy, C. Hapuarachchi, G. Mwanjika, M. Giovanetti, L. C.J. Alcantara, N. R. Faria, C.V.F. Carrington, **K.A. Hanley**, E. C. Holmes, W. Dumon, A.R.J. Lima, T. de Oliveira, N. D. Grubaugh. 2024. A new lineage nomenclature to aid genomic surveillance of dengue virus. *PLoS Biology* 22: e3002834
101. Cecilia, H., B.M. Althouse, S.R. Azar, B.A. Moehn, R. Yun, S. L. Rossi, N. Vasilakis, **K.A. Hanley**. 2024. *Aedes albopictus* is not an arbovirus aficionado: impacts of sylvatic flavivirus infection in vectors and hosts on mosquito engorgement on non-human primates. *iScience* 27:111198.
100. **Hanley, K.A.**, H. Cecilia, S.R. Azar, B.A. Moehn, W. Yu, R. Yun, B.M. Althouse, N. Vasilakis, S. L. Rossi. 2024. Immunologically mediated trade-offs shaping transmission of sylvatic dengue and Zika viruses in native and novel non-human primate hosts. *Nature Communications* 15:2682.
99. Whelpley, M.J., L.H. Zhou, J. Rascon, B. Payne, B.A. Moehn, K.I. Young, C.E. Mire, D.P.C. Peters, L.L. Rodriguez, **K.A. Hanley**. 2024. Community composition of black flies during and after the 2020 Vesicular Stomatitis Virus outbreak in southern New Mexico, USA. *Parasites and Vectors* 17:93
98. Harman, P.R., N.L. Mendell, M.M. Harman, P.A. Draney, A.T. Boyle, M.E. Gompper, T.J. Orr, D.H. Bouyer, P.D. Teel, **K.A. Hanley**. 2024. Science abhors a surveillance vacuum: detection of ticks and tick-borne bacteria in southern New Mexico through passive surveillance. *PLoS One* 19: e0292573
97. Garcia-Oliveira, G., A. Guimarães, G. Dias, T. Costa, M. Arruda, E. de Mello, M. Silva, M. de Almeida, **K. A. Hanley**, N. Vasilakis, B. Drummond. 2023. Yellow Alert: Persistent yellow fever virus circulation among non-human primates in urban areas of Minas Gerais State (2021-2023). *Viruses* 16:31
96. Carrera, J.P., D. Arauz, A. Rojas, F. Cardozo, V. Stittleburg, I. Morales Claro, J. Galue, C. Lezcano-Coba, F. R. Rebello Moreira, L. Rivera, M. Chen-German, B. Moreno, Z. Capitan-Barrios, S. López-Vergès, J. Pascale, E. Sabino, A. Valderrama, **K.A. Hanley**, C. Donnelly, N. Vasilakis, N.R. Faria, and J.J. Waggoner. 2023. Venezuelan equine encephalitis complex, Madariaga and Eastern equine encephalitis viruses genome detection in human and mosquito populations. *Journal of Clinical Medicine* 61: e0015223

95. Hendy, A., E. Hernandez-Acosta, D. Valério, N.F. Fé, C. Mendonça, E. Rodrigues Costa, E. Andrade, V.M. Scarpassa, M.V.G. de Lacerda, M. Buenemann, N. Vasilakis, **K. A. Hanley**. 2023. Where boundaries become bridges: Mosquito community composition and relationships between key vectors and the environment at forest edges in the central Brazilian Amazon. *PLoS Neglected Tropical Diseases* 17:e0011296.
94. Hendy, A. N.F. Fé, D. Valério, E. Hernandez-Acosta, B. A. Chaves, L. F. Alho da Silva, R.A. Gonçalves Santana, A. da Costa Paz, M. M. Mota Soares, F. P. Assunção, J. T. Andes Jr, C. Andolina, V. M. Scarpassa, M. V. Guimarães de Lacerda, **K. A. Hanley**, N. Vasilakis. 2022. Towards the laboratory maintenance of *Haemagogus janthinomys* (Dyar, 1921), the major neotropical vector of sylvatic yellow fever. *Viruses* 15:45
93. Silva, N.A.O., G. Albery, M.A. Arruda, G.F. Garcia Oliveira, T.A. Costa, E. M. Mello, G.D. Moreira, E.V. Reis, S.A. Silva, M.C. Silva, M.G. Almeida, D.J. Becker, C.J. Carlson, N. Vasilakis, **K.A. Hanley**, B.P. Drumond. 2023. Ecological drivers of sustained enzootic yellow fever virus transmission in Brazil, 2017-2021. *PLoS Neglected Tropical Diseases* 17: e0011407
92. Azar, A.R., R.K. Campos, R.Yun, T. Strange, S.L. Rossi, **K.A. Hanley**, N. Vasilakis, S.C. Weaver. 2022. *Aedes aegypti* shows increased susceptibility to Zika virus provided via both *in vitro* and *in vivo* models of type II diabetes. *Viruses* 14:655
91. Hendy, A., D. Valério, N. Fé, E. Hernandez Acosta, C. Mendonça, E. Andrade, I. Pedrosa, E. Costa, J. Júnior, F. Assunção, B. Chaves, V. Scarpassa, M. Gordo, M. Buenemann, M. | Lacerda, **K. A. Hanley**, N. Vasilakis. 2021. Microclimate and the vertical stratification of potential bridge vectors of mosquito-borne viruses captured by nets and ovitraps in a central Amazonian forest bordering Manaus, Brazil. *Scientific Reports* 11:21129
= corresponding authors
90. Young, K. I. , F. Valdez, C. Vaquera, C. Campos, L. Zhou, H.K. Vessels, J.K. Moulton, B.S. Drolet, P. Roza-Lopez, A. Pelzel-McCluskey, D.P.C. Peters, L. Rodriguez, **K.A. Hanley**. 2021. Surveillance along the Rio Grande during the 2020 vesicular stomatitis virus outbreak reveals spatiotemporal dynamics of and viral RNA detection in black flies. *Pathogens* 10:1264
= equal contribution
89. Humphreys, J. M., A. Pelzel-McCluskey, L.W. Cohnstaedt, B.L. McGregor, **K.A. Hanley**, A.R. Hudson, K. I. Young, D.E. Peck, L. Rodriguez, D.P.C. Peters. 2021. Integrating spatiotemporal epidemiology, eco-phylogenetics, and distributional ecology to assess West Nile disease risk in horses. *Viruses* 13:1811
88. Sacchetto, L., B.A. Chaves, E.R. Costa, A. S. de Menezes Medeiros, M. Gordo, D.B. Araujo, D.B. Leal de Oliveira, A.P. Betaressi da Silva, A.F. Negri Reis, E. L. Durigon, **K.A. Hanley**, N. Vasilakis, M.V.G. de Lacerda. 2021. Lack of evidence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) spillover in free-living Neotropical non-human primates, Brazil. *Viruses* 13:1933
87. Humphreys, J. M., K.I. Young, L.W. Cohnstaedt, **K.A. Hanley**, D.P.C. Peters. 2021. Vector surveillance, host species richness and demographic factors as neuroinvasive West Nile disease risk factors. *Viruses* 13:934
86. Scroggs, S.L.P., J.T. Gass, R. Chinnasamy, S.G. Widen, S.R. Azar, S.L. Rossi, J.B. Arterburn, N. Vasilakis, **K.A. Hanley**. 2021. Evolution of resistance to fluoroquinolones by dengue virus serotype 4 provides insight into mechanism of action and consequences for viral fitness. *Virology* 552:94-106
85. Hendy, A., E. Hernandez Acosta, D. Valerio, C. Mendonca, E. Rodrigues Costa, J. T. A. Júnior, F.P. Assunção, V.M. Scarpassa, M. Gordo, N. F. Fé, M. Buenemann, M.V.G. de Lacerda, **K. A. Hanley**, N. Vasilakis. 2020. The vertical stratification of potential bridge vectors of mosquito-borne viruses in a central Amazonian forest bordering Manaus, Brazil. *Scientific Reports* 10:18254. = corresponding authors
84. Kulkarni, A., W. Yu, A. Moon, A. Pandey, **K.A. Hanley**, J. Xu. 2020. Programmable CRISPR interference for gene silencing using Cas13a in mosquitoes. *Journal of Genomics* 8:30-36

83. Young, K.I., M. Buenemann, N. Vasilakis, D. Perera, **K.A. Hanley**. 2021. Diversity and abundance of mosquitoes, save for one key vector, declines along a gradient from interior forest to contiguous oil palm plantations in Borneo. *Ecosphere* 12: e03463
82. Scroggs, S.L.P., C.C. Andrade, R. Chinnasamy, S.A. Azar, E.E. Schirtzinger, E.I. Garcia, J.B. Arterburn, **K.A. Hanley**, S.L. Rossi. 2020. Old drugs with new tricks: Efficacy of fluoroquinolones to suppress replication of flaviviruses. *Viruses* 12:1022
81. Hendy, A., E. Hernandez Acosta, B. Chaves, N. Fe, D. Valerio, C. Mendonca, M. Lacerda, M. Buenemann, N. Vasilakis, **K.A. Hanley**. 2020. Into the Woods: Changes in mosquito community composition and presence of key vectors at increasing distances from the urban edge in urban forest parks in Manaus, Brazil. *Acta Tropica* 206:105441. = equal contribution
80. Young, K.I., J.T. Medwid, S.R. Azar, R.M. Huff, H. Drumm, L.L. Coffey, R.J. Pitts, M. Buenemann, N. Vasilakis, D. Perera, **K.A. Hanley**. 2020. Identification of host bloodmeals from mosquitoes collected in diverse habitats in Malaysian Borneo using CO1 barcoding. *Tropical Medicine and Infectious Disease* 5:E51
79. Guth, S. **K.A. Hanley**, B.A. Althouse, M. Boots. 2020. A framework for assessing the risk of enzootic establishment—arboviruses in the neotropics as a case study. *PLoS Neglected Tropical Diseases* 13: e0008338.
78. **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
77. Scroggs, S.L.P., N.D. Grubaugh, J.A. Sena, A. Sundararajan, F.D. Schilkey, D.R. Smith, G.D. Ebel, **K.A. Hanley**. 2019. Endless forms: Within-host variation in the structure of the West Nile virus RNA genome during serial passage in bird hosts. *mSphere* 4: e00291-19
76. Kulkarni, A., W. Yu, J. Jiang, C. Sanchez, A. Karna, K. Martinez, **K.A. Hanley**, M. Buenemann, I.A. Hansen, R. Xue, P. Ettestad, S. D. Melman, D. Duguna, M. Dubboun, J. Xu. 2019. *Wolbachia pipientis* occurs in *Aedes aegypti* populations in New Mexico and Florida. *Ecology and Evolution* 9:6148-6156.
75. Valdez, F., P. Palermo, J.E. Mohl, **K.A. Hanley**, D.W. Watts, M. Llano. 2019. Schlafen 11 restricts flavivirus replication. *Journal of Virology* 93:e00104-19
74. Kandel, Y., J. Vulcan, S.D. Rodriguez, A.S. Moon, E.L. Moore, H-N Chung, S. Mitra, J.J. Cordova, K.J.L. Martinez, P. Ettestad, A. Kulkarni, S.D. Melman, J. Xu, M. Buenemann, **K.A. Hanley**, I.A. Hansen. 2019. Widespread insecticide resistance in *Aedes aegypti* L. in New Mexico, U.S.A. *PLoS One* 14:e0212693
73. Diallo, D., C.T. Diagne, M. Buenemann, B.A. Yamar, I.Dia, O. Faye, A. Sall, O. Faye, D.W. Watts, S.C. Weaver, **K.A. Hanley**, M. Diallo. 2019. Mosquito (Diptera: Culicidae) biodiversity pattern in Southeastern Senegal, epidemiological implication in arbovirus and malaria transmission. *Journal of Medical Entomology* 56:453-463
72. Azar, S.A., S.L. Rossi, H.H. Haller, R. Yun, J.H. Huang, J.A. Plante, J. Zhou, J.P. Olano, C.M. Roundy, **K.A. Hanley**, S.C. Weaver, N. Vasilakis. 2018. ZIKV demonstrates minimal pathologic effects and mosquito infectivity in viremic cynomolgus macaques. *Viruses* 10:E661
71. Kovar, L., M. Nageswara-Rao, S. Ortega-Ruiz, D. V. Dugas, S. Straub, R. Cronn, S. Strickler, C. E. Hughes, **K. A. Hanley**, D. Rodriguez, B. W. Langhorst, B. Dilamanta, C.D. Bailey. PacBio-based mitochondrial genome assembly of *Leucaena trichandra* (Leguminosae) and an intragenomic assessment of mitochondrial RNA editing. *Genome Biology and Evolution*, 10:2501-2517.
70. Karna, A.K, S.R. Azar, J.A. Plante, R. Yun, N. Vasilakis, S.C. Weaver, I.A. Hansen, **K.A. Hanley**. 2018. Colonized *Sabethes cyaneus*, a sylvatic New World mosquito species, shows low vector competence and a long extrinsic incubation period for Zika virus relative to *Aedes aegypti*. *Viruses* 10:E434.
69. Gonzales, K.K., S.D. Rodriguez, H-N Chung, M. Kowalski, J. Vulcan, E.L. Moore, Y. Li, Y. Kandel, S. Willette, W. Van Voorheis, O. Holguin, **K.A. Hanley**, I.A. Hansen. 2018. The

- effect of SkitoSnack, an artificial blood meal replacement, on *Aedes aegypti* life history traits and gut microbiota. *Scientific Reports* 8:11023
68. Richman, R.L., M. Diallo, D. Diallo, A.A. Sall, O. Faye, C.T. Diagne, I. Dia, S.C. Weaver, **K.A. Hanley**, M. Buenemann. 2018. Ecological niche modeling of *Aedes* mosquito vectors of chikungunya virus in Senegal. *Parasites and Vectors* 11:255
67. Althouse, B.M., M. Guerbois, D.A.T. Cummings, O.M. Diop, O. Faye, A. Faye, D. Diallo, B.D. Sadio, A. Sow, A. Faye, A.A. Sall, M. Diallo, B. Benefit, E. Simon, D.M. Watts, S.C. Weaver, **K.A. Hanley**. 2018. Role of monkeys in the sylvatic cycle of chikungunya virus in Senegal. *Nature Communications* 9:1046
66. Adams Waldorf, K.M., J. E. Stencel-Baerenwald, C. Studholme, R. P. Kapur, B. R. Nelson, B. Armistead, C. L. Walker, S. Merillat, J. Vornhagen, J. Tisoncik-Go, A. Baldessari, M. Coleman, M. K. Dighe, D.W.W. Shaw, J. A. Roby, V. Santana-Ufret, E. Boldenow, J. A. Swanstrom, D. G. Widman, R. S. Baric, J. T. Medwid, **K. A. Hanley**, J. Ogle, G. M. Gough, W. Lee, C. English, W. M. Durning, J. Thiel, C. Gatenby, E.C. Dewey, M. R. Fairgrieve, R. F. Grant, L. Kuller, W. B. Dobyns, R. F. Hevner, M. Gale Jr., L. Rajagopal. 2018. Loss of fetal brain volume and neural progenitor cells after maternal Zika virus infection in a nonhuman primate model. *Nature Medicine* 24:368-374
65. Sow, A, O. Faye, M. Diallo, D. Diallo, R. Chen, O. Faye, C.T. Diagne, M. Guerbois, M. Wiedmann, Y. Ndiaye, S.S. Senghor, A. Faye, O.M. Diop, B. Sadio, O. Ndiaye, D. Watts, **K.A. Hanley**, A.T. Dia, D. Malvy, S.C. Weaver, A.A. Sall. 2017. Chikungunya outbreak in Kedougou, Southeastern Senegal in 2009-2010. *Open Forum Infectious Diseases* 5:ofx259.
64. Guzman, H., M.A. Contreras-Gutierrez, A.P.A. Travassos Da Rosa, M.R.T. Nunes, J.F. Cardoso, V.L. Popov, K.I. Young, C. Savit, T.G. Wood, S.G. Widen, D.M. Watts, **K.A. Hanley**, D. Perera, D. Fish, N. Vasilakis, R.B. Tesh. 2017. Characterization of three new Insect-Specific flaviviruses: Their relationship to the mosquito-borne flavivirus pathogens. *American Journal of Tropical Medicine and Hygiene*, 98:410-419.
63. Terzian, A.C.B., A.S. Schanoski, M.T. de Oliveira Mota, R.F. da Silva, C.F. Estofolete, T.E. Colombo, P. Rahal, **K.A. Hanley**, N. Vasilakis, J. Kalil, M.L. Nogueira. 2017. Viral load and cytokine response profile does not support antibody-dependent enhancement in dengue-primed, Zika-infected patients. *Clinical Infectious Diseases* 65:1260-65.
62. Young, K.I., S. Mundis, S.G. Widen, T.G. Wood, J. Cardoso, N. Vasilakis, D. Perera, **K.A. Hanley**. 2017. Land cover type affects the abundance and distribution of sylvatic dengue virus vectors at a local scale in Malaysian Borneo. *Parasites and Vectors* 10:406
61. Azar, S.R., C.M. Roundy, S.L. Rossi, J.H. Huang, G. Leal, R. Yun, I. Fernandez-Salas, C.J. Vitek, I.A.D. Paploski, P.M. Stark, J. Vela, M. Debboun, M.R. Nava, U. Kitron, G.S. Ribeiro, **K.A. Hanley**, N. Vasilakis, S.C. Weaver. 2017. Differential susceptibilities and competencies of *Aedes albopictus* populations from the Americas to Zika virus. *American Journal of Tropical Medicine and Hygiene* 97:330-339.
60. Roundy, C.M., S.R. Azar, S.L. Rossi, J.H. Huang, G. Leal, R. Yun, I.A.D. Paploski, U. Kitron, G.S. Ribeiro, **K.A. Hanley**, S.C. Weaver, N. Vasilakis. 2017. Variation in *Aedes aegypti* competence for Zika virus transmission as a function of viral strain and mosquito geographic origin. *Emerging Infectious Diseases* 23:625-632.
59. Tsujimoto, H., **K.A. Hanley**, A. Sundararajan, N.P. Devitt, F.D. Schilkey, I.A. Hansen. 2017. Dengue infection alters midgut and carcass gene expression in the Asian tiger mosquito *Ae. albopictus*. *PLoS One* 12:e0171345.
58. Althouse, B.M., N. Vasilakis, A.A. Sall, M. Diallo, S.C. Weaver, **K.A. Hanley**. 2016. Potential for Zika virus to establish a sylvatic transmission cycle in the Americas. *PLoS Neglected Tropical Diseases* 10: e0005055.
57. Andrade, C.C., K.I. Young, W.L. Johnson, M. Villa, C. Buraczyk, W.B. Messer, **K.A. Hanley**. 2016. Rise and fall of mosquito infectivity during sequential strain displacements by mosquito-borne dengue virus. *Journal of Evolutionary Biology* 29:2205-2218.

56. Rossi, S.L., R.B. Tesh, S.R. Azar, A. Muruato, **K.A. Hanley**, A.J. Auguste, R.M. Langsjoen, N. Vasilakis, S.C. Weaver. 2016. Characterization of a novel murine model to study Zika virus. *American Journal of Tropical Medicine and Hygiene*. 94:1362-9. PMID: PMC4889758
55. Althouse, B.M., **K.A. Hanley**. The Tortoise or the Hare? Impacts of within-host 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.
54. Brackney, D.E., E.E. Schirtzinger, T. Harrison, G.D. Ebel, **K.A. Hanley**. 2015. Modulation of flavivirus population diversity by RNA interference. *Journal of Virology* 89:4035-9 (Spotlight publication).
53. Schirtzinger, E.E., C.C. Andrade, N. Devitt, T. Ramaraj, J.L. Jacobi, F. Schilkey, **K.A. Hanley**. 2015. Repertoire of virus-derived small RNAs produced by mosquito and mammalian cells in response to dengue virus infection. *Virology* 476:54-60.
52. Althouse, B.M., **K.A. Hanley**, D. Diallo, M. Diallo, A.A. Sall, D.M. Watts, S.C. Weaver, D.A.T. Cummings. 2015. Impact of climate and mosquito vector abundance on sylvatic arbovirus circulation dynamics in Senegal. *American Journal of Tropical Medicine and Hygiene* 92(1):88-97.
51. Diallo, D., A.A. Sall, C.T. Diagne, O. Faye, O. Faye, Y. Ba, **K.A. Hanley**, M. Buenemann, S.C. Weaver, M. Diallo. 2014. Zika virus emergence in mosquitoes in southeastern Senegal, 2011. *PLoS One* 9(10):e109442.
50. Williams, M., S.V. Mayer, W. L. Johnson, R. Chen, E. Volkova, S. Vilcarromero, S.G. Widen, T.G. Wood, L. Suarez-Ognio, K.C. Long, **K.A. Hanley**, A.C. Morrison, N. Vasilakis, E.S. Halsey. 2014. Lineage II of Southeast Asian/American DENV-2 is associated with a severe dengue outbreak in the Peruvian Amazon. *American Journal of Tropical Medicine and Hygiene* 91:611-20.
49. **Hanley, K.A.**, M. Guerbois, T. Kautz, M. Brown, S.S. Whitehead S.C. Weaver, N. Vasilakis, P. Marx. 2014. Infection dynamics of sylvatic dengue virus serotype 2 in a natural primate host, the African green monkey. *American Journal of Tropical Medicine and Hygiene* 91:672-6.
48. Diallo, D., A.A. Sall, C.T. Diagne, O. Faye, **K.A. Hanley**, M. Buenemann, Y. Ba, O. Faye, S.C. Weaver, M. Diallo. 2014. Patterns of a sylvatic yellow fever virus amplification in southeastern Senegal, 2010. *American Journal of Tropical Medicine and Hygiene* 90:1003-13.
47. Althouse, B.M., A.P. Durbin, **K.A. Hanley**, S.B. Halstead, S. C. Weaver, D.A.T. Cummings. 2014. Viral kinetics of primate dengue infection in non-human primates: A systematic review and individual pooled analysis. *Virology* 452-453: 237-46.
46. **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.
45. Tumban, E., N. Maes, K. Young, E.E. Schirtzinger, C.T. Hanson, S.S. Whitehead, **K.A. Hanley**. 2013. Replacement of conserved or variable sequences of the mosquito-borne dengue virus 3' untranslated region with homologous sequences from directly-transmitted Modoc virus: no impact on infectivity for mosquitoes. *Journal of General Virology* 94:783-8.
44. Diallo, D., C.T. Diagne, **K.A. Hanley**, A.A. Sall, M. Buenemann, Y. Ba, I. Dia, S.C. Weaver, M. Diallo. 2012. Larval ecology of mosquito vectors of dengue-2 and chikungunya virus in southeastern Senegal. *Parasites and Vectors* 5:286.
43. Althouse, B.M., J. Lessler, A.A. Sall, M. Diallo, **K.A. Hanley**, D.W. Watts, S.C. Weaver, D.A.T. Cummings. 2012. Synchrony of sylvatic dengue isolations: A multi-host, multi-vector SIR model of dengue virus transmission in Senegal. *PLoS Neglected Tropical Diseases* 6:e1928.
42. Diallo, D., A.A. Sall, M. Buenemann, O. Faye, R. Chen, C. Diagne, Y. Ba, I. Dia, D. Watts, S.C. Weaver, **K.A. Hanley**, M. Diallo. 2012. Landscape ecology of sylvatic chikungunya virus and mosquito vectors in southeastern Senegal. *PLoS Neglected Tropical Diseases* 6: e1649

41. Antolin, M.F., K. Jenkins, C.T. Bergstrom, B. Crespi, S. De, A. Moreno-Estrada, A. Hancock, **K.A. Hanley**, R. Nesse, G.S. Omenn, S.C. Stearns. 2012. Evolutionary medicine in undergraduate education: a prescription for all biology students. *Evolution* 66:1991-2006
40. Rossi, S.R., F. Nasar, J. Cardosa, S.V. Mayer, R.B. Tesh, **K.A. Hanley**, S.C. Weaver, N. Vasilakis. 2012. Genetic and phenotypic characterization of sylvatic dengue virus type 4 strains. *Virology* 423:58-67.
39. **Hanley, K.A.** 2011. The double-edged sword: How evolution can make or break a live-attenuated virus vaccine. *Evolution: Education and Outreach* 4: 635-643.
38. Mu, R., T.A. Romero, **K.A. Hanley**, A.L. Dawe. 2011. Conserved and variable structural elements in the 5' untranslated region of two hypoviruses from the filamentous fungus *Cryphonectria parasitica*. *Virus Research* 161:203-8. PMCID: PMC3837689
37. Vasilakis, N., J. Cardosa, **K.A. Hanley**, E.C. Holmes, and S.C. Weaver. 2011. The fever from the forest: Prospects for continued emergence of sylvatic dengue virus and impact on public health. *Nature Reviews Microbiology* 9:532-41.
36. Tumban, E., D.N. Mitzel, N.E. Maes, C.T. Hanson, S.S. Whitehead, **K.A. Hanley**. 2011. Replacement of the 3' untranslated variable region of mosquito-borne dengue virus with that of tick-borne Langat virus does not alter vector specificity. *Journal of General Virology* 92:841-8.
35. McDowell, M., S.R. Gonzalez, S.C. Kumarapperuma, M. Jeselnik, J.B. Arterburn, **K.A. Hanley**. 2010. A novel nucleoside analog, 1- β -D-ribofuranosyl-3-ethynyl-[1,2,4]triazole (ETAR), exhibits efficacy against a broad range of flaviviruses *in vitro*. *Antiviral Research* 87:78-80
34. Mukherjee, S., **K.A. Hanley**. 2010. RNA interference modulates dengue virus infection in *Drosophila melanogaster* cells. *BMC Microbiology* 10:127
33. Vasilakis, N., J. Cardosa, M. Diallo, A.A. Sall, E.C. Holmes, **K.A. Hanley** S.C. Weaver. 2010. Sylvatic dengue viruses share the pathogenic potential of urban/ endemic dengue viruses. *Journal of Virology* 84:3726-7 [letter to the editor]
32. Vasilakis, N., E. Deardoff, J.L. Kenney, S.R. Rossi, **K.A. Hanley**, S.C. Weaver. 2009. Mosquitoes put the brake on evolution: experimental evolution reveals slower mutation accumulation in mosquito cells than vertebrate cells. *PLoS Pathogens* 5:e100467
31. Joseph, S.B., **K.A. Hanley**, L. Chao, and C.L. Burch. 2009. Coinfection rates in ϕ 6 bacteriophage are enhanced by virus-induced changes in host cells. *Evolutionary Applications*. 2:24-31.
30. Pepin, K.M., **K.A. Hanley**. 2008. Density-dependent competitive suppression of sylvatic dengue virus by endemic dengue virus in cultured mosquito cells. *Vector Borne and Zoonotic Diseases* 8:821-8.
29. **Hanley, K.A.**, J.T. Nelson, E. E. Schirtzinger, S.S. Whitehead, and C.T. Hanson. 2008. Superior infectivity for mosquito vectors contributes to competitive displacement among strains of dengue virus. *Biomed Central Ecology* 8:1.
28. Pepin, K.M., K. Lambeth, **K.A. Hanley**. 2008. Asymmetric competitive suppression between strains of dengue virus. *Biomed Central Microbiology* 8:28.
27. Blaney, J.E., Jr., N. Sathe, C.T. Hanson, L. Goddard, T.A. Romero, **K.A. Hanley**, B.R. Murphy, S.S. Whitehead. 2008. Dengue virus type 3 vaccine candidates generated by introduction of deletions in the 3' untranslated region (UTR) or exchange of the DENV3 3' UTR with that of DENV4. *Vaccine* 26:817-28. PMCID: PMC2246307
26. Vasilakis, N., E.B. Fokam, C.T. Hanson, E. Weinberg, A.A. Sall, S. S. Whitehead, **K.A. Hanley**, S.C. Weaver. 2008. Genetic and phenotypic characterization of sylvatic dengue strains. *Virology* 377:296-307.
25. Vasilakis, N., E. J. Shell, E.B. Fokam, P.W. Mason, **K.A. Hanley**, D.M. Estes, S.C. Weaver. 2007. Potential of ancestral sylvatic dengue-2 viruses to re-emerge. *Virology* 358:402-12.
24. Romero, T.A., E. Tumban, J. Jun, W.B. Lott, **K.A. Hanley**. 2006. Secondary structure of dengue virus type 4 3' untranslated region: Impact of deletion and substitution mutations. *Journal of General Virology* 87:3291-3296.

23. **Hanley, K.A.**, L.B. Goddard, L.E. Gilmore, T.W. Scott, J. Speicher, B.R. Murphy, A. G. Pletnev. 2005. Infectivity of West Nile/Dengue chimeric viruses for West Nile and Dengue mosquito vectors. *Vector-Borne and Zoonotic Diseases* 5: 1-10.
22. Blaney, Jr., J.E., C.T. Hanson, C. Y. Firestone, **K.A. Hanley**, B.R. Murphy, S.S. Whitehead. 2004. Genetically modified, live attenuated dengue virus type 3 vaccine candidates. *American Journal of Tropical Medicine and Hygiene* 71: 811-821.
21. Blaney, J.E., Jr., C.T. Hanson, **K.A. Hanley**, B.R. Murphy S. S. Whitehead. 2004. Vaccine candidates derived from a novel infectious cDNA clone of an American genotype dengue virus type 2. *Biomed Central Infectious Diseases* 4: 39-49.
20. **Hanley, K.A.**, L.R. Manlucu, G.G. Manipon, C.T. Hanson, S.S. Whitehead, B.R. Murphy, J.E. Blaney Jr. 2004. Introduction of mutations into the non-structural genes or 3' untranslated region of an attenuated dengue virus type 4 vaccine candidate further decreases replication in rhesus monkeys while retaining protective immunity. *Vaccine* 22:3440-3448.
19. Burch, C.L., P.E. Turner, **K.A. Hanley**. 2003. Patterns of epistasis in RNA viruses: a review of the evidence from vaccine design. *Journal of Evolutionary Biology* 16:1223-1235.
18. Whitehead, S.S., **K.A. Hanley**, J.E. Blaney Jr., L.E. Gilmore, W.R. Elkins, B.R. Murphy. 2003. Substitution of the structural genes of dengue virus type 4 with those of type 2 results in chimeric vaccine candidates which are attenuated for mosquitoes, mice and rhesus monkeys. *Vaccine* 21:4307-4316
17. **Hanley, K.A.**, L.R. Manlucu, L.E. Gilmore, J.E. Blaney Jr., C. T. Hanson, B.R. Murphy, S.S. Whitehead. 2003. A trade-off in replication in mosquito versus mammalian systems conferred by a point mutation in the NS4B protein of dengue virus type 4. *Virology* 312: 222-232.
16. Whitehead, S.S., B. Falgout, **K.A. Hanley**, J.E. Blaney Jr., L. Markoff, B.R. Murphy. 2003. A live attenuated dengue virus type 1 vaccine candidate with a 30 nucleotide deletion in the 3' untranslated region is highly attenuated and immunogenic in monkeys. *Journal of Virology* 77:1653-1657.
15. **Hanley, K.A.**, J.J. Lee, J.E. Blaney, Jr., B.R. Murphy, S.S. Whitehead. 2002. Paired charge-to-alanine mutagenesis of dengue virus type 4 NS5 confers temperature-sensitive, host-range and mouse attenuation phenotypes. *Journal of Virology* 76: 525-531
14. **Hanley, K.A.** J.A. Stamps. 2002. Does corticosterone mediate bidirectional interactions between social behaviour and blood parasites in juvenile black iguanas, *Ctenosaura similis*? *Animal Behaviour* 63: 311-322
13. Troyer, J. M. [¶], **K.A. Hanley**[¶], S.S. Whitehead, D. Strickman, R.A. Karron, A. P. Durbin, B. R. Murphy. 2001. A live attenuated recombinant dengue-4 virus vaccine candidate with restricted capacity for dissemination in mosquitoes and lack of transmission from vaccinees to mosquitoes. *American Journal of Tropical Medicine and Hygiene* 65:414-419. [¶] Equal contribution
12. Pletnev, A.G., M. Bray, **K.A. Hanley**, J. Speicher R. Elkins. 2001. Tick-borne Langat/mosquito-borne dengue flavivirus chimera, a candidate live-attenuated vaccine for protection against disease caused by members of the tick-borne encephalitis virus complex: evaluation in rhesus monkeys and mosquitoes. *Journal of Virology* 75: 8259-8267.
11. Chao, L., **K.A. Hanley**, C. L. Burch, C. Dahlberg, P.E. Turner. 2000. Kin selection and the evolution of virulence in parasites: Making hard and soft choices. *Quarterly Review of Biology* 75:261-275.
10. Schall, J.J., H. R. Prendiville, **K.A. Hanley**. 2000. Prevalence of the tick, *Ixodes pacificus*, on western fence lizards, *Sceloporus occidentalis*: Trends by gender, size, season, site and mite infestation. *Journal of Herpetology* 34:160-163.
9. **Hanley, K.A.**, M.L. Elliott, J.A. Stamps. 1999. Chemical recognition of familiar versus unfamiliar conspecifics by juvenile black iguanas, *Ctenosaura similis*. *Ethology* 105: 641-650.
8. Turner, P.E., C. L. Burch, **K.A. Hanley**, L. Chao. 1999. Hybrid frequencies confirm limit to coinfection in the RNA bacteriophage Phi 6. *Journal of Virology* 73: 2420-2424.

7. **Hanley, K.A.**, K.R. Petren, T.J. Case. 1998. An experimental investigation of the competitive displacement of a native gecko by an invading gecko: no role for parasites. *Oecologia* 115: 196-205.
6. **Hanley, K.A.**, R.N. Fisher, T.J. Case. 1995. Higher mite infestations in sexual geckos than their asexual congeners. *Evolution* 49(3): 418-436.
5. **Hanley, K.A.**, D.M. Vollmer, T.J. Case. 1995. The distribution and prevalence of helminths, coccidia and blood parasites in two competing species of gecko: implications for apparent competition. *Oecologia* 102: 220-229.
4. Radtkey, R.R., S. Donnellan, R.N. Fisher, C. Moritz, **K.A. Hanley**, T.J. Case. 1995. When species collide: the origin and spread of an asexual gecko species. *Proceedings of the Royal Society of London (Biology)* 259:145-152.
3. Upton, S.J., **K.A. Hanley**, T.J. Case. 1994. *Eimeria frenatus* sp. n. and *Eimeria rochalimai* (Apicomplexa: Eimeriidae) from *Hemidactylus frenatus* (Sauria: Gekkonidae) in Hawaii. *Transactions of the American Microscopical Society* 113(3): 390-394.
2. **Hanley, K.A.**, D.T. Bolger, T.J. Case. 1994. Comparative ecology of sexual and asexual gecko congeners (*Lepidodactylus*) in French Polynesia. *Evolutionary Ecology* 8: 438-454.
1. Upton, S.J., **K.A. Hanley**, T.J. Case, C.T. McCallister. 1991. Description of *Isospora schlegeli* (Apicomplexa: Eimeriidae) from gekkonid lizards in the South Pacific. *Canadian Journal of Zoology* 69: 3108-3110.

Books

Hanley, K.A. and S.C. Weaver, editors. 2009. Frontiers in Dengue Virus Research. Caister Academic Press. Hethersett, UK. <http://www.horizonpress.com/dengue>

Book chapters

- K.A. Hanley** and **C.C. Andrade[†]**. 2016. RNA interference: a pathway to arbovirus control. In Arboviruses. N. Vasilakis and D. Gubler (eds). Caister Academic Press. Hethersett, UK.
- T.P. Endy, S.C. Weaver, and **K.A. Hanley**. 2009. Dengue virus – Past, present and future. In Frontiers in Dengue Virus Research. K.A. Hanley and S.C. Weaver (eds.). Caister Academic Press. Hethersett, UK.
- N. Vasilakis, K. A. Hanley and S.C. Weaver. 2009. Dengue virus emergence from its sylvatic cycle. In Frontiers in Dengue Virus Research. K.A. Hanley and S.C. Weaver (eds.). Caister Academic Press. Hethersett, UK.
- Hanley, K.A.** and S.C. Weaver. 2008. Arbovirus Evolution, pp 351-392. In Origin and Evolution of Viruses (second edition). E. Domingo, C. Parrish and J. F. Holland (eds.). Elsevier, St. Louis, MO. <http://www.elsevier.com/wps/find/bookdescription.cwshome/714974/description#description>

Invited

- Vasilakis, N., **K.A. Hanley**. 2023. The Coordinating Research on Emerging Arboviral Threats Encompassing the Neotropics (CREATE-NEO). *Zoonoses* 3:16 [Review]
- Hanley, K.A.** 2012. A Planet of Viruses (Book Review). *Quarterly Rev. of Biology* 87:401-402
- Hanley, K.A.** 1997. Infection, Polymorphism and Evolution (Book Review). *Parasitology Today* 13: 278
- Hanley, K.A.**, J.E. Biardi, C.M. Greene, T.M. Markowitz, C.E. O'Connell, and J. Hornberger. 1996. The behavioral ecology of host-parasite interactions: An interdisciplinary challenge. *Parasitology Today* 12:371-373.
- Hanley, K.A.** 1996. Comportamiento social de los garrobos. *Rothschildia* 3: 10.

Patents

- *Dengue tetravalent vaccine containing a common 30 nucleotide deletion in the 3' UTR of dengue types 1, 2, 3, and 4 or antigenic chimeric viruses 1, 2, 3, and 4.*

US Patent No. 7,517,531, Issued 14 Apr 2009.

- *Development of mutations useful for attenuating dengue viruses and chimeric dengue viruses.*

US Patent No. 7,560,118, Issued 14 Jul 2009.

Selected Awards, Honors, Society Positions, and Fellowships

- | | |
|--------|---|
| 2026 | • Conference USA Professor of the Year |
| 2023 | • NMSU College of Arts and Sciences Award for Excellence in Student Mentorship |
| 2021 | • NM Governor's Medical Advisory Team on COVID-19 Vaccine Safety |
| 2018 | • Westhafer Award for Research Excellence, NMSU |
| 2017 | • Manasse Research Scholar, NMSU |
| 2016 | • Dalrymple-Young award from the American Committee on Arthropod-borne Viruses |
| 2015 | • NMSU Research Discovery Award |
| | • Chair, American Committee on Arthropod-borne Viruses (ACAV) |
| | • Standing Member, NIH Study Section on Genetic Variation and Evolution (GVE) |
| 2014 | • Chair-Elect, American Committee on Arthropod-borne Viruses (ACAV) |
| 2013 | • President, Rio Grande Branch of the American Society for Microbiology (RG-ASM) [2013-15] |
| | • First Place for Research Presentations, NMSU University Research Council Fair |
| 2011 | • Distinguished Career Award from the NMSU University Research Council for Exceptional Achievements in Creative Scholarly Activity |
| | • Plaque of Appreciation for Teaching Excellence at NMSU |
| | • Woods Hole Oceanographic Institute. Karush Scholar Award for Library Studies |
| 2001-3 | • NIAID Staff Recognition Award, \$1,500 each year |
| 1997-9 | • NSF Postdoctoral Fellowship; Training Grant in Biology of Small Populations, U. Maryland.
<i>The effects of population bottlenecks and selection on genetic variation in natural populations of the RNA virus Phi 6.</i> |
| 1996 | • NSF NATO Postdoc Fellowship in Science and Engineering, U. British Columbia (declined)
<i>The role of nuclear polyhedral virus in population cycles of the tent caterpillar.</i> |
| 1994-6 | • NSF Postdoc Fellowship; Training Grant in Integrative Approaches to Animal Behavior, UC Davis
<i>The effect of social status and hormones on parasitism in the black iguana</i> |

Grants & Contracts

- | | | | |
|------|---|-------------|-------------------------|
| 2026 | • NIH RO1 AI184428
<i>Population dynamics at an invasive front: Aedes aegypti in the American Southwest</i>
J.R. McMillan (PI), K. Hanley, co-investigator | \$3,520,471 | 01/01/2026-12/31/2030 |
| | • NM Senate Bill 79
Mosquito surveillance, prevention, and mitigation | \$500,000 | 07/01/2026-06/30/2028 |
| 2025 | • CDC/NM Department of Health Contract
<i>Brown dog tick surveillance</i>
K. Hanley PI | \$117,000 | 09/11/2025 – 07/31/2026 |
| 2024 | • NIH R01AI182303
Aligning climate and health: assessing zoonotic arboviral risks in agroforestry as a climate mitigation strategy
A. Vittor (PI), K. Hanley, co-investigator | \$3,256,858 | 04/01/2024 - 03/31/2029 |

2023	• USDA NACA 58-3022-3-042 \$400,000 08/01/2023 – 07/31/2028 <i>Investigating the Dynamics of Vesicular Stomatitis Virus in Endemic and Incursion Ecological Zones</i> • NIH R16 AI167830-01A1 \$400,000 04/01/2023-03/31/2027 <i>In vivo</i> relevance of Schlafen-mediated innate immune mechanisms in flavivirus infection M. Llano (UTEP) PI; K. Hanley collaborator
2022	• USDA NACA 58-3022-2-018 <i>Integrating vesicular stomatitis virus surveillance, phylogenetics and remote sensing toward an early warning system for vector-borne disease</i> K.A. Hanley PI \$700,000 08/15/2022 – 08/14/2027 • K99 RA1168484-01A1 <i>Assessing the roles of viral mutations and host factors in the transmission of Mayaro virus and other alphaviruses by urban mosquitoes</i> R. Kroon Campos (UTMB) PI; K. Hanley collaborator \$985,528 04/01/2023 – 03/31/2028
2021	• NIH P20GM103451 SUPPLEMENT <i>Deep sequencing SARS-CoV-2 samples from New Mexico to interrogate immunological selection on genetic variants</i> S. Lusetti (PI); K. Hanley Project Leader \$500,000 05/15/2021– 03/31/2022 • CDC U01CK000512-01-09 Supplement <i>Emerging Tick-borne Zoonotic Threats at the US-Mexico Border</i> S. Weaver (UTMB) PI; K. Hanley, subproject PI \$31,300 05/01/2021 – 06/30/2022
2020	• NSF RAPID 2031816 <i>RAPID: New World bat life histories and the potential for SARS-CoV-2 spillback</i> K. Hanley (contact), T. Orr, T. Goldberg, co-PIs \$200,000 06/15/2020 – 06/14/2021 • NSF IOS-2039769 <i>EAGER: Integrating animal movement ecology and multi-level social networks to investigate zoonotic disease dynamics</i> K. Mabry, T. Orr (co-PIs); \$300,000 09/15/20 – 08/31/2023 K.Hanley (senior personnel) • NIH R01AI145918 <i>Trade-offs between arbovirus transmission and clearance in native and novel hosts</i> K. Hanley (contact), N. Vasilakis, \$2,045,741 02/24/2020 – 01/31/2024 B. Althouse co-PIs • NIH 1 U01 AI151807-01 <i>Coordinating Research on Emerging Arboviral Threats Encompassing the Neotropics (CREATE-NEO)</i> N. Vasilakis (contact), K. Hanley, co-PIs \$6,657,430 06/01/2020 – 05/31/2025
2019	• USDA NACA 58-8064-9-012 <i>An early warning system for vesicular stomatitis virus emergence</i> K. Hanley, PI \$740,000 08/01/2019 – 07/31/2024
2018	• NSF Major Research Instrumentation grant <i>MRI: Acquisition of an ASD FieldSpec 4 Hi-Res Spectroradiometer at NMSU</i> M. Buenemann PI; \$82,880 08/01/2018 – 07/31/2019 K.A. Hanley collaborator

2017	• Little Fly Labs Contract <i>Biocontrol of disease-transmitting mosquito larvae and the pathogens they transmit using a novel gene knockout delivery system.</i> K.A. Hanley, J. Xu co-PIs \$299,000 03/01/2017 – 02/28/2018 • New Mexico Department of Health Contract <i>Characterization and control of Aedes mosquito vectors in New Mexico</i> K.A. Hanley PI \$430,000 03/15/2017 – 07/31/2018
2016	• New Mexico Department of Health Contract <i>Mapping the distribution of Aedes aegypti and Aedes albopictus in New Mexico</i> K.A. Hanley PI \$90,000 05/15/2016 – 12/31/2016 • NIH ICIDR 1U01AI115577-01 <i>Mechanisms and public health impact of sylvatic dengue virus emergence in Borneo</i> N. Vasilakis (UTMB) PI, K.A. Hanley co-I \$3,166,711 07/01/2016 - 06/30/2020
2014	• NIH 1R15AI113628-01 <i>Mechanisms of competitive displacement by lineages of mosquito-borne dengue virus</i> K.A. Hanley PI \$300,000 09/01/2014 – 08/31/2017 • NIH Science Education Partnership Award <i>Science Tools in the Classroom: Bioinformatics, Genomics and More!</i> M. Shuster PI \$1,045,371 05/01/2015 - 02/28/2019 K.A. Hanley advisory board member
2013	• NSF Research Coordination Network <i>Infectious Disease Evolution Across Scales</i> A. Graham PI; \$499,916 07/01/2014 – 06/30/2019 K.A. Hanley steering committee member • NIH RISE R25GM061222. <i>RISE to the Postdoctorate Option III</i> E. Serrano MPI, K.A. Hanley co-investigator \$4,273,114 09/15/2013 - 07/31/2018 • NMSU Interdisciplinary Research Grant <i>Impact of deforestation on sylvatic arbovirus spillover in Borneo</i> K.A. Hanley & B. Benefit, co-PIs \$8,656 08/01/2013 – 12/31/2013
2012	• NIH RO1 AI067380 <i>Quasispecies dynamics in arbovirus emergence persistence and fitness</i> G.Ebel (CSU) PI, K.A. Hanley collaborator \$149,999 09/27/2012 – 08/31/2016 • AAAS Women's Internat'l Research Collab. Grant <i>Impacts of deforestation on risks of sylvatic dengue virus spillover in Malaysia</i> K.A. Hanley PI \$19,912 01/01/2012 - 12/31/2012 • NCGR NMINBRE_A4_July2012 <i>Comparing mammalian and mosquito RNAi responses to flavivirus infection</i> K.A. Hanley & E.E. Schirtzinger, co-PIs \$10,450 07/01/2012 - 12/31/2012
2011	• NIH 1R21AI092041-02 <i>A new synergy for flavivirus therapy: RNAi enhancement and viral mutagens</i> K.A. Hanley & J. Arterburn, co-PIs \$275,000 06/01/2011 - 05/31/2013 • Tulane National Primate Research Center Pilot Study <i>Replication of sylvatic dengue virus in a natural primate host</i> K.A. Hanley PI \$35,000 01/01/2011 - 12/31/2011

- 2009 • NIH 1R21AI082399-01
Does dengue virus suppress RNA interference in its mosquito vector?
K.A. Hanley PI \$250,000 06/11/2009 - 05/31/2011
- 2008 • NIH RO1 1R01AI069145-01A2
Mechanisms of sylvatic dengue emergence
S.C. Weaver (UTMB) PI, **K.A. Hanley co-I** \$1,892,850 09/22/2008 – 09/21/2012
• Los Alamos National Labs-NMSU MOU
A GPS telemetry animal tracking system: filling the critical knowledge gap in avian migration and avian influenza distribution
K.A. Hanley co-PI \$134,524 08/01/2008 – 09/30/2010
• NMSU Interdisciplinary Research Grant
Development of novel antiviral therapies for flaviviruses
K.A. Hanley & J. Arterburn, co-PIs \$50,000 05/15/2008 – 05/14/2009
• NIH 2P20RR016480-09 NIH NM-INBRE
Impact of RNA interference on quasispecies evolution in vector-borne flaviviruses
J. Arterburn PI, \$375,000 04/01/2006 - 03/31/2009
K.A. Hanley sub-project investigator
• NMSU ASRC mini-grant
Adaptation of dengue virus to a novel arthropod host
K.A. Hanley PI \$1,911 03/09/2008 – 03/08/2009
- 2007 • NMSU ASRC mini-grant
Investigation of the ability of dengue virus to suppress RNA interference
K.A. Hanley PI \$2,000 12/31/2007 – 12/30/2008
- 2005 • NIH Research Scholar Award K22 A164193
Vector-driven selection in dengue virus
K.A. Hanley PI \$250,000 09/01/2005 – 07/31/2008
• NIH 2P20RR016480-06 NIH NM Ideas Network for Biomedical Research
Evolutionary consequences of dengue virus emergence.
J. Arterburn PI, \$105,000 04/01/2006 – 03/31/2009
K.A. Hanley sub-project investigator

• NSF ADVANCE IT grant.
Genetic determinants of transmission mode in flaviviruses
K.A. Hanley PI \$14,663 08/15/2005 – 12/31/2005
- 1993 • NSF Dissertation Improvement Grant; \$8,000
Parasites of sexual and asexual gecko congeners: Does differential parasitism explain the evolutionary maintenance of sexual reproduction?

Teaching (2012-present)

- 2012-present Associate > Full Professor of Biology, NMSU
- | | |
|--------|---|
| FA2023 | <i>Biology of Emerging Infectious Diseases</i> (BIOL469) |
| SP2024 | <i>Virology</i> (BIOL475); <i>Science and Ethics</i> (BIOL450/540) |
| SU2023 | <i>Grant Writing Workshop</i> (day-long workshop for international junior investigators sponsored by CREID) |
| | <i>Responsible Conduct of Research</i> (half-day workshop for NMSU RISE) |
| SP2023 | <i>Science and Ethics</i> (BIOL450/540) |

FA2022	<i>Biology of Emerging Infectious Diseases</i> (BIOL469)
SP2022	<i>Virology</i> (BIOL475)
FA2021	<i>Writing Grants and Manuscripts</i> (week-long workshop in Panama)
FA2020	<i>Biology of Emerging Infectious Diseases</i> (BIOL469)
SP2020	<i>Virology</i> (BIOL475)
FA2019	<i>Human Biology for Non-Majors</i> (BIOL101)
SP2019	<i>Science and Ethics</i> (BIOL450/540)
	<i>Microbiology Research</i> (BIOL450/550)
FA2018	<i>Biology of Emerging Infectious Diseases</i> (BIOL469)
SP2018	<i>Virology</i> (BIOL 475)
FA2017	Organizer: <i>Clinical Presentation and Management of Arboviral Diseases: Lessons from the Bedside for Researchers at the Bench or in the Bush</i> (Continuing Medical Education Course, sponsored by the American Society of Tropical Medicine and Hygiene. Baltimore MD)
SP2017	<i>Science and Ethics</i> (BIOL450/540)
	<i>Microbiology Research</i> (BIOL450/550)
FA 2016	Organizer: <i>Know Thine Enemy: Identifying Mosquitoes and the Viruses they Carry</i> (Continuing Medical Education Course, sponsored by the American Society of Tropical Medicine and Hygiene. Atlanta, GA)
	<i>Arbovirus Emergence</i> (Border Epidemiology Surveillance Team, Burrell College of Medicine, Las Cruces NM)
	<i>Biology of Emerging Infectious Diseases</i> (BIOL469)
SP 2016	<i>Virology</i> (BIOL 475)
FA 2015	<i>Behavioral and Evolutionary Ecology</i> (BIOL 587)
SP 2015	<i>Virology</i> (BIOL 475)
	<i>Science and Ethics</i> (BIOL450/540)
	<i>Microbiology Research</i> (BIOL450/550)
FA 2014	<i>Biology of Emerging Infectious Diseases</i> (BIOL469)
SU 2014	<i>RISE Workshop on Advances in Biomedical Research</i>
SP 2014	<i>Human Biology</i> (BIOL 101)
	<i>Science and Ethics</i> (BIOL450/540)
	<i>Microbiology Research</i> (BIOL450/550)
FA 2013	<i>Behavioral and Evolutionary Ecology</i> (BIOL 587)
	<i>Research in Microbiology</i> (BIOL 450/550)
SU 2013	<i>RISE Workshop on Global Health</i>
SP 2013	<i>Virology</i> (BIOL 475)
	<i>Tropical Field Ecology of Belize</i> (BIOL 450)
FA 2012	<i>Biology of Emerging Infectious Diseases</i> (BIOL469)
SU 2012	<i>RISE Workshop on Health Disparities due to Infectious Disease</i>
SP 2012	<i>Human Biology</i> (BIOL 101)

Graduate Students & Post-Doctoral Fellows

Student	Degree and Program	Year Graduated
Christy Andrade, Ph.D.	Post-doctoral Fellow	2012 - 2014
Lindsey Biehler	Ph.D. Biology	2024 - present
Meredith Brown, DVM/Ph.D.	Post-doctoral Fellow	2010 - 2011

Hélène Cecilia, Ph.D.	Post-doctoral Fellow	2022 - 2024
Anthony Clemons, Ph.D.	Post-doctoral Fellow	2014 - 2015
Paige Harman	M.S., Biology	2024
Eduardo Hernandez Acosta	Ph.D. Biology	2023
William Johnson	M.S. Biology	2014
Tiffany Kautz	non-thesis M.S., Biotechnology	2012
Ajit Karna, Ph.D.	Post-doctoral Fellow	2017 - 2018
Kalli Lambeth	M.S. Biology	2010
Nyree Maes	M.S. Molecular Biology	2008
Jess Martin	Post-doctoral Fellow	2023-2024
Michael McDowell	M.S. Biology	2010
Joseph Medwid	M.S. Biology	2019
Swati Mukherjee	Ph.D. Molecular Biology	2010
Stephanie Mundis	M.S. joint Biology & Geography	2017
Kimberly Pepin, Ph.D.	Post-Doctoral Fellow	2006 - 2007
Rebecca Richman	M.S. joint Biology & Geography	2013
Tammy Romero	M.S. Molecular Biology	2006
Erin Schirtzinger, Ph.D.	Post-doctoral Fellow	2011 – 2013
Stacey Scroggs	Ph.D. Biology	2019
Carleen Silva	Ph.D. Biology	2026, anticipated
Ebenezer Tumban	Ph.D. Molecular Biology	2007
Federico Valdez, Ph.D.	Post-doctoral Fellow (joint USDA)	2020 - present
Nikole Warner, Ph.D.	ASERT Post-doctoral Fellow	2020
Madelin Whelpley	M.S. Biology	2023
Katherine Young	M.S. Biology	2015
Katherine Young	Ph.D. Biology	2019
Katherine Young	Post-doctoral Fellow	2020-2022
Lawrence Zhou	Ph.D. Biology	2026

Graduate Committees

Student	Degree, University, Yr. Graduated	Major advisor
Otis Akraši	M.S. Geography, NMSU, 2023	M. Buenemann
Alejandro Camacho-Davila*	Ph.D. Chemistry, NMSU 2006	J. Herndon
Gonzalo Castillo	M.S. Biology, NMSU 2008	G. Unguez
Cody Champion	Ph.D. Biology, NMSU, 2018	J. Xu
Felicity Coulter	Ph.D., Mol. Micro, OHSU, 2024	W. Messer
Christine Dahlin	Ph.D. Biology, NMSU 2010	T. Wright
Sean Dolan*	M.S. Anthropology, NMSU 2011	M. McCrossin
Lisa Drake	M.S., Biology, NMSU 2011	I. Hansen
Lisa Drake	Ph.D. Biology, NMSU 2015	I. Hansen
Alejandro Delgado	M.S. Biology, NMSU 2006	J. Gustafson
Jordan Gass	Ph.D. Pathobiology, UNM	S. Bradfute
R. Govindaraju	Ph.D. Biology, NMSU 2010	C. D. Bailey
Kristina Gonzalez	Ph.D. Biology, NMSU, 2018	I. Hansen
Lalo Gonzalez	Ph.D. Biology, NMSU 2013	J. Curtiss
Chinh Hoang	M.S. Biology, NMSU 2006	G. B. Smith
Yashoda Kandel	Ph.D. Biology, NMSU, 2023	I. Hansen
Anna Kirby	M.S., FWCS, NMSU, 2024	M. Gompper
S. Kumarapperuma*	Ph.D. Chemistry, NMSU 2008	J. Arterburn
Mahesh Lamsal	M.S. Biology, NMSU 2023	I. Hansen

April Lopez	Ph.D. Biology, NMSU	I. Hansen
Hailey Luker	Ph.D. Biology, NMSU	I. Hansen
Douglas Miller	M.S. (non-thesis), NMSU 2016	M. Nishiguchi
Elliott Miot	Ph.D., Med Ent, Sorbonne, 2019	L. Lambrechts
Stephen Peinado	M.S., EPPWS, NMSU 2013	R. Creamer
David Price	Ph.D. Biology, NMSU, 2015	I. Hansen
Vanessa Macias	M.S. Biology, NMSU 2010	J. Xu
Rong Mu	Ph.D. Mol Biol, NMSU 2011	A. Dawe
Kendra Pesko	Ph.D. SOM Pathology, UNM 2011	G. Ebel
Dong Pei	Ph.D. Biology, NMSU 2017	J. Xu
David Price	Ph.D. Mol Biology, NMSU 2015	I. Hansen
John Roskopf	M.S. Pathobiology, UTEP 2010	K. Johnson
William Soto	Ph.D. Biology, NMSU 2009	M. Nishiguchi
Madeline Steck	Ph.D. Pathology, UTMB	N. Vasilakis
John Upton	M.S. Pathobiology, UTEP 2008	K. Johnson
Federico Valdez	Ph.D. Pathobiology, UTEP, 2018	M. Llano
Carlos Valenzuela	Ph.D. Pathobiology, UTEP, 2024	M. Llano
Nikos Vasilakis	Ph.D. Virology, UTMB 2008	S. Weaver
Holly Vuong	M.S. Fish&Wildlf, NMSU 2006	D. Caccamise
Taylor Weary	Ph.D., Pathobiol Sci, U, Wisc, 2023	T. Goldberg
Anna Young	Ph.D. Biology, NMSU 2011	T. Wright
* Dean's representative		

Selected, Invited Presentations (2008-present)

- 2025
 - University of Minnesota, Institute of Molecular Virology. Michael P. Murtaugh Invited Lecture.
The Tortoise or the Hare? Within-host dynamics and between-host transmission of sylvatic dengue, Zika and yellow fever viruses.
 - Universidad Nacional, Costa Rica, School of Veterinary Medicine
VSV moves in mysterious ways
- 2024
 - Burroughs Wellcome Fund Comparative Immunology Meeting
Spillover, Spread and Spillback of Sylvatic Arthropod-Borne Viruses
- 2023
 - Harvard Medical School Blavatnik Institute of Microbiology
The Tortoise or the Hare? Within-host dynamics and transmission of sylvatic flaviviruses in native and novel primate hosts.
 - Boston University Department of Microbiology
The Tortoise or the Hare? Within-host dynamics and between-host transmission of sylvatic dengue, Zika and yellow fever viruses
 - Oregon Health and Sciences University, Molecular Microbiology and Immunology Department Annual Retreat. Graduate Student Invitee.
Inside, Outside and Upside-Down: Within-Host Dynamics and Transmission of Sylvatic Dengue, Zika and Yellow Fever Virus
 - Gordon Research Conference on Microbial Evolution
Monkey in the Middle: Leveraging Lab and Field Studies to Understand Spillover and Spillback of Mosquito-Borne Flaviviruses
 - UC Davis School of Veterinary Medicine, Department of Medical Microbiology and Immunology
Monkey in the Middle: Within-Host Dynamics and Transmission of Dengue and Zika Virus in Native and Novel Non-Human Primate Hosts
 - UC Davis Designated Emphasis in the Biology of Vector-Borne Disease

- Who's Flying this Thing? Investigations of Emerging Arthropod-borne Viruses*
• Northern Arizona University, Biological Sciences Seminar Series
- 2022 *Monkey in the Middle: Spillover, Spillback and Spread of Mosquito-Borne Viruses*
• Keynote Speaker, Jefferson Vaccine Center Symposium, Philadelphia, PA
When Mosquitoes Monkey Around: How Within-Host Dynamics Impact Transmission of Dengue and Zika Virus in both Native and Novel Monkey Hosts
• Plenary Talk, American Society for Virology, Madison, WI
When Mosquitoes Monkey Around: Spillover and Spillback of Mosquito-borne Viruses between Wildlife and Humans
- 2021 • Texas A&M University
Spillover, Spillback and Spread: How Viruses From Wildlife Take Over the World
• ASTMH presentation and panel discussion on Arbovirus Surveillance during the COVID-19 pandemic
Surveillance of Emerging Arboviruses in the Americas
• NM-INBRE Keynote
Panning for Pathogens: Surveillance as a Strategy for Pandemic Prediction and Prevention
• University of New Mexico
Panning for Pathogens: Surveillance as a Strategy for Pandemic Prediction and Prevention
• University of Texas Medical Branch
Have Vector, Will Travel: Spillover, spillback and spread of vector-borne viruses
- 2020 • The College of William and Mary
Spillover, Spillback and Spread: How Viruses From Wildlife Take Over the World
• Virtual Seminar Series on Virus Evolution
Waiting in the Wings: Spillover, Spread and Spillback of Mosquito-Borne Viruses
• University of Texas El Paso Biology Seminar Series
Ecological and Evolutionary Drivers of Spillover and Spillback of Mosquito-Borne Viruses
• Keynote Speaker for University of Florida Emerging Pathogens Institute Research Day
Waiting in the Wings: Spillover, Spread and Spillback of Sylvatic Arboviruses
- 2019 • Institut Pasteur, Paris, France
Ecological and Evolutionary Drivers of Spillover and Spillback of Mosquito-Borne Viruses
• Research Coordination Network on Infectious Disease Evolution Across Scales (RCN-IDEAS). Princeton University, Princeton, NJ.
Arbovirus Coinfections: Impacts on Epidemiology
• Louisiana State University School of Veterinary Medicine, Baton Rouge, LA
Waiting in the Wings: Spillover, Spread and Spillback of Sylvatic Arboviruses
- 2018 • Meeting of the American Society of Tropical Medicine and Hygiene, New Orleans, LA
Symposium on History of Arbovirology: How the Past Informs the Present
Magnificent Obsession: Searching for the Lair of Sylvatic Arboviruses
• University of Idaho Center for Health and the Human Ecosystem
Keynote Speaker for Annual Research Symposium
March of the Mosquito-Borne Viruses: Spillover, Spread and Spillback of Dengue, Chikungunya, Zika and Yellow Fever Virus
- 2017 • Wadsworth Center, New York State Department of Health, Division Seminar
Ecological and Evolutionary Approaches to Understand Spillover and Spread of Dengue Virus and Zika Virus
• Cary Institute of Ecosystem Studies Lunch Bunch Seminar Series
March of the Mosquito-Borne Viruses: Spillover, Spread and Spillback of Dengue, Chikungunya, Zika and Yellow Fever Virus
• University of Texas Rio Grande Valley
Waiting in the Wings: Emergence, Evolution and Control of Mosquito-Borne Viruses

- 2016

- University of New Mexico Research Symposium on Zika Virus
Ecological Studies of Zika virus and its vectors: Research on four continents
 - NMSU Biomedical Research Symposium.
Dengue and Chikungunya and Zika: Science in a Time of Public Health Emergency
 - Global Resilience Network.
Zika and Other Emerging Mosquito-Borne Diseases: Update and Potential Risk Mitigation Strategies (Live WebForum)
 - Waksman Institute of Microbiology, Rutgers University.
Waiting in the Wings: Evolution, Emergence and Control of Arthropod-Borne Viruses
- 2015

- NIH IDeA Western Regional Meeting.
Waiting in the Wings: Circulation and Spillover of Sylvatic Dengue Virus
 - Symposium on “Contributions of Naturalists to the Fight Against Dengue in Brazil and Beyond”, American Society of Naturalists Meeting.
Waiting in the Wings: Circulation and Spillover of Sylvatic Dengue Virus (Brazil, June 2015)
 - Distinguished Lecture in Life Sciences, Pennsylvania State University.
Waiting in the Wings: Emergence and Evolution of Mosquito-Borne Viruses
- 2013

- College of Veterinary Medicine at Illinois, Pathobiology Seminar Series.
Mosquitoes and monkeys and man, oh my! Sylvatic cycles and spillover of mosquito-borne viruses
 - Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak.
Prospects for emergence of sylvatic dengue virus.
 - University of Illinois, Urbana/Champaign. *Fuel for the fever: Mechanisms of emergence and invasion of mosquito-borne viruses*
 - Meeting of the Entomological Society of America, Southwestern Branch.
Viral determinants of vector competence among species and strains of flaviviruses.
- 2012

- Center of Excellence for Infectious Diseases, Texas Tech Health Sciences Center
Prospects for emergence of sylvatic dengue virus
 - Department of Ecology and Evolutionary Biology, Yale University.
When mosquitoes monkey around: prospects for emergence of sylvatic dengue virus
 - Department of Biology, New Mexico State University.
When mosquitoes monkey around: sylvatic dengue virus in wild and captive primates
- 2011

- Department of Entomology, University of California, Davis.
Fevers from the forest: Dynamics of sylvatic dengue virus and chikungunya virus in their primate hosts and mosquito vectors in southeastern Senegal.
 - Laboratory of Zoonotic Pathogens Rocky Mountain Laboratories, NIAID, NIH.
Fevers from the forest: Dynamics of dengue and chikungunya viruses in their sylvatic transmission cycles in southeastern Senegal
 - Society for the Study of Evolution, Evolutionary Medicine Symposium in Honor of George Williams
The Taming of the Flu: How evolution enables and undermines live vaccines (Norman, OK, 6/18/11-6/20/11)
 - National Evolutionary Synthesis Center (NESCent) catalysis meeting on the evolution of infectious diseases: Integrating empirical and modeling approaches.
Intra-Host Virus Dynamics (Durham, NC, 3/22/11-3/25/11)
- 2010

- American Society of Microbiology 2010 Meeting Symposium on the Evolution of Vector-Borne Diseases.
Empty Niche Syndrome: Why we are unlikely to eradicate dengue virus (San Diego, CA).
 - International Conference on Emerging Infectious Diseases.
The role of inter-strain competition in the emergence and resurgence of dengue virus (Atlanta, GA).
 - German-American Frontiers of Science Evolution of Infectious Disease Symposium.

- 2008 *Evolution of Infectious Diseases* (Potsdam, Germany)
• University of New Mexico
Rational design of a dengue virus vaccine
• Penn State University.
The fever from the forest: Emergence & control of dengue virus
Ecology and Evolution of Infectious Diseases Meeting.
Design of a live-attenuated vaccine for dengue virus: a meeting of the minds for medicine and evolutionary ecology (Colo. State University, Fort Collins, Colorado).

Symposium & Workshop Organizer and Chair (2007 – present)

- 2022 K.A. Hanley and Nik Vasilakis (co-chairs). *From the Panama Canal to the Pantanal: investigating diversity, dynamics, drivers and deterrents of emerging zoonotic arboviruses in the Neotropics*. American Society of Tropical Medicine and Hygiene, Seattle, WA (November 2022)
- 2017 **K.A. Hanley** and D. LaBeaud (co-chairs). Business symposium for the American Committee and Arthropod-Borne Viruses (ACAV). American Society of Tropical Medicine and Hygiene, Baltimore MD (November 2017)
K.A. Hanley and P. Turner (co-organizers). Workshop on *Evolutionary Causes and Consequences of Arbovirus Emergence*. Sponsored by NSF-funded Research Coordination Network on Disease Evolution Across Scales (RCN-IDEAS). New Orleans, LA (May 2017)
- 2016 **K.A. Hanley** and N. Vasilakis (co-chairs). Business symposium for the American Committee and Arthropod-Borne Viruses (ACAV). American Society of Tropical Medicine and Hygiene, Atlanta, GA
- 2009 N. Vasilakis and **K.A. Hanley** (co-chairs). *The fever from the forest: Fifty years of research on sylvatic dengue virus*. American Society of Tropical Medicine and Hygiene, Washington, DC

Professional Service (2004 – Present)

Ad hoc reviewer for the following peer-reviewed journals

American Journal of Tropical Medicine and Hygiene; Biology Letters; BMC Evolutionary Biology; Current Molecular Medicine; Current Opinion in Virology; Ecology; Emerging Infectious Diseases; Evolution; Evolutionary Applications; Journal of Biomedicine and Biotechnology; Journal of Herpetology; Journal of Infectious Diseases; Journal of General Virology; Journal of Molecular Evolution; Journal of Virology; Nature Communications; Nature Microbiology; Nature Scientific Reports; PLoS Biology; PLoS Neglected Tropical Diseases; PLoS One; PLoS Pathogens; Proceedings of the National Academy of Sciences; Science; Vector-Borne and Zoonotic Diseases; Virology Journal

Steering Committee Member

Sealy Center for Vector-Borne and Zoonotic Diseases, University of Texas Medical Branch

NIH Study Section Member

Genetic Variation and Evolution (GVE) study section: 2015-2021

Ad hoc reviewer for the following funding agencies

British Medical Research Council
French National Research Agency
National Medical Research Council of Singapore
Norwegian Research Council
Netherlands Organization for Scientific Research
Swiss National Science Foundation

U.S.A. Defense Threat Reduction Agency (DTRA)

U.S.A. Department of Defense Peer Reviewed Medical Research Program

U.S.A. NIH; National Institute for Allergy and Infectious Diseases:

AREA special emphasis panel (ZRG1 IDM-S)

Drug Discovery and Mechanisms of Antimicrobial Resistance (DDR) study section

Fellowships: Immunology, Virology, Mycology and Vaccines (ZRG1 F07C-J)

Genetic Variation and Evolution (GVE) study section

Partnerships for Biodefense Viral Pathogens Review Committee

Recovery Act Limited Competition: NIH Director's Opportunity for Research in Five
Thematic Areas (RC4)

Rapid Assessment of Zika Virus (ZIKV) Complications (R21)

Small Business: Non-HIV diagnostics, food safety, sterilization/disinfection, and
bioremediation special emphasis panel (ZRG1 IDM-V)

Virology B (VIRB) study section

U.K. Vaccine Network

References

Dr. Scott C. Weaver (mentor and collaborator)
John Sealy Distinguished University Chair in Human Infections
Center for Biodefense and Emerging Infectious Diseases and Department of Pathology University of
Texas Medical Branch
Galveston, TX 77555-0609
(409) 266-6500
sweaver@UTMB.EDU

Dr. Jeffrey B. Arterburn (mentor and collaborator)
Regents Professor
Department of Chemistry and Biochemistry
New Mexico State University
Las Cruces, NM 88003
(575) 646-2738
jarterbu@nmsu.edu

Dr. Stephen S. Whitehead (mentor and collaborator)
Senior Associate Scientist
Laboratory of Infectious Diseases
National Institute of Allergy and Infectious Diseases
National Institutes of Health
33 North Drive, Room 3W10A,
Bethesda, MD 20892
(301) 496-7692
swhitehead@niaid.nih.gov

Dr. Nikos Vasilakis (collaborator)
Professor
Center for Biodefense and Emerging Infectious Diseases
Center for Tropical Diseases
Institute for Human Infections and Immunity
6.324 Galveston National Laboratory
University of Texas Medical Branch
301 University Blvd
Galveston, TX 77555-0610
409.266.6587 (lab)
409.266.6919 (office)
nivasila@utmb.edu