Stanford



Brian Dawes

- Postdoctoral Medical Fellow, Infectious Diseases
- Fellow in Medicine - Med/Infectious Diseases

Bio

BIO

I am currently an infectious disease fellow and postdoctoral researcher in the LaBeaud Lab. My clinical and research interest is the epidemiology and pathogenesis of emerging zoonotic viruses which pose epidemic/pandemic threats using one health approaches and emphasizing diagnostics and interventions aimed at benefiting those in low- and middle-income countries. I received an MD/PhD from the University of Texas Medical Branch studying Nipah virus neuropathogenesis and antiviral development, La Crosse virus neuropathogenesis, and completed vaccine pipeline analysis for WHO for Nipah and Zika viruses. I then completed my internal medicine residency at Stanford University where I was a global health scholar and completed multiple clinical rotations in Kampala, Uganda at Mulago hospital. During residency in the LaBeaud lab, I studied Rift Valley Fever virus stability in milk products.

My current research is focused on better understanding the causes of acute febrile illness in Grenada in collaboration with the Windward Research and Education Foundation (WINDREF). We are conducting an acute febrile illness cohort and performing diagnostics for common arboviral infections including dengue, Zika, and chikungunya viruses. We will use this data to develop better estimates for the incidence of arboviral infections on the island and identify epidemiologic risk factors which could be the target of preventative interventions. This study is also assessing a novel diagnostic system for antigen detections in collaboration with Dr. Ali Yanik at UCSC. We will be testing these samples for hantavirus infections or antibodies to determine if hantaviral infections are clinically important causes of disease in Grenada. In addition, we are performing a pilot ecologic survey of rodents and bats and will attempt to identify circulating hantaviruses in these species.

CLINICAL FOCUS

- Infectious Diseases
- Global Health
- Fellow

HONORS AND AWARDS

- ASTMH Travel award, American Society of Tropical Medicine and Hygiene (2025)
- Seed grant award, Stanford Center for Innovation in Global Health (2024)
- Global Health Scholars Program, Yale/Stanford University (2023, 2022)
- Alpha Omega Alpha, University of Texas Medical Branch (2020)
- Jeane B. Kempner Fellowship, University of Texas Medial Branch (2017)
- Travel Grant, American Society for Virology (2015)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Postdoctoral Affiliate, Stanford Center for Innovation in Global Health (2024 - present)
- Member, Infectious Disease Society of America (2023 - present)
- Member, American Society of Tropical Medicine and Hygiene (2022 - present)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Texas Medical Branch (2020)
- Bachelor of Science, University of Illinois at Urbana Champaign (2012)
- Doctor of Medicine, University of Texas Medical Branch (2020)
- Residency, Stanford University , Internal Medicine-Global Health Track (2023)
- Ph.D., University of Texas Medical Branch , Microbiology and Immunology (2020)
- M.D., University of Texas Medical Branch (2020)
- B.S., University of Illinois at Urbana-Champaign , Molecular and Cellular Biology (2012)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My current research is focused on better understanding the causes of acute febrile illness in Grenada in collaboration with the Windward Research and Education Foundation (WINDREF). We are conducting an acute febrile illness cohort and performing diagnostics for common arboviral infections including dengue, Zika, and chikungunya viruses. We will use this data to develop better estimates for the incidence of arboviral infections on the island and identify epidemiologic risk factors which could be the target of preventative interventions. This study is also assessing a novel diagnostic system for antigen detections in collaboration with Dr. Ali Yanik at UCSC. We will be testing these samples for hantavirus infections or antibodies to determine if hantaviral infections are clinically important causes of disease in Grenada. In addition, we are performing a pilot ecologic survey of rodents and bats and will attempt to identify circulating hantaviruses in these species.

CURRENT CLINICAL INTERESTS

- Infectious Diseases
- Global Health
- Zoonotic viruses
- One Health
- Emerging infectious diseases
- pandemic preparedness

RESEARCH PROJECTS

- Evaluation of a novel antigen detection diagnostic system for the diagnosis of arboviral infections in Grenada. (2024 - present)
- A One Health Pilot Study to Estimate Hantavirus Disease Burden and Ecology Grenada (2024 - present)
- Stability of Rift Valley fever virus in milk (2022 - present)

LAB AFFILIATIONS

- Desiree LaBeaud, LaBeaud Lab (7/1/2024)

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Infectious Diseases (Fellowship Program)

Publications

PUBLICATIONS

- **Opportunities and challenges for countermeasures against Rift Valley fever virus: A quintessential One Health pathogen.** *PLoS neglected tropical diseases*
  Dawes, B. E., Gerken, K. N., Bett, B., LaBeaud, A. D.
  2026; 20 (8): e0014645

- **Community interpretation of a consent form and willingness to participate in a Nipah virus vaccine trial in Bangladesh.** *Vaccine*
  Nahar, N., Parveen, S., Gurley, E. S., Ghosh, P. K., Jabeen, I., Haidar, M. R., Jahan, F., Munim, M. S., Ali, M. W., Shirin, T., Banu, S., Chowdhury, A. I., Alam, et al
  2025; 68: 127953

- **Community willingness to participate in a Nipah vaccine trial in Bangladesh.** *Vaccine*
  Nahar, N., Parveen, S., Gurley, E. S., Ghosh, P. K., Jabeen, I., Haidar, M. R., Jahan, F., Munim, M. S., Chanda, K. F., Ali, M. W., Akhtar, Z., Shirin, T., Banu, et al
  2025; 62: 127578

- **Rift Valley fever virus remains infectious in milk stored in a wide range of temperatures.** *The Journal of infectious diseases*
  Dawes, B. E., De La Mota-Peynado, A., Rezende, I. M., Buyukcangaz, E. K., Harvey, A. M., Gerken, K. N., Winter, C. A., Bayrau, B., Mitzel, D. N., Waggoner, J. J., Pinsky, B. A., Wilson, W. C., LaBeaud, et al
  2025

- **Henipavirus infection of the central nervous system.** *Pathogens and disease*
  Dawes, B. E., Freiberg, A. N.
  2019; 77 (2)

- **Human neural stem cell-derived neuron/astrocyte co-cultures respond to La Crosse virus infection with proinflammatory cytokines and chemokines** *JOURNAL OF NEUROINFLAMMATION*
  Dawes, B. E., Gao, J., Atkins, C., Nelson, J. T., Johnson, K., Wu, P., Freiberg, A. N.
  2018; 15: 315

- **Favipiravir (T-705) protects against Nipah virus infection in the hamster model** *SCIENTIFIC REPORTS*
  Dawes, B. E., Kalveram, B., Ikegami, T., Juelich, T., Smith, J. K., Zhang, L., Park, A., Lee, B., Komeno, T., Furuta, Y., Freiberg, A. N.
  2018; 8: 7604

- **The Host E3-Ubiquitin Ligase TRIM6 Ubiquitinates the Ebola Virus VP35 Protein and Promotes Virus Replication** *JOURNAL OF VIROLOGY*
  Bharaj, P., Atkins, C., Luthra, P., Giraldo, M., Dawes, B. E., Miorin, L., Johnson, J. R., Krogan, N. J., Basler, C. F., Freiberg, A. N., Rajsbaum, R.
  2017; 91 (18)

- **The Matrix Protein of Nipah Virus Targets the E3-Ubiquitin Ligase TRIM6 to Inhibit the IKKε Kinase-Mediated Type-I IFN Antiviral Response** *PLOS PATHOGENS*
  Bharaj, P., Wang, Y. E., Dawes, B. E., Yun, T. E., Park, A., Yen, B., Basler, C. F., Freiberg, A. N., Lee, B., Rajsbaum, R.
  2016; 12 (9): e1005880

- **Research and development of Zika virus vaccines** *NPJ VACCINES*
  Dawes, B. E., Smalley, C. A., Tiner, B. L., Beasley, D. W. C., Milligan, G. N., Reece, L. M., Hombach, J., Barrett, A. D. T.
  2016; 1: 16007

- **Status of vaccine research and development of vaccines for Nipah virus** *VACCINE*
  Satterfield, B. A., Dawes, B. E., Milligan, G. N.
  2016; 34 (26): 2971-2975

- **Nipah Virus C Protein Recruits Tsg101 to Promote the Efficient Release of Virus in an ESCRT-Dependent Pathway** *PLOS PATHOGENS*
  Park, A., Yun, T., Vigant, F., Pernet, O., Won, S. T., Dawes, B. E., Bartkowski, W., Freiberg, A. N., Lee, B.
  2016; 12 (5): e1005659