

EXPERIENCE

One Health Research Consulting <i>Owner/Principal Consultant</i>	Glen Rock, NJ 2024-present
EcoHealth Alliance <i>Principal Research Scientist, Vector-Borne Diseases</i> <i>Rift Valley Fever Projects Manager and Co-PI</i> <i>Senior Research Scientist</i> <i>PREDICT-2 EHA Surveillance & Outbreak Coordinator</i> <i>PREDICT EHA Latin America Regional Coordinator</i> <i>Field Veterinarian</i>	New York, NY 2019-2024 2014-2024 2012-2019 2014-2019 & 2017-2019 2011-2014 2010-2012
Columbia University <i>Adjunct Research Scientist, E3B Department</i>	New York, NY December 2010 - 2024

RESEARCH PROGRAMS

Rift Valley fever virus (RVFV) research: Co-PI on Understanding Rift Valley Fever in the Republic of South Africa, DTRA: HDTRA1-19-0033; Reducing the Threat of Rift Valley Fever: Ecology, Epidemiology and Socio-Economics, DTRA: HDTRA1-19-0033; & An Open-Source Framework for Rift Valley Fever Forecasting, Wellcome Trust projects. We 1) Evaluated the RVFV infection dynamics in longitudinal sheep & vector populations; 2) Evaluated population-level exposure to RVFV in people, livestock & wildlife, over time & space; 3) Conducted a One Health cost & benefit analysis of RVF outbreak prevention; 4) Developed an early warning system for RVF, sustainably supported by a government partner, & are expanding across Africa.

Crimean-Congo hemorrhagic fever virus (CCHFV) research: PI on Crimean-Congo Hemorrhagic Fever: Reducing an Emerging Health Threat in Tanzania project, DTRA: HDTRA1-20-1-0018. We 1) Conducted a baseline assessment of CCHFV seroprevalence in people, cattle and small mammals & CCHFV presence in ticks; 2) Built up capacity in Tanzania to increase CCHFV diagnosis & the morphological tick identification.

Viral emerging zoonotic disease research: USAID PREDICT & PREDICT 2 projects: 1) Build capacity for One Health surveillance for emerging viruses; 2) Discover and characterize new viruses; 3) Assess and predict the risk of viral spillover at different interfaces; 4) Respond to outbreaks of EIDs and unknown pathogens.

EDUCATION

University of Glasgow <i>PhD Epidemiology</i>	Glasgow, UK October 2015 – June 2020
University of Minnesota <i>Doctor of Veterinary Medicine</i> <i>Master of Public Health</i>	St. Paul, MN September 2004 - May 2008 May 2005 - November 2007
Princeton, University <i>A.B., Ecology and Evolutionary Biology Cumme Laude</i>	Princeton, NJ September 1999 - May 2003

PUBLICATIONS

40 peer-reviewed publications, see ORCID: [0000-0002-6563-5280](https://orcid.org/0000-0002-6563-5280).

SKILLS

One Health Leadership: Coalesced, coordinated and manage teams representing medicine and epidemiology (human and veterinary), environmental sciences, entomology, conservation & economics and with partners in Asia, Africa, Europe, and the Americas; coordinated with gov't partners.

Project Development and Management: Idea generation, Power analysis, Partner engagement, Grant writing & submission (NIH, NSF, USDA, USAID, DOD, USFW & foundations), Wrote SOPs, & questionnaires, Biosafety assessment, Managed IRB and IACUC protocols, Budgeting.

Research, analytic & data management: simulation-based power analyses; GLM & GLMMs; Bayesian statistical tools, mixture models, mathematical modeling; standard epidemiological analyses: risk factor analysis, incidence estimates, weighted seroprevalence, & developed reproducible techniques in R for data quality assurance and cleaning to integrate complex One Health data (r package: ohcleandat).

Training: Developed training materials and guides; trained over 317 people from more than 12 countries across Africa, Asia and Latin America; support analysis and manuscript writing for partners; topics: epidemiology, wildlife surveillance, field biosafety, One Health, project SOPs & ethics.