Risa Pesapane Environment Domain voting rep <u>rrpesapane@ucdavis.edu</u> University of California Davis



Risa Pesapane, National Science Foundation Graduate Research Fellow pursuing a PhD in disease ecology as part of both the School of Veterinary Medicine and Graduate Group of Ecology at the University of California Davis. Risa's research interests are inspired by the network of direct and indirect interactions between humans and animals in the landscape. She studies connectivity,

both socially and spatially, among members of ecological communities that might lead to spillover of either infectious diseases or arthropod vectors. With her career, Risa hopes to contribute to achieving a predictive capacity for emerging infectious diseases and facilitate the creation of institutions capable of integrating One Health into policy and development.

Risa earned an M.S. in wildlife science from Virginia Tech in 2011 where she studied microbial exchange at the human-wildlife interface of Chobe National Park in Botswana. This study found that humans and wildlife were exchanging antimicrobial-resistant bacteria through a common water source, the Chobe, demonstrating how water quality has significant impacts on the health of an entire environmental system. Some of Risa's current projects at UC Davis include: 1) studying how rodent community composition influences hantavirus prevalence in partnership with the California Department of Public Health, 2) conservation management of the critically endangered Amargosa vole in partnership with local, state, and federal organizations, and 3) spillover of nasal mites among species of marine mammals off the Pacific coast in partnership with California Department of Fish and Wildlife.Beyond her research, Risa is also active in undergraduate and peer mentoring programs at UC Davis with particular emphasis on retention of minority groups in STEM fields.