My interest in disease ecology and epidemiolgy research is primarily focused on disease-environment relationships. Environmental variability is a recognized driver of epidemic phases and used to establish the potential geographical niche of diseases based on physiological limitations of the host, pathogen, and/or vector. I am interested in exploring the influence of environmental variability as a driver of host, vector, and disease behavior. By understanding these interactions the environment could potentially be considered as a factor for management in order to prevent and control disease epidemics.

For my dissertation I am conducting research on the multihost plant disease sudden oak death. This disease is caused by the environmentally transmitted pathogen *Phytophthora ramorum*. My focus is on how interannual climatic variability affects pathogen loads and transmission at multiple scales. Infection of true oak species (*Quercus sp.*), the namesake of the disease, depends on pathogen amplification via a very competent foliar host, California bay laurel. Although not a vector-borne disease, this multihost dynamic of sudden oak death lends itself to consideration of the similarities with vector-borne systems.

As I approach the finish of my dissertation I am excited and eager to apply my experience to analyzing additional disease systems. Moving forward, I have aspirations to develop and integrate knowledge for improving potential management and control applications. Like the goals of VectorBiTE, I see this necessitating interaction and cooperative research amongst diverse fields, collecting, documenting, and providing access to key data, and continuing development of analytical tools. To these goals I would add targeted communication of progress as well as outcomes. I believe that improving our understanding of vector behavior in disease transmission will provide additional avenues of defense against vector-borne and other diseases.

I hope to join you at the first VectorBiTE meeting to learn more about the community and take part in addressing the three interrelated questions. My background leads me to a particular interest in the quantification and modeling of environmental drivers of vector-borne disease dynamics. Thank you for considering my application.