Biography

After becoming involved in the world of pollinator research with Samantha Alger and Dr. Alison Brody as an undergraduate at the University of Vermont, I decided to make the switch from the pre-medical track to that of a pollinator-focused disease ecologist. I continued my work as an accelerated Master’s student at UVM and will be switching to a Ph.D. with Dr. Alison Brody and Dr. Brandon Ogbunu (complex systems and epidemiology) in the Fall of 2017. I want to continue to study disease from an epidemiological perspective in both native and managed pollinators. My long term goal would be to start a bee research lab in a university setting where I could both continue to pursue knowledge on the many diseases contributing to pollinator decline and disseminate that knowledge to students, beekeepers, the scientific community and the broader concerned population as a whole.

Personal Statement

I grew up around honey bees. My grandfather kept an apiary for many years and decided when I was 11, to delegate the management of the bee yard to me. I was hooked. I had not known very much about bees up until that point but through my grandfather’s tutelage and my own research, I eventually figured out how to monitor the bees during the year, extract honey, and most importantly get them through the harsh Vermont winters. This background has always given me a fascination and respect for bees and for pollinators in general. When I started my sophomore year in the biology department at the University of Vermont, I learned that I could spend my life surrounded by these amazing organism, asking questions that are both interesting to science and valuable to pollinator conservation efforts. I decided that this was the only job for me.

Prject description:

The objectives for this study are to analyze bumblebees caught at five different field sites at four time points (~110 bees per time point) for five common bee pathogens (2 species of *Nosema* and 3 RNA viruses) using molecular techniques. I will examine **(1)** patterns of coinfection between the two species of *Nosema*, **(2)** patterns of coinfection between RNA viruses and *Nosema spp.*, **(3)** and study the temporal variation in prevalence of these five pathogens and how it corresponds to bee abundance through time.