**Objective:** To obtain a full-time position as a research biologist in the field of pollinator pathology.

**Education**

**University of Vermont 2014-Present**

B.S. in zoology - (anticipated graduation date: 2017)

Cumulative GPA: 3.54/4.0 GPA in Major: 3.7/4.0

M.S. in biology - (anticipated graduation date: 2018)

Cumulative GPA: 3.7.0/4.0 GPA in Major: 3.7/4.0

**Community College of Vermont 2011-2014**

Liberal studies

Cumulative GPA: 4.0/4.0 GPA in Major: 4.0/4.0

**Experience**

**Field Assistant and Lab Tech and data analysist for Ph.D. Candidate, Samantha Alger 2015-Present**

* Assisted in field surveys and sample collection at 32 field sites in Northern Vermont
* Assisted in bumblebee rearing and summer field experiment maintenance
* Extracted RNA from samples, measured concentration using spectrophotometry
* Made qPCR master-mixes, set up and ran PCR plates to determine viral levels in specimens
* Data analyst for field and lab experiments pertaining to RNA viruses in bumble bees

**Undergraduate Research in Bumblebee Parasitology 2015-Present**

* Dissected over 300 bumblebee specimens (documenting parasite loads)
* Counted *Nosema* (fungal) spores and tracheal mites in specimens
* Looking at correlations between parasite abundance, species type and geographic location

**Graduate Research in Bumblebee Pathology (with Dr. Alison K. Brody) 2016-Present**

* Mathematical modeling (R-based) of *Nosema* prevalence in response to density
* Parasite competition experiments and models
* *Bombu*s survey to look at viral and parasite loads throughout the year
* *Bombus* pathogen survivability experiments due to overwintering stressors
* RNA virus and parasite coinfection experiments in bumble bee hosts
* Looking at correlations between parasite abundance, species type and geographic location

**Honeybee Research Collaborations with Hamilton College (Dr. Herman Lehman) 2016-Present**

* Research looking at differential success of local and imported honeybee stocks
* Conducting mathematical modeling and data analyses for experiment

**National Honeybee Survey (APHIS) 2015-Present**

* Collected samples from 24 Vermont apiaries (over 200 colonies) for USDA labs
* Identified and documented hive maladies and parasites during hive inspections

**Island Def Jam Recording Artist 2010-Present**

* Signed by L.A. Reid as lead guitar player of the band “Burnham”
* Released EP *Almost Famous* with Island Def Jam Records
* Radio interviews with Z100, Ryan Seacrest and Billboard
* Toured North America on “My World Tour” (Justin Bieber) and on two headlining tours

**EMI Songwriter 2011-Present**

* Signed to a publishing deal as a songwriter in the band “Burnham”
* Charted on Billboard top 100 and Radio Disney’s top 10
* Wrote and recorded with Ryan Tedder (OneRepublic), Benji Madden (Good Charlotte), Claude Kelly (Whitney Houston and Miley Cyrus), Toby Gad (Fergie and Beyoncé)

**Skills**

**Research:** RNA extraction, DNA extraction, Nanodrop (spectrophotometry) Qubit (fluorometry), insect rearing and dissection, microscopy, real-time qPCR (Applied Biosystems), field survey and specimen (insect) collection, data management manipulation and analysis, mathematical modeling (R and Python)

**Computer**: Microsoft Office (Word, Excel, PowerPoint etc.), JMP (Statistical Analysis), StepOnePlus Real-Time qPCR software, Fluent in the R programming language, HTML, Markdown, LaTeX & familiar with Python

**Activities and Honors**

* Spoke on pathogens in migratory vs. stationary bee operations 2017 (Southern Adirondack Beekeeper’s Association)
* Spoke on local adaptation in honeybee queens 2017 (Vermont Beekeeper’s Association meeting)
* Spoke on the threat of pathogens to native pollinators at VT statehouse 2016 (Pollinator Protection Committee meeting)
* APLE Research Award Recipient 2015
* Awarded the Ronald Suiter Prize (funded ABF conference) 2015
* UVM Merit Scholarship 2014-2016
* Invited to Golden Key International Honor Society 2016-2016
* Member of TriBeta National Biology Honors Society 2016-Present
* UVM Dean’s List 2014-2015
* Member of the UVM Bee Club 2015-Present
* CCV President’s List Honors 2013-2014
* SAG-AFTRA member 2010-2014
* *International Songwriting Competition* Semifinalist 2014
* Song placed top 3 in the *John Lennon Songwriting Contest* 2013
* *International Songwriting Competition* Finalist 2013