

**Title: Postdoctoral Research Associate in Pollinator Landscape Ecology**

**Location:** Washington State University, Pullman WA

**Position Details:**

The Hopkins Lab at Washington State University seeks a highly motivated postdoctoral research associate to work on a three-year project focused on developing tools to support beekeepers. Our team is using innovative sensor technologies and large-scale field sampling to track thousands of beehives as they are transported from California to Washington throughout crop pollination seasons. As bees travel, they are exposed to pathogens and pesticides that occur in specific places at specific points of time. Yet, given that many beekeepers are often unable to identify where or when their hives were exposed, it is difficult to mitigate damage and take steps to protect related hives. The successful applicant will work alongside beekeepers, industry members, and multidisciplinary researchers to gather data on honey bee health metrics across diverse landscapes over space and time. Using modern statistical and machine learning techniques, the applicant will use data on environmental and landscape factors to predict where and when beehives are exposed to pathogens and pesticides. Models will be created and validated using data from tests on hundreds of commercial beehives over a multiple year project. In many senses, just as society attempts to use contact tracing to identify sources of human pathogens like COVID-19, our project will use analytical tools to better inform beekeepers of threats to their hives.

Along with their research, the postdoctoral associate will aid in the mentorship of graduate and undergraduate students working in this lab. The associate will have access to honey bee research facilities in Pullman, WA and Othello, WA including approximately 200 research colonies. This position will require frequent inter-state travel (3-4 days per month), and one international trip to present at the Apimondia conference in 2023 in Santiago (Chile). Outside the Hopkins lab, the candidate is expected to collaborate with the landscape ecology research group at Washington State University, and with programs such as the WSU Decision Aid System to advance their research questions ([www.decisionaid.systems](http://www.decisionaid.systems); [www.potatoes.decisionaid.systems](http://www.potatoes.decisionaid.systems))

**Required Qualifications:** Applicants must hold a Ph.D. degree in a field of ecology, entomology, biology, statistics, or a related field. The applicant must both be willing to work in the field with honey bees and researchers and have extremely strong statistical and analytical abilities. The successful applicant will be required to collate, process, and analyze huge spatial and temporal datasets and coordinate with many scientists collecting these data. Advanced skills in R, GIS, Python, and other appropriate software is required. This position is open to anyone with the legal ability to begin working in the US by May 2021.

**Preferred qualifications** include a strong background in predictive modeling techniques, landscape ecology, beekeeping experience, the ability to lift and carry up to 50lbs, a valid driver's license, and ability to obtain a passport for international travel.

Annual salary: \$45,510

Tenure Track: No

Position Term in Months: 12

Department: Entomology

Lab website: <http://labs.wsu.edu/hopkinslab>

Position Start Date: May 2021 or sooner, depending on availability

Background Check: This position has been determined to require a background check

Screening Begin Date: Immediately

Screening End Date: This post will remain open until filled

Required Documents, to be sent to [Rachel.olsson@wsu.edu](mailto:Rachel.olsson@wsu.edu)

- Cover Letter including research interests, experience, future plans, and commitment to diversity (2 pages maximum)
- Curriculum vitae (including publication list)
- Names of 3 references we can contact about your application