Description

The Department of Entomology and Nematology at the University of California Davis seeks to fill a postdoctoral research position in landscape ecotoxicology to contribute to a USDA/UC Davis-funded project to estimating pesticide exposure to bees in agricultural landscapes. The researcher would join the UC Davis Bee Biology group directed by Neal Williams and Elina L. Niño and work closely with collaborators from Sweden's Lund University and the Institute of the Environment at the University of Minnesota.

The project aims to develop and implement a predictive model of bees' pesticide exposure from detailed, spatially and temporally resolved pesticide use data, spatial explicit land use information and temporally resolved flower resource information. It combines this modelling work with empirical data on bee foraging and pesticide exposure based on bee-collected pollen. Bee-collected pollen is used to identify plant species and quantify pesticide residues to which bees are exposed. Forage plant identity and pesticide residues are used to evaluate the model outcome.

The successful candidate will lead the collaborative modelling work, and will help to coordinate the collection of pollen samples and assessment of bee health together with staff from the Davis Bee Biology Group.

Applicants are required to have a Ph.D. or equivalent doctorate in ecology, population biology, agroecology, applied mathematics or similar and be able to provide evidence that all requirements have been met for completion of the Ph.D. prior to the effective date of hire. The candidate should have excellent written and oral communication skills, the ability to collaborate with and coordinate the efforts of a large team of researchers from different institutions, and a track record of publishing his/her work in scientific journals and presenting to broad audiences. The candidate should also have strong quantitative and computational skills, knowledge of spatial datasets and competence in R, Matlab, Python or similar statistical and modeling languages. Candidate must be willing and able to travel to field sites and must be ok with occasionally working irregular schedule (e.g., evenings, weekends). Previous experience working with bees and pesticide fate modelling, as well as coordinating team projects and leading of field sample collection are desirable but not required.

Candidates should submit their applications by Dec 20, 2018 for full consideration.

Applications must include a cover letter explaining goals and interest in the project, CV, and contact information for three references. Review of applications will begin immediately and will continue until the position is filled.

The position should begin by in April 2019, but may start as early as the January 2019.

Salary will be determined based on level of experience in compliance with University of California guidelines.

This is a full time appointment, funded for one one-year from date of hire, with excellent possibility of an additional year pending quality of work during the first year. For more information, please contact Prof. Neal Williams (nmwilliams@ucdavis.edu).