

## **Graduate Student Positions (PhD) at Oregon State University Honey Bee Lab**

The Sagili Honey Bee Lab at Oregon State University, Corvallis, Oregon is seeking two Ph.D. students in the following areas:

**PhD Position 1:** This incoming doctoral student will be part of a DARPA (Defense Advanced Research Projects Agency) funded collaborative research project between the OSU honey bee lab, the OSU artificial intelligence and robotics lab (Dr. Julie Adams) and SIFT (a research and development consulting company). The goals of this project are to understand and analyze altruistic self-removal and drifting behaviors of honey bees to develop new metaheuristics (a class of algorithms) that will enhance cyber defense capabilities, robotic swarms or unmanned aerial vehicle systems.

**Qualifications:** A Master's degree in Entomology or relevant field is desirable. Knowledge of honey bee biology, some experience working with honey bees and strong statistical analysis skills are preferred. Prior experience using behavior tracking software, such as Noldus Observer, is a plus. No prior experience with metaheuristics, robotics or cyber security is required. The other collaborators will implement this portion of the project.

**PhD Position 2:** This doctoral student will focus on a FFRA (Foundation for Food and Agriculture Research) funded collaborative project between the OSU Honey Bee Lab, the OSU Pollinator Health Extension Lab (Dr. Andony Melathopoulos) and a few other groups involved in pollinator research. The incumbent is expected to conduct research (1) to develop a robust methodology for assessing honey bee pesticide exposure and (2) establish a baseline of pesticide exposure and pollen nutrition for honey bees in a few major bee-pollinated cropping systems. The interaction between nutrition and pesticide toxicity on colony health will also be studied.

**Qualifications:** A Master's degree in Entomology or relevant field is desirable. Knowledge of honey bee biology, experience working with honey bees and strong statistical analysis skills are preferred.

**How to apply:** Interested candidates are encouraged to send inquiries or submit their applications with a CV (including GPA and GRE scores if available), Statement of Interest/Research, and names and contact information of three references by February 15 to Ramesh Sagili ([ramesh.sagili@oregonstate.edu](mailto:ramesh.sagili@oregonstate.edu)). The successful applicants will be required to submit their application to Oregon State University graduate school.

**Start Dates:** The successful candidates are expected to start in either spring term (April 1), summer term (June 1) or fall term (September 1) of 2018.

**Compensation:** Both these graduate student positions will receive competitive stipend (assistantship), tuition waiver and health insurance.