



Postdoctoral Scholar in Insect Physiology

A postdoctoral position is available to work on analysis of the gut surface proteome of insect pests of agricultural / urban importance. The management of pest insects is confounded by the arrival of invasive pest species and the evolution of insect resistance to current management approaches. Most of the alternative approaches for management act via the gut, including the use of bacteria-derived pesticidal proteins, viruses and gene silencing RNAs. Detailed knowledge of the most abundant proteins on the surface of the gut epithelium is important for optimization of established technologies that target- or enter via- the gut, and to identify new targets.

Please see the following papers for additional insight:

[C.S. Tavares et al., 2022](#) J. Proteomics;

[J. Jimenez et al., 2024](#) Arch. Insect Biochem. Physiol.

Responsibilities:

Responsibilities include 1) mentoring of undergraduate student assistant who will assist with gut dissections, 2) preparation of brush border membrane vesicles, 3) proteomic analyses.

Required Qualifications:

- PhD in entomology, biochemistry or a related area
- Demonstrated productivity evidenced by publication record

Preferred qualifications:

- Research experience with insect physiology and bioinformatics
- Strong communication and organizational skills.

Location: This position is based in the laboratory of Dr. Bryony C. Bonning, Eminent Scholar and Professor, [Department of Entomology and Nematology](#) at University of Florida. The [Bonning lab](#) provides outstanding infrastructure for cutting-edge research and has a strong record of innovation and trainee placement within the agricultural biotechnology industry sector, USDA and academia.

University of Florida has the largest Entomology and Nematology department in the nation, with outstanding facilities. The diverse faculty has strengths in both basic and applied research, and strong collaborative and interdepartmental interactions. Gainesville, Florida is consistently ranked among the [Top 10 Best College Towns](#) in the U.S.

How to Apply: Candidates should apply by emailing a single pdf file with “PD Application – InsectGut” in the subject line containing 1) a statement of research experience, interests and career goals, 2) curriculum vitae including complete publication list, 3) names, e-mail addresses and telephone numbers for three references to: Dr. Bryony C. Bonning, E-mail: bbonning@ufl.edu

Review of applications will begin on **Monday, December 23rd, 2024** and continue until the position has been filled.

The [Institute of Food and Agricultural Sciences](#) is committed to creating an environment that affirms diversity across a variety of dimensions.

The Foundation for The Gator Nation

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