

PhD in Insect Nutritional Ecology and Stress

A PhD position is currently available in the MacMillan and Bertram labs at Carleton University for an enthusiastic and motivated PhD student to study how the abiotic environment and nutrition interact to influence insect growth and survival.

Project and Environment

As this PhD candidate, you will conceptually develop and undertake experiments to characterize how crickets in a mass rearing environment are influenced by interacting biotic and abiotic factors like diet, temperature, and humidity.



Work in close collaboration with an industrial partner and two mentors to deepen our understanding of what determines growth rates (and thus yields) of insects raised for food and feed.

You will gain access to a range of experimental techniques (e.g. animal husbandry, behaviour assays, biochemical assays, elemental analysis, microscopy and bioinformatics to name a few!) as part of a large, welcoming, and supportive team with shared goals. You will also have wealth of opportunities for developing your skills as a teacher, mentor, and communicator (in whatever way best fits your career goals) in a positive and encouraging environment.

Required skills

A strong academic background with knowledge of, and ideally direct experience in, techniques related to insect rearing and handling, animal nutrition, and/or thermal biology.

Experience with insect mass rearing would be an asset.

Demonstrated excellence in written and oral science communication.



**MacMillan
Lab**

macmillanlab.com

**BERTRAM
LAB**

suebertram.ca

People who identify with groups underrepresented in STEM fields are particularly encouraged to apply!

To Apply

Please send a cover letter, CV, and unofficial copy of your transcripts to:
Dr. Heath MacMillan heath.macmillan@carleton.ca



Carleton
UNIVERSITY