

# CAPSTONE PROJECT

## School of Environmental and Forest Sciences

UNIVERSITY of WASHINGTON

College of the Environment

## *Effect of non-native plant pollen on native bee development*

### Capstone Project Announcement

A capstone project opportunity is available for one student interested in using protein analysis techniques to investigate the levels of protein found in pollen collected by native bees.

### Project Description & Duties:

The selected student will use multiple machines in a lab setting to isolate protein from pollen, chart out protein analysis, and compare to protein standards. This will give insight into the levels of protein in pollen collected by native bees in the PNW.



Tasks include analyzing protein samples, running samples, pipetting, and using the Bradford bio-assay method for analysis. The option to go further and complete DNA analysis would be presented. Training will be provided but preference will be given to students with previous experience and expertise in protein or DNA analysis. The student could also have the opportunity to co-author a scientific paper on this project if desired.

### Schedule and time commitment:

The work is lab based, and weekly schedule will be negotiated upon hire.

The student should also attend weekly laboratory meetings (1 hour/week) of the Tobin lab (date and time to be determined each quarter – currently Wednesdays at 11:30-12:30PM).



**Requirements:** A background in an environmental or forestry related discipline is desirable. Preference will be given to students with previous protein-analysis or lab-related analysis experience. A background in DNA analysis experience would also be preferred.

**Credit Offered:** Capstone credit available (5 credits/quarter), could be used for a Winter Quarter capstone project (data collection and analysis begins immediately upon hire).

**How to Apply:** Send an email of interest and resume to:

Lila Westreich, [westr097@uw.edu](mailto:westr097@uw.edu), UW School of Environmental and Forest Sciences

**Deadline:** Friday, October 27<sup>th</sup>, 2017