



PhD student in bee phylogenomics, fall 2022

Department of Entomology, Washington State University

Position description: We seek an incoming graduate student with an interest in bee systematics and phylogenetic comparative analyses. The successful candidate will collaborate on a multi-institutional project and use the latest molecular and analytical methods to conduct research on bee phylogeny and evolution. This position is partially funded by a US NSF grant. Broad project aims are to: (1) resolve uncertainties in higher-level bee phylogeny and classification, (2) incorporate fossils to reconstruct the global biogeographic history of bees, and (3) analyze patterns of host plant use, revealing how host plant specialization impacts rates of diversification in bees. The project will generate genomic level data across the bee tree of life. The NSF grant is a collaboration with Elizabeth Murray and Silas Bossert at WSU, Bryan Danforth at Cornell University, Michael Branstetter at the USDA Pollinating Insects Research Unit & Utah State University, and Paulmichael Maxfield at the Natural History Museum of Utah. The PhD student will contribute to a comprehensive phylogenomic dataset of bees and will develop their own research project on a group of bees, including analyses on host plant evolution.

Qualifications: MS in entomology, biology, or a related field. Preference given to candidates who have skills in insect systematics, bee identification, bioinformatics, and/or molecular lab work.

Professional expectations: The PhD student will work at Washington State University, Pullman, in the lab of Elizabeth Murray and Silas Bossert. There will be several opportunities for travel during the appointment, including at least one scientific meeting a year. PIs will encourage professional development and creative and independent approaches to problem solving. We expect the graduate student will help foster a collaborative and inclusive environment in our team of scientists.

About the lab: We reconstruct the phylogenetic relationships of Hymenoptera to study patterns of evolution (<https://murraylabwsu.weebly.com>). Our expertise includes phylogenomics, taxonomy, museum curation, molecular dating, diversification, historical biogeography, and comparative analyses. The lab is in the exciting stage of being newly established and building personnel and resources, and we welcome candidates who will contribute to a diverse laboratory environment.

About the location: Washington State University is a land-grant institution located in Pullman, Washington. The Department of Entomology (<https://entomology.wsu.edu>) hosts facilities such as the MT James Entomological Collection (<https://museum.entomology.wsu.edu>), the Honey Bee and Pollinator Research, Extension, and Education Facility, and state of the art laboratory equipment. Faculty in Entomology are located on campuses and research & extension centers across the state. Additionally, the University of Idaho is nine miles away and has a community of systematists, which increases opportunities for scientific exchange in on-campus and inter-campus seminars and events.

To apply: Contact Elizabeth Murray (e.murray@wsu.edu) prior to applying; please include your CV along with a description of your background and your fit for the position. The priority deadline for applications to the WSU grad school is January 10, 2022. See <https://gradschool.wsu.edu/apply/>.

Washington State University is an equal opportunity/affirmative action educator and employer. Members of ethnic minorities, women, special disabled veterans, veterans of the Vietnam-era, recently separated veterans, and other protected veterans, persons of disability and/or persons age 40 and over are encouraged to apply.