
BALL STATE UNIVERSITY



Get your Ph.D. in Dr. Foster's Ecological and Comparative Biomechanics Lab!

<http://www.comparativebiomechanics.com>

The Ecological and Comparative Biomechanics Lab is looking for highly motivated students interested in pursuing a Ph.D. in the Environmental Sciences Program at Ball State University. Led by Dr. Kathleen Foster, our lab seeks to create a diverse research environment focusing on the **biomechanical and physiological mechanisms underlying animal locomotion**, with the goal of understanding what processes govern the interaction between animals and their environment.

Current topics in which prospective students could pursue research include, but are not limited to:

- Ecomorphology/ecomechanics
- Biomechanics and functional morphology through growth and development
- Comparative muscle physiology
- Statistical and machine learning methods in biology

Students will benefit from lab and BSU resources to become proficient in the use of research tools and techniques including:

- High-speed video
- Electromyography
- Aurora *in situ* muscle lever system
- GIS
- Advanced computational/statistical methods

The [BSU Environmental Sciences Ph.D. Program](#) is an interdisciplinary program that spans multiple departments in the College of Sciences and Humanities. Although students in our lab will have a concentration in Biology, they will benefit from the interdisciplinary nature of the program through core courses in Ecosystem Ecology, GIS, Environmental Chemistry, and Environmental Geology.

Qualifications: Applicants must have completed a Master's Degree in Biology, Engineering, or related fields, with a minimum GPA of 3.0. Prior experience with computer programming (e.g. R, Matlab, Python) is valuable, but not required.

Application Deadline: Both national and international students are encouraged to apply. The BSU deadlines for applications are **August 8, 2022 (U.S. students)** and **June 15, 2022 (international students)** for students wishing to begin their Ph.D. in the Fall Semester 2022 and **December 26, 2022 (U.S. students)** and **November 15, 2022 (international students)** for students wishing to begin their Ph.D. in the Spring Semester 2023.

Prospective students **must contact the PI** (klfoster@bsu.edu) to discuss their interest in applying to the lab. In your email, include the following information:

- A brief summary of your research experiences and interests
- A copy of your CV, including any presentations and publications (pending or otherwise)
- Please write "Ecological and Comparative Biomechanics Lab" in the subject line of your email