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# BALL STATE UNIVERSITY

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## 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 Bachelor's or Master's Degree in Biology, Engineering, or related fields, with a minimum GPA of 3.0, by August, 2021. Although students with an M.S. degree are preferred, exceptional and self-motivated Bachelor's students are encouraged to apply. At least one year of independent research experience is required (e.g. Honor's or Master's thesis). 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 **June 25, 2021 (U.S. students)** and **May 28, 2021 (international students)** for students wishing to begin their Ph.D. in the Fall Semester 2021.

Prospective students **must contact the PI** ([klfoster@bsu.edu](mailto: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