
BALL STATE UNIVERSITY



Postdoctoral Researcher in Comparative Biomechanics & Functional Morphology

<http://www.comparativebiomechanics.com>

The Ecological and Comparative Biomechanics Lab led by Prof. Kathleen Lois Foster in the Department of Biology at Ball State University, invites applications for a postdoctoral position in comparative biomechanics and functional morphology of lizards to begin in Spring 2024. The postdoctoral researcher will contribute to the experimental and statistical aspects of a large-scale, NSF-funded research project focusing on the **data-driven development of the mathematical laws that govern morphology and locomotion through development**. As part of this effort, the successful candidate will conduct biomechanical experiments and collect detailed morphological data of arboreal lizards as they grow from hatchling to adult-size. This position is particularly suited to a person who is excited by the prospect of learning and thinking about **new ways to examine and quantify the connection between animal structure and movement**.

The successful candidate will join the research team of Prof. Foster and collaborate with the Co-PI on this project, Prof. Alessandro Maria Selvitella (Purdue University Fort Wayne and eScience Institute, University of Washington). The activities of both Dr. Foster's and Dr. Selvitella's labs are grounded in Equity, Diversity, and Inclusion, as well as collaboration, interdisciplinarity, and community impact. Candidates with the most diverse backgrounds are invited to apply for this position and will enrich the research activities of the lab. The primary location of research will be in the brand-new Foundational Sciences Building at Ball State University, which rests on the traditional, ancestral, unceded territory of the Myaamiaki and Lenape peoples.

Duration:

The appointment will be for up to two years, with annual renewal based on satisfactory performance.

Primary responsibilities:

- Laboratory research (40%) - Design and conduct biomechanical and morphological experiments and care for animals in accordance with BSU IACUC-approved protocols
- Data analysis/interpretation/dissemination (40%) - Process and analyze experimental data, write manuscripts, and prepare conference presentations related to the project
- Supervision (10%) - Mentor/train undergraduate and graduate students working in Dr. Foster's lab
- Lab participation (5%) - Contribute to the lab environment and organization and participate in lab activities such as outreach initiatives at local schools and public venues
- Personal/Professional Development (5%) - Identify and apply to relevant grant opportunities, seek out training workshops and educational seminars related to the project and grant writing, develop pedagogical skills through guest lecture opportunities, and meet weekly with Drs. Foster and Selvitella

Required qualifications:

- Ph.D. in biology, biomechanics, functional morphology, engineering, or a related field

Preferred qualifications:

- Strong experimental skills related to the fields of functional morphology and/or biomechanics
- Excellent scientific communication skills demonstrated through a strong record of peer-reviewed publications and conference presentations

- Strong collaborative skills for working well in a team environment
- Self-motivated with a desire to develop/improve effective mentorship skills
- Proficiency in computer programming/statistical software (e.g. R, Matlab, Python)

How to apply:

Interested candidates should submit their CV (including a list of publications), a cover letter/letter of interest, and contact information for three references via the Ball State University application portal (<https://bsu.peopleadmin.com/postings/40020>). The cover letter should describe the candidate's background and relevant experience, why they are interested in this project, and how the position advertised in this notice is in line with their long-term career goals. Applicants must be eligible to work in the US and must be able to show that proof within 3 days of hire.

Application Deadline:

December 3, 2023

Desired Start Date:

January 8, 2024. However, a delayed start date may be negotiated.

Funding Source:

This position is funded through the NSF Grant Award Number 2152792 on RUI: Collaborative Research: DMS/NIGMS 1: The mathematical laws of morphology and biomechanics through ontogeny. The Co-PI on this project is Prof. Alessandro Maria Selvitella, Purdue University Fort Wayne and eScience Institute, University of Washington (NSF Grant Award Number 2152789).

Questions:

Any questions from interested applicants should be directed to Dr. Foster via email at klfoster@bsu.edu. Please include "Postdoctoral Researcher in Comparative Biomechanics and Functional Morphology" in the subject line of the email.