

Date: 02/22/2021

ARIZONA STATE UNIVERSITY IACUC ANNUAL REVIEW

I. Currently approved protocol

Protocol Number: 19-1714R
 Protocol Title: A Bio-inspired Robotic System for Effective Locomotion on Complex Deformable Terrain
 Principal Investigator: [REDACTED]
☐ Funded ☒ Unfunded

II. Status of Project

A. Were the animal activities conducted?

- i. ☒ **Yes, they were conducted.** If yes,
1. Were there any significant animal welfare issues (morbidity or mortality, complications, etc.) encountered over the past 12 months?
 - a. ☒ Yes. Describe (include the problem, approximate number of animals affected, and resolution). Proceed to item II B when completed.
 Occasionally weak/lethargic on vendor delivery with body injuries and infections (i.e. wounds, lesions, abrasion, and abscess). Possibly due to animals being juvenile and sent in groups, thus having the possibility for fights and attacks to occur between lizards within small confined space.
 - b. ☐ No. Proceed to item II B.
- ii. ☐ **No, they were not conducted.** If the protocol will be terminated, complete the Final Review form.
1. If the protocol will remain active, why were animal activities not conducted?

Proceed to Section V.

B. Have there been any recent findings, either from this study or a related study that would change the planned use of animals?

- Species Used
 - Animal Numbers
 - Procedures
 - Criteria to Measure/Monitor Pain or Distress
 - Alternatives to Painful Procedures
 - Restraint
 - Amelioration and Control of Painful Procedures
 - Estimation of Potential Postoperative/Intervention Pain
 - Preoperative/Postoperative/Chronic Care
 - Euthanasia/Disposition of Animals
 - Animal Care and/or Use Sites
- i. ☐ Yes. Complete a separate [Request for Changes](#) form describing all proposed changes as well as the scientific rationale for these changes. Proceed to item III.
- ii. ☒ No. Proceed to item III.

III. Updated Information

A. Did the pain status stated on the protocol remain appropriate for the procedures performed?

- i. ☒ Yes. Proceed to item IV.
 ii. ☐ No. If no, please describe: Proceed to item IV when completed

B. Has there been new funding added to the project?

- i. ☐ Yes. Provide new grant(s) information:
 Granting Agency:
 Title:
 ASU Proposal or Award number:

☒ No.

IV. Progress Report (for research or teaching protocols only)

Provide a statement on progress under this protocol over the past 12 months. Include any presentations or publications that have resulted from this protocol during the past 12 months.

A Hydrodynamic Force Platform (HFP) was designed and developed, which directly measure the water running forces of basilisk lizard as it runs across water. The influence of basilisk toe fringes was explored by applied adhesive between their digits and fringes, preventing the fringes from flattening out. It was observed that in the "absence" fringes body sinkage increased, body pitch and body forward velocity decreased. The forelimbs were observed to contact the water, thus hindering bipedal running. These finds have been present at the [REDACTED] Currently, the water running force data are being evaluated. Once completed, the finding will be submitting or journal publication.

V. Personnel

All personnel who work with animals are required to have animal care training within the last four years. ASU IACUC training modules can be completed at https://asu.co1.qualtrics.com/jfe/form/SV_b2b2XRXRrs1309f. Personnel are required to have Level III training certification on file with the IACUC office in order to perform procedures independently (without supervision). See the IACUC web site (<http://researchintegrity.asu.edu/training/useofanimals>) for more information on training and Level III forms.

All procedures MUST be performed under supervision unless the person is Level III certified to conduct the procedure independently. Personnel are not Level III certified until the IACUC has reviewed and approved the Level III training documentation. The PI is responsible for ensuring that personnel that are not Level III certified are supervised at all times.

A. List the names, titles, affiliations, and roles of **ALL** persons currently involved in the research or teaching activity.

Name	Title	ASURITE name	Role in Protocol		Species with which individual will have direct contact ("none," "all," or list species)	FOR IACUC USE ONLY Training Confirmation
			What procedures will each person be doing on live animals under supervision only?	For which procedures is each person Level 3 certified at the time of protocol submission?		
[REDACTED]	PI	[REDACTED]	Morphology Characterization	Locomotion Studies	All	2/2021 OHSP
	RA		Morphology Characterization	Locomotion Studies	All	2/2021 OHSP
	RA		Morphology Characterization	Locomotion Studies	All	3/2020

	RA		Morphology Characterization	Locomotion Studies	All	2/2021
	RA		Morphology Characterization	Locomotion Studies	All	3/2021 OHSP

- B. If any of the above listed personnel are new to the protocol, describe their years of experience with all listed species and procedures they will be conducting under this protocol. For procedures for which they are not yet trained, but will likely be trained to do during the activity period of this protocol, provide a description of who will provide such training:

are new to this protocol. They have no previous experience with handling the specimens and will need to complete their training prior to the submission of the annual review through the IACUC and DACT. They will all be trained to perform the specified procedures for the experiments by the lead RA and perform the procedures under the lead RA's supervision.

- C. List the names of any individuals no longer involved with the research (these individuals will be removed from the protocol and DACT will be notified):

VI. Certification

By signing this report, I certify that, to the best of my knowledge, the information included herein is accurate and complete. I understand that continued animal use past the scheduled termination date of the protocol requires IACUC approval. I also understand that should the animal use under this protocol require ANY change from that stated in the protocol, prior approval by the IACUC is required.

Principal Investigator's Signature

02/22/2021

Date

FOR IACUC USE ONLY
Annual Review Determination

ANNUAL REVIEW APPROVAL SIGNATURES:

Chair, IACUC (or Designee)

Date

Attending Veterinarian (or Designee)

Date

IACUC Member

Date