

Date: 08/03/2021

ARIZONA STATE UNIVERSITY IACUC ANNUAL REVIEW

I. Currently approved protocol

Protocol Number: 21-1805R
 Protocol Title: Immunization with recombinant protein antigens
 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).

A mouse cage was found flooded so the techs moved the animals to a new cage. One animal was hunched and scruffy, and was separated from the rest of the cage so she could recover. The animal failed to recover, attributed to an unknown health condition. she was euthanized.

- b. ☐ No. Proceed to item II B.
 2. Were all unanticipated welfare issues reported?
 - a. ☒ Yes. Proceed to item II B.
 - b. ☐ No. Describe. Proceed to item II B when completed.
- 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 II B.

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 III B.
- ii. ☐ No. If no, please describe: Proceed to item III B 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.

We performed two mouse immunization experiments, using a total of 102 C57BL/6 female mice. The first study used 39 mice in groups that received different norovirus antigens:

- 6 mice GI.I/GII.4 VLP
- 6 mice norovirus P-domain N-RIC
- 6 mice norovirus S-domain N-RIC
- 6 mice norovirus T cell epitope N-RIC
- 6 mice norovirus NS1 N-RIC
- 6 mice P/S/T/N combined
- 3 mice PBS

ELISA on sera showed antigen-specific antibody (IgG) responses.

The second study (in progress) used 63 mice that received different dengue virus or HSV gD antigens:

- DENV1-4 NRIC
- DENV1-4 CRIC
- Co-delivered DV1, DV2, DV3, and DV4 NRICs
- 1t2H3t4 NRIC
- DV1 NRIC (human IgG)
- mDV1 NRIC (mouse IgG)
- gD NRIC or CRIC with gD VLP
- gD NRIC (GnGn)
- gD NRIC (wt)
- gD mNRIC (GnGN)
- PBS

Studies to evaluate the immune responses are in progress.

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 (<https://researchintegrity.asu.edu/animals/training>) for more information on training and Level III forms.

*** Procedures other than husbandry, handling, or behavioral testing 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 who 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.

<u>Name</u>	<u>Title</u>	<u>ASURITE name</u>	<u>Role in Protocol</u>		<u>Species with which individual will have direct contact ("none," "all", or list species)</u>	<u>FOR IACUC USE ONLY</u> <u>Training Confirmation</u>
			<u>What activities will each person perform on live animals ONLY while under direct supervision?</u>	<u>What activities will each person be allowed to perform independently (including appropriate Level 3 certification*) at the time of protocol submission?</u>		
	PI		none	none	none	10/2017 OHSP not applicable
	vet tech		none	immunization, blood sampling, euthanasia	all	Basics 8/2018 Rodent 6/2019 OHSP
	Graduate Student		prepare antigens, assist vet tech with immunization & blood collection	none	mouse	Basics 1/2019 Rodent 2/2019 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:

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.

08/03/2021

Principal Investigator's Signature

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