



Centers for Disease Control and Prevention  
Division of Vector-Borne Diseases  
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## MEMORANDUM

To: Steve Monroe, Ph.D.  
Institutional Official  
Associate Director for Laboratory Science and Safety

From: [REDACTED]  
Chairperson, CDC-Fort Collins Institutional Animal Care and Use Committee  
[REDACTED] Ph.D.  
Immediate past Chairperson, CDC-FC IACUC

Subject: Semiannual Evaluation of Animal Care and Use Program and Inspection of  
Facilities – Division of Vector-Borne Diseases, Fort Collins, CO

Date: November 12, 2019

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DVBD Institutional Animal Care and Use Committee (IACUC)

This memorandum documents the September 10, 2019 Semiannual Evaluation of the Centers for Disease Control and Prevention (CDC) – Division of Vector-Borne Diseases animal facility inspection and program review by the Institutional Animal Care and Use Committee (IACUC), as required by the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals and as a condition of this Institution's Animal Welfare Assurance on file with the Office of Laboratory Animal Welfare (OLAW) and United States Department of Agriculture (USDA) Animal Welfare Regulations, 9 CFR Chapter I, subchapter A, as applicable. This evaluation utilized the National Research Council's *Guide for the Care and Use of Laboratory Animals* (2011).

Findings of the September 10, 2019 Semiannual Review of the CDC-Fort Collins Animal Care and Use Program

The CDC-Fort Collins IACUC conducted the Semiannual Evaluation of the Institution's Animal Care and Use Program on September 10, 2019 using the PHS Policy on Humane Care

(b)(6) and Use of Laboratory Animals (PHS Policy), the *Guide for the Care and Use of Laboratory Animals*, 2011 (the "Guide"), and Title 9 CFR Chapter I, Subchapter A – Animal Welfare Regulations (USDA Regulations), as applicable. (b)(6)

(b)(6) CDC-Fort Collins IACUC members who participated in the Program review included: [redacted] provided administrative support. (b)(6)

The modified OLAW checklist was utilized for the review with discussion. No significant deficiencies were noted. One minor deficiency was noted: two IACUC members whose appointments started in January 2019 have not completed the required on-line training (per IACUC Policy 22 should be completed within 60 days of appointment; email to be sent to their supervisors asking that time be provided for them to complete this requirement).

The CDC-Fort Collins IACUC members reviewed records and inspected the animal facilities on September 10, 2019 using the PHS Policy on Humane Care and Use of Laboratory Animals, the *Guide for the Care and Use of Laboratory Animals*, 2011 (the "Guide"), and Title 9 CFR Chapter I, Subchapter A – Animal Welfare Regulations (USDA Regulations), as applicable. Currently approved exceptions to the 2011 Guide were also reviewed. (b)(6) (b)(6)

(b)(6) (b)(6) CDC-Fort Collins IACUC members who participated in the facility inspection included [redacted] and [redacted] provided administrative support. [redacted] and [redacted] all from animal care contractor services) escorted IACUC members through the animal facilities and/or answered questions. (b)(6) (b)(6)

No significant deficiencies were noted by the IACUC during the facility inspection and records review. There was one minor deficiency noted: principle investigators and protocol staff are not completing the census forms when animals are euthanized or found deceased. An e-mail reminder was sent out by the IACUC Administrator to all PIs and protocol associates.

Due to continuing reliability and operational issues with the cage and rack washers, preventative maintenance and repair records were reviewed by a subcommittee of the IACUC as part of the semi-annual review. The subcommittee concluded that the provided PM records demonstrated a systematic effort to schedule and complete regular preventative maintenance (PM); and, delays in completing the PM tasks were improving. Also, it appeared that issues directly related to animal welfare had been corrected. On the date of the semi-annual inspection, the tunnel washer had been repaired and were operating as expected. The rack washer had not been operational since June 2019. The subcommittee recommended that the IO consider whether the CDC's Occupational Health & Safety Office should be consulted to determine if continued operation of these units poses any unacceptable risk to operators. None of the provided documentation indicated that a safe operation determination had been made.

Post-meeting note: the rack washer is undergoing a complete rebuild and the tunnel washer received additional repairs and is operating to standards (The Guide for the Care and Use of Laboratory Animals and the Animal Welfare Act and Animal Welfare Regulation) as of the date of this letter.



### Approved Protocol Exceptions to the *Guide*

The following are exceptions to the 2011 *Guide* that were reviewed and approved by the IACUC for individual protocols.

Five (5) approved protocols allow mice to be individually housed on a metal grate for up to 5 days while ticks feed (ticks drop off into ½" of water kept under metal grate, replete ticks are removed from water daily). Mice are provided with a plastic petri dish bottom (as a platform for respite from any discomfort incurred by the metal grate) for days 2-4 before ticks begin dropping off. A mouse hut is provided for additional comfort. Mice are euthanized at the end of the tick-feeding session or returned to regular housing, depending on the study protocol.

One protocol allows rabbits to be single-housed with an Elizabethan-collar to facilitate feeding and biocontainment of ectoparasites or to prevent fighting.

Two (2) mouse protocols allow pregnant females to be housed individually when they are ready to litter.

For the purpose of disease surveillance, one (1) mouse protocol allows for the use of soiled bedding from cages housing mice be placed in cages with SPF mice as a means of exposure.

### Program Changes

The following IACUC policies were modified:

FTC-007 Protocol Personnel Defined: addition of reference to Policy 29 for occupational health requirements

FTC-025 Anesthesia and Analgesia Guidelines: updated dosages of some anesthetics

FTC-026 Blood Collection Guidelines: requirement added to weigh animals to facilitate calculation of acceptable blood collection volume.

FTC-032 Requesting Animals from the DVBD Mouse Colony: added requirement for PI or protocol associate to be present when mice approximately 3 weeks of age are delivered to verify sex.

### Program Exceptions

There were no program exceptions since the last report to the IO.

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Names of IACUC Members

[Redacted area for Names of IACUC Members]

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Signatures/ Initials

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**Appendix A****RESULTS OF IACUC SEMI-ANNUAL PROGRAM REVIEW AND FACILITY INSPECTION FOR DVBD****FOLLOW-UP RECORD**

September 10, 2019

| <b>Location and Item to Fix</b>  | <b>(S) or (M)*</b> | <b>Correction Plan</b>  | <b>Person Responsible</b> | <b>Corrective Action Performed</b>                 | <b>Correct by date</b> | <b>Date Corrected</b> |
|--|--------------------|---|---------------------------|--|------------------------|-----------------------|
| Animal census forms  | M                  | Remind PIs and protocol associates to document number of animals euthanized or found dead                             |                           | E-mail sent out to all PIs and protocol associates | Not specified          | 9-18-2019             |
| 2 new IACUC members out of compliance with Policy 22 – Training of IACUC Members; on-line training not completed | M                  | Send email reminders to the members and copy supervisors requesting time be allotted to complete the on-line training |                           | Email sent as specified with correct by date.      | September 23, 2019     | 10-2-2019             |

\*Significant (S) or Minor (M)