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COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
EXECUTIVE VICE PRESIDENT FOR RESEARCH

February 28, 2018

Brent Morse, D.V.M.
Acting Director
Division of Compliance Oversight
Office of Laboratory Animal Welfare
National Institutes of Health
6705 Rockledge Drive
Suite 360, MSC 7982
Bethesda, MD 20892-7982

Re: Columbia University
Animal Welfare Assurance # D16-00003 (A3007-01)

Dear Dr. Morse,

On November 28, 2017, Columbia University (the "University") notified the Office of Laboratory Animal Welfare ("OLAW") by telephone of an incident that resulted in the deaths of 5 *Peromyscus* used in research supported by the Public Health Service ("PHS"). The research was being conducted under protocol AAAT0450, funded by NIH grant # 1R00HD084732-01. This letter reports the results of a review of the incident by the Institutional Animal Care and Use Committee ("IACUC" or the "Committee") and the corrective actions taken by the Institute of Comparative Medicine ("ICM").

Background and Investigation

On November 27, 2017, the University Attending Veterinarian ("AV") informed Dr. MJ Shepherd, IACUC Executive Director, of an incident that resulted in the deaths of 5 adult *Peromyscus*. Dr. Shepherd informed the IACUC Chair and an investigation was initiated. The AV submitted an "Animal Care Incident Report" to the IACUC on December 8, 2017.

The investigative team met with the ICM Resident involved with the incident and the ICM Assistant Manager of the vivarium where the incident occurred. The ICM staff members stated that there were 30-40 total cages of *Peromyscus* and that the animals had been moved onto automatic watering on November 16, though water bottles were left in the cages. Since the animals were doing well, the lab members removed the water bottles on November 22. On November 24, the investigator suspected dehydration in one of the animals and he notified ICM via email and placed a water bottle on the cage. He subsequently found a second cage with a suspect dehydrated animal and a dead, cannibalized mouse. The PI then placed water bottles

on all the cages. The veterinary resident arrived within 3 hours and determined that all the animals appeared normal. She randomly checked multiple spigots on the rack and water was flowing. No other mice were observed dead at that time, so she confirmed that all of the mice had food and water bottles before leaving.

On the morning of November 25, 2017, 4 additional adults (3 of which had been cannibalized) from 4 different cages were reported dead by ICM technical staff to the Assistant Manager, who informed the veterinary resident. The husbandry staff was then instructed to place hydrogel packs in every *Peromyscus* cage.

Necropsy of the single intact (not cannibalized) carcass did not reveal any overt signs of disease or abnormality. The cause of death of the adult *Peromyscus* is presumed to be dehydration resulting from difficulty accessing the automatic watering system, but other causes of death (fighting, disease, etc.) could not be conclusively ruled out due to cannibalization.

The investigative team also met with the investigator in whose research the animals were being used. His description of the events was consistent with that of the ICM staff members.

Corrective Actions

Actions taken by the ICM included routinely placing water bottles and hydrogel packs in each cage along with the automatic watering spigots. A kit including syringes, saline, hydrogel and warming pads was also placed in the room. The investigator is currently collecting video data of various species of *Peromyscus* to determine whether there are differences in behavior related to consumption of water that could be useful to ICM in selecting the best water source for each species.

The ICM report from the investigative team was provided to the IACUC and a convened meeting of a quorum of the Committee was held on January 11, 2018. Following review of the facts and discussion, the Committee agreed that the handling of the event was appropriate.

Columbia University remains committed to achievement and maintenance of the highest standards of laboratory animal care and use. If you have any further questions concerning this report, please contact Dr. Shepherd at (b) (6)

Sincerely,

(b) (6)

G. Michael Purdy, Ph.D.
Executive Vice President for Research

cc:

(b) (6)
MJ Shepherd, D.V.M.

Wolff, Axel (NIH/OD) [E]

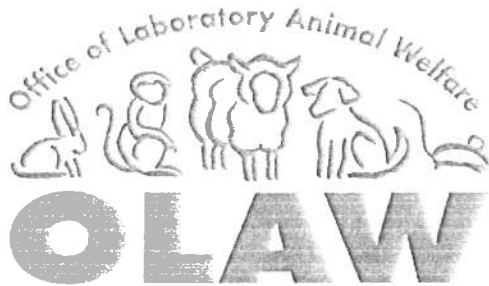
From: OLAW Division of Compliance Oversight (NIH/OD)
Sent: Thursday, March 01, 2018 12:55 PM
To: Shepherd, Mary J.
Cc: OLAW Division of Compliance Oversight (NIH/OD)
Subject: RE: Columbia University Compliance Report

Thanks MJ. We'll send a response soon.
Axel

From: Shepherd, Mary J. [mailto:ms4387@cumc.columbia.edu]
Sent: Thursday, March 01, 2018 11:41 AM
To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>
Subject: Columbia University Compliance Report

Please let me know if you have any questions or concerns about the attached compliance report. Thank you. MJ

Mary Jo (MJ) Shepherd, DVM, CPIA
Executive Director of the Office of the IACUC
Columbia University
154 Haven Ave. [REDACTED]
NYC, NY 10032
[REDACTED] (b) (6)
ms4387@columbia.edu



Initial Report of Noncompliance

By: *am*

Date: 11/28/17

Time: 9:45

Name of Person reporting: *MJ Shephard*
 Telephone #: (b) (6)
 Fax #:
 Email:

Name of Institution: *Columbia U*
 Assurance number: *A3007*

Did incident involve PHS funded activity? _____

Funding component: _____

Was funding component contacted (if necessary): _____

What happened?

4 mice died from no water. Had not learned to use the lick after morning.

Species involved: *Peromyscus*

Personnel involved:

Dates and times:

Animal deaths:

Projected plan and schedule for correction/prevention (if known): _____

New policy

Projected submission to OLAW of final report from Institutional Official:

OFFICE USE ONLY

Case # _____