



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH

FOR US POSTAL SERVICE DELIVERY:

Office of Laboratory Animal Welfare
6700B Rockledge Drive, Suite 2500, MSC 6910
Bethesda, Maryland 20892-6910
Home Page: <http://grants.nih.gov/grants/olaw/olaw.htm>

FOR EXPRESS MAIL:

Office of Laboratory Animal Welfare
6700B Rockledge Drive, Suite 2500
Bethesda, Maryland 20817
Telephone: (301) 496-7163
Facsimile: (301) 402-7065

October 31, 2018

Re: Animal Welfare Assurance
#A3281-01 [OLAW Case 2D]

Dr. P. Srirama Rao
Vice President for Research and Innovation
Virginia Commonwealth University
Biotech One, (b) (4)
PO Box 980568
Richmond, VA 23298-0568

Dear Dr. Rao,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your final report, dated October 29, 2018, of an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at Virginia Commonwealth University. Initial, prompt notification was provided by phone on October 4th. According to the information provided, OLAW understands that on September 25th two mouse cages were found to not be fully docked in the ventilated cage slots. Animals in one cage appeared fine but the other cage was overcrowded with 25 mice consisting of three litters and three adults. Sixteen animals were dead in this cage. It was determined that the research personnel who had not properly docked the cages also had a history of not weaning animals promptly and not euthanizing geriatric animals resulting in overcrowding. It was also determined that the colony manager was not listed on an approved protocol. It was stated that the related animal activity was PHS funded.

Corrective actions included the PI instructing his staff: to ensure cages are properly docked; animals are weaned on time, and; the colony manager is not allowed to handle animals until added to the protocol. In addition, the colony size will be reduced; animals will be checked by the investigator and primary lab contact at least once/week; the investigator will follow-up on any health issue/observation within one business day; the investigator will submit a protocol amendment to include mice up to 18 months of age; the investigator will develop an enhanced monitoring plan for pups, and; the investigator will discuss with the transgenic core director a plan to archive several colonies. To address colony management program-wide, the monitoring of colonies by DAR staff will be enhanced and an educational event regarding rodent colony management will be added to the presentation by the ACUP.

Based on the information provided, OLAW is satisfied that appropriate actions have been taken to investigate this incident, provide corrective measures, and prevent recurrence. OLAW concurs that the incident warranted reporting. We appreciate being informed of this matter and find no cause for further action by this office.

Sincerely,

(b) (6)

Brent C. Morse, DVM
Director
Division of Compliance Oversight
Office of Laboratory Animal Welfare

cc: IACUC Contact
Amy Chang, M.S., Assistant Director for Animal Research



VCU

Office of Research and Innovation

October 29, 2018

Brent Morse, D.V.M., Director
Division of Compliance Oversight
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P. Sriroma Rao, PhD
Vice President for Research and Innovation

VCU Animal Welfare Assurance number D16-00180 (A3281-01)

Dear Dr. Morse:

Virginia Commonwealth University, in accordance with Assurance D16-00180 (A3281-01) and PHS Policy IV.F.3., provides this report of noncompliance regarding the death of 16 mice due to improper placement of a severely overcrowded cage onto an individually ventilated rack. This incident was reported to you on October 4, 2018 via a telephone call by Ms. Amy Chuang, Director of Animal Care and Use Program, Office of Research Subjects Protection (ORSP).

Description of Incident:

On Tuesday, September 25th, Division of Animal Resources (DAR) animal care staff reported two cages that had not been fully docked into their ventilated cage slots. Animals in one of the cages, which was not overcrowded, appeared fine. However, the other cage contained three adults and three litters for a total of 25 mice; of these, 16 animals were found dead. The oldest litter was born on August 14th, so it should have been weaned by September 14th. This overdue weaning was reported by DAR animal care staff on September 18th and then was submitted to DAR veterinary staff on September 19th. The investigator was contacted immediately when the incident was found on September 25th. Upon investigation, several additional issues related to rodent colony management emerged:

- Multiple prior instances of overcrowding were due to failure to wean/separate litters in a timely manner, along with a failure to euthanize geriatric mice (i.e., greater than two years of age).
- The investigative staff failed to dock the cage into the ventilated cage slot properly.
- The investigative staff who managed the colony was not listed on an approved IACUC protocol. He was previously listed but had been inadvertently removed when two protocols were merged.

Corrective action plan:

When the investigator was notified about the incident, he immediately notified his staff and instructed them to do the following:

- 1) Ensure cages are fully docked when placing back on the rack.
- 2) Make sure animals are weaned on time (i.e., no later than 28 days after birth).
- 3) The investigative staff involved in this incident is not allowed to handle animals until added to the protocol.

In addition to the above actions, the IACUC subcommittee composed of the IACUC Chair, Attending Veterinarian, Clinical Veterinarian, and Research Liaison Specialist met with the investigator and his staff involved in this incident on October 18th, and agreed on a corrective action plan involving the following elements:

- (1) Colony size has been reduced to less than 500 animals and will be maintained at that level until further notice.
- (2) The investigator and primary lab contact will both check on breeding colony animals at least once/week.
- (3) The investigator will personally contact any animal handler on his protocol receiving a DAR health issue/observation within one business day, and the issue will be addressed within one additional business day.
- (4) The investigator has submitted an amendment to include using mice up to 18 months of age.
- (5) The investigator will discuss a schedule for monitoring pups before reaching 28 days of age weaning limit, and report back to the IACUC on an enhanced monitoring plan prior to the IACUC meeting on November 14th.
- (6) The investigator will meet with lab personnel, determine which mouse strains need biodegradable huts for litters, and stop using huts for all other strains, as the huts make it more difficult to visualize animals.
- (7) The investigator will meet with the transgenic core director to discuss a plan to archive several colonies, and report back to the IACUC prior to the meeting on November 14th.

Since we recognize that the rodent colony management is an issue with multiple PIs, DAR and ORSP will implement the following refinements to current practice:

- (1) DAR husbandry staff should report animal health issues, including cage overcrowding, to the veterinary staff on the same day with a follow-up every two days for overcrowding cages if issues have not been resolved. DAR veterinary staff might instruct DAR staff to separate overcrowded cages if no action has been taken in a timely manner by the investigative staff.
- (2) An educational event regarding rodent colony management will be added to the presentation by the ACUP.

After a phone consultation with Dr. Morse and a review of direct costs associated with the procurement and care of animals related to this incident, the monetary impact of the noncompliance is considered insignificant and, as such it is not necessary to make an adjustment to the grant.

We regret that this incident occurred. Following our detailed investigation, we have deployed specific corrective actions to enhance our program and to minimize future occurrences. The IACUC are advised of the above corrective actions at the full committee meeting on November 14th.

We appreciate your consideration of VCU's efforts to minimize future occurrences. VCU remains committed to animal welfare and recognizes its ethical responsibilities in ensuring the welfare of research animals and complying with the *PHS Policy* on the Humane Care and Use of Laboratory Animals.

Sincerely yours,

(b) (6)

P. Srirama Rao, Ph.D.
Vice President for Research and Innovation

Morse, Brent (NIH/OD) [E]

From: OLAW Division of Compliance Oversight (NIH/OD)
Sent: Tuesday, October 30, 2018 3:05 PM
To: Kuei-Lan Chuang; OLAW Division of Compliance Oversight (NIH/OD)
Cc: Srirama Rao; (b) (6)
Subject: RE: Follow-up letter (VCU Assurance# D16-00180/A3281-01)

Thank you for providing this final report Ms. Chuang. We will send an official response soon.

Best regards, Brent Morse

Brent C. Morse, DVM, DACLAM
Director
Division of Compliance Oversight
Office of Laboratory Animal Welfare
National Institutes of Health

Please note that this message and any of its attachments are intended for the named recipient(s) only and may contain confidential, protected or privileged information that should not be distributed to unauthorized individuals. If you have received this message in error, please contact the sender.

From: Kuei-Lan Chuang [mailto:kchuang@vcu.edu]
Sent: Tuesday, October 30, 2018 1:50 PM
To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>; Morse, Brent (NIH/OD) [E] <morseb@mail.nih.gov>
Cc: Srirama Rao <psrao@vcu.edu>; (b) (6)
Subject: Follow-up letter (VCU Assurance# D16-00180/A3281-01)

Dear Dr. Morse,

Attached please find the follow-up letter signed by Dr. Rao, VCU Institutional Official. The incident was reported to you by phone on October 4th. The written report includes a detailed explanation of the incident and actions taken by VCU IACUC.

We have reviewed this incident thoroughly and deployed specific corrective actions designed to enhance our animal program and to prevent future occurrences. We appreciate your consideration and VCU recognizes its responsibilities to comply with the Public Health Service Policy on the Humane Care and Use of Laboratory Animals and the Guide, and also remains committed to animal welfare.

Should you have any questions regarding this matter, please do not hesitate to contact me at (b) (6) or email to: kchuang@vcu.edu.

Best Regards,

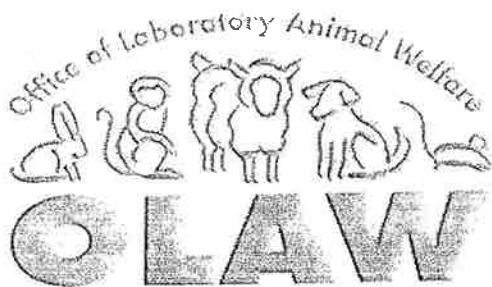
Amy Chuang

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Amy

Amy Chuang, M.S., RQAP-GLP, CPIA
Director of the Animal Care and Use Program
Office of Research Subjects Protections (ORSP)
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Box 980568
800 E. Leigh St., (b) (4)
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Animal Research website: <https://research.vcu.edu/secure/acup/index.htm>
Animal Care and Use Program Blog: <http://wp.vcu.edu/acup/>



Initial Report of Noncompliance

By: [Signature]Date: 10/4/18Time: 10:00Name of Person reporting: Amy ChuongTelephone #: [Redacted] (b) (6)Fax #: [Redacted]Email: [Redacted]Name of Institution: VCUAssurance number: A3281Did incident involve PHS funded activity? YesFunding component: [Redacted]Was funding component contacted (if necessary): [Redacted]What happened? 2 mouse breeding cages not properly docked & not weaned on time. 16 of 25 mice found dead. Colony manager not on protocol but experienced & trained.Species involved: MousePersonnel involved: ResearcherDates and times: [Redacted]Animal deaths: YesProjected plan and schedule for correction/prevention (if known): [Redacted]Training, disciplineAdvised not necessary to contact funding component

Projected submission to OLAW of final report from Institutional Official:

New I.O. report may be delayed.

OFFICE USE ONLY

Case # [Redacted]