February 21, 2020

Re: Animal Welfare Assurance
#A3245-01 (OLAW Case 3X)

Dr. Melur K. Ramasubramanian
Vice President for Research
Professor, Mechanical Engineering
University of Virginia
Box 400301
Charlottesville VA 22904-4301

Dear Dr. Ramasubramanian,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your February 18, 2020 letter reporting an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Virginia. According to the information provided, OLAW understands that expired inhalant anesthetic had been used to euthanize mice.

The corrective actions consisted of the Institutional Animal Care and Use Committee (IACUC) notifying the Principal Investigator (PI) who disposed of the expired drug, decided to use CO2 for euthanasia instead, and updated the protocol to reflect the change. The IACUC counseled the PI never to use expired anesthetic in animals.

Based on its assessment of this explanation, OLAW understands that measures have been implemented to correct and prevent recurrence of this problem. OLAW concurs with the actions taken by the IACUC to comply with the PHS Policy.

Sincerely,

Axel Wolff, M.S., D.V.M.
Deputy Director
Office of Laboratory Animal Welfare

cc: IACUC Chair
University of Virginia  
Animal Welfare Compliance Report  
PHS Assurance #A3245-01

This document is a summary of the incident, actions taken, and final resolution. Due to the timing of the investigation and resolution, a preliminary report was not submitted.

**UVA Compliance Case #: 2019-U**

<table>
<thead>
<tr>
<th>Nature of Incident(s):</th>
<th>Condition that had the potential to jeopardize the health or well-being of animals. Specifically, the use of an expired anesthetic to euthanize animals (mice)</th>
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<tbody>
<tr>
<td><strong>Summary of Incident:</strong></td>
<td>During the semi-annual inspection, the inspectors found a bottle of expired anesthesia that had been used beyond the expiration date to euthanize animals on one occasion.</td>
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<td><strong>Action taken by IACUC:</strong></td>
<td>The IACUC discussed the incident at the Program Review meeting and agreed this was a significant deficiency due to the potential impact on animal welfare. The IACUC sent the PI a letter reminding him that he is prohibited from using expired anesthesia for any purpose. He was required to properly dispose of the expired material and to provide a written corrective action plan to prevent recurrence.</td>
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<td><strong>Action taken by PI:</strong></td>
<td>The PI responded to the IACUC’s concerns and submitted a corrective action plan. The PI indicated that the expired bottle was disposed of and they do not plan to use the inhalational anesthetic in the future for euthanasia. They discovered that the use of carbon dioxide, available in the vivaria, was a better choice for their research. They will update the animal use protocol as needed.</td>
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<td><strong>Action taken by IACUC:</strong></td>
<td>The IACUC felt that the PI responded appropriately and no further action was deemed necessary.</td>
</tr>
<tr>
<td><strong>Decision/Resolution:</strong></td>
<td>The IACUC accepted the corrective action plan as submitted, and no further action was deemed necessary.</td>
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<tr>
<td><strong>Federal Funding:</strong></td>
<td>R01 HD093703</td>
</tr>
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<td><strong>Notification of Final Disposition:</strong></td>
<td>☒IO ☒OLAW</td>
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Thank you for providing these reports. We will send official responses soon.

Best regards, Brent Morse

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

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Dr. Axel Wolff, Director of Compliance Oversight Office of Laboratory Animal Welfare National Institutes of Health RKL 1, Suite 360, MSC 7982
6705 Rockledge Dr., Bethesda, MD

Dr. Wolff:

I attach two compliance reports from our IACUC. These are our cases 2019-U and 2020-A.

In these cases, the IACUC has investigated thoroughly, taken appropriate action and the committee has determined that these matters are now resolved to their satisfaction.

I have reviewed the reports and I concur with the committee responses and final determinations.

Regards,

For Melur Ramasubramanian