



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) 480-3387

February 25, 2020

Re: Animal Welfare Assurance  
A3306-01 [OLAW Case 2X]

Dr. Terence Flotte  
Dean, Provost and Executive Deputy Chancellor  
University of Massachusetts Medical School  
55 Lake Avenue North  
Worcester, MA 01655

Dear Dr. Flotte,

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 Massachusetts Medical School, following up on an initial report on February 4, 2020. According to the information provided, OLAW understands that mice were being euthanized by a different method than described in the approved protocol. Specifically, instead of euthanizing the mouse with sodium pentobarbital and performing a bilateral thoracotomy, the laboratory anesthetized the animal with ketamine/xylazine while on a pulmonary recording machine and removed the lungs.

The corrective actions consisted of counseling the investigators and staff to follow the protocol, having the laboratory submit an unanticipated event report, and amending the protocol.

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 institution to comply with the PHS Policy.

Sincerely,

(b) (6)

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

cc: IACUC Chair



February 18, 2020

Institutional Animal Care and Use Committee (IACUC)  
Office of Research  
University of Massachusetts Medical School  
55 Lake Avenue North  
Worcester, MA 01655-0002 USA  
508.856.5416 (office) 508.856.5004 (fax)

Division of Compliance Oversight  
Office of Laboratory Animal Welfare  
National Institutes of Health  
Rockledge 1, Suite 260  
6705 Rockledge Drive  
Bethesda, MD 20892

Dear members of the Division of Compliance Oversight,

RE: Assurance # D16-00196 (A3306-01)

On behalf of the University of Massachusetts Medical School (UMMS), I am submitting a report of a recent incident of failure to adhere to IACUC protocol, A-2341-18.

On 12/20/19, during the Fall Semi-Annual 2019 inspections, an Inspector asked a lab member to clarify the euthanasia of mice following a non-survival procedure. A discrepancy was found between the written protocol and the verbal description of the procedure provided by the lab member. The lab is approved to give a terminal dose of sodium pentobarbital followed by a bilateral thoracotomy. The experimental procedure involves the animal being placed under Ketamine/Xylazine anesthesia while hooked up to a machine that records pulmonary mechanics. The procedure averages no more than 3 minutes, and the animal is then euthanized. The lab member verbally stated that they were not giving the dose of sodium pentobarbital as described in their protocol because the animal already under anesthesia is euthanized by removal of the lungs for their subsequent post-mortem analysis. Two lab groups use the pulmonary recording device. The other lab utilizing the machine is approved to euthanize their animals by a secondary physical means (bilateral thoracotomy) while under K/X anesthesia. The lab member confirmed that this may have led to some confusion as to which euthanasia method they were approved to perform.

As an immediate corrective action, the researchers were informed of the importance of protocol adherence as well as advised to follow the protocol as written. They were asked to submit an unanticipated event report (UAE) for clarification. Additionally, The PI submitted an amendment on 1/09/20 to include remove the use of sodium pentobarbital as the primary method of euthanasia in the terminal procedure.

The IACUC discussed this incident by full committee on 1/27/20, it was determined that the lab had not performed the euthanasia of the animals in accordance to their protocol. However, the euthanasia was compliant with the AVMA Guidelines for Euthanasia as well as the IACUC policy on Euthanasia. As such, the Attending Veterinarian confirmed that animal health was at no point at risk despite this non-compliance. The amendment has been reviewed and approved by the IACUC. The PI was advised to meet with his staff to discuss the importance of protocol adherence. The IACUC has determined the corrective actions to be sufficient.

Animal activities described in this report were covered by NIH funds, 5P01HL131471-04 and 5R01DK098252-06

Thank you for your consideration and please let me know if you have additional questions.

Sincerely,

(b) (6)

Terence Flotte, M.D.  
Institutional Official  
Dean, Provost and Executive Deputy Chancellor  
University of Massachusetts Medical School

## Wolff, Axel (NIH/OD) [E]

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**From:** OLAW Division of Compliance Oversight (NIH/OD)  
**Sent:** Friday, February 21, 2020 6:55 AM  
**To:** (b) (6)  
**Cc:** OLAW Division of Compliance Oversight (NIH/OD)  
**Subject:** RE: Assurance D16-00196 (A3306-01) Final Report (1)

Thank you for this report. We will send a response soon.

Axel Wolff, M.S., D.V.M.  
Deputy Director, OLAW

**From:** (b) (6)  
**Sent:** Thursday, February 20, 2020 4:31 PM  
**To:** OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>  
**Cc:** (b) (6)  
**Subject:** Assurance D16-00196 (A3306-01) Final Report (1)

To whom it may concern,

Please find the attached final report for an incident filed with OLAW on 02/04/2020. I am filing this on behalf of the University of Massachusetts Medical School Institutional Official, Dean Flotte, assurance #D16-00196 (A3306-01).

Please contact me with any questions.

Sincerely,  
(b) (6)

(b) (6)



**Office of Research**  
55 Lake Avenue North, Suite 51-859  
Worcester MA 01655-0002

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**Morse, Brent (NIH/OD) [E]**

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**From:** OLAW Division of Compliance Oversight (NIH/OD)  
**Sent:** Tuesday, February 04, 2020 2:07 PM  
**To:** (b) (6) OLAW Division of Compliance Oversight (NIH/OD)  
**Cc:** (b) (6)  
**Subject:** RE: Assurance D16-00196 (A3306-01) Preliminary Report (1)

Thank you for this preliminary report. We will open a case file and await the final report as noted below.

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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**From:** (b) (6)  
**Sent:** Tuesday, February 04, 2020 1:41 PM  
**To:** OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>  
**Cc:** (b) (6)  
**Subject:** Assurance D16-00196 (A3306-01) Preliminary Report (1)

To whom it may concern,

I am submitting a preliminary report on behalf of the University of Massachusetts Medical School Institutional Official, Dean Flotte, assurance #D16-00196 (A3306-01).

IACUC protocol A-2341-18: On 12/20/19, during the Fall Semi-Annual 2019 inspections, an Inspector asked a lab member to clarify the euthanasia of mice following a non-survival procedure. A discrepancy was found between the written protocol and the verbal description of the procedure provided by the lab member. The lab is approved to give a terminal dose of sodium pentobarbital followed by a bilateral thoracotomy. The experimental procedure involves the animal being placed under Ketamine/Xylazine anesthesia while hooked up to a machine that records pulmonary mechanics. The procedure averages no more than 3 minutes, and the animal is then euthanized. The lab member verbally stated that they were not giving the dose of sodium pentobarbital as described in their protocol because the animal was already under anesthesia. Two lab groups use the pulmonary recording device. The other lab utilizing the machine is approved to euthanize their animals by a secondary physical means (bilateral thoracotomy) while under K/X anesthesia. The lab member confirmed that this may have led to some confusion as to which euthanasia method they were approved to perform.

As an immediate corrective action, the researchers were informed of the importance of protocol adherence as well as advised to follow the protocol as written. They were asked to submit an unanticipated event report (UAE) for clarification. Additionally, The PI submitted an amendment on 1/09/20 to include remove the use of sodium pentobarbital as the primary method of euthanasia in the terminal procedure. The IACUC is further investigating this incident and a final report will be submitted thereafter.

Please contact me with any questions.

Sincerely,

(b) (6)

(b) (6)



Office of Research

55 Lake Avenue North, Suite S1-859  
Worcester MA 01655-0002

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