

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

May 12, 2023

FOR EXPRESS MAIL: Office of Laboratory Animal Welfare 6700B Rockledge Drive, Suite 2500 Bethesda, Maryland 20817 <u>Telephone</u>: (301) 496-7163 Facsimile: (301) 480-3387

Re: Animal Welfare Assurance A3317-01 [OLAW Case J]

Stacie Bloom, Ph.D. Vice Provost for Research New York University Office of the Provost; Bobst, 70 Washington Square South, New York, NY 10012

Dear Dr. Bloom,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your May 5, 2023 letter reporting an adverse event involving a research mouse at New York University Washington Square Campus. According to the information provided, OLAW understands that a fire occurred during use of electrocautery with a mouse under gaseous anesthesia. The mouse was undergoing an approved tumor resection and the electrocautery ignited the oxygen delivered by the anesthesia machine and the alcohol skin disinfectant.

The immediate action taken consisted of extinguishing the fire and euthanizing the mouse. The staff involved was not injured and only the mouse's fur was singed. The Fire Safety Manager and safety team were notified, the Principal Investigator was counseled by the veterinarians, and preventive measures were implemented. Going forward, less alcohol will be used to clean the skin, the skin will be allowed to dry, the skin preparation will be conducted away from the surgical field, and non-flammable disinfectants will be used on surfaces. A detailed directive on risk minimization when using potential ignition sources was distributed to all animal users and relevant signs were posted.

Based on the information provided, OLAW is satisfied that appropriate actions have been taken to investigate, correct, and prevent recurrence of the adverse event. Your prompt and thorough resolution of this matter is commendable and consistent with the PHS Policy on Humane Care and Use of Laboratory Animals philosophy of monitored self-regulation. We appreciate having been informed about this matter and find no cause for further action by this Office.

Sincerely,

(b) (6)

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

cc: IACUC Chair



NEW YORK UNIVERSITY A private university in the public service

Institutional Animal Care and Use Committee 665 Broadway, Suite 804 New York, NY 10012 Phone 212-998-4256 Fax 212-995-4029

May 5, 2023

-3317-7

Axel Wolff, DVM Director, Division of Compliance Oversight Office of Laboratory Animal Welfare National Institutes of Health Rockledge 1, Suite 360 6705 Rockledge Drive Bethesda, MD 20892

Dear Dr. Wolff:

New York University Washington Square Campus (NYU-WS), in accordance with Assurance A3317-01 and PHS Policy IV.F.3., provides this report of an unexpected adverse incident. The animal involved was used under IACUC-approved protocol number 19-1515 which does not receive any PHS funding. Lee-Ronn Paluch, BVSc, DACLAM, Director and Attending Veterinarian, Office of Veterinary Resources (OVR) left a voice message with OLAW on Friday April 21, 2023 to report the incident, which was subsequently conveyed to Devora McCoy, MBA at OLAW, on Monday April 24, 2023 via telephone. This case was assigned number A3317-J.

The incident occurred on April 19, 2023 and was immediately reported to the OVR Director/AV by the Principal Investigator (PI). A mouse was undergoing an approved tumor resection under general gaseous anesthesia and electrocautery was being used to provide hemostasis per protocol. Unfortunately, the use of an electrocautery device in the presence of oxygen (delivered via nose cone) following the use of alcohol skin disinfectant during aseptic skin preparation ignited a fire. The lab members were able to quickly extinguish the fire and immediately euthanized the mouse by cervical dislocation. The animal's fur was burned, but no skin burns occurred. No lab personnel were harmed.

The AV notified NYU's Research & Laboratory Safety team and the institution's Fire Safety Manager. The Fire Safety Manager inspected the procedure space the following morning (4/20/23) and concluded that the fire was caused using a cautery device in the presence of a fuel (alcohol) and an oxidizer (oxygen). This is a documented phenomenon reported in both veterinary and human operating rooms.<sup>1</sup>

The AV reported this incident to the IACUC at their meeting on April 20, 2023, and recommended that this incident be reported to OLAW.

The clinical veterinarian and the AV subsequently met with the PI to discuss methods to prevent a similar adverse event. As the lab requires cautery to manage hemostasis when excising highly

<sup>&</sup>lt;sup>1</sup> https://pubs.asahq.org/anesthesiology/article/130/3/492/19230/Operating-Room-Fires

vascular tumors, and given that gaseous anesthesia provides a more reliable plane of anesthesia for surgical procedures than injectable anesthesia, the lab will implement the following steps in future:

- During aseptic skin preparation, rather than applying alcohol with a soaked gauze pad, prepackaged alcohol skin wipes will be used to contain the volume of alcohol applied, to prevent pooling of alcohol on the skin, and to prevent buildup of alcohol fumes which may occur when soaking gauze.
- The skin will be allowed to dry fully after alcohol application (waiting at least 3 minutes to allow any fumes to dissipate).
- Aseptic skin preparation will be performed on a part of the benchtop away from the surgical field, and the animal will only be transferred to the surgical area once the skin has dried.
- A non-flammable surface disinfectant will be used to disinfect the benchtop and any instrumentation in the surgical field.

In addition to the lab's specific methods of prevention, the Office of Veterinary Resources will disseminate guidelines to all animal labs on Monday May 8<sup>th</sup>, 2023 regarding the risks of electrocautery in the presence of alcohol and oxygen as follows:

- Avoid the use of cautery devices or other ignition sources (eg. lasers, high speed burrs or drills, fiberoptic light sources) whenever possible
- When use of the above devices is necessary:
  - The ignition source should be switched off and kept aside when not actively in use
    - Discuss with veterinarians whether alcohol-based disinfectants are appropriate for skin preparation (procedure specific)
    - When using alcohol as part of the aseptic skin preparation, keep the volume to a minimum, do not allow pooling of skin preps, and ensure sufficient drying time (at least 3 minutes)
    - Discuss with veterinarians whether injectable anesthesia is a viable alternative to gaseous anesthesia
    - When gaseous anesthesia is necessary, and the animal may be intubated, endotracheal tubes should be used in place of mask anesthesia. For large animals, cuffed endotracheal tubes should be used.
    - o Titrate oxygen flow to the lowest safe concentration when the device is in use.

Signage will also be posted in animal surgery rooms on Monday May 8th, 2023 to serve as a reminder to personnel to be cautious when using potential ignition sources.

New York University is committed to protecting the welfare of animals used in research and appreciates the guidance and assistance provided by OLAW in this regard. Should you have any questions regarding this report, please contact James Higham, PhD, IACUC Chair and Lee-Ronn Paluch, BVSc, DACLAM, Attending Veterinarian.

Thank you for your consideration of this matter.

Sincerely,

(b) (6)

Stacie Bloom, PhD, Vice Provost for Research Institutional Official New York University

## McCoy, Devora (NIH/OD) [E]

From:	OLAW Division of Compliance Oversight (NIH/OD)
Sent:	Monday, May 8, 2023 1:12 PM
To:	leeronn.paluch@nyu.edu
Cc:	OLAW Division of Compliance Oversight (NIH/OD)
Subject:	RE: [EXTERNAL] OLAW Final Report Case #A3317-J

Good afternoon Dr. Paluch,

Thank you for sending us this final report for case A3317-J and we will send an official response soon.

Best, Devora

Devora McCoy, BS, MBA (pronunciation) Program Analyst Division of Compliance Oversight Office of Laboratory Animal Welfare National Institutes of Health

Phone: 301-435-2390 Email: <u>devora.mccoy@nih.gov</u>

From: Lee-Ronn Paluch < Irp289@nyu.edu>	
Sent: Friday, May 5, 2023 11:02 AM	
To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov></olawdco@od.nih.gov>	
Cc: Stacie Bloom <blooms03@nyu.edu>;</blooms03@nyu.edu>	<sup>(b) (6)</sup> James Paul Higham
<jhigham@nyu.edu></jhigham@nyu.edu>	
Subject: [EXTERNAL] OLAW Final Report Case #A3317-J	

Good morning,

Attached is the final report for NYUWS (AWA #A3317-01) Case J, reported to Devora McCoy on 4/24/23.

Sincerely, Lee-Ronn

Lee-Ronn Paluch, BVSc, DACLAM Director/Attending Veterinarian, Office of Veterinary Resources Co-Director, NYU-Regeneron Postdoctoral Training Program in Laboratory Animal Medicine Clinical Associate Professor of Neural Science New York University

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## A3317-J

## **Initial Report of Noncompliance**

By: DCM

Date: 4/24/2023

Time: 12pm

Name of Person reporting: Leeronn Paluch Telephone #: (b) (6) Fax #: Email:

Name of Institution: \_\_NYU- Washington Square\_ Assurance number: \_\_A3317-01\_\_\_\_\_

Did incident involve PHS funded activity? \_No\_\_\_\_ Funding component: \_\_\_\_\_ Was funding component contacted (if necessary):

What happened:

Mass surgery; cautery cutting used and fire occurred; alcohol was present and possible cause in conjunction with heat from cautery; mouse euthanized; some equipment melted; Lab/IACUC looking into alternative methods to complete procedures

Species involved: mouse Personnel involved: lab members Dates and times: 4/19/23 Animal deaths:

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

Projected submission to OLAW of final report from Institutional Official: ~2 weeks

OFFICE USE ONLY Case #\_\_\_\_\_