

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

April 10, 2020

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8W]

Mr. George A. Huber
Vice Chancellor for Research Conduct the and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Mr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your April 3, 2020 letter reporting an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Pittsburgh. This letter had not been preceded by a preliminary report to OLAW.

According to the information provided, this Office understands that the University of Pittsburgh Animal Care and Use Committee (ACUC) determined that instances of noncompliance occurred with respect to: the conduct of animal-related activities without appropriate IACUC review and approval and animals with no access to water. The final report states that the incident was reviewed at the February 17, 2020 IACUC meeting. The incident involved 6 cages of mice found to be without access to water. Investigative results revealed the mice were being water restricted overnight, which was not included on the protocol. The IACUC reviewed and accepted the investigator's corrective actions as the following:

- The investigator submitted an IACUC modification that outlines the experimental rationale and duration of water restriction.
- The investigator will review the IACUC protocol with all members of the lab before any further animal work is carried out, and with any students or new members of the lab as part of their orientation.
- The investigator will require all personnel to double check IACUC protocols before ordering any animals for future experiments.

The IACUC levied the following sanctions:

The investigator was reminded that data collected from studies involving off-protocol work
represents work not approved by the IACUC and cannot be used in public presentations or
publications without disclosing the lack of IACUC approval. The investigator was also informed
that NIH funds cannot be used to pay for animal-related charges associated with off-protocol work.

Page 2 – Mr. Huber April 10, 2020 OLAW Case A3187-8W

It is noted that the research is supported by PHS funds. Based on its assessment of this explanation, OLAW understands that the University of Pittsburgh has implemented appropriate measures to correct and prevent recurrences of these problems and is now compliant with provisions of the PHS Policy. We appreciate being informed of these matters and find no cause for further action by this Office.

Sincerely,
(b) (6)

Jacquelyn T. Tubbs, DVM Veterinary Medical Officer Division of Compliance Oversight Office of Laboratory Animal Welfare

cc: IACUC Contact

Office of Research Protections

Suite 401, Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 412-624-2202 ghuber@pitt.edu orp.pitt.edu



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

April 3, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its February 17, 2020 meeting.

Six cages of mice assigned to the investigator's protocol were found to be without access to water. Upon further investigation, the mice were being water restricted overnight, which was not included on the protocol.

The University of Pittsburgh IACUC reviewed and accepted the investigator's corrective action plan (CAP), which consisted of the following item:

- 1. The investigator submitted an IACUC modification that outlines the experimental rationale and duration of water restriction.
- The investigator will review the IACUC protocol with all members of the lab before any further animal work is carried out, and with any students or new members of the lab as part of their orientation.
- 3. The investigator will require all personnel to double check IACUC protocols before ordering any animals for future experiments.

The investigator's research is supported by the following NIH grant:

POPULATION GENOMIC ANALYSIS OF GUT MICROBIAL COLONIZATION IN PREMATURE INFANTS (1R01AI092531-01)

¹ PHS Policies IV.B.7 and IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 April 3, 2020

The IACUC has levied the following sanctions:

 The investigator was reminded that data collected from studies involving off-protocol work represents work not approved by the IACUC and cannot be used in public presentations or publications without disclosing the lack of IACUC approval. Additionally, the investigator was informed that NIH funds cannot be used to pay for animal-related charges associated with off-protocol work.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b)(6)

George A. Huber

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, April 6, 2020 7:40 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

Thank you for these reports,

(b) (6) We will send responses soon.

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

From:

(b) (6)

Sent: Friday, April 3, 2020 11:21 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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April 10, 2020

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Y]

Mr. George A. Huber
Vice Chancellor for Research Conduct and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Mr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your April 3, 2020 letter reporting an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Pittsburgh. This letter had not been preceded by a preliminary report to OLAW.

According to the information provided, this Office understands that the University of Pittsburgh Animal Care and Use Committee (ACUC) determined that instances of noncompliance occurred with respect to: an incident that jeopardized the health and well-being of animals resulting in harm and death to animals. The final report states on December 15, 2019 a mouse cage (referred to as a "box") from an auto water rack was found mistakenly placed on a rack labeled as a manual water bottle rack by a member of the investigator's lab following room change on December 12th. A water bottle was not provided, and the cage contained one surviving and one dead adult mouse.

The IACUC reviewed the incident at the February 17, 2020 meeting. The committee reviewed and accepted the investigator's corrective action plan and the animal facility director's summary of preventative actions, they include the following:

- The animal care technician was retrained on daily husbandry checks.
- The investigator and lab members will pay closer attention to animal rack designations in the housing room.
- Every newly created cage that is to be placed in the manual supply rack will be double checked for the presence of a water bottle.
- Members of the lab will be briefed on this incident and will be urged to implement additional measures to ensure the well-being of the research animals.

Page 2 – Mr. Huber April 10, 2020 OLAW Case A3187-8Y

The IACUC also levied the following sanctions:

A letter of reprimand was sent to the investigator, the Director of the animal care program, and their supervisors regarding this event.

It is noted that these animals were involved in PHS supported animal activities. Based on its assessment of this explanation, OLAW understands that the University of Pittsburgh has implemented appropriate measures to correct and prevent recurrences of these problems and is now compliant with provisions of the PHS Policy. We appreciate being informed of these matters and find no cause for further action by this Office.

Sincerely.

(b) (6)

Jacquelyn T. Tubbs, DVM Veterinary Medical Officer Division of Compliance Oversight Office of Laboratory Animal Welfare

cc: IACUC Contact



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

April 3, 2020

Office of Research Protections

Suite 401, Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 412-624-2202 ghuber@pitt.edu orp.pitt.edu

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹ that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its February 17, 2020 meeting.

On December 15, 2019, a box from an auto water rack was found to have been mistakenly placed on a rack labeled as a manual water bottle rack by a member of the investigator's lab following a room change on December 12. A water bottle was not provided. Upon discovery, the box contained one surviving and one deceased adult mouse.

The University of Pittsburgh IACUC reviewed and accepted the investigator's corrective action plan (CAP) and and the animal facility Director's summary of preventative actions, which consisted of the following items:

- 1. The animal care technician was retrained on daily husbandry checks.
- 2. The investigator and lab members will pay closer attention to animal rack designations in the housing room.
- 3. Every newly created cage that is to be placed in the manual supply rack will be double checked for the presence of a water bottle.
- 4. Members of the laboratory will be briefed on this incident and will be urged to implement additional measures to ensure the well-being of the research animals.

The investigator's research is supported by the following NIH grant:

PULMONARY ARTERIOLE OCCLUSION BY PLATELET-NEUTROPHIL MICRO-EMBOLISM ACUTE CHEST SYNDROME (R01HL128297-05)

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 April 3, 2020

The IACUC has levied the following sanctions:

1. A letter of reprimand was sent to the investigator, the Director of the animal care program, and their supervisors regarding this event. The letter has been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

George A. Huber

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, April 6, 2020 7:40 AM

To:

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

Thank you for these reports,

(b) (6) We will send responses soon.

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

From:

(b) (6)

Sent: Friday, April 3, 2020 11:21 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b)(6)



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August 25, 2021

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 9M]

Dr. Bill Yates
Interim Vice Chancellor for Research Protections
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Yates.

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your August 23, 2021 letter reporting a serious deviation from the provisions of the *Guide for the Care and Use of Laboratory Animals* at the University of Pittsburgh. According to the information provided, OLAW understands that two mice died due to lack of food. The food hopper had not been filled when the animals were weaned by a postdoctoral fellow. The animal caretaker could not see the mice during the daily health check because they were hidden behind the food hopper.

The corrective actions consisted of retraining the postdoctoral fellow responsible on weaning procedures and this individual will check each cage for the presence of food before leaving the animal facility. To prevent a recurrence, the food hopper will now be pre-filled with food and left in the hood where cages are processed for weaning. A letter of reprimand was issued to the investigator and supervisor.

Based on its assessment of this explanation, OLAW understands that measures have been implemented to reduce the likelihood of a recurrence. 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

Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh. PA 15213 Phone: (b) (6)

Fax:

Email: vcorp@pitt.edu

August 23, 2021

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹.

On June 21, 2021, during a daily room check, a box containing two deceased mice was discovered without food. The food hopper was upside down inside the cage and had not been filled when the animals were weaned by a postdoctoral fellow during the afternoon of June 18. The mice were discovered behind the food hopper. Because of this obstructed view the cage appeared to be empty to animal care technicians checking the box.

The corrective actions taken in this case consisted of the following items:

- The postdoc's workflow has been evaluated and reconfigured, and he has been retrained in weaning procedures.
- Going forward, food hoppers will always be pre-filled with food and left in the hood until being replaced in the cage prior to placing the cage back in the rack. This will provide a clear indication if a cage is missing food as the hopper would be visible in the hood instead of in the cage.
- Additionally, the postdoc will visually check each cage being weaned from or weaned to, verifying that each has food, before leaving the animal facility.

The investigator's research is supported by the following NIH grants:

5R01AI043603-21

Murine Memory B Cell Development and Function

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM August 23, 2021 Page 2

4R37AI118841-06

Investigating How TLR7 Activates and TLR9 Regulates

Systemic Autoimmunity

5R01AI105018-07

Signaling and Selection in Germinal Center B Cells

1R21AI154267-01A1

Exploring the Role of Long Noncoding RNAs in

Germinal Center B cells

The IACUC levied the following sanctions:

1. A letter of reprimand was sent to the investigator and his supervisors regarding this event. This letter has been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates, PhD

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, August 23, 2021 8:04 AM

To:

(ь)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports,

(b) (6) We will send a response soon.

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

From:

(b) (6)

Sent: Monday, August 23, 2021 7:50 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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Facsimile: (301) 480-3387

August 25, 2021

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 9N]

Dr. Bill Yates
Interim Vice Chancellor for Research Protections
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your August 23, 2021 letter reporting a serious deviation from the provisions of the *Guide for the Care and Use of Laboratory Animals* at the University of Pittsburgh. According to the information provided, OLAW understands that three of four mice died due to lack of water. The cage had been provided with a full water bottle, the mice drank the water, but the animal care staff failed to notice that it had become empty.

The immediate action taken upon discovery consisted of providing hydrogel to the surviving mouse, which subsequently recovered. The corrective actions consisted of retraining the animal caretakers on providing food/water and on conducting daily health checks appropriately. A letter of reprimand was sent to the Division of Laboratory Animal Resources Director and their supervisor.

Based on its assessment of this explanation, OLAW understands that corrective actions were taken in this situation. While OLAW concurs with the actions taken by the institution, this Office is concerned that the initial as well as the redundant health checks failed. Ongoing vigilance is imperative to prevent animals from dying due to preventable incidents of lack of food/water. Please continue to aggressively enforce the provision of food/water as well as vigilance by all staff to ensure animal welfare.

Sincerely,

(b) (6)

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

cc: IACUC Chair

Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6 Fax:

Email: vcorp@pitt.edu

August 23, 2021

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹.

On June 28, 2021, one box containing four adult mice was found in the animal facility without access to water. Three of these mice were deceased upon discovery. The surviving mouse was provided with hydrogel and monitored for twenty-four hours, during which no further issues were evident. The box was changed on June 23 and, given that one mouse survived, a filled water bottle was likely provided at that time and the water was subsequently consumed by the mice over the next few days. As there was no evidence that the water bottle leaked after being provided, there was a period during which the emptied water bottle was not noticed by animal care staff during daily health checks.

The corrective actions taken in these cases consisted of the following item:

 Animal care staff were retrained on how to properly perform food, water and health checks.

The IACUC levied the following sanctions:

• A letter of reprimand was sent to the DLAR Director and his supervisors regarding this event. This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM August 20, 2021 Page 2

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates, PhD

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, August 23, 2021 8:04 AM

To:

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports,

(b) (6) We will send a response soon.

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

From:

(b) (6)

Sent: Monday, August 23, 2021 7:50 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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Bethesda, Maryland 20817
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Facsimile: (301) 480-3387

January 14, 2022

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 9P]

Dr. Bill Yates
Acting Vice Chancellor for Research Protections
University of Pittsburgh
3500 Fifth Avenue, (6) (4) Hieber Building
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your December 20, 2021 letter reporting an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Pittsburgh. This letter had not been preceded by a preliminary report to OLAW.

According to the information provided, this Office understands that the University of Pittsburgh Animal Care and Use Committee (ACUC) determined that instances of noncompliance occurred with respect to: mice lacking access to food. The final report states on October 18, 2021, three boxes with 8 adult mice were discovered in the animal facility without access to food. Seven animals were found dead, a surviving mouse was provided supportive care, but ultimately was euthanized by laboratory personnel. It is understood the investigator's lab personnel did not provide food when the boxes were setup on October 15th. Also, animal facility staff did not identify the lack of food until October 18th. The following corrective action plans were provided by the animal facility and investigator and approved by the IACUC:

- All facility staff members were retrained on the proper way to conduct health, food, and water checks. Each check is to be completed separate from the others so the tech can concentrate on one item at a time.
- Since the accidental loss, the investigator has been placing "Recently Weaned" tags on each cage that is weaned.
- The investigator has created a task checklist, including food supply, for animal breeding work so that tasks aren't missed.
- The investigator will assign two workers (rather than one) to execute all animal work.

It is noted that this research is supported by PHS funding. Based on its assessment of this explanation, OLAW understands that the University of Pittsburgh has implemented appropriate measures to correct and prevent recurrences of these problems and is now compliant with provisions of the PHS Policy.

We appreciate being informed of these matters and find no cause for further action by this Office.

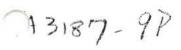
Page 2 - Dr. Yates January 14, 2022 OLAW Case A3187-9P

Sincerely,

Jacquelyn Digitally signed by Jacquelyn T. Tubbs -S Date: 2022.01.14 15:01:58 -05'00'

Jacquelyn Tubbs, DVM, DACLAM Senior Animal Welfare Program Specialist Division of Compliance Oversight Office of Laboratory Animal Welfare

cc: IACUC contact





Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6)

Fax: Email: vcorp@pitt.edu

December 20, 2021

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹.

On October 18, 2021, three boxes containing eight adult mice were found in the animal facility without access to food. Seven of the mice were deceased upon discovery. The surviving mouse was provided with supportive care and was later humanely euthanized by the investigator's laboratory personnel. The investigator's lab personnel did not provide food when the boxes were set up on October 15 and animal facility staff did not detect the lack of food until October 18.

The IACUC approved the animal facility and the investigator's corrective action plans, which included the following items:

- All facility staff members were retrained on the proper way to conduct health, food, and water checks. Each check is to be completed separate from the others so the tech can concentrate on one item at a time.
- Since the accidental loss, the investigator has been placing "Recently Weaned" tags on each cage that is weaned.
- 3. The investigator has created a task checklist, including food supply, for animal breeding work so that tasks aren't missed.
- 4. The investigator will assign two workers (rather than one) to execute all animal work.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM December 20, 2021 Page 2

The investigator's research is supported by the following NIH grants:

R01-HL142997-03

Epigenetic

Modulation

in

Septic

Immunosuppression

R01-HL149719-02

Role of TACC2 in smoking-induced COPD

The IACUC levied the following sanction:

• A letter of reprimand was sent to the investigator and his supervisors regarding this event. This letter has been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates, PhD

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, December 20, 2021 8:15 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports,

(b) (6) We will send responses soon.

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

From:

(b) (6)

Sent: Monday, December 20, 2021 8:01 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: [EXTERNAL] University of Pittsburgh

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and are confident the content is safe.

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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February 17, 2022

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 9Q]

Dr. Bill Yates
Acting Vice Chancellor for Research Protections
University of Pittsburgh
3500 Fifth Avenue, (b) (4) Hieber Building
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your February 7, 2022 letter reporting an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Pittsburgh. This letter had not been preceded by a preliminary report to OLAW.

According to the information provided, this Office understands that the University of Pittsburgh Animal Care and Use Committee (ACUC) determined that instances of noncompliance occurred with respect to: animal deaths likely due to lack of access to water. The final report states on December 15, 2021, five mice were found without access to water. Two animals were found dead, and the remaining 3 mice were given fluids and soft food. The following morning, two of the remaining animals were found dead and it was determined death was likely due to lack of water and stressors related to the experimental procedures.

Per the report, the mice underwent a procedure involving the bladder on December 13th. Afterwards, the cage was placed on a rack not equipped with automatic water and a water bottle was not provided. Per the approved protocol, the animals were to be monitored daily by the investigator's lab personnel. In response to the incident, the investigator discussed with each lab member the need to ensure that animal cages are returned to the correct rack.

The IACUC approved the investigator's corrective action plan and levied the following sanctions:

- A letter of reprimand was sent to the investigator and his supervisors regarding this event.
- The investigator and laboratory staff will undergo training on animal monitoring.

It is understood the experimental procedure was performed on December 13th and the animals were discovered two days later without access to water. It is not clear if this rack was in an investigator-managed area or in a general animal housing room. If the rack was in a general animal housing room, OLAW recommends that it is also emphasized to husbandry staff the importance of daily observations of animals to prevent future recurrence.

It is noted that this research is supported by PHS funding. Based on its assessment of this explanation, OLAW understands that the University of Pittsburgh has implemented appropriate measures to correct and prevent recurrences of these problems and is now compliant with provisions of the PHS Policy.

We appreciate being informed of these matters and find no cause for further action by this Office.

Page 2 – Dr. Yates February 17, 2022 OLAW Case A3187-9Q

Sincerely,

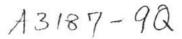
Jacquelyn T. Digitally signed by Jacquelyn T. Tubbs -S

Tubbs -S

Date: 2022.02.17
12:39:42-05'00'

Jacquelyn Tubbs, DVM, DACLAM Senior Animal Welfare Program Specialist Division of Compliance Oversight Office of Laboratory Animal Welfare

cc: IACUC contact





Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6) Fax:

Email: vcorp@pitt.edu

February 7, 2022

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹.

On Wednesday, December 15, 2021, one box containing five mice was found without access to water. Two of the mice were recently deceased. The other three mice in the box were alive and given fluids and soft food. The next morning two of these mice were found deceased; the cause of death seems to have been the lack of water and stressors related to the experimental procedures.

These mice had undergone an experimental procedure on their bladders on December 13. After the procedure was completed, the box was accidentally placed in a rack not equipped with automatic water and a water bottle was not provided. According to the investigator's protocol, the manipulated mice were to be monitored daily by the investigator's lab personnel.

The IACUC approved the investigator's corrective action plan, which included the following item:

The investigator discussed with each lab member the need to ensure that the animal cages are returned to the correct rack.

The investigator's research is supported by the following NIH grant:

5R01DK119183-03

Role of PIEZO Channels in Bladder Function and Dysfunction

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM February 7, 2022 Page 2

The IACUC levied the following sanctions:

- 1. A letter of reprimand was sent to the investigator and his supervisors regarding this event. This letter has been placed in our files.
- 2. The investigator and laboratory staff will undergo training on animal monitoring.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,
(b) (6)

Bill J. Yates, PhD

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, February 9, 2022 7:19 AM

To:

(b) (

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

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: Monday, February 7, 2022 9:47 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: [EXTERNAL] Reportable Event Notice

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Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.





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

March 14, 2022

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 9S]

Dr. Bill Yates
Acting Vice Chancellor for Research Protections
University of Pittsburgh
3500 Fifth Avenue, (6)(4)Hieber Building
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your March 4, 2022 letter reporting three similar instances of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Pittsburgh. According to the information provided, OLAW understands that:

For incident 1: On Saturday, December 18, 2021, one box of five mice was found on an auto-water rack without a lixit. Three of the mice were found deceased. The surviving two mice were given supportive care. It is estimated they went two days without water. The PI has several boxes at any given time in the room for which they disconnect the lixits and supply "special water" in bottles, but it was not determined why this specific box was without a lixit.

For incident 2: On Sunday, January 23, 2022, one box of two mice was found on an auto-water rack without a lixit. Both mice were found deceased. The investigator's technician may have accidentally placed the box in a slot used by a different investigator who uses "special water" bottles instead of the lixit, which is typically removed. It was not determined why this specific box was in a slot without a lixit. Animal facility technicians did not notice the missing lixit during two daily room checks.

For Incident 3: On Tuesday, January 11, 2022, five boxes of five total mice were found housed on an autowater rack with the wrong type of grommet in the boxes and without access to water. Three of the mice, each in a different box, were found deceased. The PI staff did not notice the difference and housed mice in the wrong boxes. It was not caught during the daily room checks.

The IACUC approved the corrective action plan submitted by the animal facility director, which included the following items:

- 1. Animal facility technicians were retrained to ensure a lixit is in place in every slot and is properly installed during daily checks (incident 1, 2, and 3).
- 2. A designated row on one rack was labeled for use for water bottles only (incidents 1 and 2).
- 3. The cagewash and husbandry technicians were retrained to notice the differences in the two types of boxes and remove them if found in the wrong corridor (incident 3).

Page 2 - Dr. Yates March 14, 2022 OLAW Case A3187-9S

The IACUC levied the following sanction:

· A letter was sent to the animal facility director regarding these events.

Based on the information provided, OLAW is satisfied that appropriate actions have been taken to investigate these incidents and prevent recurrences. OLAW concurs that the incidents warranted reporting. We appreciate being informed of these matters and find no cause for further action by this office.

Sincerely,

Brent C. Morse -S Digitally signed by Brent C. Morse -S

Date: 2022.03.15 07:45:59 -04'00'

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

cc: IACUC contact



A3187-98

Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6) Fax:

Email: vcorp@pitt.edu

March 4, 2022

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of three similar reportable incidents¹.

Incident 1: On Saturday, December 18, 2021, one box of five mice was found on an autowater rack without a lixit. Three of the mice were found deceased. The surviving two mice were given supportive care. The room underwent a box change on December 13th. The PI has several boxes at any given time in the room for which they disconnect the lixits and supply "special water" in bottles. Animal facility personnel could not determine who moved the box or why the lixit was missing, however, and the technician who changed the room on the previous Monday was certain all lixits were in place. Given the condition of the mice when found, it is estimated they went two days without water.

Incident 2: On Sunday, January 23, 2022, one box of two mice was found on an autowater rack without a lixit. Both mice were found deceased. The room underwent a box change on January 18th and the lixit was present. The investigator's technician may have accidentally placed the box in a slot used by a different investigator who uses "special water" bottles instead of the lixit, which is typically removed. Animal facility personnel could not determine if or when this happened, however, or when the box was placed in the wrong space. Animal facility technicians missed the missing lixit during two daily room checks.

Incident 3: On Tuesday, January 11, 2022, five boxes of five total mice were found housed in an automatic water rack with the wrong type of box and without access to water. Three of the mice, each in a different box, were found deceased. The animal facility in question has two types of housing boxes that look very similar. One type is a flat grommet and the other is a deep grommet box. They are kept in separate corridors. Five of the deep grommet boxes were mistakenly sent to a flat grommet corridor. The PI staff did not notice the difference and housed mice in the wrong boxes. It was not caught during the daily room checks.

¹ PHS Policy IV.C.1.d

The IACUC approved the corrective action plan submitted by the animal facility director, which included the following items:

- Animal facility technicians were retrained to ensure a lixit is in place in every slot and is properly installed during daily checks (incident 1, 2, and 3).
- A designated row on one rack was labeled for use for water bottles only (incidents 1 and 2).
- 3. The cagewash and husbandry technicians were retrained to notice the differences in the two types of boxes and remove them if found in the wrong corridor (incident 3).

The IACUC levied the following sanction:

· A letter was sent to the animal facility director regarding these events.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely, (b) (6)

Bill J. Yates, PhD

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, March 7, 2022 7:15 AM

To:

(b)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notices

Thank you for these reports. We will send responses soon.

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

From:

(b) (6)

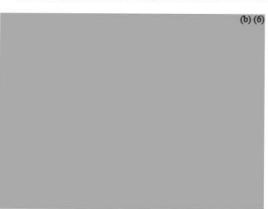
Sent: Sunday, March 6, 2022 8:41 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: [EXTERNAL] Reportable Event Notices

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and are confident the content is safe.

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.





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

May 19, 2022

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 9W]

Dr. Bill Yates
Acting Vice Chancellor for Research Protections
University of Pittsburgh
3500 Fifth Avenue, (6) (4) Hieber Building
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your May 2, 2022 letter reporting two similar instances of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Pittsburgh. IT was not stated if the associated activities were PHS supported. According to the information provided, OLAW understands that:

For incident 1: On March 28th, 2022, one box containing one mouse was discovered without food during daily rounds in the animal facility. The mouse was given wet food and supportive care but was found deceased the next morning. The animal facility technician performing daily checks missed this box for at least 48 hours.

For incident 2: On February 15, 2022, one box containing three deceased mice was discovered without access to water in the animal facility. The box was housed on an automatic water rack, but the wrong type of box was employed, preventing mice from obtaining water.

OLAW understands that the IACUC approved the corrective action plan submitted by the animal facility director for the incidents, which included the following items:

- Animal facility technicians were reminded to ensure all cages have food, a lixit or bottle present, as part of the daily health check.
- 2. The specific flat grommet boxes not to be used on most automatic water racks have been marked to distinguish them from the normal boxes.

The IACUC levied the following sanction:

Letters for these incidents were sent to the animal facility director regarding these events.

Based on the information provided, OLAW is satisfied that appropriate actions have been taken to investigate these incidents and prevent recurrences, but OLAW also notes the similarities of these incidents to those reported by you in your March 4, 2022 letter. OLAW views instances of lack of basic living requirements such as food, water, and a proper cage environment with great concern. OLAW concurs that the incidents warranted reporting. We appreciate being informed of these matters and find no cause for further action by this office, at this time.

Page 2 - Dr. Yares May 19, 2022 OLAW Case 43187-94F

Sincerely,

Brent C. Morse - Digitally signed by Brent C. Morse - S

S

Date: 2022.05.19 15:15:14 -04'00'

Brent C. Morse, DVM Director

Division of Compliance Oversight Office of Laboratory Animal Welfare

cc: IACUC contact





Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6) Fax:

Email: vcorp@pitt.edu

May 2, 2022

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of two similar reportable incidents¹.

Incident 1: On March 28th, 2022, one box containing one mouse was discovered without food during daily rounds in the animal facility. The mouse was given wet food and supportive care, but was found deceased the next morning. The animal facility technician performing daily checks missed this box for at least 48 hours.

Incident 2: On February 15, 2022, one box containing three deceased mice was discovered without access to water in the animal facility. The box was housed on an automatic water rack, but the wrong type of box was employed, preveting mice from obtaining water.

The IACUC approved the corrective action plan submitted by the animal facility director for the incidents, which included the following items:

- Animal facility technicians were reminded to ensure all cages have food, a lixit or bottle
 present, as part of the daily health check.
- 2. The specific flat grommet boxes not to be used on most automatic water racks have been marked to distinguish them from the normal boxes.

The IACUC levied the following sanction:

Letters for these incidents were sent to the animal facilty director regarding these
events.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM May 2, 2022 Page 2

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely, (b) (6)

Bill J. Yates, PhD

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Friday, May 6, 2022 7:47 AM

To:

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

Thank you for these reports,

(b) (6) We will send responses soon.

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

From:

(b) (6)

Sent: Wednesday, May 4, 2022 1:38 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: [EXTERNAL] Reportable Event Notice

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.



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DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH

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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

TEST INP// Etallouring of Etallo John John In

January 6, 2020

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

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8T]

Mr. George A. Huber
Vice Chancellor for Research Conduct
and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your December 19, 2019 letter reporting a serious deviation from the provisions of the *Guide for the Care and Use of Laboratory Animals* at the University of Pittsburgh. According to the information provided, OLAW understands that one mouse died due to lack of food in the cage.

The corrective actions consisted of providing diet gel and food, placing the technician responsible on administrative leave, counseling the laboratory staff, retraining the laboratory staff on ensuring adequate food and water is in the cage following cage setup and weaning, having a laboratory member conduct weekly cage checks, having a senior technician assist with cage setup and weaning, and retraining all current and one new technician. A letter of reprimand was issued to the Principal Investigator and Executive Director of the animal care program.

Based on its assessment of this explanation, OLAW understands that measures have been implemented in this specific incident to address the problem. However, this Office remains concerned about the ongoing issue of animal deaths due to lack of food/water and we await the response to case A3187-8Q regarding program wide steps to be taken to prevent such problems. Thank you for informing OLAW about this matter.

Sincerely,

(b) (6)

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

cc: IACUC Chair

Office of Research Protections

Sulte 401, Hieber Building

3500 Fifth Avenue Plttsburgh, PA 15213 412-624-2202 ghuber@pltt.edu

orp.plll.edu



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

December 19, 2019

Brent Morse, DVM, DACLAM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to report an incident of non-compliance that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its November 18, 2019 meeting.

On September 30, 2019, it was determined that one box of mice covered by the investigator's IACUC protocol was not provided with food. Immediately upon discovery, the mice were provided with diet gel and food. One mouse did not survive.

The University of Pittsburgh IACUC reviewed and accepted the investigator's corrective action plan (CAP), which consisted of the following items:

- Consistent with University practice, the technician responsible for the cage was placed on administrative leave until an investigation has been completed.
- 2. The Principal Investigator discussed the noncompliance at a lab meeting on October 21, 2019.
- 3. Lab personnel were retrained on ensuring adequate food and water is provided to mice at the time of cage setup and weaning.
- 4. A lab member will perform weekly checks of all cages for adequate food and water.
- 5. A senior technician will assist with new cage setup and weaning.
- 6. A new technician will be trained with the assistance of a veterinary technician for animal care and handling issues.
- 7. Animal care technicians were retrained.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 December 19, 2019

The investigator's research is supported by the following NIH grants:

- THE ROLE OF ACOD1 IN IMMUNOMODULATION IN INTRAPULMONARY KLEBSIELLA PNEUMONIAE INFECTION
- HOST CONTROL MECHANISMS AGAINST K. PNEUMONIAE INFECTION IN THE LUNGS
- MECHANISMS OF HOST PROTECTION AGAINST PATHOGEN-SECRETED PROTEASES IN ACUTE LUNG INJURY

The IACUC has levied the following sanctions:

 A letter of reprimand was sent to the Principal Investigator, the Executive Director of the animal care program, and their supervisors regarding this incident of non-compliance. The letter has been placed in our files as evidence of the same.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b)(6)

George A. Huber

Morse, Brent (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Thursday, December 19, 2019 3:50 PM

To:

(b) (6) OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

Thank you for providing these final reports

(b) (6) 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

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:

(b) (6)

Sent: Thursday, December 19, 2019 2:59 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.



From:

Wolff, Axel (NIH/OD) [E]

Sent:

Thursday, February 13, 2020 6:50 AM

To:

Chapman, Deborah L

Subject:

OLAW report

Hello Dr. Chapman,

Please submit a response regarding the actions being taken to address prevention of rodent deaths due to lack of food/water at the University of Pittsburgh. We have received another report of deaths due to lack of water on January 14, 2020. If your IACUC has not fully developed plan, then just send an interim one.

Thank you.

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

To:

Walker, Keri (NIH/OD) [C]

Subject:

A3187-8Q

Case A3187-8Q, University of Pittsburgh

Dear Mr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your January 29, 2020 response to my December 9, 2019 request for information on measures being taken to prevent rodent deaths due to lack of food/water at the University of Pittsburgh. According to the information provided, OLAW understands the following:

- The Institutional Animal Care and Use Committee (IACUC) conducted a detailed review of husbandry practices.
- The animal care and use program is committed to preventing animal deaths due to human error.
- A training program is in place for new animal caretakers who are closely supervised until considered proficient.
- Husbandry errors result in retraining.
- Newly weaned rodents are monitored by Division of Laboratory Animal Resources (DLAR) staff to ensure good health and provision of food/water.
- An enhanced DLAR training program has been implemented and a new Training Manager has been hired. The training will include animal care and research staff.
- Two additional training staff have also been hired.

Responses to OLAW's specific questions are as follows:

- A root cause of why the problems occurred was conducted and concluded that incidents of rodent deaths
 occurred in different facilities and involved different staff and supervisors. There were no repeat failures by the
 same staff.
- 2) In addition to retraining, an incentive program has been established which rewards staff that identify mock cages missing food/water.
- Staff performance problems are documented in employee records and repeat violations are addressed by increasing discipline.
- 4) The institution is aware that any animal death due to human error is unacceptable and is committed to achieving 100% compliance.
- 5) The IACUC is involved in the proposed corrective actions and is requiring all animal care staff to enroll in the new training program. The IACUC will monitor improvement in animal husbandry. The IACUC, DLAR, and investigators are invested in continuing improvement. The number of staff should be proportionate to the number of animals.

OLAW received the January 14, 2020 report which stated that one sentinel mouse died and one required treatment due to not having water. The corrective action consisted of retraining the caretaker on the conduct of daily health checks and all animal facility staff was counseled. A letter of reprimand was issued to the Executive Director of the animal care program and their supervisor.

Based on its assessment of the actions being proposed or already in place, OLAW finds them to be an acceptable approach to achieve the goal of significantly reducing or eliminating rodent deaths caused by human error. We are confident that measures such as the mock cages are a positive approach which should yield the expected results because they have been successfully applied at other institutions facing the same problem. As with similar cases, OLAW is obligated to monitor the success of the proposed program and is hereby placing the University of Pittsburgh on an enhanced reporting schedule. Under this schedule OLAW is requesting an update every two months on the first day of

the month to report success as measured by a reduction in deaths. Near misses that have been successfully caught and corrected should also be reported. Any other metrics such as the status of the mock cage program, the percentage of people trained, and any additional hires should be included. Reportable events, including deaths due to lack of food/water are to be independently promptly reported. We look forward to receiving the first report on April 1, 2020. Feel free to contact me should you have any questions.

cc: IACUC Chair

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Tuesday, February 18, 2020 6:52 AM

То:

Chapman, Deborah L

Subject:

RE: OLAW Case A3187-8Q

Hi Dr. Chapman,

Thanks for this information. I will adjust the calendar to ensure that we know when to expect your enhanced reporting file and will have U of Pittsburgh be set for the 15th, every 2 months. Yes, I will personally handle this but the reports should still go to olawdco@od.nih.gov (which Dr. Morse also monitors). Any other questions, just let me know.

Axel Wolff

From: Chapman, Deborah L <dlc7@pitt.edu> Sent: Friday, February 14, 2020 10:25 AM

To: Walker, Keri (NIH/OD) [C] <keri.walker@nih.gov>; Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>

Subject: Re: OLAW Case A3187-8Q

Dear Dr. Wolff,

The DLAR will start collecting the requested data immediately. The IACUC and DLAR leadership group met with the Institutional Official (IO) today. Because data will need to be collated from 9-10 separate facilities, the DLAR asked whether these reports can be submitted by the 15th of the following month, such that so that the Feb-March report would arrive to you by the 15th of April and so on.

Also the IO wanted to make sure these reports were sent to the correct person. These reports should come directly to you, right? Should they also be cc'd to Dr. Morse?

Thank you for your time.

Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

tel (office): (b) (6) fax: (b) (6)

From: "Walker, Keri (NIH/OD) [C]" < keri.walker@nih.gov>

Date: Thursday, February 13, 2020 at 11:16 AM

To: "Huber, George A" <ghuber@pitt.edu>

Cc: Deborah Chapman < dlc7@pitt.edu>

Subject: OLAW Case A3187-8Q

Dear Mr. Huber,

Attached please find Dr. Wolff's interim response to OLAW Case A3187-8Q.

If you have any questions, feel free to contact us by phone or by e-mail.

Best Regards, Keri

Keri Walker
Program Specialist (Contractor)
Office of Laboratory Animal Welfare
National Institutes of Health
6700B Rockledge Dr., Suite 2500
Bethesda, MD 20892
301-435-2390
keri.walker@nih.gov



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH

FOR US POSTAL SERVICE DELIVERY:
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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
<u>Telephone</u>: (301) 496-7163
<u>Facsimile</u>: (301) 480-3387

February 13, 2020

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Mr. George A. Huber
Vice Chancellor for Research Conduct
and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your January 29, 2020 response to my December 9, 2019 request for information on measures being taken to prevent rodent deaths due to lack of food/water at the University of Pittsburgh. According to the information provided, OLAW understands the following:

- The Institutional Animal Care and Use Committee (IACUC) conducted a detailed review of husbandry practices.
- The animal care and use program is committed to preventing animal deaths due to human error.
- A training program is in place for new animal caretakers who are closely supervised until considered proficient.
- Husbandry errors result in retraining.
- Newly weaned rodents are monitored by Division of Laboratory Animal Resources (DLAR) staff to ensure good health and provision of food/water.
- An enhanced DLAR training program has been implemented and a new Training Manager has been hired. The training will include animal care and research staff.
- Two additional training staff have also been hired.

Responses to OLAW's specific questions are as follows:

- A root cause of why the problems occurred was conducted and concluded that incidents of rodent deaths occurred in different facilities and involved different staff and supervisors. There were no repeat failures by the same staff.
- 2) In addition to retraining, an incentive program has been established which rewards staff that identify mock cages missing food/water.

Page 2 – Mr. Huber February 13, 2020 OLAW Case A3187-80

- 3) Staff performance problems are documented in employee records and repeat violations are addressed by increasing discipline.
- 4) The institution is aware that any animal death due to human error is unacceptable and is committed to achieving 100% compliance.
- 5) The IACUC is involved in the proposed corrective actions and is requiring all animal care staff to enroll in the new training program. The IACUC will monitor improvement in animal husbandry. The IACUC, DLAR, and investigators are invested in continuing improvement. The number of staff should be proportionate to the number of animals.

OLAW received the January 14, 2020 report which stated that one sentinel mouse died and one required treatment due to not having water. The corrective action consisted of retraining the caretaker on the conduct of daily health checks and all animal facility staff was counseled. A letter of reprimand was issued to the Executive Director of the animal care program and their supervisor.

Based on its assessment of the actions being proposed or already in place, OLAW finds them to be an acceptable approach to achieve the goal of significantly reducing or eliminating rodent deaths caused by human error. We are confident that measures such as the mock cages are a positive approach which should yield the expected results because they have been successfully applied at other institutions facing the same problem. As with similar cases, OLAW is obligated to monitor the success of the proposed program and is hereby placing the University of Pittsburgh on an enhanced reporting schedule. Under this schedule OLAW is requesting an update every two months on the first day of the month to report success as measured by a reduction in deaths. Near misses that have been successfully caught and corrected should also be reported. Any other metrics such as the status of the mock cage program, the percentage of people trained, and any additional hires should be included. Reportable events, including deaths due to lack of food/water are to be independently promptly reported. We look forward to receiving the first report on April 1, 2020. Feel free to contact me should you have any questions.

Sincerely,

(b) (6)

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

cc: IACUC Chair



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

January 29, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

RE: OLAW Case 80

Dear Dr. Morse:

We appreciate the opportunity to respond to OLAW's inquiries pursuant to the University of Pittsburgh's November 27, 2019 letter. We are pleased that OLAW acknowledged our efforts to implement measures to maintain compliance with the PHS Policy on Humane Care and Use of Laboratory Animals. In addition to those measures, the IACUC conducted a detailed review of rodent husbandry practices this month.

The University of Pittsburgh's animal care program is significant and while our goals are to be 100% compliant, we request that the contents of the November 27th letter be reviewed in context of our program size and the period of time in question, which was the three (3) month period of April through June of 2019. We have answered your specific questions below, but would like to take this opportunity to reiterate our commitment to animal care and provide you with information about or most recent efforts to achieve our goal of 100% compliance.

Our training programs and procedures are designed to achieve zero animal losses due to errors in husbandry practices. Procedures are in place at multiple levels to mitigate errors. The training program provided by the Division of Laboratory Animal Resources (DLAR) includes hands-on training for new animal care technicians, direct oversight of new technicians prior to allowing them to independently engage in husbandry duties, and verification of successful husbandry task completion by facility supervisors until new employee proficiency is verified. Daily checking for food, water, and animal health is a critical part of this training. In addition, if a husbandry error is detected, the involved technician receives retraining, as does the entire husbandry staff of the facility, during daily meetings.

Additional husbandry oversight is provided by the DLAR staff for newly-weaned animals. Newly weaned boxes of rodents are marked by research personnel for enhanced monitoring by DLAR staff members to ensure that these animals thrive after weaning. This demarcation also serves as a double check to ensure that newly established boxes are provided with food and water.

Office of Research Protections

Suite 401, Hieber Bullding 3500 Fifth Avenue Plttsburgh, PA 15213 412-624-2202 ghuber@pltt.edu orp.pitt.edu Brent Morse, DVM, DACLAM Page 2 January 29, 2020

We have just launched an enhanced DLAR training program (January 2020), for which the DLAR created and filled a new Training Manager position (2019). The Training Manager has been working to develop an enhanced training program for both animal care staff and investigators, which includes the implementation of additional didactic and hands-on training for research personnel and departmental technicians. With two new training staff members hired in January of 2020, this new arm of the DLAR will help the University of Pittsburgh achieve an even better level of training of research personnel and animal care staff members. We believe that additional training of all groups handling animals will help us achieve our goal of zero animal loss due to husbandry errors.

Below are the University's responses to OLAW's questions:

1) Has a root cause analysis been conducted to determine the cause of these repeat deficiencies (i.e. insufficient training, insufficient supervision, insufficient staffing)?

Yes. We evaluated the possibility of a common root cause for these incidents. The University of Pittsburgh's rodent program is spread over 10 facilities. The reported incidents involved different staff members at different facilities, each with different supervisors. These staff members have not repeated husbandry errors, which attests to the success of our retraining of individuals. These staff members have different levels of experience in our animal care and use program, such that errors do not appear to be linked to training of particular employees.

2) While retraining may be an appropriate response to address something such as use of different caging, it is not adequate when negligence results in animals dying due to lack of food/water. All staff should be aware that animals require food/water in order to survive and additional steps must be taken to ensure adequate husbandry.

We agree that basic retraining does not address this issue. That is why we are supplementing our approach by implementing a mock rodent cage program, which demonstrated success in mitigating loss. A mock rodent cage that is missing food and/or a water bottle is randomly placed in racks across the program. The day when the boxes are installed as well as the day when they are discovered by the staff will be recorded. Contests will be held between and within facilities with the facility finding the largest number of mock boxes winning an incentive and any facility that finds over 75% of the mock boxes within two days also receives an incentive. This program is designed to reinforce the amount of time it takes to recognize an issue in a rodent cage. We are confident that this initiative, together with our enhanced training programs, will help us achieve our goals.

3) Repeat instances of failing to provide food/water or failing to adequately monitor animals must be addressed with escalating sanctions for staff and supervisors.

Monitoring of staff performance by the DLAR is consistent with the University's Human Resources policies. All performance incidents are documented in employee records, and there is a progressive discipline process for all staff that is implemented when errors occur following retraining. It is of note that none of the husbandry incidents included in the November 27th letter were associated with one individual staff member, indicating that our retraining program is effective.

Brent Morse, DVM, DACLAM Page 3 January 29, 2020

4) OLAW realizes that seven noncompliant fatal food/water issues over several months may not appear to be of great magnitude in a large program, however such failures constitute a serious animal welfare concern and steps must be taken to prevent them throughout the program. We agree that while the report represented .0002% of the rodent boxes maintained during the three-month period, our target is 0% and we are working very hard to achieve that goal. We have outlined the efforts we have and plan to take to become 100% compliant. We consider all animal loss to be very serious and are confident that our hiring of a training manger and two trainers to implement an enhanced training program, along with initiatives to focus attention to detail, will allow us to achieve our goal of zero animal loss due to husbandry errors.

5) Provide information on how the Institutional Animal Care and Use Committee plans to address the matter program wide to include animal care staff, technicians, laboratory staff, veterinarians, investigators, supervisors, and facility managers.

The IACUC Compliance Office shared the outcomes of an independent investigation of animal husbandry practices with the full IACUC at its monthly meeting on January 27, 2020 and a pathway moving forward to address enhancing staff training. Beginning in February, all animal care staff, regardless of length of employment, will be required to enroll in the new training program referenced above. The IACUC will monitor the program's success in improving animal husbandry at monthly meetings and will recommend changes as necessary. The IACUC emphasized that IACUC, DLAR, and investigators continue to work cohesively to ensure the success of the program. The IACUC also recommended that the University ensure that its staffing numbers maintain proportionate to the size of our animal program.

Sincerely,
(b) (6)
George A. Huber

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Thursday, February 13, 2020 7:17 AM

To:

(b) (6)

Subject:

RE: OLAW report

Thank you for this report,

(b) (6) I will respond soon.

Axel Wolff

From:

(b) (6)

Sent: Thursday, February 13, 2020 7:06 AM

To: Chapman, Deborah L <dlc7@pitt.edu>; Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>; Huber, George A

<ghuber@pitt.edu> Subject: OLAW report

Attached is our email containing the response. Please let us know if you need something more than this. Thank you.

(b) (6)

From: Chapman, Deborah L <dlc7@pitt.edu> Sent: Thursday, February 13, 2020 7:00 AM

To: Wolff, Axel (NIH/OD) [E] < wolffa@od.nih.gov >; Huber, George A < ghuber@pitt.edu >;

Subject: Re: OLAW report

Dear Dr. Wolff,

The full IACUC met on January 27th and our Institutional Official (cc'd here) submitted a response either on the 28th or the 29th. I am also coing his office so that they can send the letter directly to you.

Sorry that the letter did not reach you.

Debbie

Deborah L. Chapman, Ph.D.

Associate Professor

Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh

102 Life Sciences Annex

Fifth & Ruskin Avenues

Pittsburgh, PA 15260

tel (office):

(b) (6)

fax:

(b) (6)

From: "Wolff, Axel (NIH/OD) [E]" <wolffa@od.nih.gov>

Date: Thursday, February 13, 2020 at 6:50 AM

To: Deborah Chapman < dlc7@pitt.edu>

Subject: OLAW report

Hello Dr. Chapman,

Please submit a response regarding the actions being taken to address prevention of rodent deaths due to lack of food/water at the University of Pittsburgh. We have received another report of deaths due to lack of water on January 14, 2020. If your IACUC has not fully developed plan, then just send an interim one.

Thank you.

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

From: Sent: To: Subject:	Wolff, Axel (NIH/OD) [E] Thursday, February 13, 2020 7:02 AM Chapman, Deborah L RE: OLAW report
Thanks for the quick response, Dr AW	. Chapman. I'll keep a watch out for the report.
From: Chapman, Deborah L <dlc7 (6)="" (b)="" (nih="" 13,="" 2020="" <wol="" [e]="" axel="" february="" od)="" olaw="" re:="" report<="" sent:="" subject:="" td="" thursday,="" to:="" wolff,=""><td></td></dlc7>	
Dear Dr. Wolff, The full IACUC met on January or the 29th. I am also cc'ing his Sorry that the letter did not reach Debbie	27th and our Institutional Official (cc'd here) submitted a response either on the 28th office so that they can send the letter directly to you.
Deborah L. Chapman, Ph.D.	
Associate Professor	
Department of Biological Sciences	s
Chair, Institutional Animal Care a	nd Use Committee
University of Pittsburgh	
102 Life Sciences Annex	
Fifth & Ruskin Avenues	
Pittsburgh, PA 15260	
tel (office): (b) (6) fax: (b) (6)	

From: "Wolff, Axel (NIH/OD) [E]" <wolffa@od.nih.gov>

Date: Thursday, February 13, 2020 at 6:50 AM

To: Deborah Chapman < dlc7@pitt.edu>

Subject: OLAW report

Hello Dr. Chapman,

Please submit a response regarding the actions being taken to address prevention of rodent deaths due to lack of food/water at the University of Pittsburgh. We have received another report of deaths due to lack of water on January 14, 2020. If your IACUC has not fully developed plan, then just send an interim one.

Thank you.

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



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

December 9, 2019

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Mr. George A. Huber
Vice Chancellor for Research Conduct
and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your November 27, 2019 letter reporting seven serious deviations from the provisions of the *Guide for the Care and Use of Laboratory Animals* at the University of Pittsburgh. According to the information provided, OLAW understands the following about the incidents and the corresponding corrective actions:

 Two mice died due to lack of water caused by using the wrong cages on an automatic watering rack which prevented the mice from reaching the lixits. Nine pups and one adult survived. The cages had been incorrectly marked, thus leading to the dehydration deaths.

Corrective actions: The surviving mice were given water, diet gel, and were monitored. The animal caretaker was retrained on which mouse cages to use on which racks and the cage wash technician was trained on the various types of mouse cages, how to mark them, and how they are placed on racks.

 Eight mice died due to lack of food. The animals had been weaned and placed into new cages without food and the animal care staff failed to identify the problem during daily health checks.

Corrective actions: The husbandry staff was retrained and monitored. The laboratory's standard operating procedure for weaning was revised to require notification of a supervisor following weaning to verify provision of food/water.

3) Two mice died due to lack of food. Food had not been added following a cage change and the problem was not identified by husbandry staff during daily health checks.

Corrective actions: The caretaker responsible was retrained on cage changing and health checks.

4) Three of five mice died due to lack of food and the problem was not identified during daily health checks.

Corrective actions: The surviving mice were given food and were monitored. The husbandry staff was retrained and observed performing health checks. The investigator modified that food hoppers to accommodate the experimental powdered food.

5) Two mice died of dehydration due to a missing water bottle. A laboratory member had moved the cage to the wrong rack and the problem was not identified during daily health checks.

Corrective actions: The animal caretakers were retrained and new laboratory staff will be counseled on ensuring food/water for all animals.

 A mouse died because it had crawled into the feeder during cage change and could not access the water.

Corrective actions: The animal caretaker was retrained on cage changing, health checks, and was monitored. All staff was counseled on this incident.

7) One dead and one live mouse were found in a cage without food. The mice had been weaned but not given food and the problem was not identified during daily health checks.

Corrective actions: The surviving mouse was given food mush, the animal caretaker for the room was retrained, all facility caretakers were counseled, the laboratory member responsible was retrained on weaning, and the facility manger was counseled.

In each situation, a letter of reprimand was issued to the Attending Veterinarian, the Principal Investigator, and their supervisors.

Based on its assessment of these explanations, OLAW understands that measures have been implemented in each case to address and correct the problem. While OLAW concurs with overall actions taken by the institution to comply with the PHS Policy on Humane Care and Use of Laboratory Animals, the ongoing nature of these husbandry failures is of concern to this Office. Before potentially placing the University of Pittsburgh on an enhanced reporting schedule, please address the following:

- 1) Has a root cause analysis been conducted to determine the cause of these repeat deficiencies (i.e., insufficient training, insufficient supervision, insufficient staffing)?
- 2) While retraining may be an appropriate response to address something such as use of different caging, it is not adequate when negligence results in animals dying due to lack of food/water. All staff should be aware that animals require food/water in order to survive and additional steps must be taken to ensure adequate husbandry.
- 3) Repeat instances of failing to provide food/water or failing to adequately monitor animals must be addressed with escalating sanctions for staff and supervisors.
- 4) OLAW realizes that seven noncompliant fatal food/water issues over several months may not appear to be of great magnitude in a large program, however such failures constitute a serious animal welfare concern and steps must be taken to prevent them throughout the program.
- 5) Provide information on how the Institutional Animal Care and Use Committee plans to address the matter program wide to include animal care staff, technicians, laboratory staff, veterinarians, investigators, supervisors, and facility managers.

Please provide any and all information on the steps being taken to prevent animal deaths due to lack of food/water by **January 6**, **2020**. Upon evaluation of the proposed plan and schedule, this Office will determine which additional steps need to be taken to ensure compliance. Feel free to contact me should you have any questions.

Page 2 – Dr. Huber December 9, 2019 OLAW Case A3187-8Q

Sincerely,

(b) (6)

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

cc: IACUC Chair



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

November 27, 2019

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (IACUC) (Assurance number D16-00118), I am writing to report several incidents that occurred over the course of the past year in our animal facilities. Notification of the incidents was provided to the IACUC in August and September. They are described below, followed, for the sake of clarity, by the corrective action plan for the incident, as well as whether an involved investigator

receives NIH or NSF funding.

On March 26, 2019, a two mouse boxes in an auto water cage rack were discovered with a collective total of one adult mouse, two deceased adult mice, and nine surviving mouse pups. It was determined that when the cages were changed on March 23 and 24, 2019, although the lixits in both boxes were functioning properly, the technician inserted the incorrect mouse boxes when doing the room change, and the lixit was higher than the adult mice could reach. This error was the result of the cages being mismarked. The surviving mouse pups were provided diet gel and water and monitored. The surviving adult mouse was provided diet gel and water and monitored but died the following day.

o The animal care technician involved was retrained on the proper style of boxes to use for each rack.

The cage wash technician involved was retrained on the different types of mouse cages and how each are to be placed and marked following washing.

On April 14, 2019, two boxes totaling 8 dead mice were found without access to food. The animals had been weaned up to two days earlier, placed in boxes, but not provided with food. Animal care technicians failed to notice the lack of food during their rounds.

The technicians involved in performing daily room checks were retrained, observed performing box checks, and spot checked for several days.

O The investigator will update his lab's standard protocol for weaning to include an email from whomever performed the weaning to a supervisor, who will ensure that each new box has been handled appropriately, including having food provided.

Suite 401, Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 412-624-2202 ghuber@pltt.edu orp.pltt.edu o The investigator's research is supported by the following NIH grants: 5R01DK109907-04 BRANCHED CHAIN ACYL-COA METABOLISM AND DISEASE

5R01DK078775-12 INBORN ERRORS OF LONG CHAIN FAT METABOLISM

- On May 12, 2019, a box containing two deceased adult mice were found without access to
 food during morning room checks. The box had been changed on May 6, 2019 and it was
 assumed that no food was added at the time of the box change. The lack of food had been
 missed by several technicians doing daily room checks.
 - The animal care technician involved was retrained on performing box changes and performing daily room checks.
- On May 23, 2019, five mice were found without access to food. Three of the mice were dead.
 Upon discovery, the surviving mice were provided with food by animal care staff and monitored for seventy-two hours.

 The technicians involved in performing daily room checks were retrained, observed performing box checks, and spot checked for several days.

o The investigator has outfitted the in-cage food containers with a cover with small holes in order to allow the mice access to the special powdered food required for the study and prevent food spilwlage if the container is overturned.

The investigator's research is supported by the following NIH grant:

5R01CA174713-05 CONTROL OF METABOLISM AND ENERGYSENSING PATHWAYS BY C-MYC

On June 3, 2019, two adult mice were found dead in their cages and without access to water. The cage was found on a water bottle cage rack but missing a water bottle. It was determined that a member of the investigator's staff moved the box to the wrong rack on May 30, 2019. Animal care technicians did not notice that the water bottle was missing for four days.

 The event and retraining of staff was discussed at a morning meeting of animal facility staff.

- O To avoid any such mishaps in the future, this event will be highlighted to any new laboratory staff being trained to manage animals. The investigator will explain to new staff the need for vigilance and thoroughness in their working with experimental animals.
- The investigator's research is not supported by NIH grants.

On June 14, 2019, a box on an auto water rack containing one deceased adult mouse was
discovered during a routine cage change. It was assumed that the mouse crawled into the
feeder during the last cage change on June 7, 2019. No other mice were affected.

o The technician involved was retrained on performing OptiMice cage changes and ensuring the food hopper is full to prevent mice from climbing into the hopper during cage changes. The technician was observed performing cage changes and retrained on daily box checks.

 The event and preventative actions were discussed with all personnel during a morning meeting.

- On June 27, 2019, a box containing two recently weaned mouse was found without access
 to food. One of the pups was dead. Upon discovery, animal care staff provided mush to
 the surviving pup daily for two days. The animals had been weaned by the investigator's
 staff two days earlier, placed in boxes, but not provided with food. DLAR technicians
 did not notice the lack of food in the box for two days.
 - o The technician performing daily room checks was retrained.
 - The situation was reviewed and discussed with all facility animal care technicians.
 - o To prevent this from occurring again, the investigator reviewed the staff members' process for weaning, including double checking each box for food before it is put on the rack.
 - Additionally, the investigator discussed the situation with the facility manager who oversees the holding room.

The University of Pittsburgh IACUC reviewed and accepted the investigator's corrective action plan (CAP), which are described after each item above.

For each incident, the IACUC has levied the following sanctions:

1. A letter of reprimand was sent to the Attending Veterinarian, to each Principal Investigator, and their supervisors regarding these violations. The letters have been placed in our files as evidence of a violation.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,	(b) (6)
George A. Huber	

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Thursday, December 12, 2019 6:48 AM

To:

Chapman, Deborah L

Subject:

RE: Initial response for A3187-8Q

Yes, Dr. Chapman, we can certainly extend the response deadline to allow your committee to develop a thorough response to a serious issue. I will place your request in the case file and look forward to receiving a final or interim report before the end of January.

Axel Wolff

From: Chapman, Deborah L <dlc7@pitt.edu>
Sent: Wednesday, December 11, 2019 3:16 PM
To: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>
Subject: FW: Initial response for A3187-8Q

Hello Dr. Wolff,

We received your letter regarding OLAW case 8Q (attached) on Monday only after our Dec. full IACUC meeting had ended. This letter requires at least one response requiring input from the full IACUC committee. Your letter requests a response by January 6, 2020. Is it possible to extend that deadline until after the next full committee meeting, which is scheduled for Jan. 27, 2020? Please let me know if you would like to discuss this further.

Sincerely, Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

tel (office):

(b) (6)

From: "Ward, Joan (NIH/OD) [E]" < wardjoa@od.nih.gov >

Date: Monday, December 9, 2019 at 2:19 PM

To:

(b) (6)

Cc: Deborah Chapman < dlc7@pitt.edu>
Subject: Initial response for A3187-8Q

Dear Dr. Huber,

Attached please find Dr. Axel Wolff's initial response to OLAW Cases A3187-8Q.

If you have any questions, feel free to contact us by phone or by e-mail.

Best Regards,

Joan

Joan Ward Program Specialist Office of Laboratory Animal Welfare National Institutes of Health 6700B Rockledge Dr., Suite 2500 Bethesda, MD 20892 301-496-7163 wardjoa@od.nih.gov

From:

Chapman, Deborah L <dlc7@pitt.edu>

Sent:

Thursday, December 12, 2019 8:54 AM

To:

Wolff, Axel (NIH/OD) [E]

Subject:

Re: Initial response for A3187-8Q

Thank you! I don't want to rush responses and not have the full committee's opinions! Debbie

--

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

tel (office):

(b) (6)

From: "Wolff, Axel (NIH/OD) [E]" <wolffa@od.nih.gov>

Date: Thursday, December 12, 2019 at 6:47 AM

To: Deborah Chapman < dlc7@pitt.edu > Subject: RE: Initial response for A3187-8Q

Yes, Dr. Chapman, we can certainly extend the response deadline to allow your committee to develop a thorough response to a serious issue. I will place your request in the case file and look forward to receiving a final or interim report before the end of January.

Axel Wolff

From: Chapman, Deborah L <<u>dlc7@pitt.edu</u>>
Sent: Wednesday, December 11, 2019 3:16 PM
To: Wolff, Axel (NIH/OD) [E] <<u>wolffa@od.nih.gov</u>>
Subject: FW: Initial response for A3187-8Q

Hello Dr. Wolff,

We received your letter regarding OLAW case 8Q (attached) on Monday only after our Dec. full IACUC meeting had ended. This letter requires at least one response requiring input from the full IACUC committee. Your letter requests a response by January 6, 2020. Is it possible to extend that deadline until after the next full committee meeting, which is scheduled for Jan. 27, 2020? Please let me know if you would like to discuss this further.

Sincerely, Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

tel (office):

(b) (6)

From: "Ward, Joan (NIH/OD) [E]" <wardjoa@od.nih.gov>

Date: Monday, December 9, 2019 at 2:19 PM

To:

(b) (6)

Cc: Deborah Chapman < dlc7@pitt.edu > Subject: Initial response for A3187-8Q

Dear Dr. Huber,

Attached please find Dr. Axel Wolff's initial response to OLAW Cases A3187-8Q.

If you have any questions, feel free to contact us by phone or by e-mail.

Best Regards, Joan

Joan Ward Program Specialist Office of Laboratory Animal Welfare National Institutes of Health 6700B Rockledge Dr., Suite 2500 Bethesda, MD 20892 301-496-7163 wardjoa@od.nih.gov

Morse, Brent (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, November 27, 2019 1:25 PM

To:

(b) (6) OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for providing these reports

(b) (6) 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

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:

(b) (6

Sent: Wednesday, November 27, 2019 12:58 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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

July 9, 2021

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Dr. Bill Yates
Interim Vice Chancellor for Research Protections
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your May 10 and June 14, 2021 letters providing a final update under an enhanced reporting schedule for the University of Pittsburgh as well as an update on a previously reported incident. According to the information provided, OLAW understands the following:

- In an April 28, 2021 report it was stated that no water bottle was provided to a mouse cage upon
 weaning and that the animal care staff failed to notice the missing bottle. The Institutional Animal
 Care and Use Committee (IACUC) received additional information which stated that the dead
 mouse had been a runt and it was not possible to determine how long the cage had been without
 water and who was responsible for the incident.
- 2) Due to ongoing reports of mice dying due to mostly preventable lack of food/water, the University of Pittsburgh had been placed on enhanced reporting by OLAW in February 2020 to allow measures to be implemented to significantly reduce or eliminate this problem. The actions taken in response consisted of using mock mouse cages without food/water to serve as a training tool for husbandry staff. Also, a second food/water check of all rodent cages was implemented with two separate individuals checking all cages. This led to a significant decrease in food/water deaths with only four cages incurring losses out of 33,000 over a five month period.

Based on its assessment of this and all of the preceding reports, OLAW finds the current policies and procedures in place to be effective in significantly reducing or eliminating rodent deaths due to lack of food/water. As such, the enhanced reporting schedule is hereby lifted and no further updates need to be submitted to OLAW, although any future such incidents should still be promptly reported. OLAW thanks you, the IACUC, the veterinary staff, technical staff, and husbandry staff for successfully implementing actions which enhance the welfare of research animals at the University of Pittsburgh.

Sincerely,

(b) (6)

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

cc: IACUC Chair



Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: Fax:

Email: vcorp@pitt.edu

June 14, 2021

Axel V. Wolff, MS, DVM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
wolffa@od.nih.gov

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982 olawdco@od.nih.gov

RE: OLAW Case 8Q Follow-up

Dear Drs. Wolff and Morse:

As requested in your letter dated May 23, 2021, I am attaching the University of Pittsburgh's comprehensive report detailing the success of the programs of the Department of Laboratory Animal Resources (DLAR) to reduce animal death due to lack of food or water. This report summarizes the original concern, steps taken to address it, and our success in eliminating animal deaths due to husbandry issues.

After the implementation of a second daily food and water check on all rodent cages last December (two staff members checking each box for proper food and water levels at different times), a decrease in animal losses was noted. Only four mouse boxes incurred animal losses in January-May 2021, out of a daily census of approximately 33,000 boxes.

The three animal deaths noted in April and May of 2021 (all were in a single cage) have not yet been reviewed at a convened IACUC meeting. An additional reporting letter regarding this animal mortality will be sent after the IACUC's discussion of the events.

Please let me know if you need any other information, and thank you for your time.

Sincerely,

(b) (6)

Bill J. Yates

Summary of Enhanced Monitoring Reports to OLAW for the period March 2020 - May 2021

Timeline:

March 2020: The University of Pittsburgh is placed on enhanced monitoring by OLAW. The University was required to submit bimonthly reports indicating the following:

- 1. Average daily mouse census
- 2. Total number of mouse boxes maintained each month
- Number of mouse boxes to which food and/or water was added resulting in no animal loss
- 4. Number of mouse boxes with animal loss due to lack of food or water
- 5. Number of mice lost
- Number of full-time animal care and cage wash technicians hired or lost during each month
- 7. The level of additional training provided to animal care staff each month

March 2020 – August 2021: The animal program instituted a mock-box program in each facility consisting of randomly placed mouse cages with fake mice with lacking either food or water. The mock box program serves as a training tool for husbandry staff.

December 2020: The animal program initiated a daily second food and water check on all rodent cages. This results in two separate staff members checking each box for proper food and water levels.

	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21
Daily census of rodent boxes	34,437	26,742	28,017	29,143	25,241	29,796	30,904	31,229	31,922	31,794	32,301	32,357	32,214	33,316	33,134
Total number of rodent boxes for the month*	1,067,547	802,260	868,527	874,290	782,471	923,676	927,120	968,099	957,660	985,614	1,001,331	905,996	998,634	999,480	1,027,154
Number of boxes with food/water added resulting in no animal loss**	13,695	13,580	28,129	19,019	20,518	21,280	21,785	18,852	19,352	18,866	18,635	15,705	16,753	18,528	15,840
Number of boxes with animal loss due to lack of food and water	4 (0.01%)	3 (0.01%)	6 (0.02%)	6 (0.02%)	3 (0.01%)	16 (0.05%)***	3 (0.01%)	3 (0.01%)	4 (0.01%)	0	1 (0.003%)	1 (0.003%)	1 (0.003%)	0	1 (0.003%)
Number of animals lost	4	4	14	8	5	36***	7	8	12	0	1	1	1	0	3
Full time animal care technicians Hires (resignations)	2	1	5	1	2	3 (2)	3 (2)	5 (4)	5 (2)	3 (2)	3 (1)	2 (3)	2 (2)	1 (1)	6 (3)
Full time cage wash technicians Hires (resignations)	2	0	0	1	0	1 (1)	0 (2)	0 (1)	0 (0)	1 (1)	2 (0)	1 (0)	3 (1)	0 (2)	2 (0)
Husbandry technicians retrained	22	20	13	15	6	3	1	2	3	0	2	1	2	0	6

^{*}Total number of rodent boxes for each month represents the number of boxes managed for the entire month and is determined by multiplying the daily census by the number of days in the month.

^{**}Animal cages whose food or water fall below a prescribed level are provided additional food and water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water.

^{****}One facility had a mouse rack on autowater with the water line not attached properly. This resulted in 32 mice lost (15 affected cages).

	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21
Daily census of rodent boxes	34,437	26,742	28,017	29,143	25,241	29,796	30,904	31,229	31,922	31,794	32,301	32,357	32,214	33,316	33,134
Total number of rodent boxes for the month*	1,067,547	802,260	868,527	874,290	782,471	923,676	927,120	968,099	957,660	985,614	1,001,331	905,996	998,634	999,480	1,027,154
Number of boxes with food/water added resulting in no animal loss**	13,695	13,580	28,129	19,019	20,518	21,280	21,785	18,852	19,352	18,866	18,635	15,705	16,753	18,528	15,840
Number of boxes with animal loss due to lack of food and water	4 (0.01%)	3 (0.01%)	6 (0.02%)	6 (0.02%)	3 (0.01%)	16 (0.05%)***	3 (0.01%)	3 (0.01%)	4 (0.01%)	0	1 (0.003%)	1 (0.003%)	1 (0.003%)	0	1 (0.003%)
Number of animals lost	4	4	14	8	5	36***	7	8	12	0	1	1	1	0	3
Full time animal care technicians Hires (resignations)	2	1	5	1	2	3 (2)	3 (2)	5 (4)	5 (2)	3 (2)	3 (1)	2 (3)	2 (2)	1 (1)	6 (3)
Full time cage wash technicians Hires (resignations)	2	0	0	1	0	1 (1)	0 (2)	0 (1)	0 (0)	1(1)	2 (0)	1 (0)	3 (1)	0 (2)	2 (0)
Husbandry technicians retrained	22	20	13	15	6	3	1	2	3	0	2	1	2	0	6

^{*}Total number of rodent boxes for each month represents the number of boxes managed for the entire month and is determined by multiplying the daily census by the number of days in the month.

^{**}Animal cages whose food or water fall below a prescribed level are provided additional food and water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water.

^{****}One facility had a mouse rack on autowater with the water line not attached properly. This resulted in 32 mice lost (15 affected cages).



(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6)

Fax: Email: vcorp@pitt.edu

May 10, 2021

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to correct the description of a reportable incident made in a letter sent on April 28, 2021, which stated that bid did not provide a water bottle at the time of weaning and the DLAR technician performing daily checks did not notice the missing bottle.

The Committee has received new information since that report was made. The loss of a mouse on February 28, 2021 should have been characterized thusly:

One box containing two adult mice and three pups was found in the animal facility without access to water. One mouse pup, a "runt," was deceased upon discovery. While the water bottle was missing when discovered, neither the length of time that the mice went without water, nor whether the investigator's technician was responsible could not be determined.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates, PhD

¹ PHS Policy IV.C.1.d

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Tuesday, May 11, 2021 11:27 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice - Correction

Follow Up Flag:

Follow up

Flag Status:

Flagged

Thank you for forwarding this correction, (b) (6) I will place it in the case file which will then correctly reflect the facts involved.

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

From:

(b) (6)

Sent: Monday, May 10, 2021 2:55 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice - Correction

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)



June 29, 2021

(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: Fax:

Email: vcorp@pitt.edu

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident. This incident was described in the enhanced monitoring report submitted to OLAW on June 14, 2021.

On May 3, 2021, one box containing five adult mice was found in the animal facility without access to food. Three of the mice were deceased upon discovery. The surviving mice were provided with hydrogel and mush and monitored for twenty-four hours, during which no further health issues occurred. The box was set-up by animal husbandry staff on April 28. The lack of food was not noticed by staff during daily rounds.

The corrective actions taken in these cases consisted of the following item:

 DLAR staff were retrained on how to properly perform food, water and health checks.

The IACUC levied the following sanction:

 A letter of reprimand was sent to the DLAR Director and his supervisors regarding this event. This letter has been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates, PhD

¹ PHS Policy IV.C.1.d

Walker, Keri (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, June 30, 2021 8:15 AM

To:

(b) (

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

Good morning,

Thank you for these reports. We will send a response soon.

Best,

Keri

Keri Walker
Program Analyst
Division of Compliance Oversight
Office of Laboratory Animal Welfare
National Institutes of Health
6700B Rockledge Dr., Suite 2500
Bethesda, MD 20892
301-435-2390
keri.walker@nih.qov

From:

(b) (6)

Sent: Tuesday, June 29, 2021 12:33 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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

May 3, 2021

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Dr. Bill Yates
Acting Vice Chancellor for Research Protections
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your April 6 and 28, 2021 letters providing an update under an enhanced reporting schedule for the University of Pittsburgh as will as a report on mouse deaths due to lack of food/water. According to the information provided, OLAW understands the following about the incidents and the corresponding corrective actions:

- Two adult mice and three pups did not have access to water and one pup died. A technician had
 weaned the cage but did not provide a water bottle and the problem was not noted by animal care
 staff during the daily health check.
- Three adult mice were found without food and one mouse died. The problem was not noted either by animal care staff during the daily health check or by research staff working with the mice.

Corrective actions: Husbandry staff was retrained on the appropriate conduct of daily health checks; the investigator was counseled to ensure water bottles are placed on mouse cages; the laboratory staff was counseled to ensure that food and water is present for all mice. Letters of reprimand were issued to the director of Division of Laboratory Animal Resources, the investigators, and their supervisors.

Other than these two incidents, there were no further rodent deaths due to lack of food/water during February and March. The twice daily food/water checks, which are conducted by a different technician, has resulted in a significant reduction of deaths due to lack of food/water. A total of four animal caretakers were hired during these two months and five left. Additional training was provided to a faculty member and staff and to animal care staff.

Based on the success of the twice daily health checks and decreasing trends in rodent deaths due to lack of food/water, we request that the update on **June 15**, **2021** constitute a brief summary of the original problem, the steps taken to address it, and an outline of the decreasing numbers (or complete elimination) of deaths. Barring any unforeseen complications, OLAW feels that the enhanced reporting requirements will be able to be lifted upon receipt of the report. Any instances of death due to lack of food/water should still be reported independently. Thank you for keeping OLAW apprised on this matter.

Sincerely,

(b) (6)

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

cc: IACUC Chair



Office of Research Protections

(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6) vcorp@pitt.edu orp.pitt.edu

April 6, 2021

Axel V. Wolff, MS, DVM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
wolffa@od.nih.gov

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982 olawdco@od.nih.gov

RE: OLAW Case 80 Follow-up

Dear Drs. Wolff and Morse:

As requested in your letter dated February 13, 2020, I am attaching the University of Pittsburgh's seventh report detailing the success of the programs of the Department of Laboratory Animal Resources (DLAR) to reduce animal death due to lack of food or water. This report includes the months of February and March of 2021.

As noted in the last report, to reduce instances of husbandry-related animal mortality, our program introduced an additional daily food and water check for each cage. Each animal cage is checked in the morning and in the afternoon for lack of food and water with each check performed by a different technician. This provides two separate, independent daily checks of each cage.

With the implementation of this new program and as stipulated in our last report, animal mortality due to husbandry problems has been reduced to a very low level.

The two animal deaths included in this report have not yet been reviewed at a convened IACUC meeting. An additional reporting letter regarding this animal mortality will be sent after the IACUC's discussion of the events.

Axel V. Wolff, MS, DVM Brent Morse, DVM, DACLAM Page 2 April 6, 2021

The DLAR Director included in the report the number of cages for which the DLAR staff recognized low levels of water or food that did not result in animal loss. As in our previous reports, the DLAR Director included a summary of current DLAR staffing and new hires during this reporting period, in addition to the numbers for technicians receiving additional training.

Please let me know if you need any other information.

Our next report will include the months of April and May 2021 and will be sent by June 15, 2021.

Sincerely,

(b) (6)

Bill J. Yates

Axel V. Wolff, MS, DVM Brent Morse, DVM, DACLAM April 6, 2021

OLAW Report February 2021 - March 2021

Rodent Cages with low/no food and water	
Daily census of rodent boxes	
Total number of rodent boxes for the month *	

Total number of rodent boxes for the month * 905,99

Number of boxes with food/water added resulting in no animal loss** 15,709

Number of boxes with animal loss due to lack of food and water*** 1 (0.00)

Number of animals lost

February	March
32,357	32,214
905,996	998,634
15,705 (48.5%)	16,753 (52%)
1 (0.003%)	1 (0.003%)
1	1

Hires (Losses): February March 1. Full Time Animal Care Husbandry Technicians 2 (3) 2 (2) 2. Full Time Cage Wash Technicians 1 (0) 3 (1)

Additional Training:

February: Faculty member and staff received additional training on checking for water bottles in breeding boxes. March: Animal Care Technicians received additional training on daily health check

^{*}Total number of rodent boxes for each month represents the number of boxes managed for the entire month and is determined by multiplying the daily census by the number of days in the month.

^{**}Animal cages whose food or water fall below a prescribed level are provided additional food and water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water.

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, April 7, 2021 7:51 AM

To:

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Follow-up 3187 (8Q)

Thank you. We will send a response soon.

Axel Wolff

From:

(b) (6)

Sent: Tuesday, April 6, 2021 9:44 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>; Wolff, Axel (NIH/OD) [E]

<wolffa@od.nih.gov>

Subject: Follow-up 3187 (8Q)

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)





(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6) Fax:

Email: vcorp@pitt.edu

April 28, 2021

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of two reportable incidents¹.

Please note that both of the incidents described below were included in the April 15th Enhanced Monitoring Report previously submitted to your office.

On February 28, 2021, one box containing two adult mice and three pups was found in the animal facility without access to water. One mouse pup was deceased upon discovery. It was determined that the investigator's technician did not provide a water bottle at the time of weaning and the DLAR technician performing daily checks did not notice the missing bottle.

On March 25, 2021, one box containing three adult mice was found in the animal facility without access to food. One of the mice was deceased upon discovery. The lack of food was not noticed by DLAR staff during daily rounds or by the investigator's laboratory personnel when they accessed the mice.

The corrective actions taken in these cases consisted of the following items:

- 1. Husbandry staff were retrained on how to perform daily rounds.
- The investigator related to the February 28 incident was reminded to ensure that lab members place or replace the water bottle when changing or handling a mouse box.
- The investigator related to the March 25 incident discussed the issue at a biweekly lab
 meeting and will remind lab members at all future meetings about checking for food
 and water when weaning mice and leaving the mouse colony room.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM April 28, 2021 Page 2

The IACUC levied the following sanctions

 A letter of reprimand was sent to the DLAR Director, the investigators, and their supervisors regarding these events. These letters have been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates, PhD

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Friday, April 30, 2021 7:24 AM

To:

(b) (

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notices

Thank you for these reports,

(b) (6) We will send responses soon.

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

From:

(b) (6)

Sent: Wednesday, April 28, 2021 1:27 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notices

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you!

(b) (6)





February 22, 2021

(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6) Fax:

Email: vcorp@pitt.edu

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹. Note that this incident was included in the enhanced monitoring report for Case 3187-80 sent to OLAW on February 9, 2020.

One box of newly weaned mice was found in the animal facility without access to food. One of the mice was deceased upon discovery. The surviving four mice in the box were given soft food and subsequently recovered. It was determined the investigator's technician did not fill the food hopper at the time of weaning and the DLAR technician performing daily checks did not notice the lack of food.

The DLAR Director's corrective action plan (CAP) consisted of the following item:

Husbandry staff were retrained on how to perform daily rounds.

The IACUC will ensure that the investigator's lab personnel are retrained on weaning procedures.

The IACUC levied the following sanction:

 A letter of reprimand was sent to the DLAR Director, the investigator, and their supervisors regarding this event. This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 February 22, 2021

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,



Bill J. Yates

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, February 24, 2021 7:44 AM

To:

(b) (

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports,

(b) (6) We will send responses soon.

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

From:

(b) (6)

Sent: Tuesday, February 23, 2021 2:13 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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
Fagsimile: (301) 480-3387

February 12, 2021

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Dr. Bill Yates
Interim Vice Chancellor for Research Protections
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your February 9, 2021 letter providing an update under an enhanced reporting schedule for the University of Pittsburgh to allow this Office to monitor the steps being taken to eliminate rodent deaths due to lack of food/water. According to the information provided, OLAW understands that a major change in the daily conduct of health checks has been implemented whereby all cages are now checked twice daily by a different technician. These two independent daily food/water checks have already resulted in a significant reduction in mortality. Specifically, only one animal died over the past two months due to a husbandry deviation and this case will be reported separately to this Office. Also, six animal caretakers were hired in December and January but three left. Two caretakers received additional training on the proper conduct of health checks.

OLAW applauds the programmatic change which appears to have resulted in immediate positive outcomes. We will continue to monitor the impact of the new initiative as well as other steps taken to address the primary problem. As such, please provide the next update by **April 15, 2021**. Thank you for keeping OLAW apprised on these matters.

Sincerely,

(b) (6)

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

cc: IACUC Chair



Office of Research Protections

Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: Fax:

Email: vcorp@pitt.edu

February 9, 2020

Axel V. Wolff, MS, DVM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982 wolffa@od.nih.gov

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982 olawdco@od.nih.gov

RE: OLAW Case 8Q Follow-up

Dear Drs. Wolff and Morse:

As requested in your letter dated February 13, 2020, I am attaching the University of Pittsburgh's sixth report detailing the success of the programs of the Department of Laboratory Animal Resources (DLAR) to reduce animal death due to lack of food or water. This report includes the months of December 2020 and January 2021.

To reduce instances of lack of food in rodent cages resulting in animal mortality, our program introduced an additional daily food and water check for each cage. Each animal cage is checked in the morning and in the afternoon for lack of food and water with each check performed by a different technician. This provides two separate, independent daily checks of each cage.

With the implementation of this new program, animal mortality due to husbandry problems has been reduced.

The one animal death included in this report occurred at the end of January, and the incident has not yet been reviewed at a convened IACUC meeting. An additional reporting letter regarding this animal mortality will be sent after the IACUC's discussion of the event.

The DLAR Director included in the report the number of cages for which the DLAR staff recognized low levels of water or food that did not result in animal loss. As in our previous reports, the DLAR Director included a summary of current DLAR staffing and new hires during this reporting period, in addition to the numbers for technicians receiving additional training.

Our next report will include the months of February and March 2021 and will be sent by April 15, 2021.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates

OLAW Report December 2020 – January 2021 Rodent Cages with low/no food and water	December	January
Daily census of rodent boxes	31,794	32,301
Total number of rodent boxes for the month *	985,614	1,001,331
Number of boxes with food/water added resulting in no animal loss**	18,866 (59.3%)	18,635 (57.7%)
Number of boxes with animal loss due to lack of food and water ***	0	1 (0.003%)
Number of animals lost	0	1

Hires (Losses):	December	January
1.	Full Time Animal Care Husbandry Technicians	3 (2)	3 (1)
2.	Full Time Cage Wash Technicians	1 (1)	2 (0)

Additional Training:

January: Two Husbandry care technicians received additional training on proper health checks

OLAW Report December 2020 - January 2021

- *Total number of rodent boxes for each month represents the number of boxes managed for the entire month and is determined by multiplying the daily census by the number of days in the month.
- **Animal cages whose food or water fall below a prescribed level are provided additional food and water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water.
- *** To reduce animal loss due to lack of food among rodent cages, we have instituted an additional food and water check for each cage. Each animal cage is checked in the morning and in the afternoon for lack of food and water with each check performed by a different technician. This provides two separate sets of eyes on each cage.

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, February 10, 2021 7:01 AM

To:

(b) (

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh Follow-up Case 8Q (3187-01)

Thank you for this update. I will send a response soon.

Axel Wolff

From:

(b) (6)

Sent: Tuesday, February 9, 2021 1:58 PM

To: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>; OLAW Division of Compliance Oversight (NIH/OD)

<olawdco@od.nih.gov>

Subject: University of Pittsburgh Follow-up Case 8Q (3187-01)

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)



(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6

rone: Fax:

Email: vcorp@pitt.edu

December 17, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its December 14, 2020 meeting.

Please note that this issue was previously reported to OLAW in the most recent enhanced monitoring report (December 8, 2020) for Case 3187-8Q.

One box was found in the animal facility containing two mice without access to water. One mouse was dead upon discovery. The investigator's lab staff members were responsible for changing the water, which they failed to do, and a DLAR technician did not recognize that the bottle was empty.

The University of Pittsburgh's IACUC reviewed and accepted the investigator's and the DLAR Director's corrective action plans, which consisted of the following items:

- The room techs that performed rounds were retrained on how to perform rounds: observing for food, then going through the room observing for water, and lastly going though and performing health checks.
- 2. The investigator modified the special water treatment experimental protocol to include less mice per experimental harvest. The modification of experimental group size involves a staggered special water treatment plan. This modification also requires the investigator's lab staff to switch from a weekly check to the observation of special water-treated mice every other day.
- 3. Members of the investigator's lab have undergone, with the laboratory manager, a retraining session on care and maintenance of experimental animals. The laboratory manager also collaborated with lab staff on the experimental design where less mice are harvested more frequently. These corrective actions will help ensure the welfare of the animals.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 December 15, 2020

The investigator's research is supported by the following NIH grant:

5R01HL130268-04

DUAL ROLE OF HMGB1 IN PATHOGENIC PLATELET BIOLOGY IN PULMONARY HYPERTENSION

The IACUC levied the following sanction:

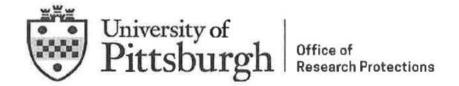
• Letter of reprimand were sent to the investigator, the DLAR Director and their supervisors regarding this event. These letters have been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates



(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6 Fax: Email: vcorp@pitt.edu

December 17, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹ that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its December 14, 2020 meeting.

Please note that this issue was previously reported to OLAW in the most recent enhanced monitoring report (December 8, 2020) for Case 3187-8Q.

Three boxes containing eleven mice were found in the animal facility without food in the hopper. Ten of the mice were deceased upon discovery. The surviving mouse was provided with supportive care and monitored for 24 hours, with no further issues noted the next day. It was determined the DLAR technician performing daily checks did not notice the lack of food.

The University of Pittsburgh's IACUC reviewed and accepted the DLAR Director's corrective action plan (CAP), which consisted of the following item:

The room techs who performed rounds were retrained on how to perform rounds: observing
for food, then going through the room observing for water, and lastly going though and
performing health checks.

The IACUC levied the following sanction:

A letter of reprimand was sent to the DLAR Director and his supervisor regarding this event.
 This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 December 17, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,



Bill J. Yates



3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6)

Fax:

Email: vcorp@pitt.edu

December 17, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its December 14, 2020 meeting.

Please note that this issue was previously reported to OLAW in the most recent enhanced monitoring report (December 8, 2020) for Case 3187-8Q.

One box containing one mouse assigned to the investigator's protocol was found in the animal facility without food in the hopper. The mouse died while animal care staff attempted to provide it with mush and hydrogel. It was determined that the PI's lab technician performing the most recent box change on October 30th did not place food in the hopper, and the animal care technician performing daily checks did not notice the lack of food.

The University of Pittsburgh IACUC reviewed and accepted the DLAR Director and the investigator's corrective action plans (CAPs), which consisted of the following items:

- All of the facility staff were trained on the performing daily checks for food, water and health.
- 2. Lab personnel will handle a smaller number of cages when separating the mice.
- Before transferring mice to a new cage, food will be added to the empty cage.
- Lab personnel will check availability of food in every cage before putting it back on the cage rack.
- 5. Before leaving the mouse room, lab personnel will check all lab cages to make sure that food and water is available to animals.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 December 17, 2020

- 6. Separating mice into new cages on Fridays will be avoided if possible.
- If possible, lab cages will be checked on Friday afternoons to make sure mice have enough food during weekends.

The investigator's research is supported by the following NIH grant:

1R01EY030861-01A1

EPIGENETIC BASIS OF RETINAL CELL FATE DETERMINATION

The IACUC has levied the following sanctions:

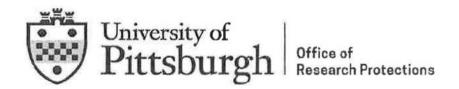
• Letters of reprimand were sent to the investigator, the DLAR Director and their supervisors regarding this event. These letters have been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates



3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6

Email: vcorp@pitt.edu

December 17, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹ that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its December 14, 2020 meeting.

Please note that this issue was previously reported to OLAW in the most recent enhanced monitoring report (December 8, 2020) for Case 3187-8Q.

One box containing four mice was found in the animal facility without food in the hopper. The mice were deceased upon discovery. It was determined the DLAR technician performing daily checks did not notice the lack of food.

The University of Pittsburgh's IACUC reviewed and accepted the DLAR Director's corrective action plan (CAP), which consisted of the following item:

The room techs who performed rounds were retrained on how to perform rounds: observing
for food, then going through the room observing for water and lastly going though and
performing health checks.

The IACUC levied the following sanction:

A letter of reprimand was sent to the DLAR Director and his supervisor regarding this event.
 This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 December 17, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates

Wolff, Axel (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, December 21, 2020 7:27 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports,

(b) (6) We will send responses soon.

Axel Wolff

From:

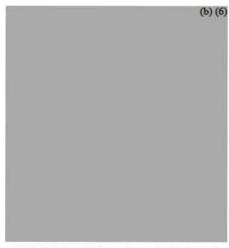
(b) (6)

Sent: Thursday, December 17, 2020 2:37 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.



NOTE: The University of Pittsburgh will be closed for the holidays and winter recess from Monday, December 21 through January 3, 2021. We will reopen on Monday, January 4, 2021 at 8:30 am. Thank you!



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.nlh.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

December 9, 2020

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Dr. Bill Yates
Interim Vice Chancellor for Research Protections
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your December 8, 2020 letter providing an update under an enhanced reporting schedule for the University of Pittsburgh to allow this Office to monitor the steps being taken to eliminate rodent deaths due to lack of food/water. We also acknowledge receipt of one report from October 30, 2020 and two reports from December 4, 2020 reporting rodent deaths due to lack of food or water and the corrective actions as follows:

 One mouse died from lack of food as none was provided following a cage change; the problem was not identified during the daily health check.

Corrective action: The animal caretaker was retrained and a letter of reprimand was used to the Division of Laboratory Animal Resources (DLAR) Director and supervisor.

Four mice died due to lack of food. Food was not provided during cage set up and the problem was not identified during the daily health check.

Corrective action: The animal care staff in the facility was retrained on the conduct of daily health checks; a letter of reprimand was issued to the DLAR Director and supervisor.

 One mouse died of dehydration because the water valve had not been attached. The problem was not identified during the daily health check.

Corrective action: The animal care staff in the facility was retrained on cage changing procedures and on attaching water valves; a letter of reprimand was issued to the DLAR Director and supervisor.

According to the information provided, OLAW understands the following:

- 1) During October and November, 20 mice died due to lack of food and water.
- During that time period, ten full time animal caretakers were hired and six left.
- During that time period, no new full time cage wash technicians were hired and one left.
- 4) During that time, five caretakers received retraining on the proper conduct of health checks.

Page 2 – Dr. Yates December 9, 2020 OLAW Case A3187-8Q

While OLAW understands that the percentage of rodents dying due to lack of food/water is a small portion of the total animals in-house, the goal of the current efforts must be to <u>eliminate</u> these preventable incidents. Other institutions on similar monitoring by OLAW often show a slight increase of cases as a result of the enhanced scrutiny but as internal enforcement efforts increase, the death rate soon drops to zero or very close to zero. It is imperative that the current training efforts, enhanced supervision, escalating sanctions, and program wide awareness continue, or increase, in order to prevent additional deaths. Please provide the next status update by **February 15, 2021**.

Sincerely,

(b) (6)

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

cc: IACUC Chair



December 8, 2020

Axel V. Wolff, MS, DVM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982 wolffa@od.nih.gov

Brent Morse, DVM, DACLAM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
olawdco@od.nih.gov

RE: OLAW Case 8Q Follow-up A3187

Dear Drs. Wolff and Morse:

As requested in your letter dated February 13, 2020, I am attaching the University of Pittsburgh's fifth report detailing the success of the programs of the Department of Laboratory Animal Resources (DLAR) to reduce animal death due to lack of food or water. This report includes the months of October and November.

The DLAR Director included the number of cages for which the DLAR staff recognized low levels of water or food that did not result in animal loss. As in our previous reports, the DLAR Director included a summary of current DLAR staffing and new hires during this reporting period, in addition to the numbers for technicians receiving additional training.

Our next report will include the months of December 2020 and January 2021 and will be sent by February 15, 2021.

3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6

Email: vcorp@pitt.edu

Axel V. Wolff, MS, DVM Brent Morse, DVM, DACLAM Page 2 December 8, 2020

Please do not hesitate to contact me if you need any further information or have any questions or concerns.

Sincerely,



Bill J. Yates

OLAW Report October - November 2020

Rodent Cages with low/no food and water	October	November
Daily census of rodent boxes	31,229	31,922
Total number of rodent boxes for the month *	968,099	957,660
Number of boxes with food/water added resulting in no animal loss**	18,852 (60.4%)	19,352 (60.6%)
Number of boxes with animal loss due to lack of food and water	3 (0.01%)	4 (0.01%)
Number of animals lost	8	12

Hires ((Losses):	October	November
1.	Full Time Animal Care Husbandry Technicians	5 (4)	5 (2)
2.	Full Time Cage Wash Technicians	0(1)	0 (0)

Additional Training:

October: 2 Husbandry care technicians received additional training on proper health checks

November: 3 Husbandry care technician received additional training on proper health checks

OLAW Report For Period October - November, 2020.

- *Total number of rodent boxes for each month represents the number of boxes managed for the entire month and is determined by multiplying the daily census by the number of days in the month.
- **Animal cages whose food or water fall below a prescribed level are provided additional food and water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water.

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, December 9, 2020 7:40 AM (b) (6)

To:

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Follow-up Response to #3187-A (8Q)

Thank you for this update,

(b) (6) I will send a response soon.

Axel Wolff

From:

(b) (6)

Sent: Tuesday, December 8, 2020 10:24 AM

To: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>; OLAW Division of Compliance Oversight (NIH/OD)

<olawdco@od.nih.gov>

Subject: Follow-up Response to #3187-A (8Q)

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Acting Vice Chancellor for Research Protections. Thank you.

(b) (6)



Bill J. Yates, PhD Acting Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6)

Fax:

Email: vcorp@pitt.edu

December 4, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹ that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its November 16, 2020 meeting.

Three mice were discovered in one box in the animal facility without access to water. One mouse was deceased upon discovery. It was determined that the technician performing the most recent box change did not ensure that the box's drinking valve was attached, and the technician performing daily room checks did not notice the condition of the mice or that the box's drinking valve was missing.

The University of Pittsburgh IACUC reviewed and accepted the DLAR Director's corrective action plan (CAP), which consisted of the following item:

 All facility technicians were retrained on box changing procedures, which includes ensuring that a drinking valve is attached.

The IACUC levied the following sanction:

A letter of reprimand was sent to the DLAR Director and his supervisor regarding this event.
 This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 December 4, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,



Bill J. Yates

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, December 9, 2020 7:24 AM

To:

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

(b) (6) These incidents will be included in the A3187-8Q case file and should be Thank you for these reports, included in the next status report.

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

From:

Sent: Friday, December 4, 2020 3:02 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Acting Vice Chancellor for Research Protections. Thank you.

(b) (6)



Bill J. Yates, PhD Acting Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6) Fax:

Email: vcorp@pitt.edu

December 4, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹ that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its November 16, 2020 meeting.

Five mice were found in one box in the animal facility without food in the hopper. Four mice were deceased upon discovery. It was determined that the technician performing the box set up did not place food in the food hopper, and the technician performing daily checks did not notice the lack of food.

The University of Pittsburgh IACUC reviewed and accepted the DLAR Director's corrective action plan (CAP), which consisted of the following item:

 The animal care staff within the facility were retrained on performing daily room checks for food, water, and animal health.

The IACUC levied the following sanction:

A letter of reprimand was sent to the DLAR Director and his supervisor regarding this
event. This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 December 4, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, December 9, 2020 7:24 AM

To:

(b) (d

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

Thank you for these reports, (b) (6) These incidents will be included in the A3187-8Q case file and should be included in the next status report.

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

From:

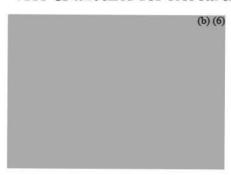
(b) (6)

Sent: Friday, December 4, 2020 3:02 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Acting Vice Chancellor for Research Protections. Thank you.



A3187-8Q



Bill J. Yates, PhD Acting Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6) Fax:

Email: vcorp@pitt.edu

December 3, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its October 19, 2020 meeting.

This incident was preliminarily reported in an email from the University of Pittsburgh's IACUC Chair to Dr. Wolff on October 6, 2020. In addition, this incident was included in the enhanced monitoring report I sent to Dr. Wolff on October 9, 2020.

Due to a faulty water-line connection, thirteen boxes of mice were found in an animal housing room without access to water. Twenty-nine of the fifty-two mice were deceased. Surviving mice were provided mush and monitored for forty-eight hours without further health issues.

The University of Pittsburgh's IACUC reviewed and accepted the DLAR Director's corrective action plan (CAP), which consisted of the following item:

The animal care staff members within the facility were retrained.

The IACUC has levied the following sanction:

A letter of reprimand was sent to the DLAR Director and his supervisor regarding this event.
 This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 December 3, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,



Bill J. Yates

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Friday, December 4, 2020 7:27 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports, (b) (6) We will send a response to the first one soon and I will address the second letter when replying to the next status update.

Axel Wolff

From:

(b) (6)

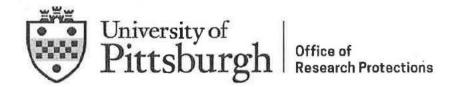
Sent: Thursday, December 3, 2020 2:43 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Acting Vice Chancellor for Research Protections. Thank you.

(ь) (б)



Bill J. Yates, PhD Acting Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6)

Fax:

Email: vcorp@pitt.edu

October 30, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹ that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its September 28, 2020 meeting.

On July 30, 2020, one single-housed adult mouse was found deceased in the holding room without access to food. The box was changed five days earlier by an animal care technician but was not provided the petri dish of food stipulated in the protocol. Although animal care personnel performed daily checks in the room, the lack of food was not detected.

The University of Pittsburgh's IACUC reviewed and accepted the DLAR Director's corrective action plan, which entailed the following:

The animal care technician was retrained.

The IACUC has levied the following sanctions:

A letter of reprimand was sent to the DLAR Director and his supervisor regarding this event.
 This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 October 30, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,



Bill Yates

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, November 2, 2020 7:25 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports, (b) (6) I will place the first one in file A3187-8Q and incorporate in the enhanced reporting procedures. We will respond to the other case as usual.

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

From:

(b) (6)

Sent: Friday, October 30, 2020 11:12 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Acting Vice Chancellor for Research Protections.

(b) (6)



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

October 16, 2020

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Dr. Bill Yates
Interim Vice Chancellor for Research Protections
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your October 9, 2020 letter providing an update under an enhanced reporting schedule for the University of Pittsburgh to allow this Office to monitor the steps being taken to eliminate rodent deaths due to lack of food/water. OLAW also acknowledges receipt of the October 6, 2020 preliminary report from the Institutional Animal Care and Use Committee chair stating that 29 mice died from dehydration due to an improperly connected water line. The surviving mice were given mush and recovered. This information was incorporated in the current report.

According to the information provided, OLAW understands the following:

- During August and September, 40 mice died due to lack of food/water. The spike in August was due to the disconnected water line described above.
- During this time, 56 mock cages were set up (in August only as this activity was temporarily discontinued for September); 46 were identified within 48 hours and 10 were identified thereafter.
- Three additional full time animal caretakers were hired in each month and one additional cage wash technician was hired.
- 4) During this time four husbandry care technicians received additional training on the proper conduct of health checks; facility personnel were retrained on connecting water lines to rodent racks.
- Rodent cages have food/water added when noted to be below an established level. Low levels can be due to health issues, behavioral issues, or low levels at set up of the cage.

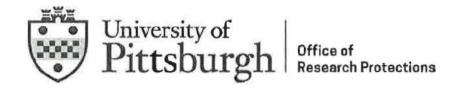
Based on its assessment of this update, OLAW understands that efforts are ongoing regarding ensuring adequate staffing levels and training. OLAW concurs with the actions being taken by the institution to attempt to eliminate animal deaths due to lack of food/water and will continue to monitor the situation. Please provide the next status update by **December 15, 2020** and continue to promptly report deaths as they occur. Thank you for keeping OLAW apprised on this matter.

Sincerely,

(b) (6)

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

cc: IACUC Chair



Interim Vice Chancellor for Research Protections
Professor of Otolaryngology & Neuroscience & Clinical
and Translational Science
Vice-Chair, School of Medicine Curriculum Committee

(b) (4)-lieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Office Phone: (b) (6) Cell Phone: (b) (6)

vcorp@pitt.edu orp.pitt.edu

October 9, 2020

Axel V. Wolff, MS, DVM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982 wolffa@od.nih.gov

Brent Morse, DVM, DACLAM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
olawdco@od.nih.gov

RE: OLAW Case 8Q Follow-up

Dear Drs. Wolff and Morse:

As requested in your letter dated February 13, 2020, I am attaching the University of Pittsburgh's fourth report detailing the success of the programs of the Department of Laboratory Animal Resources (DLAR) to reduce animal death due to lack of food or water. This report includes the months of August and September.

The DLAR Director included the number of cages for which the DLAR staff recognized low levels of water or food that did not result in animal loss. As in our previous reports, the DLAR Director included a summary of current DLAR staffing and new hires during this reporting period, in addition to the numbers for technicians receiving additional training and the success of the Mock Box program. The Mock Box program was temporarily discontinued at the end of August, but will resume in 2021.

Please let me know if you need any other information. Our next report will include the months of October and November and will be sent by December 15th.

Sincerely, 17

(b) (6

Bill J. Yates

OLAW Report August - September 2020

Rodent Cages with low/no food and water	August	September
Daily census of rodent boxes	29,796	30,904
Total number of rodent boxes for the month *	923,676	927,120
Number of boxes with food/water added resulting in no animal loss**	21,280	21,785
Number of boxes with animal loss due to lack of food and water	16 (0.05%)***	3 (0.01%)
Number of animals lost	33***	7
Mock Box program	August	September

Box program	August	September		
Number of mock boxes placed	56	N/A (Mock box program stopped at end of August)		
Number of boxes found within 48 hrs	46 (82%)			
Number of boxes found > 48 hrs	10 (18%)			
	Number of mock boxes placed Number of boxes found within 48 hrs	Number of mock boxes placed 56 Number of boxes found within 48 hrs 46 (82%)		

August	September	
3 (2)	3 (2)	
1(1)	0 (2)	
	3 (2)	

Additional Training:

August: 3 Husb

3 Husbandary care technicians received additional training on proper health checks

Facility personnel received additional training on connecting water lines to rodent racks.

September: 1 Husbandary care technician received additional training on proper health checks

OLAW Report For Period August - September, 2020.

- *Total number of rodent boxes for each month represents the number of boxes managed for the entire month and is determined by multiplying the daily census by the number of days in the month.
- **Animal cages whose food or water fall below a presecribed level are provided additional food and water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water.
- ***One facility had a mouse rack on autowater with the water line not attached properly. This resulted in 29 mice lost (13 affected cages).

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, October 14, 2020 7:57 AM

To:

Bill Yates VC ORP

Cc:

OLAW Division of Compliance Oversight (NIH/OD); OLAW Division of Assurances

(NIH/OD)

Subject:

RE: University of Pittsburgh's fourth report regarding rodent husbandry

Thank you for this report, Dr. Yates. We will send a response soon. Congratulations on your appointment as IO. Feel free to contact me regarding any OLAW or animal related questions.

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

From: Bill Yates VC ORP < VCORP@pitt.edu> Sent: Monday, October 12, 2020 1:22 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Cc: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>; Chapman, Deborah L <dlc7@pitt.edu>

(b) (6)

(b) (6)

Subject: University of Pittsburgh's fourth report regarding rodent husbandry

Dear Drs. Wolff and Morse:

As requested in your letter dated February 13, 2020, I am attaching the University of Pittsburgh's fourth report detailing the success of the programs of the Department of Laboratory Animal Resources (DLAR) to reduce animal death due to lack of food or water. This report includes the months of August and September.

As OLAW was informed this morning, I have assumed responsibilities as Institutional Official (IO) for the University of Pittsburgh's animal care and use program, following George Huber.

Please let us know if you have any questions.

Bill Yates

Bill Yates, Ph.D.

*_*_*_*_*_*_*_*_*_*_*_*_*

Interim Vice-Chancellor for Research Protections
Professor of Otolaryngology & Neuroscience & Clinical and Translational Science
Vice-Chair, School of Medicine Curriculum Committee
University of Pittsburgh

Editor-in-Chief, Experimental Brain Research

Mailing address:

University of Pittsburgh School of Medicine Eye & Ear Institute Building 203 Lothrop Street, (b) (4) Pittsburgh, PA 15213

(b) (6)

E-MAIL: byates@pitt.edu

Alternate email: neuroyates@neuroyates.com

WWW Page: http://neuroyates.com/



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH

FOR US POSTAL SERVICE DELIVERY:
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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

August 12, 2020

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Mr. George A. Huber
Vice Chancellor for Research Conduct
and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Mr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your August 10, 2020 letter providing an update under an enhanced reporting schedule for the University of Pittsburgh to allow this Office to monitor the steps being taken to eliminate rodent deaths due to lack of food/water. OLAW also acknowledges receipt of the July 20, 2020 letter reporting the deaths of four mice due to dehydration. The wrong cage had been used on the automatic watering rack and could not be seated properly to allow access to water. The corrective action consisted of retraining animal care staff on the different types of cages and racks used in the facility.

According to the information provided, OLAW understands the following:

- During June and July, 13 mouse deaths occurred due to lack of food/water.
- During this time, 123 mock cages were set up; 106 were identified within 48 hours while 17 were identified later.
- There are currently 79 animal caretakers and 23 cage wash technicians on board.
- 4) During June and July, 3 fulltime animal caretakers and 1 cage wash technician were hired.
- During this time 21 caretakers were trained on the proper conduct of daily health checks.
- 6) Rodent cages have food/water added when noted to be below an established level. Low levels can be due to health issues, behavioral issues, or low levels at set up of the cage.

Based on its assessment of this update, OLAW understands that efforts are ongoing regarding ensuring adequate staffing levels, mock cage setups, and training. OLAW concurs with the actions being taken by the institution to attempt to eliminate animal deaths due to lack of food/water and will continue to monitor the situation. Please provide the next status update by **October 15, 2020** and continue to promptly report deaths as they occur. Thank you for keeping OLAW apprised on this matter.

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

cc: IACUC Chair



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6)

ghuber@pitt.edu orp.pitt.edu

August 10, 2020

Axel V. Wolff, MS, DVM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
wolffa@od.nih.gov

Brent Morse, DVM, DACLAM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
olawdco@od.nih.gov

RE: OLAW Case 8Q Follow-up

Dear Drs. Wolff and Morse:

As requested in your letter dated February 13, 2020, I am attaching the University of Pittsburgh's second report detailing the success of the programs of the Department of Laboratory Animal Resources (DLAR) to reduce animal death due to lack of food or water. This report includes the months of June and July, as well as cumulative data since March, our first month of enhanced monitoring.

The DLAR Director included the number of cages for which the DLAR staff recognized low levels of water or food that did not result in animal loss. As in our previous reports, the DLAR Director included a summary of current DLAR staffing and new hires during this reporting period, in addition to the numbers for technicians receiving additional training and the success of the Mock Box program.

OLAW Page 2 August 10, 2020

Please let me know if you need any other information. Our next report will include the months of August and September and will be sent by October 15th.

Sincerely,

(b) (6)

George A. Huber

OLAW Report March - May 2020

Roden	t Cages with low/no food and water	March	April	May	June	July
	Daily census of rodent boxes	34,437	26,742	28,017	29,143	25,241
	Total number of rodent boxes for the month *	1,067,547	802,260	868,527	874,290	782,471
	Number of boxes with food/water added resulting in no animal loss**	13,695	13,580	28,129	19,019	20,518
	Number of boxes with animal loss due to lack of food and water	4 (0.01%)	3 (0.01%)	6 (0.02%)	6 (0.02%)	3 (0.01%)
	Number of animals lost	4	4	14	8	5
Mock	Box program (First month – serves as baseline)	March	April	Мау	June	July
		(baseline)				
	Number of mock boxes placed	68	68	64	61	62
	Number of boxes found within 48 hrs	56 (82%)	54 (79%)	55 (86%)	50 (82%)	56 (90%)
	Number of boxes found > 48 hrs	12 (18%)	14 (21%)	9 (14%)	11 (18%)	6 (10%)
DLARS	Staffing:	March	April	May	June	July
	Current Animal Care Technicians	74	74	78	78	79
	Current Cage Wash Technicians	23	23	23	23	23
New H	ires:	March	April	May	June	July
1.	Full Time Animal Care Husbandry Technicians	2	1	5	1	2
2.	Full Time Cage Wash Technicians	2	0	0	1	0
3.	Temporary Cage Wash Technicians (to serve as a reserve work force in the event of COVID-19 related call-offs)	3	3	3	0	0

Additional Training:

March: 22 husbandry technicians received additional husbandry training on proper health checks.

April: 20 husbandry technicians received additional husbandry training on proper health checks.

May: 13 husbandry technicians received additional husbandry training on proper health checks.

June: 15 husbandry techinicans received additional training on proper health checks.

July: 6 husbandry techinicans received additional training on proper health checks.

OLAW Report For Period April - May, 2020.

*Total number of rodent boxes for each month represents the number of boxes managed for the entire month and is determined by multiplying the daily census by the number of days in the month.

**Animal cages whose food or water fall below a presecribed level are provided additional food and water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water. During the COVID-19 crisis, with IACUC approval, we switched from changing rodent cages every 7-10 days to every 14 days. As a result, a majority of these cages required additional food and water during the 14 day period due to the size of the food hopper and water bottle. This is reflected in the increased number of boxes in this row in May.

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, August 12, 2020 7:40 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Follow-up Response #3187-8Q

Thank you

(b) (6) I will send a response soon.

Axel Wolff

From:

(b) (6)

Sent: Monday, August 10, 2020 10:28 AM

To: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>; OLAW Division of Compliance Oversight (NIH/OD)

<olawdco@od.nih.gov>

Subject: Follow-up Response #3187-8Q

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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

June 19, 2020

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Mr. George A. Huber
Vice Chancellor for Research Conduct
and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Mr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your June 15, 2020 letter providing the second report under an enhanced reporting schedule for the University of Pittsburgh to allow this Office to monitor the steps being taken to eliminate rodent deaths due to lack of food/water. OLAW also acknowledges receipt of letters from April 16, May 4, and May 8, 2020 which constitute independent noncompliance reports relevant to the matter. According to the information provided, OLAW understands the following about the incidents and the corresponding corrective actions:

- April 16, 2020 answers to OLAW questions from April 10, 2020.
- Rodent cages have food and water added when noted to be low due to regular consumption or excessive consumption due to behavior or health condition (i.e. diabetes).
- Specific patterns have not been identified as to why cages may be missing food/water.
- There have been no instances of repeat noncompliance for the same staff member.
- 4. All staff is aware of the heightened attention being given to the current initiative.
- May 4, 2020 letter. Three out of four mice died due to lack of food. The empty hopper was not noted during the daily health check. The corrective action consisted of retraining husbandry staff on the appropriate conduct of health checks and food/water levels. A letter of reprimand was sent to the animal facility director and supervisor.
- May 8, 2020 letter. One mouse died due to lack of food. The empty hopper was not noted during the daily health check. Laboratory staff had manipulated the cage. The corrective action consisted of retraining the husbandry staff on the appropriate conduct of health checks and food/water levels. The laboratory technician involved will be supervised by the investigator, a checklist will be used when weaning or handling mice, and the technician will double check all cages for food/water.
- June 15, 2020 letter. Due to the COVID-19 pandemic, cage changing had been temporarily switched to once every 14 days, which required additional topping off of food/water. The schedule has subsequently been restored to rodent cage changes every 7-10 days.

Page 2 - Dr. Huber June 19, 2020 OLAW Case A3187-8Q

- 1. Rodent deaths due to lack of food/water consisted of 4 in March, 4 in April, and 14 in May.
- 2. Sixty plus mock boxes were placed with approximately 80 plus percent identified by staff within 48 hours.
- There were 74 animal care technicians on board in March and April, and 78 in May. New hires
 consisted of 2 in March, 1 in April, and 5 in May. The staffing levels of cage wash technicians was
 also listed.
- 4. Additional training on the conduct of health checks was provided to 22 husbandry technicians in March, 20 in April, and 13 in May.

Based on the information provided, OLAW understands that between 0.01% and 0.02% of rodent cages were identified as having animal deaths due to lack of food/water. To further reduce the number of deaths, the mock cage program is being continued to increase staff vigilance, additional animal care staff has been hired, and additional training was provided to the animal care staff. OLAW concurs with the actions being taken by the institution to attempt to eliminate animal deaths due to lack of food/water and will continue to monitor the situation. As such, please provide the next status update by **August 15**, **2020**. Continue to promptly report deaths promptly as they occur. Thank you for keeping OLAW apprised on this matter.

Sincerely,

(b) (6)

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

cc: IACUC Chair



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

June 15, 2020

Axel V. Wolff, MS, DVM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
wolffa@od.nih.gov

Brent Morse, DVM, DACLAM
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
olawdco@od.nih.gov

RE: OLAW Case 8Q Follow-up

Dear Drs. Wolff and Morse:

As requested in your letter dated February 13, 2020, I am attaching the University of Pittsburgh's second report detailing the success of the programs of the Department of Laboratory Animal Resources (DLAR) to reduce animal death due to lack of food or water. This report includes the months of April and May, as well as March, our first month of enhanced monitoring.

Similar to March's report, the DLAR Director included the number of cages for which the DLAR staff recognized low levels of water or food that did not result in animal loss. Please note that during the COVID-19 pandemic the DLAR switched from changing rodent cages every 7-10 days to every 14 days. This resulted in an increase in the number of cages requiring additional food and water in May. Husbandry technicians monitoring the cages add additional food and water when levels fall below prescribed levels; typically animals in these cages are never deprived of food or water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water.

This switch to a 14-day cage change was temporarily approved by the IACUC so that the DLAR could have separate groups of staff working on different days, to assure there was not a critical absence of personnel due to a COVID-19 exposure. As of June 1, 2020, the DLAR switched back

Office of Research Protections

(b) (4) Hieber Building 3500 Fifth Avenue Pittshurgh, PA 15213 (b) (6) ghuber@pitt.edu

orp.pitt.edu

OLAW Page 2 June 15, 2020

to changing rodent cages every 7-10 days as Pittsburgh was transferred to yellow and then to green status for COVID-19 by Governor Wolf of Pennsylvania.

The DLAR Director further included a summary of current DLAR staffing and new hires during this reporting period. Finally, the numbers for technicians receiving additional training and the success of the Mock Box program are also included. Because you asked additional questions after our initial report, I will add that no common patterns have emerged, different staff were at fault for the April and May incidents and therefore no personnel actions have been taken (besides retraining).

Please let me know if you need any other information. Our next report will include the months of June and July and will be sent by August 15th.

Sincerely,

(b) (6)

George A. Huber

OLAW Report March - May 2020

Rodent Cages with low/no food and water	March	April	May
Daily census of rodent boxes	34,437	26,742	28,017
Total number of rodent boxes for the month *	1,067,547	802,260	868,527
Number of boxes with food/water added resulting in no animal loss**	13,695	13,580	28,129
Number of boxes with animal loss due to lack of food and water	4 (0.01%)	3 (0.01%)	6 (0.02%)
Number of animals lost	4	4	14
Mock Box program (First month – serves as baseline)	March (baseline)	April	May
Number of mock boxes placed	68	68	64
Number of boxes found within 48 hrs	56 (82%)	54 (79%)	55 (86%)
Number of boxes found > 48 hrs	12 (18%)	14 (21%)	9 (14%)
DLAR Staffing:	March	April	May
Current Animal Care Technicians	74	74	78
Current Cage Wash Technicians	23	23	23
New Hires:	March	April	May
 Full Time Animal Care Husbandry Technicians Full Time Cage Wash Technicians Temporary Cage Wash Technicians (to serve as a reserve work force in the event of COVID-19 related call-offs) 	2 2 3	1 0 3	5 0 3

Additional Training:

March: 22 husbandry technicians received additional husbandry training on proper health checks.

April: 20 husbandry technicians received additional husbandry training on proper health checks.

May: 13 husbandry technicians received additional husbandry training on proper health checks.

OLAW Report For Period April - May, 2020.

*Total number of rodent boxes for each month represents the number of boxes managed for the entire month and is determined by multiplying the daily census by the number of days in the month.

**Animal cages whose food or water fall below a prescribed level are provided additional food and water. The low levels can be due to health issues such as diabetes, behavioral issues such as repeated gnawing of food, and laboratory staff setting up new cages with low amounts of food and water. During the COVID-19 crisis, with IACUC approval, we switched from changing rodent cages every 7-10 days to every 14 days. As a result, a majority of these cages required additional food and water during the 14 day period due to the size of the food hopper and water bottle. This is reflected in the increased number of boxes in this row in May.

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, June 17, 2020 7:41 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Follow-up Report #3187-8Q

Thank you for this report,

(b) (6) I will respond soon.

Axel Wolff

From:

(b) (6)

Sent: Monday, June 15, 2020 1:08 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>; Wolff, Axel (NIH/OD) [E]

<wolffa@od.nih.gov>

Subject: Follow-up Report #3187-8Q

Please review the attached correspondence and information forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (6)



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

May 8, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its April 20, 2020 meeting.

On February 24, 2020, a box containing one mouse was found in the animal facility without access to food. When discovered, the mouse was deceased and the food hopper was empty. The box had been activated by the investigator's laboratory personnel on February 17th. Animal husbandry staff did not notice the lack of food during daily room checks.

The University of Pittsburgh IACUC reviewed and accepted the animal facility director's summary of preventative actions and the investigator's corrective action plan, which consisted of the following items:

- All staff were retrained on room checks, acceptable food levels, and acceptable water levels.
- The investigator will supervise the lab technician in the mouse facility until he can handle the responsibilities alone.
- 3. The investigator's lab technician will utilize a checklist when he separates, weans, or otherwise interacts with the animals.
- Before the investigator's lab technician leaves the mouse facility, he will double check every cage he has interacted with to ensure that they have access to food and water.

The investigator's research is not supported by NIH or NSF grants.

Office of Research Protections

(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6)

ghuber@pitt.edu orp.pitt.edu

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 May 8, 2020

The IACUC has levied the following sanctions:

1. A letter of reprimand was sent to the animal facility director, the investigator, and and their supervisors regarding this event. These letters have been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

George A. Huber

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, May 13, 2020 7:30 AM

To:

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

(b) (6) Note that the 1st one will be placed into the ongoing enhanced reporting Thank you for both of these reports, file (A3187-8Q) and needs to also be discussed in the next status update.

Axel Wolff

From:

Sent: Monday, May 11, 2020 12:25 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (6)



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

May 4, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its March 16, 2020 meeting.

On January 31, 2020, a box containing four mice was found in the animal facility without access to food. When discovered, the box contained one surviving mouse and the food hopper was empty. The box had been changed on January 27th by animal husbandry personnel. Animal husbandry staff did not notice the lack of food during daily room checks.

The University of Pittsburgh IACUC reviewed and accepted the animal facility director's summary of preventative actions, which consisted of the following item:

 All staff were retrained on room checks, acceptable food levels, and acceptable water levels.

The IACUC has levied the following sanctions:

 A letter of reprimand was sent to the animal facility director and his supervisor regarding this event. The letter has been placed in our files.

Office of Research Protections

(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6)

ghuber@pitt.edu orp.pitt.edu

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 May 4, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

George A. Huber

From: OLAW Division of Compliance Oversight (NIH/OD)

Sent: Wednesday, May 6, 2020 7:33 AM

To: (b) (6

Cc: OLAW Division of Compliance Oversight (NIH/OD)

Subject: RE: University of Pittsburgh

Thank you for this report, (b) (6) I will place this into file A3187-8Q and respond upon receipt of the next status update.

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

From: (b) (6)
Sent: Monday, May 4, 2020 3:58 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (6)



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

April 16, 2020

Axel V. Wolff, MS, DVM
Deputy Director
NIH Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive – MSC 7982
Bethesda, MD 20892-7982
olawdco@od.nih.gov

Dear Dr. Wolff:

Thank you for your response on April 10, 2020 to the University of Pittsburgh's first requested enhanced report to OLAW under A3187-01(8Q). I wanted to respond now to your questions numbered 1 through 5 below, rather than waiting two months until the next report.

1) For the 13,695 cages that needed food/water, were they actually without food/water; had they been missed; did they just need "topping off; and why was the number so high?

Response: There are several different situations that require the animal husbandry staff of the Division of Laboratory Animal Resources (DLAR) to "top off" or add food and water to a cage. The reported numbers primarily represent cages to which food or water were added, but some food and water were remaining. The DLAR standard operating procedure on rodent husbandry states:

<u>Provision of Food:</u> Assess the appearance and quantity of food. Refill the feeder with the appropriate animal diet when the feeder is <u>less than or equal to half full</u>.

<u>Provision of Water:</u> Water bottles: Remove any water bottle that is <u>one third or less full</u> and replace it with a sanitized full water bottle.

- A. DLAR staff is trained to ensure that rodent boxes have plenty of food and water. If the levels are near or at the levels described above, they add additional food or water.
- B. There are a significant number of mouse cages housing mice described in the literature as 'food chewers'. These strains have a behavior that causes them to chew the food pellets depleting pellets in the food hopper. They do not eat the food, simply chew it so that it falls to the bottom of the cage. DLAR often adds food to these cages several times a week.

Office of Research Protections

(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6)

ghuber@pitt.edu orp.pitt.edu Axel V. Wolff, MS, DVM Page 2 April 16, 2020

- C. Animals with certain health conditions such as diabetes may eat or drink excessive quantities of food and water. We have a number of investigators working with diabetic rodents.
- D. Many of our rat boxes require water bottles to be filled during the week due to the small size of the bottle.
- 2) Have any patterns emerged for behaviors that result in animals not having food/water and dying (i.e. weaning, food restriction studies)?

Response: No; None of the animal loss reported in the four cages was due to any specific behavior and did not occur in cages recently weaned or under food restriction.

- 3) Have any personnel actions been necessary for repeat noncompliance, if this has occurred?

 Response: No; None of the four boxes with animal loss were the result of repeated noncompliance.
- 4) Are all staff members, including research personnel, animal care personnel, technicians, and veterinary staff aware of the heightened attention under this current initiative?

Response: Yes

5) Provide any additional updates on any other steps being taken to address the issue.

Response: We have no new updates at this time.

Please do not hesitate to contact me if you have any further questions or concerns.

Sincerely,

(b) (6)

George A. Huber

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Friday, April 17, 2020 7:26 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Follow-up Response 3817-01 (8Q)

Thank you for this update,

(b) (6) I will add to the case file and respond when the next report comes in.

Axel Wolff

From:

(b) (6)

Sent: Thursday, April 16, 2020 11:46 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Follow-up Response 3817-01 (8Q)

Please review the attached follow-up correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (б)



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

April 10, 2020

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Mr. George A. Huber
Vice Chancellor for Research Conduct
and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Mr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of Dr. Chapman's April 7, 2020 letter providing a status update under an enhanced reporting period for the University of Pittsburgh to allow this Office to monitor the steps being taken to eliminate rodent deaths due to lack of food/water. According to the information provided, OLAW understands the following:

- Out of a total of 34,437 rodent cages, four cages had deaths due to lack of food/water. A total of 13,695 cages needed to have food/water provided, which was done and resulted in no deaths.
- 2) A mock cage system has been put into place to help animal care staff become more vigilant in finding cages that may need food/water. In the first month of this program, 68 mock cages were placed and 56 were identified within two days. The remainder were found after two days.
- 3) There are currently 74 animal caretakers and 23 cage wash technicians on board. New staff is being hired and may serve as a reserve work-force to be called upon in case of staff illness during the pandemic. These include two full time animal care husbandry technicians, two full time cage wash technicians, and three temporary cage wash technicians.
- Additional training on the proper conduct of daily health checks has been provided to 22 husbandry technicians.

Based on its assessment of this information, OLAW understands that 0.01% rodents died due to lack of food/water, a mock cage program is in place to increase staff vigilance and appears to be successful, additional staff has been hired, and additional training was provided to the animal care staff. OLAW concurs with the actions being taken by the institution to attempt to eliminate animal deaths due to lack of food/water. Dr. Chapman's summary data is clear, concise, and will allow easy comparison to subsequent summaries to assess trends. In the next report, due **June 15, 2020**, please provide the same data sets and answer these additional questions:

1) For the 13,695 cages that needed food/water, were they actually without food/water; had they been missed; did they just need "topping off"; and why was the number so high? Page 2 – Dr. Huber April 10, 2020 OLAW Case A3187-80

- 2) Have any patterns emerged for behaviors that result in animals not having food/water and dying (i.e. weaning, food restriction studies)?
- 3) Have any personnel actions been necessary for repeat noncompliance, if this has occurred?
- 4) Are all staff members, including research personnel, animal care personnel, technicians, and veterinary staff aware of the heightened attention under this current initiative?
- 5) Provide any additional updates on any other steps being taken to address the issue.

Thank you for keeping OLAW apprised on this matter.

Sincerely,

(b) (6)

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

cc: IACUC Chair

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, April 8, 2020 7:31 AM

To:

Chapman, Deborah L

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh Report to OLAW re: Case A3187-8Q

Thank you for this report, Dr. Chapman. I will review carefully and send a response soon. Axel Wolff

From: Chapman, Deborah L <dlc7@pitt.edu>

Sent: Tuesday, April 7, 2020 2:40 PM

To: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>

Cc: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh Report to OLAW re: Case A3187-8Q

University of Pittsburgh (Assurance number D16-00118)

Dear Drs. Wolff and Morse.

As requested in your letter dated Feb. 13, 2020, I am attaching the University of Pittsburgh's first report detailing the success of the DLAR's training programs to reduce animal death due to lack of food or water. This report includes the full month of March. Included in the attached document are the numbers for "near misses" in which DLAR staff caught instances where water or food was low or missing that did not result in animal loss, as well as those instances in which it was not caught. The DLAR Director also included a summary of current DLAR staffing and new hires during March. The new hires include a reserve work-force that may be called upon in the event that staff call off for sickness due to the COVID-19 pandemic. Finally the numbers for technicians receiving additional training and the success of the Mock Box program, which is designed to train the animal care staff to attention to detail when performing health checks, are also included.

Please let me know if you need any other information or if you would like a different format in future reports. Our next report will include the full months of April and May and will be sent by June 15th. Wishing you all good health as we muddle through COVID19!

Best,

Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

OLAW Report March 2020

Roden	t Cages with low/no food and water					
	Daily census of rodent boxes	34,437				
	Number of boxes with food/and-water added resulting in no animal loss_	13,695 (39.8%)				
	4 (0.01%)					
Mock	Box program (First month – serves as baseline)					
	Number of mock boxes placed	68				
	Number of boxes found within 48 hrs	56 (82%)				
	Number of boxes found > 48 hrs	12 (18%)				
DLAR :	Staffing:					
	Current Animal Care Technicians	74				
	Current Cage Wash Technicians	23				
March	New Hires:					
1.	Full Time Animal Care Husbandry Technicians	2				
2.	Full Time Cage Wash Technicians	2				
3.	Temporary Cage Wash Technicians	3				
	(to serve as a reserve work force in the event of					
	COVID-19 related call-offs)					

Additional Training:

22 husbandry technicians received additional husbandry training on proper health checks.

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Thursday, February 13, 2020 6:50 AM

To:

Chapman, Deborah L

Subject:

OLAW report

Hello Dr. Chapman,

Please submit a response regarding the actions being taken to address prevention of rodent deaths due to lack of food/water at the University of Pittsburgh. We have received another report of deaths due to lack of water on January 14, 2020. If your IACUC has not fully developed plan, then just send an interim one.

Thank you.

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

To:

Walker, Keri (NIH/OD) [C]

Subject:

A3187-8Q

Case A3187-8Q, University of Pittsburgh

Dear Mr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your January 29, 2020 response to my December 9, 2019 request for information on measures being taken to prevent rodent deaths due to lack of food/water at the University of Pittsburgh. According to the information provided, OLAW understands the following:

- The Institutional Animal Care and Use Committee (IACUC) conducted a detailed review of husbandry practices.
- The animal care and use program is committed to preventing animal deaths due to human error.
- A training program is in place for new animal caretakers who are closely supervised until considered proficient.
- Husbandry errors result in retraining.
- Newly weaned rodents are monitored by Division of Laboratory Animal Resources (DLAR) staff to ensure good health and provision of food/water.
- An enhanced DLAR training program has been implemented and a new Training Manager has been hired. The training will include animal care and research staff.
- Two additional training staff have also been hired.

Responses to OLAW's specific questions are as follows:

- A root cause of why the problems occurred was conducted and concluded that incidents of rodent deaths
 occurred in different facilities and involved different staff and supervisors. There were no repeat failures by the
 same staff.
- In addition to retraining, an incentive program has been established which rewards staff that identify mock cages missing food/water.
- Staff performance problems are documented in employee records and repeat violations are addressed by increasing discipline.
- 4) The institution is aware that any animal death due to human error is unacceptable and is committed to achieving 100% compliance.
- 5) The IACUC is involved in the proposed corrective actions and is requiring all animal care staff to enroll in the new training program. The IACUC will monitor improvement in animal husbandry. The IACUC, DLAR, and investigators are invested in continuing improvement. The number of staff should be proportionate to the number of animals.

OLAW received the January 14, 2020 report which stated that one sentinel mouse died and one required treatment due to not having water. The corrective action consisted of retraining the caretaker on the conduct of daily health checks and all animal facility staff was counseled. A letter of reprimand was issued to the Executive Director of the animal care program and their supervisor.

Based on its assessment of the actions being proposed or already in place, OLAW finds them to be an acceptable approach to achieve the goal of significantly reducing or eliminating rodent deaths caused by human error. We are confident that measures such as the mock cages are a positive approach which should yield the expected results because they have been successfully applied at other institutions facing the same problem. As with similar cases, OLAW is obligated to monitor the success of the proposed program and is hereby placing the University of Pittsburgh on an enhanced reporting schedule. Under this schedule OLAW is requesting an update every two months on the first day of

the month to report success as measured by a reduction in deaths. Near misses that have been successfully caught and corrected should also be reported. Any other metrics such as the status of the mock cage program, the percentage of people trained, and any additional hires should be included. Reportable events, including deaths due to lack of food/water are to be independently promptly reported. We look forward to receiving the first report on **April 1, 2020**. Feel free to contact me should you have any questions.

cc: IACUC Chair

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Tuesday, February 18, 2020 6:52 AM

To:

Chapman, Deborah L

Subject:

RE: OLAW Case A3187-8Q

Hi Dr. Chapman,

Thanks for this information. I will adjust the calendar to ensure that we know when to expect your enhanced reporting file and will have U of Pittsburgh be set for the 15th, every 2 months. Yes, I will personally handle this but the reports should still go to olawdco@od.nih.gov (which Dr. Morse also monitors). Any other questions, just let me know.

Axel Wolff

From: Chapman, Deborah L <dlc7@pitt.edu> Sent: Friday, February 14, 2020 10:25 AM

To: Walker, Keri (NIH/OD) [C] <keri.walker@nih.gov>; Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>

Subject: Re: OLAW Case A3187-8Q

Dear Dr. Wolff,

The DLAR will start collecting the requested data immediately. The IACUC and DLAR leadership group met with the Institutional Official (IO) today. Because data will need to be collated from 9-10 separate facilities, the DLAR asked whether these reports can be submitted by the 15th of the following month, such that so that the Feb-March report would arrive to you by the 15th of April and so on.

Also the IO wanted to make sure these reports were sent to the correct person. These reports should come directly to you, right? Should they also be cc'd to Dr. Morse?

Thank you for your time.

Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

(b) (6)

From: "Walker, Keri (NIH/OD) [C]" < keri.walker@nih.gov>

Date: Thursday, February 13, 2020 at 11:16 AM To: "Huber, George A" <ghuber@pitt.edu>

Cc: Deborah Chapman < dlc7@pitt.edu > Subject: OLAW Case A3187-8Q

Dear Mr. Huber,

Attached please find Dr. Wolff's interim response to OLAW Case A3187-8Q.

If you have any questions, feel free to contact us by phone or by e-mail.

Best Regards, Keri

Keri Walker
Program Specialist (Contractor)
Office of Laboratory Animal Welfare
National Institutes of Health
6700B Rockledge Dr., Suite 2500
Bethesda, MD 20892
301-435-2390
keri.walker@nih.gov



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH

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Home Fage: http://grants.nih.gov/grants/olaw/olaw.htm

February 13, 2020

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

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Mr. George A. Huber
Vice Chancellor for Research Conduct
and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Huber.

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your January 29, 2020 response to my December 9, 2019 request for information on measures being taken to prevent rodent deaths due to lack of food/water at the University of Pittsburgh. According to the information provided, OLAW understands the following:

- The Institutional Animal Care and Use Committee (IACUC) conducted a detailed review of husbandry practices.
- The animal care and use program is committed to preventing animal deaths due to human error.
- A training program is in place for new animal caretakers who are closely supervised until considered proficient.
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- An enhanced DLAR training program has been implemented and a new Training Manager has been hired. The training will include animal care and research staff.
- Two additional training staff have also been hired.

Responses to OLAW's specific questions are as follows:

- A root cause of why the problems occurred was conducted and concluded that incidents of rodent deaths occurred in different facilities and involved different staff and supervisors. There were no repeat failures by the same staff.
- In addition to retraining, an incentive program has been established which rewards staff that identify mock cages missing food/water.

- Staff performance problems are documented in employee records and repeat violations are addressed by increasing discipline.
- 4) The institution is aware that any animal death due to human error is unacceptable and is committed to achieving 100% compliance.
- 5) The IACUC is involved in the proposed corrective actions and is requiring all animal care staff to enroll in the new training program. The IACUC will monitor improvement in animal husbandry. The IACUC, DLAR, and investigators are invested in continuing improvement. The number of staff should be proportionate to the number of animals.

OLAW received the January 14, 2020 report which stated that one sentinel mouse died and one required treatment due to not having water. The corrective action consisted of retraining the caretaker on the conduct of daily health checks and all animal facility staff was counseled. A letter of reprimand was issued to the Executive Director of the animal care program and their supervisor.

Based on its assessment of the actions being proposed or already in place, OLAW finds them to be an acceptable approach to achieve the goal of significantly reducing or eliminating rodent deaths caused by human error. We are confident that measures such as the mock cages are a positive approach which should yield the expected results because they have been successfully applied at other institutions facing the same problem. As with similar cases, OLAW is obligated to monitor the success of the proposed program and is hereby placing the University of Pittsburgh on an enhanced reporting schedule. Under this schedule OLAW is requesting an update every two months on the first day of the month to report success as measured by a reduction in deaths. Near misses that have been successfully caught and corrected should also be reported. Any other metrics such as the status of the mock cage program, the percentage of people trained, and any additional hires should be included. Reportable events, including deaths due to lack of food/water are to be independently promptly reported. We look forward to receiving the first report on April 1, 2020. Feel free to contact me should you have any questions.

Sincerely,

(b) (6)

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

cc: IACUC Chair



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

January 29, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

RE: OLAW Case 8Q

Dear Dr. Morse:

We appreciate the opportunity to respond to OLAW's inquiries pursuant to the University of Pittsburgh's November 27, 2019 letter. We are pleased that OLAW acknowledged our efforts to implement measures to maintain compliance with the PHS Policy on Humane Care and Use of Laboratory Animals. In addition to those measures, the IACUC conducted a detailed review of rodent husbandry practices this month.

The University of Pittsburgh's animal care program is significant and while our goals are to be 100% compliant, we request that the contents of the November 27th letter be reviewed in context of our program size and the period of time in question, which was the three (3) month period of April through June of 2019. We have answered your specific questions below, but would like to take this opportunity to reiterate our commitment to animal care and provide you with information about or most recent efforts to achieve our goal of 100% compliance.

Our training programs and procedures are designed to achieve zero animal losses due to errors in husbandry practices. Procedures are in place at multiple levels to mitigate errors. The training program provided by the Division of Laboratory Animal Resources (DLAR) includes hands-on training for new animal care technicians, direct oversight of new technicians prior to allowing them to independently engage in husbandry duties, and verification of successful husbandry task completion by facility supervisors until new employee proficiency is verified. Daily checking for food, water, and animal health is a critical part of this training. In addition, if a husbandry error is detected, the involved technician receives retraining, as does the entire husbandry staff of the facility, during daily meetings.

Additional husbandry oversight is provided by the DLAR staff for newly-weaned animals. Newly weaned boxes of rodents are marked by research personnel for enhanced monitoring by DLAR staff members to ensure that these animals thrive after weaning. This demarcation also serves as a double check to ensure that newly established boxes are provided with food and water.

Office of Research Protections

(b) (4) Heber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6) ghuber@pitt.edu orp.pitt.edu Brent Morse, DVM, DACLAM Page 2 January 29, 2020

We have just launched an enhanced DLAR training program (January 2020), for which the DLAR created and filled a new Training Manager position (2019). The Training Manager has been working to develop an enhanced training program for both animal care staff and investigators, which includes the implementation of additional didactic and hands-on training for research personnel and departmental technicians. With two new training staff members hired in January of 2020, this new arm of the DLAR will help the University of Pittsburgh achieve an even better level of training of research personnel and animal care staff members. We believe that additional training of all groups handling animals will help us achieve our goal of zero animal loss due to husbandry errors.

Below are the University's responses to OLAW's questions:

1) Has a root cause analysis been conducted to determine the cause of these repeat deficiencies (i.e. insufficient training, insufficient supervision, insufficient staffing)?

Yes. We evaluated the possibility of a common root cause for these incidents. The University of Pittsburgh's rodent program is spread over 10 facilities. The reported incidents involved different staff members at different facilities, each with different supervisors. These staff members have not repeated husbandry errors, which attests to the success of our retraining of individuals. These staff members have different levels of experience in our animal care and use program, such that errors do not appear to be linked to training of particular employees.

2) While retraining may be an appropriate response to address something such as use of different caging, it is not adequate when negligence results in animals dying due to lack of food/water. All staff should be aware that animals require food/water in order to survive and additional steps must be taken to ensure adequate husbandry.

We agree that basic retraining does not address this issue. That is why we are supplementing our approach by implementing a mock rodent cage program, which demonstrated success in mitigating loss. A mock rodent cage that is missing food and/or a water bottle is randomly placed in racks across the program. The day when the boxes are installed as well as the day when they are discovered by the staff will be recorded. Contests will be held between and within facilities with the facility finding the largest number of mock boxes winning an incentive and any facility that finds over 75% of the mock boxes within two days also receives an incentive. This program is designed to reinforce the amount of time it takes to recognize an issue in a rodent cage. We are confident that this initiative, together with our enhanced training programs, will help us achieve our goals.

3) Repeat instances of failing to provide food/water or failing to adequately monitor animals must be addressed with escalating sanctions for staff and supervisors.

Monitoring of staff performance by the DLAR is consistent with the University's Human Resources policies. All performance incidents are documented in employee records, and there is a progressive discipline process for all staff that is implemented when errors occur following retraining. It is of note that none of the husbandry incidents included in the November 27th letter were associated with one individual staff member, indicating that our retraining program is effective.

Brent Morse, DVM, DACLAM Page 3 January 29, 2020

4) OLAW realizes that seven noncompliant fatal food/water issues over several months may not appear to be of great magnitude in a large program, however such failures constitute a serious animal welfare concern and steps must be taken to prevent them throughout the program.

We agree that while the report represented .0002% of the rodent boxes maintained during the three-month period, our target is 0% and we are working very hard to achieve that goal. We have outlined the efforts we have and plan to take to become 100% compliant. We consider all animal loss to be very serious and are confident that our hiring of a training manger and two trainers to implement an enhanced training program, along with initiatives to focus attention to detail, will allow us to achieve our goal of zero animal loss due to husbandry errors.

5) Provide information on how the Institutional Animal Care and Use Committee plans to address the matter program wide to include animal care staff, technicians, laboratory staff, veterinarians, investigators, supervisors, and facility managers.

The IACUC Compliance Office shared the outcomes of an independent investigation of animal husbandry practices with the full IACUC at its monthly meeting on January 27, 2020 and a pathway moving forward to address enhancing staff training. Beginning in February, all animal care staff, regardless of length of employment, will be required to enroll in the new training program referenced above. The IACUC will monitor the program's success in improving animal husbandry at monthly meetings and will recommend changes as necessary. The IACUC emphasized that IACUC, DLAR, and investigators continue to work cohesively to ensure the success of the program. The IACUC also recommended that the University ensure that its staffing numbers maintain proportionate to the size of our animal program.

Sincerely,

(b) (6)

George A. Huber

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Thursday, February 13, 2020 7:17 AM

To:

(b) (6

Subject:

RE: OLAW report

Thank you for this report,

(b) (6) I will respond soon.

Axel Wolff

From:

(b) (6)

Sent: Thursday, February 13, 2020 7:06 AM

To: Chapman, Deborah L <dlc7@pitt.edu>; Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>; Huber, George A

<ghuber@pitt.edu>
Subject: OLAW report

Attached is our email containing the response. Please let us know if you need something more than this. Thank you.

(b) (6)

From: Chapman, Deborah L < dlc7@pitt.edu > Sent: Thursday, February 13, 2020 7:00 AM

To: Wolff, Axel (NIH/OD) [E] < wolffa@od.nih.gov >; Huber, George A < ghuber@pitt.edu >;

(b) (6)

57.5

Subject: Re: OLAW report

Dear Dr. Wolff,

The full IACUC met on January 27th and our Institutional Official (cc'd here) submitted a response either on the 28th or the 29th. I am also cc'ing his office so that they can send the letter directly to you.

Sorry that the letter did not reach you.

Debbie

Deborah L. Chapman, Ph.D.

Associate Professor

Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh

102 Life Sciences Annex

Fifth & Ruskin Avenues

Pittsburgh, PA 15260

(b) (6)

From: "Wolff, Axel (NIH/OD) [E]" <wolffa@od.nih.gov>

Date: Thursday, February 13, 2020 at 6:50 AM

To: Deborah Chapman < dlc7@pitt.edu>

Subject: OLAW report

Hello Dr. Chapman,

Please submit a response regarding the actions being taken to address prevention of rodent deaths due to lack of food/water at the University of Pittsburgh. We have received another report of deaths due to lack of water on January 14, 2020. If your IACUC has not fully developed plan, then just send an interim one.

Thank you.

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

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Thursday, February 13, 2020 7:02 AM

To:

Chapman, Deborah L

Subject:

RE: OLAW report

Thanks for the quick response, Dr. Chapman. I'll keep a watch out for the report.

AW

From: Chapman, Deborah L <dlc7@pitt.edu> Sent: Thursday, February 13, 2020 7:00 AM

To: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>; Huber, George A <ghuber@pitt.edu>;

(b) (6)

(b) (6)

Subject: Re: OLAW report

Dear Dr. Wolff,

The full IACUC met on January 27th and our Institutional Official (cc'd here) submitted a response either on the 28th or the 29th. I am also cc'ing his office so that they can send the letter directly to you.

Sorry that the letter did not reach you.

Debbie

Deborah L. Chapman, Ph.D.

Associate Professor

Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

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From: "Wolff, Axel (NIH/OD) [E]" <wolffa@od.nih.gov>

Date: Thursday, February 13, 2020 at 6:50 AM

To: Deborah Chapman < dlc7@pitt.edu>

Subject: OLAW report

Hello Dr. Chapman,

Please submit a response regarding the actions being taken to address prevention of rodent deaths due to lack of food/water at the University of Pittsburgh. We have received another report of deaths due to lack of water on January 14, 2020. If your IACUC has not fully developed plan, then just send an interim one.

Thank you.

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



December 9, 2019

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
Faosimile: (301) 402-7065

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 8Q]

Mr. George A. Huber
Vice Chancellor for Research Conduct
and Compliance
University of Pittsburgh

(b) (4) Hieber Building
3500 Fifth Avenue
Pittsburgh, PA 15213

Dear Dr. Huber,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your November 27, 2019 letter reporting seven serious deviations from the provisions of the *Guide for the Care and Use of Laboratory Animals* at the University of Pittsburgh. According to the information provided, OLAW understands the following about the incidents and the corresponding corrective actions:

 Two mice died due to lack of water caused by using the wrong cages on an automatic watering rack which prevented the mice from reaching the lixits. Nine pups and one adult survived. The cages had been incorrectly marked, thus leading to the dehydration deaths.

Corrective actions: The surviving mice were given water, diet gel, and were monitored. The animal caretaker was retrained on which mouse cages to use on which racks and the cage wash technician was trained on the various types of mouse cages, how to mark them, and how they are placed on racks.

 Eight mice died due to lack of food. The animals had been weaned and placed into new cages without food and the animal care staff failed to identify the problem during daily health checks.

Corrective actions: The husbandry staff was retrained and monitored. The laboratory's standard operating procedure for weaning was revised to require notification of a supervisor following weaning to verify provision of food/water.

 Two mice died due to lack of food. Food had not been added following a cage change and the problem was not identified by husbandry staff during daily health checks.

Corrective actions: The caretaker responsible was retrained on cage changing and health checks.

4) Three of five mice died due to lack of food and the problem was not identified during daily health checks.

Corrective actions: The surviving mice were given food and were monitored. The husbandry staff was retrained and observed performing health checks. The investigator modified that food hoppers to accommodate the experimental powdered food.

5) Two mice died of dehydration due to a missing water bottle. A laboratory member had moved the cage to the wrong rack and the problem was not identified during daily health checks.

Corrective actions: The animal caretakers were retrained and new laboratory staff will be counseled on ensuring food/water for all animals.

6) A mouse died because it had crawled into the feeder during cage change and could not access the water.

Corrective actions: The animal caretaker was retrained on cage changing, health checks, and was monitored. All staff was counseled on this incident.

7) One dead and one live mouse were found in a cage without food. The mice had been weaned but not given food and the problem was not identified during daily health checks.

Corrective actions: The surviving mouse was given food mush, the animal caretaker for the room was retrained, all facility caretakers were counseled, the laboratory member responsible was retrained on weaning, and the facility manger was counseled.

 In each situation, a letter of reprimand was issued to the Attending Veterinarian, the Principal Investigator, and their supervisors.

Based on its assessment of these explanations, OLAW understands that measures have been implemented in each case to address and correct the problem. While OLAW concurs with overall actions taken by the institution to comply with the PHS Policy on Humane Care and Use of Laboratory Animals, the ongoing nature of these husbandry failures is of concern to this Office. Before potentially placing the University of Pittsburgh on an enhanced reporting schedule, please address the following:

- 1) Has a root cause analysis been conducted to determine the cause of these repeat deficiencies (i.e., insufficient training, insufficient supervision, insufficient staffing)?
- 2) While retraining may be an appropriate response to address something such as use of different caging, it is not adequate when negligence results in animals dying due to lack of food/water. All staff should be aware that animals require food/water in order to survive and additional steps must be taken to ensure adequate husbandry.
- Repeat instances of failing to provide food/water or failing to adequately monitor animals must be addressed with escalating sanctions for staff and supervisors.
- 4) OLAW realizes that seven noncompliant fatal food/water issues over several months may not appear to be of great magnitude in a large program, however such failures constitute a serious animal welfare concern and steps must be taken to prevent them throughout the program.
- 5) Provide information on how the Institutional Animal Care and Use Committee plans to address the matter program wide to include animal care staff, technicians, laboratory staff, veterinarians, investigators, supervisors, and facility managers.

Please provide any and all information on the steps being taken to prevent animal deaths due to lack of food/water by **January 6, 2020**. Upon evaluation of the proposed plan and schedule, this Office will determine which additional steps need to be taken to ensure compliance. Feel free to contact me should you have any questions.

Page 2 - Dr. Huber December 9, 2019 OLAW Case A3187-8Q

Sincerely,

(b) (6)

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

cc: IACUC Chair



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

November 27, 2019

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (IACUC) (Assurance number D16-00118), I am writing to report several incidents that occurred over the course of the past year in our animal facilities. Notification of the incidents was provided to the IACUC in August and September. They are described below, followed, for the sake of clarity, by the corrective action plan for the incident, as well as whether an involved investigator receives NIH or NSF funding.

- On March 26, 2019, a two mouse boxes in an auto water cage rack were discovered with a collective total of one adult mouse, two deceased adult mice, and nine surviving mouse pups. It was determined that when the cages were changed on March 23 and 24, 2019, although the lixits in both boxes were functioning properly, the technician inserted the incorrect mouse boxes when doing the room change, and the lixit was higher than the adult mice could reach. This error was the result of the cages being mismarked. The surviving mouse pups were provided diet gel and water and monitored. The surviving adult mouse was provided diet gel and water and monitored but died the following day.
 - The animal care technician involved was retrained on the proper style of boxes to use for each rack.
 - The cage wash technician involved was retrained on the different types of mouse cages and how each are to be placed and marked following washing.
- On April 14, 2019, two boxes totaling 8 dead mice were found without access to food. The animals had been weaned up to two days earlier, placed in boxes, but not provided with food. Animal care technicians failed to notice the lack of food during their rounds.
 - The technicians involved in performing daily room checks were retrained, observed performing box checks, and spot checked for several days.
 - The investigator will update his lab's standard protocol for weaning to include an email from whomever performed the weaning to a supervisor, who will ensure that each new box has been handled appropriately, including having food provided.

Office of Research Protections

(b) (4) Hleber Bullding 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6) ghuber@pltt.edu orp.pitt.edu The investigator's research is supported by the following NIH grants:
5R01DK109907-04 BRANCHED CHAIN ACYL-COA METABOLISM
AND DISEASE

5R01DK078775-12 INBORN ERRORS OF LONG CHAIN FAT METABOLISM

- On May 12, 2019, a box containing two deceased adult mice were found without access to
 food during morning room checks. The box had been changed on May 6, 2019 and it was
 assumed that no food was added at the time of the box change. The lack of food had been
 missed by several technicians doing daily room checks.
 - The animal care technician involved was retrained on performing box changes and performing daily room checks.
- On May 23, 2019, five mice were found without access to food. Three of the mice were dead.
 Upon discovery, the surviving mice were provided with food by animal care staff and monitored for seventy-two hours.

 The technicians involved in performing daily room checks were retrained, observed performing box checks, and spot checked for several days.

- o The investigator has outfitted the in-cage food containers with a cover with small holes in order to allow the mice access to the special powdered food required for the study and prevent food spilwlage if the container is overturned.
- o The investigator's research is supported by the following NIH grant:
 5R01CA174713-05 CONTROL OF METABOLISM AND ENERGYSENSING PATHWAYS BY C-MYC
- On June 3, 2019, two adult mice were found dead in their cages and without access to water.
 The cage was found on a water bottle cage rack but missing a water bottle. It was determined
 that a member of the investigator's staff moved the box to the wrong rack on May 30, 2019.
 Animal care technicians did not notice that the water bottle was missing for four days.
 - The event and retraining of staff was discussed at a morning meeting of animal facility staff.
 - o To avoid any such mishaps in the future, this event will be highlighted to any new laboratory staff being trained to manage animals. The investigator will explain to new staff the need for vigilance and thoroughness in their working with experimental animals.
 - o The investigator's research is not supported by NIH grants.
- On June 14, 2019, a box on an auto water rack containing one deceased adult mouse was
 discovered during a routine cage change. It was assumed that the mouse crawled into the
 feeder during the last cage change on June 7, 2019. No other mice were affected.
 - o The technician involved was retrained on performing OptiMice cage changes and ensuring the food hopper is full to prevent mice from climbing into the hopper during cage changes. The technician was observed performing cage changes and retrained on daily box checks.
 - The event and preventative actions were discussed with all personnel during a morning meeting.

- On June 27, 2019, a box containing two recently weaned mouse was found without access
 to food. One of the pups was dead. Upon discovery, animal care staff provided mush to
 the surviving pup daily for two days. The animals had been weaned by the investigator's
 staff two days earlier, placed in boxes, but not provided with food. DLAR technicians
 did not notice the lack of food in the box for two days.
 - o The technician performing daily room checks was retrained.
 - The situation was reviewed and discussed with all facility animal care technicians.
 - o To prevent this from occurring again, the investigator reviewed the staff members' process for weaning, including double checking each box for food before it is put on the rack.
 - Additionally, the investigator discussed the situation with the facility manager who oversees the holding room.

The University of Pittsburgh IACUC reviewed and accepted the investigator's corrective action plan (CAP), which are described after each item above.

For each incident, the IACUC has levied the following sanctions:

 A letter of reprimand was sent to the Attending Veterinarian, to each Principal Investigator, and their supervisors regarding these violations. The letters have been placed in our files as evidence of a violation.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,	(b) (6)
George A. Huber	

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Thursday, December 12, 2019 6:48 AM

To:

Chapman, Deborah L

Subject:

RE: Initial response for A3187-8Q

Yes, Dr. Chapman, we can certainly extend the response deadline to allow your committee to develop a thorough response to a serious issue. I will place your request in the case file and look forward to receiving a final or interim report before the end of January.

Axel Wolff

From: Chapman, Deborah L <dlc7@pitt.edu>
Sent: Wednesday, December 11, 2019 3:16 PM
To: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>
Subject: FW: Initial response for A3187-8Q

Hello Dr. Wolff.

We received your letter regarding OLAW case 8Q (attached) on Monday only after our Dec. full IACUC meeting had ended. This letter requires at least one response requiring input from the full IACUC committee. Your letter requests a response by January 6, 2020. Is it possible to extend that deadline until after the next full committee meeting, which is scheduled for Jan. 27, 2020? Please let me know if you would like to discuss this further.

Sincerely, Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

(b) (6)

From: "Ward, Joan (NIH/OD) [E]" <wardjoa@od.nih.gov>

Date: Monday, December 9, 2019 at 2:19 PM

To:

(b) (6)

Cc: Deborah Chapman < dlc7@pitt.edu > Subject: Initial response for A3187-8Q

Dear Dr. Huber,

Attached please find Dr. Axel Wolff's initial response to OLAW Cases A3187-8Q.

If you have any questions, feel free to contact us by phone or by e-mail.

Best Regards,

Joan

Joan Ward
Program Specialist
Office of Laboratory Animal Welfare
National Institutes of Health
6700B Rockledge Dr., Suite 2500
Bethesda, MD 20892
301-496-7163
wardjoa@od.nih.gov

From:

Chapman, Deborah L <dlc7@pitt.edu>

Sent:

Thursday, December 12, 2019 8:54 AM

To:

Wolff, Axel (NIH/OD) [E]

Subject:

Re: Initial response for A3187-8Q

Thank you! I don't want to rush responses and not have the full committee's opinions! Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

(b) (6)

From: "Wolff, Axel (NIH/OD) [E]" <wolffa@od.nih.gov>

Date: Thursday, December 12, 2019 at 6:47 AM

To: Deborah Chapman < dlc7@pitt.edu > Subject: RE: Initial response for A3187-8Q

Yes, Dr. Chapman, we can certainly extend the response deadline to allow your committee to develop a thorough response to a serious issue. I will place your request in the case file and look forward to receiving a final or interim report before the end of January.

Axel Wolff

From: Chapman, Deborah L <<u>dlc7@pitt.edu</u>>
Sent: Wednesday, December 11, 2019 3:16 PM
To: Wolff, Axel (NIH/OD) [E] <<u>wolffa@od.nih.gov</u>>
Subject: FW: Initial response for A3187-8Q

Hello Dr. Wolff.

We received your letter regarding OLAW case 8Q (attached) on Monday only after our Dec. full IACUC meeting had ended. This letter requires at least one response requiring input from the full IACUC committee. Your letter requests a response by January 6, 2020. Is it possible to extend that deadline until after the next full committee meeting, which is scheduled for Jan. 27, 2020? Please let me know if you would like to discuss this further.

Sincerely, Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

(b) (6)

From: "Ward, Joan (NIH/OD) [E]" <wardjoa@od.nih.gov>

Date: Monday, December 9, 2019 at 2:19 PM

To: (b) (

Cc: Deborah Chapman < dlc7@pitt.edu > Subject: Initial response for A3187-8Q

Dear Dr. Huber,

Attached please find Dr. Axel Wolff's initial response to OLAW Cases A3187-8Q.

If you have any questions, feel free to contact us by phone or by e-mail.

Best Regards, Joan

Joan Ward Program Specialist Office of Laboratory Animal Welfare National Institutes of Health 6700B Rockledge Dr., Suite 2500 Bethesda, MD 20892 301-496-7163 wardjoa@od.nih.gov

Morse, Brent (NIH/OD) [E]

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OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, November 27, 2019 1:25 PM

To:

(b) (6) OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for providing these reports

(b) (6) 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

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:

(b) (6)

Sent: Wednesday, November 27, 2019 12:58 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (6)

From:

Wolff, Axel (NIH/OD) [E]

Sent:

Friday, October 9, 2020 7:52 AM

To:

Chapman, Deborah L

Subject:

RE: Preliminary report

Thank you for this report, Dr. Chapman. Although the cause of the deaths is different from other reports, this case will be added to file A3187-8Q which is the enhanced reporting document monitoring animal deaths due to lack of food/water. The response will be incorporated in the reply to the ongoing status reports.

Axel Wolff

From: Chapman, Deborah L <dlc7@pitt.edu> Sent: Tuesday, October 6, 2020 11:41 AM

To: Wolff, Axel (NIH/OD) [E] <wolffa@od.nih.gov>

Subject: Preliminary report

Institute: University of Pittsburgh

Assurance number: A3187-01 (legacy assurance number) and D16-00118 (current number)

Dear Dr. Wolff,

I wanted to alert you to an event that occurred in one of our facilities back in July. This is a late report and I apologize for this. The report was submitted from the facility on time but was misplaced in an avalanche of e-mails over the summer. Fortunately, this oversight was caught by a DLAR supervisor who brought it to the DLAR director who then submitted it to me last week. This incident still needs to go to our full committee thi month (October 19th) to vote on reportability and to deliberate the Corrective Action Plan provided by the DLAR. You will then receive an officially letter from our new Institutional Official, Dr. Yates.

This incident involving thirteen (13) boxes of mice, for a total of fifty two (52) adult mice, twenty nine (29) mice were deceased and twenty three (23) mice that survived. On July 27, 2020 a DLAR technician conducted a semiannual water line replacement on the rodent rack in question. Once the line was replaced the technician checked the lixit to witness that there was water being provided to the mouse boxes. When the room underwent a box change on Thursday, July 30, 2020, 29 mice were found deceased in 13 boxes on one rack. While the waterline appeared to be properly connected, it was not and water was not being delivered to the rack. Because rodent racks provide water based on gravity, and empty from the top down, the top rows are the first to loss water when there is an error, or problem with water delivery. These top rows are the positions in which the affected boxes were located. A senior DLAR technician diagnosed the problem, and the surviving mice were provided mush and monitored for 48hrs without further health issues.

An approved corrective action plan will be detailed in the official IO letter that will be sent later this month. This incident will also be included in the enhanced monitoring report (Case A3187-8Q) to you which we will submit by October 15th.

Please let me know if you need additional information at this time.

Sincerely,

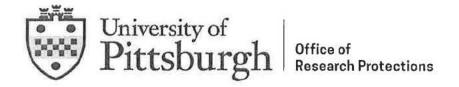
Debbie

Deborah L. Chapman, Ph.D. Associate Professor Department of Biological Sciences

Chair, Institutional Animal Care and Use Committee

University of Pittsburgh 102 Life Sciences Annex Fifth & Ruskin Avenues Pittsburgh, PA 15260

(b) (6)



(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6)

vcorp@pitt.edu orp.pitt.edu

George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy & Management

September 15, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its July 20, 2020 meeting.

On June 16, 2020, six boxes containing a total of 13 adult mice were found in the animal facility without access to water. Eight of the mice were deceased. The surviving mice were immediately provided with fluids and water. The technician making this discovery determined that the lixits supplying the boxes were not working correctly, even though the water supply line to the rack was connected. After she disconnected and then reconnected the line, the lixits began working again. Given the boxes were located on different rows and columns on the rack, and the DLAR technician reported that the mice were healthy the day before, no direct cause of the event could be determined.

As a preventative measure, all of the lixits on the rack have been replaced.

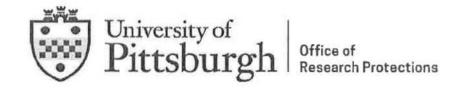
Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (б)

George A. Huber

¹ PHS Policy IV.C.1.d



(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6)

vcorp@pitt.edu orp.pitt.edu

George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy & Management

September 15, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its July 20, 2020 meeting.

On May 7, 2020, one box containing three adult mice was found in the animal facility without access to food. Only one mouse survived and was found to be lethargic. The surviving mouse was provided with diet gel, monitored for twenty-four hours and was found to be bright, alert and responsive the next day. Our records show that the box was changed on May 1, and either was not provided food at this time or all of the food was consumed between May 1 and May 7. Although DLAR personnel performed daily checks in the room, the lack of food in the box was not detected.

The University of Pittsburgh IACUC reviewed and accepted the DLAR Director's corrective action plan (CAP), which consisted of the following items:

- 1. The facility supervisor retrained all personnel on performance standards with room checks.
- The facility supervisor shadowed employees while performing rounds to ensure they were performing room checks as required.

The IACUC has levied the following sanctions:

A letter of reprimand was sent to the DLAR Director and his supervisor regarding this
event. This letter has been placed in our files.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 September 15, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

George A. Huber

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, September 16, 2020 7:36 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports, (b) (6) I will place the 2 reports regarding rodents deaths due to lack of food/water in file A3187-8Q and respond upon receipt of the ongoing status report under enhanced reporting. We will respond to the third report soon.

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

From:

(b) (6)

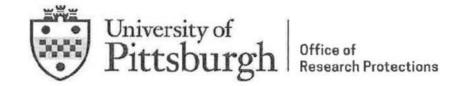
Sent: Tuesday, September 15, 2020 1:07 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.





(b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6)

ghuber@pitt.edu orp.pitt.edu

George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy & Management

July 20, 2020

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its June 15, 2020 meeting.

On May 8 2020, a box containing one surviving adult mouse and four deceased adult mice was found in the animal facility without access to water. The surviving mouse was provided with supportive care, but was found deceased the next day.

The wrong style of box for the holding rooms in the particular corridor was used, and consequently could not be properly seated on the automatic water rack. A review showed that the correct cage was used at the time of the last cage change by animal facility staff, and thus the direct cause of this event could not be determined.

As a preventative measure, the IACUC recommended that animal facility personnel review the different cages and racks used in the animal facility so that personnel understand which racks and cages are compatible.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

	(b) (6
George A. Huber	

¹ PHS Policy IV.C.1.d

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Wednesday, July 22, 2020 9:26 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for this report, (b) (6) I will place it in file A3187-8Q, the ongoing case monitoring food/water problems, and will respond upon receipt of the next status update.

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

From:

(b) (6)

Sent: Monday, July 20, 2020 11:59 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: University of Pittsburgh

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (б)



George A. Huber, JD, MSIE, MSSM Vice Chancellor for Research Protections Professor of Health Policy and Management

January 14, 2020

Office of Research Protections

(b) (4) Hieber Bullding 3500 Fifth Avenue Pittsburgh, PA 15213 (b) (6) ghuber@pitt.edu orp.pitt.edu

12/3/19

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to report an incident of non-compliance that was reviewed by the University's Institutional Animal Care and Use Committee (IACUC) at its December 9, 2019 meeting.

On October 23, 2019, it was determined that one box of two sentinel mice was not provided with water. One mouse was deceased. The surviving mouse was immediately provided with subQ fluids, moistened food pellets and water.

The University of Pittsburgh IACUC reviewed and accepted the facility executive director's corrective action plan (CAP), which consisted of the following items:

- 1. The animal care technician was retrained on daily husbandry checks.
- The event was reviewed with animal facility staff at a staff meeting. This included a refresher on daily husbandry checks.

The IACUC has levied the following sanctions:

 A letter of reprimand was sent to the Executive Director of the animal care program, and their supervisors regarding this incident of non-compliance. The letter has been placed in our files as evidence of the same.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM Page 2 January 14, 2020

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

George A. Huber

Morse, Brent (NIH/OD) [E]

From:

OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Thursday, January 16, 2020 8:39 AM

To:

(b) (6) OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: Reportable Event Notice

Thank you for providing this report

(b) (6) 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:

(b) (d

Sent: Wednesday, January 15, 2020 3:31 PM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: Reportable Event Notice

Please review the attached correspondence forwarded on behalf of George A. Huber, Vice Chancellor for Research Protections. Thank you.

(b) (6)



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
Itome 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

January 14, 2022

Re: Animal Welfare Assurance #A3187-01 [OLAW Case 9P]

Dr. Bill Yates
Acting Vice Chancellor for Research Protections
University of Pittsburgh
3500 Fifth Avenue, (6) (4) Hieber Building
Pittsburgh, PA 15213

Dear Dr. Yates,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your December 20, 2021 letter reporting an instance of noncompliance with the PHS Policy on Humane Care and Use of Laboratory Animals at the University of Pittsburgh. This letter had not been preceded by a preliminary report to OLAW.

According to the information provided, this Office understands that the University of Pittsburgh Animal Care and Use Committee (ACUC) determined that instances of noncompliance occurred with respect to: mice lacking access to food. The final report states on October 18, 2021, three boxes with 8 adult mice were discovered in the animal facility without access to food. Seven animals were found dead, a surviving mouse was provided supportive care, but ultimately was euthanized by laboratory personnel. It is understood the investigator's lab personnel did not provide food when the boxes were setup on October 15th. Also, animal facility staff did not identify the lack of food until October 18th. The following corrective action plans were provided by the animal facility and investigator and approved by the IACUC:

- All facility staff members were retrained on the proper way to conduct health, food, and water checks. Each check is to be completed separate from the others so the tech can concentrate on one item at a time.
- Since the accidental loss, the investigator has been placing "Recently Weaned" tags on each cage
 that is weaned.
- The investigator has created a task checklist, including food supply, for animal breeding work so that tasks aren't missed.
- The investigator will assign two workers (rather than one) to execute all animal work.

It is noted that this research is supported by PHS funding. Based on its assessment of this explanation, OLAW understands that the University of Pittsburgh has implemented appropriate measures to correct and prevent recurrences of these problems and is now compliant with provisions of the PHS Policy.

We appreciate being informed of these matters and find no cause for further action by this Office.

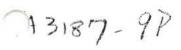
Page 2 - Dr. Yates January 14, 2022 OLAW Case A3187-9P

Sincerely,

Jacquelyn Digitally signed by Jacquelyn T. Tubbs -S Date: 2022.01.14 15:01:58 -05'00'

Jacquelyn Tubbs, DVM, DACLAM Senior Animal Welfare Program Specialist Division of Compliance Oversight Office of Laboratory Animal Welfare

cc: IACUC contact





Bill J. Yates, PhD Vice Chancellor for Research Protections Professor of Otolaryngology & Neuroscience & Clinical and Translational Science (b) (4) Hieber Building 3500 Fifth Avenue Pittsburgh, PA 15213 Phone: (b) (6)

Fax: Email: vcorp@pitt.edu

December 20, 2021

Brent Morse, DVM, DACLAM NIH Office of Laboratory Animal Welfare Rockledge One, Suite 360 6705 Rockledge Drive – MSC 7982 Bethesda, MD 20892-7982

Dear Dr. Morse:

As the Institutional Official responsible for the University of Pittsburgh's Animal Care and Use Program (Assurance number D16-00118), I am writing to advise your office of a reportable incident¹.

On October 18, 2021, three boxes containing eight adult mice were found in the animal facility without access to food. Seven of the mice were deceased upon discovery. The surviving mouse was provided with supportive care and was later humanely euthanized by the investigator's laboratory personnel. The investigator's lab personnel did not provide food when the boxes were set up on October 15 and animal facility staff did not detect the lack of food until October 18.

The IACUC approved the animal facility and the investigator's corrective action plans, which included the following items:

- All facility staff members were retrained on the proper way to conduct health, food, and water checks. Each check is to be completed separate from the others so the tech can concentrate on one item at a time.
- Since the accidental loss, the investigator has been placing "Recently Weaned" tags on each cage that is weaned.
- 3. The investigator has created a task checklist, including food supply, for animal breeding work so that tasks aren't missed.
- 4. The investigator will assign two workers (rather than one) to execute all animal work.

¹ PHS Policy IV.C.1.d

Brent Morse, DVM, DACLAM December 20, 2021 Page 2

The investigator's research is supported by the following NIH grants:

R01-HL142997-03

Epigenetic

Modulation

in

Septic

Immunosuppression

R01-HL149719-02

Role of TACC2 in smoking-induced COPD

The IACUC levied the following sanction:

• A letter of reprimand was sent to the investigator and his supervisors regarding this event. This letter has been placed in our files.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

(b) (6)

Bill J. Yates, PhD

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OLAW Division of Compliance Oversight (NIH/OD)

Sent:

Monday, December 20, 2021 8:15 AM

To:

(b) (6)

Cc:

OLAW Division of Compliance Oversight (NIH/OD)

Subject:

RE: University of Pittsburgh

Thank you for these reports,

(b) (6) We will send responses soon.

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

From:

(b) (6)

Sent: Monday, December 20, 2021 8:01 AM

To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>

Subject: [EXTERNAL] University of Pittsburgh

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and are confident the content is safe.

Please review the attached correspondence forwarded on behalf of Bill J. Yates, PhD, Vice Chancellor for Research Protections. Thank you.

(b) (6)