



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

May 15, 2019

Re: Animal Welfare Assurance  
A3564-01 [OLAW Case G]

Dr. Joh Koker  
Interim Provost and Vice Chancellor  
University of Wisconsin-Oshkosh  
800 Algoma Boulevard  
Oshkosh, WI 54901-8622

Dear Dr. Koker,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your May 10, 2019 letter reporting two adverse events involving gerbils at the University of Wisconsin- Oshkosh (UWO), following up on an initial telephone report on April 16, 2019. According to the information provided, OLAW understands the following:

- 1) On two separate occasions, a gerbil was placed into an anesthetic induction box and died after exposure to isoflurane. After contacting the manufacturer, it was determined that the machine needed a firmware update.

Corrective action: Use of the anesthetic chamber was stopped, the firmware was updated, the system was tested, two gerbils were successfully anesthetized and recovered, the standard operating procedure was updated with detailed instructions, and the laboratory was allowed to resume animal activities.

- 2) Five breeding pairs of gerbils had been shipped from a vendor to UWO but due to a delay, some pups were born in transit and died or were cannibalized. Airline employees had forgotten to load the shipping boxes onto the connecting flight.

Corrective action: The gerbils were allowed to settle in and the females accepted the pups. The matter was reported to USDA, the airline, and the vendor. Future gerbil shipments will request pregnant females which are earlier in gestation.

Based on its assessment of these explanations, OLAW understands that measures have been taken in each situation to correct and prevent recurrence of the problem. OLAW concurs with the actions taken by UWO to comply with the PHS Policy on Humane Care and Use of Laboratory Animals.

Sincerely,

(b) (6)

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

cc: IACUC Chair  
Robert Gibbens, D.V.M., USDA-APHIS-AC



To: Office of Laboratory Animal Welfare  
Division of Compliance Oversight  
Rockledge One, Suite 360, MSC 7982  
6705 Rockledge Drive  
Bethesda, MD 20892-7982

Date: May 10, 2019

Re: Final Report of Noncompliance

**INSTITUTION:** University of Wisconsin Oshkosh

**ASSURANCE NUMBER:** D16-00342 (Legacy: A3564-01)

**FUNDING COMPONENT:** NIH-NIAIDS Subcontract with University of Georgia, Subcontract ID: SUB00001922

UW Oshkosh, in accordance with Assurance D16-00342 and PHS Policy IV.F.3., provides this final report of noncompliance regarding two recent incidents with Mongolian gerbils:

- 1) Anesthetic issues with SomnoSuite Anesthesia Machine resulting in two gerbil deaths, and
- 2) Gerbil transportation delay resulting in gerbil pup deaths

A preliminary report was submitted on April 16, 2019 via telephone to Dr. Axel Wolff in the OLAW Division of Compliance Oversight by (b) (6)

**First Incident Description:**

On March 28, 2019, a gerbil was placed in the induction box using the SomnoSuite anesthesia machine with 5% isoflurane following the researcher laboratory's protocol. Following induction, the gerbil was moved to the nose cone and his breathing slowed significantly. The gerbil was removed from the nose cone, allowed oxygen and resuscitation efforts were made. The gerbil stopped breathing. The IACUC and Attending Veterinarian were notified following the incident. The Attending Veterinarian conducted a post-mortem exam and determined that the gerbil died of pulmonary congestion and heart failure, consistent with reaction to anesthetic. The incident was placed on the upcoming meeting agenda for IACUC discussion. On April 8, 2019, another gerbil was anesthetized using the SomnoSuite according to the researcher's protocol and the gerbil experienced depressed breathing during the induction process. This gerbil was placed on the nose cone with 100% oxygen and resuscitation efforts were made but the gerbil did not make it. The IACUC and Attending Veterinarian were notified and the research lab voluntarily suspended procedures involving anesthetizing animals using the SomnoSuite and scheduled a conference call with SomnoSuite. The Attending Veterinarian conducted a post-mortem exam and determined that the gerbil died of pulmonary congestion and heart failure, consistent with reaction to anesthetic. The incident was added to the upcoming IACUC meeting agenda. On April 11, 2019, the research lab members, laboratory animal manager, and compliance officer had a conference call with a Clinical Research Scientist from Somnosuite to discuss the recent issues experienced. During that phone call it was determined that a SomnoSuite firmware update was needed and should resolve the mortality issues that were experienced during the priming of the syringe. The current firmware required re-priming of the system prior to use which may have caused an influx of anesthetic gas into the induction chamber. It was likely that the notice on the firmware update was sent to the previous lab manager who is no longer at University of Wisconsin Oshkosh (UWO). That day the firmware update was completed and a follow-up video conference was scheduled for the next day to go through all the functions of the SomnoSuite and the settings to ensure everything is set up properly. The representative informed us that the SomnoSuite does not need any calibration or annual maintenance, but a Zero Sensor test can be conducted to ensure everything is working properly. A

Zero Sensor test was conducted during the meeting and the representative explained the steps to set up a profile for each species at UWO that currently undergo anesthesia procedures.

#### **IACUC Follow-up to First Incident:**

The IACUC discussed the incident at the April 17, 2019 meeting and was satisfied with the steps taken in response to the incident. USDA was also voluntarily notified, but we were informed that equipment malfunction was not considered a recordable noncompliance. (b) (6) lab was given permission to resume procedures. Two animals currently on (b) (6) training protocol #313 were anesthetized using updated Somnosuite methods learned during the video conference. The first two animals were simply anesthetized and recovered to assess new Somnosuite process for anesthesia. In both cases, induction went well. Later that day a gerbil was anesthetized and underwent protocol procedures. The animal maintained well under anesthesia and there were no issues. The following standard operating procedure was updated and approved at the May 8, 2019 meeting to include more detailed instructions for using the SomnoSuite Anesthesia Machine: SOP #11: Anesthesia Monitoring for Small Animals. A copy of this final report was reviewed and accepted by the IACUC on May 8, 2019.

#### **Second Incident Description:**

Five breeding pairs of Mongolian gerbils arrived to UWO from Charles River Laboratories on 3/27/19 (Charles River Order #0000024731). Transportation of the gerbils from Charles River's facility was: Air transport via Delta Air Lines from New York (La Guardia) to Detroit (DTW) and then from Detroit to Appleton (ATW). Ground transport from Appleton to UWO via ground courier was contracted by Straight Shot Express. The 5 breeding pairs ordered were shipped on Monday 3/25/19 and were due to arrive to UWO on Tuesday, 3/26/19. Though it was told to us that the gerbils were to arrive on Tuesday, we were never given any kind of tracking information or a time frame for arrival. At approximately 2:00 P.M. on Tuesday, the Laboratory Animal Manager left a message with Charles River to find out when the animals would be arriving. Charles River called back and informed us that the animals were supposed to arrive to UWO around 3:20 P.M., but there was some kind of delay and they would not be arriving until Wednesday 3/27/19 around 10:00 A.M. A reason for the delay was not given, but they assured us that the animals would be kept in a temperature regulated environment until they could resume transit. On Wednesday 3/27/19, the animals arrived almost exactly at 10:00 A.M. Upon opening the animal transport container, it was discovered that, of the 5 breeding pairs, 4 had already delivered pups. One female had 9 pups with her in the box, 6 of which were dead. In addition, there was a number of other females who had between 1-3 live pups in the box with them. Because Charles River sent along cage cards with the gerbils and we could see how many litters they'd previously had and how many pups were in each litter, it's possible that the females that only had 1-3 pups with them actually gave birth to more, but cannibalized the rest. The breeding pairs were placed in their new home cages along with their pups and were left alone for ~ 1 hour. The Laboratory Animal Manager checked on them after an hour and at that time, the females appeared stress and hadn't accepted their pups. By the next morning (Thursday, 3/28/19), the females had accepted their pups and appeared less stressed. It was later discovered that the reason the gerbils arrived a day late was because the Delta Airline employees forgot to load them onto their connecting flight from Detroit to Appleton. Because of this, they had to take a later flight and the whole shipping process was delayed. A formal complaint was made to Charles River and Delta Airlines. Charles River responded that they guarantee overnight shipping but they are not responsible for airline mishaps or delayed flights and offered to credit the animals. Direct ground transportation is not an option to Wisconsin at this time. The incident was placed on the agenda for the upcoming IACUC meeting.

#### **IACUC Follow-up to Second Incident:**

The IACUC discussed this incident at the April 17, 2019 meeting. The IACUC was pleased with the follow up the research lab had already completed and thanked them for their prompt attention to the matter. (b) (6) notified USDA VMO Dr. Welch about the incident since he had mentioned during a previous visit to contact USDA if we experience issues with animal transportation. A formal complaint to USDA regarding the transportation issue was submitted online. The IACUC questioned if other gerbil vendors are available. IACUC members offered to inquire with colleagues and post the question on CompMed and the IACUC Listserv. The only other vendor identified that carries gerbils as a research model is Janvier Labs and they are located in Europe. In the future, if pregnant females are required, females earlier in gestation will be requested. UWO will also communicate closely with Charles River regarding any future shipments of live animals. A copy of this final report was reviewed and accepted by the IACUC on May 8, 2019.

UWO is committed to protecting the welfare of animals used in research and appreciates the guidance and assistance provided by OLAW in this regard. Should you have any questions or need additional information regarding this report, please contact (b) (6)

Thank you for your consideration of this matter.

Sincerely,

(b) (6)

Dr. John Koker  
Provost and Vice Chancellor for Academic Affairs  
Institutional Official for Research



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

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**From:** OLAW Division of Compliance Oversight (NIH/OD)  
**Sent:** Monday, May 13, 2019 7:21 AM  
**To:** Animal Care and Use Committee; OLAW Division of Compliance Oversight (NIH/OD)  
**Cc:** John Koker  
**Subject:** RE: Final Report: D16-00342

Thank you for providing this final report. 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

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**From:** Animal Care and Use Committee [mailto:iacuc@uwosh.edu]  
**Sent:** Friday, May 10, 2019 6:19 PM  
**To:** OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>  
**Cc:** John Koker <koker@uwosh.edu>  
**Subject:** Final Report: D16-00342

Good afternoon,

Attached is a final report from the University of Wisconsin Oshkosh regarding two recent incidents with gerbils. A preliminary report was submitted to Dr. Axel Wolff on April 16, 2019.

Please let me know if you have any questions or require additional information.

Sincerely,

(b) (6)



(b) (6)





## Initial Report of Noncompliance

By: awDate: 4/16/19Time: 12:00

Name of Person reporting: (b) (6)

Telephone #: (b) (6)

Fax #:

Email:

Name of Institution: U of Wisconsin - OshkoshAssurance number: A3564Did incident involve PHS funded activity? Yes

Funding component: \_\_\_\_\_

Was funding component contacted (if necessary): \_\_\_\_\_

What happened?

- 1) Pregnant Gerbils delayed in shipment, gave birth, babies died, eaten  
Error in shipment at airport
- 2) Gerbils died in anesthesia machine. Equipment didn't have required upgrades  
Species involved: Gerbils  
Personnel involved:  
Dates and times:  
Animal deaths: Yes, babies

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

- 1) Contacted USDA, Charles River, airline
- 2) Got necessary software to calibrate machine

Projected submission to OLAW of final report from Institutional Official:

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Case # \_\_\_\_\_