Johns Hopkins University  
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3400 N. Charles Street  
Baltimore, MD 21218

**CITATION AND NOTIFICATION OF PENALTY**

We believe that you violated the Animal Welfare Act (7 U.S.C. § 2131 et seq.) (AWA), as described below.

**Date of Alleged Violation: June 16, 2021**

9 C.F.R. § 3.80(a)(2)(ii) Primary enclosures. General requirements. Primary enclosures must be designed and constructed of suitable materials so that they are structurally sound for the species of nonhuman primates contained in them and protect the nonhuman primate from injury.

You failed to construct and maintain primary enclosures so that nonhuman primates are protected from injury.

As documented on June 17, 2021 inspection report, a deceased rhesus macaque was found entrapped in the cable used to open and close the shift door of its primary enclosure. The animal became entrapped when a clasp used to secure the cable and keep the shift door closed was positioned incorrectly creating laxity in the cable. (Site 001).

**Date of Alleged Violation: March 3, 2021**

9 C.F.R. § 2.38(f)(1) Miscellaneous. Handling. Handling of all animals shall be done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, behavioral stress, physical harm, or unnecessary discomfort.

You failed to handle animals in a manner that does not cause trauma, physical harm, or unnecessary discomfort as required.

As documented on the August 23, 2021 inspection report, on March 3, 2021, a pig was used in a cardiac study procedure. The pig was transported from recovery to its home enclosure. On March 4, 2021, Research Animal Resource Veterinary Staff observed that the pig was unable to stand on its own and the pig was euthanized. A necropsy identified that the pig sustained two broken elbows. An internal investigation identified that the pig injured itself when transitioning from the transport cage to the
home enclosure and the Senior Laboratory Technician failed to notify Veterinary Staff of the incident. (Site 003).

Date of Alleged Violation: July 30, 2021

9 C.F.R. § 2.131(b)(1) Handling of Animals. Handling of all animals shall be done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, behavioral stress, physical harm, or unnecessary discomfort.

You failed to handle animals expeditiously and carefully as possible to avoid behavioral stress, physical harm, and/or unnecessary discomfort.

As documented on the November 15, 2021 inspection report, a latch lock on a primary enclosure housing ten rhesus macaques was not completely secured. The animals escaped from their enclosure into the hallway of the facility. Nine of the ten animals were returned to their enclosure and one juvenile primates entered a drain that was uncovered for cleaning. The animal was later recovered deceased. (Site 001).

Date of Alleged Violation: September 27, 2022

9 C.F.R. § 2.33(b)(3) Attending veterinarian and adequate veterinary care. Each research facility shall establish and maintain programs of adequate veterinary care that includes daily observation of all animals to assess their health and well-being that includes a mechanism of direct and frequent communication that timely and accurate information on problems of animal health, behavior, and well-being is conveyed to the attending veterinarian.

You failed to conduct daily observation of animals and communicate issues to the attending veterinarian as required.

During the inspection that occurred on September 27, 2022, APHIS officials reviewed Laboratory study notes for Rabbit Study A. A review of the records showed insufficient documentation of daily observations following tumor implantation on August 18, 2022. The protocol required the animals to be observed for signs of distress such as lethargy, lack or response to stimuli, food and water intake, feces and urine output, respiratory distress, guarding incision, hiding in the corner, aggression, and physical examination at the incision site, but the records showed little documentation of fecal output, feed consumption and other parameters for signs of distress. Additionally, animal weights were only recorded on August 18, 2022, August 23, 2022 and August 31, 2022.
The records showed that on August 31, 2022, a rabbit did not accept treats, had decreased fecal output, and decreased energy, but the rabbit’s symptoms were not reported to the veterinary staff as indicated in the protocol. On September 1, 2022, facility personnel contacted the RAR Veterinary Staff noting lethargy and decreased fecal/urine output in the rabbit. Following examination, the rabbit was euthanized. At the time of necropsy, the body condition score was 1 of 5. (Site 003).

Date of Alleged Violation: December 7, 2022

9 C.F.R. § 2.33(b)(3) Attending veterinarian and adequate veterinary care. Each research facility shall establish and maintain programs of adequate veterinary care that includes daily observation of all animals to assess their health and well-being that includes a mechanism of direct and frequent communication that timely and accurate information on problems of animal health, behavior, and well-being is conveyed to the attending veterinarian.

You failed to conduct daily observation of animals and communicate issues to the attending veterinarian as required.

On December 7, 2022, APHIS officials observed a female baboon with a round approximately quarter sized wound located on its left heel. The baboon was observed shifting weight between the right and left feet and lifting the left foot. APHIS officials reviewed the study observation records and found that, on December 5, 2022, laboratory staff observed bilateral pressure ulcers on the animal’s feet and applied Bacitracin.

Further review of the records identified that facility personnel failed to notify RAR veterinary staff of the issue until weekly rounds on December 7, 2022. Additionally, the treatment plan implemented by the laboratory staff was not reviewed by the RAR veterinary staff until December 7, 2022.

Date of Alleged Violation: December 6, 2022

9 C.F.R. § 2.38(f)(1) Miscellaneous. Handling. Handling of all animals shall be done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, behavioral stress, physical harm, or unnecessary discomfort.

You failed to handle animals in a manner that does not cause trauma, physical harm, or unnecessary discomfort as required.

On August 26, 2022 and August 31, 2022, procedures under a
traumatic brain injury study were conducted. An investigation identified inadequate aseptic techniques, post-surgical monitoring, and failure to follow the established humane endpoint parameters. As a result, three rabbits suffered physical harm. After demonstrating significant neurological deficits, one study rabbit was euthanized. The necropsy revealed an abscess at the incision site. On September 5, 2022, a veterinary resident noticed dehiscence of the incision for a second study rabbit. A RAR veterinarian identified a third study rabbit with an infection at the incision site. All three rabbits were euthanized.

**Date of Alleged Violation: February 28, 2023**

9 C.F.R. § 2.31(d)(8) Institutional Animal Care and Use Committee (IACUC). Proposed activities and proposed significant changes in ongoing activities that have been approved by the IACUC may be subject to further appropriate review and approval by officials of the research facility.

You failed to obtain approval for proposed activities and proposed significant changes in ongoing activities.

APHIS officials reviewed Revised protocol A, dated December 20, 2021, and found that potassium chloride (KCl) would be administered at rate of 40mEq 15 minutes into cooling to effect. A review of study records indicated that Dog No. 2 was administered an intravenous bolus of KCl and went into cardiac arrest. Ultimately, the animal expired. The route of administration for the potassium chloride was not included in the approved protocol.

**Date of Alleged Violation: May 22, 2023**

9 C.F.R. § 2.31(d)(8) Institutional Animal Care and Use Committee (IACUC). Proposed activities and proposed significant changes in ongoing activities that have been approved by the IACUC may be subject to further appropriate review and approval by officials of the research facility.

You failed to obtain approval for proposed activities and proposed significant changes in ongoing activities.

On March 24, 2022, while reviewing the animal census the IACUC found that two pigs were ordered for use under a protocol that expired on March 1, 2022. A further review of the records identified that the principal investigator performed experimental procedures on one of the pigs on March 22, 2022. The other pig was not used under the expired protocol and was later transferred to another IACUC approved protocol.
The penalty for the alleged violation(s) described above is $12,300.