



## Inspection Report

UNIVERSITY OF WISCONSIN-MADISON

Customer ID: **616**

Certificate: **35-R-0001**

RESEARCH ANIMAL RESOURCES CTR.

Site: 001

DIRECTOR RESEARCH ANIMAL

ALL CAMPUS SITES

1710 UNIVERSITY AVENUE 396 ENZYME INST

Type: ROUTINE INSPECTION

MADISON, WI 53726

Date: Dec-17-2009

### 2.31 (c) (3)

#### INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

(c)(3) IACUC functions. With respect to activities involving animals, the IACUC, as an agent of the research facility, shall:.....

.....The reports must distinguish significant deficiencies from minor deficiencies. A significant deficiency is one which, with reference to Subchapter A, and, in the judgment of the IACUC and the Institutional Official, is or may be a threat to the health or safety of the animals.....

\*\*IACUC facility inspections and program reviews did not contain reasonable and specific plans for correcting deficiencies. The IACUC must include plans for correcting deficiencies and should also consider methods in the plan to prevent re-occurrence of the non-compliance.

Correct by: from this date forward

### 2.31 (d) (1) (ii)

#### INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

(d) IACUC review of activities involving animals..... (1) In order to approve proposed activities or proposed significant changes in ongoing activities, the IACUC shall conduct a review of those components of the activities related to the care and use of animals and determine that the proposed activities are in accordance with this subchapter unless acceptable justification for a departure is presented in writing;.....

.....(ii) The principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animals, and has provided a written narrative description of the methods and sources,....., used to determine that alternatives were not available;.....

\*\*Protocols #A01195, #A00810, #00664, #G00510, #V1296 contain painful procedures. There is nothing to indicate that the principal investigators had considered alternatives to potentially painful procedures that may cause more than momentary or slight pain and/or distress to the animals in the written narratives of these protocols.

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## Inspection Report

Correct by: From this date forward

**2.31** (d) (1) (viii)

### INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

(d) IACUC review of activities involving animals. (1) In order to approve proposed activities or proposed significant changes in ongoing activities, the IACUC shall conduct a review of those components of the activities related to the care and use of animals and determine that the proposed activities are in accordance with this subchapter unless acceptable justification for a departure is presented in writing:..... Further, the IACUC shall determine that the proposed activities or significant changes in ongoing activities meet the following requirements:

.....(viii) Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures;.....

\*\*In Protocol V846 there has been an unexpected high mortality rate in gerbils attributed to anesthesia. This has not been reported to the veterinary staff or to the IACUC. The research staff was not adequately trained to report incidents of this nature.

Correct by: From this date forward

**2.31** (d) (1) (ix)

### INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

(d)(1)Further, the IACUC shall determine that the proposed activities or significant changes in ongoing activities meet the following requirements:.....

.....(ix) Activities that involve surgery include appropriate provision for pre-operative and post-operative care of the animals in accordance with established veterinary medical and nursing practices.....

\*\*Protocol V1296: Under this protocol dogs undergo major survival surgeries after which they may be expected to develop acute, terminal renal failure, which did occur in at least two dogs on the study. The post-operative care for these dogs, as approved in the protocol, calls for the administration of subcutaneous fluids to the dogs postoperatively instead of intravenous fluid therapy. This post-operative treatment is not in accordance with established veterinary medical practices, and the protocol contains no scientific justification for such a departure.

Correct by: From this date forward

**2.31** (d) (7)

### INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

(7) If the IACUC suspends an activity involving animals, the Institutional Official, in consultation with the IACUC, shall review the reasons for suspension, take appropriate corrective action, and report that action with a full explanation to APHIS and any Federal agency funding that activity;.....

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\*\*Protocols L294, M1486, M1640 were suspended by the ACUC in February 2009, however, no notification was provided to APHIS by the Institutional Official regarding the reasons for suspension and the corrective actions that had been taken.

Correct by: January 10, 2010

### 2.31 (e) (3)

#### INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

.....(e) A proposal to conduct an activity involving animals, or to make a significant change in an ongoing activity involving animals, must contain the following:.....(3) A complete description of the proposed use of the animals.....

1. Review of Protocol #A01245: The protocol includes the administration of several substances by means of needle/syringe injection or with a novel medical device system. The description of the proposed use of the animals contains insufficient detail to follow exactly what procedures will be done to the animals from the beginning of the study until the study's conclusion.

2. Review of Protocol #A00810: The protocol studies cardiac electrical activity in swine. The narrative of this protocol refers to the following:

- a. Performing ablation of liver, kidney and lung as part of the study but includes no specific details.
- b. A statement about external stimulation of brain tissues but includes no specific details.
- c. The surgical training portion of the protocol is mentioned, however, there is an insufficient description of the proposed use of the animals for the training portion.

A proposal for animal use must contain a complete description of the proposed use of the animals so the IACUC can determine that the proposed activities meet the requirements outlined under 2.31 (d) (1).

Correct by: From this date forward

### 2.32 (a)

#### PERSONNEL QUALIFICATIONS.

(a) It shall be the responsibility of the research facility to ensure that all scientists, research technicians, animal technicians, and other personnel involved in animal care, treatment, and use are qualified to perform their duties. This responsibility shall be fulfilled in part through the provision of training and instruction to those personnel.....

\*\*A technician was observed inadequately restraining a non-human primate in a squeeze cage requiring her to make several attempts to administer an anesthetic via syringe. It is the responsibility of the facility to ensure that animal care staff are properly trained and qualified to perform their duties.

Correct by: From this date forward

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## Inspection Report

2.33 (b) (1)

### ATTENDING VETERINARIAN AND ADEQUATE VETERINARY CARE.

(b) Each research facility shall establish and maintain programs of adequate veterinary care that include: (1) The availability of appropriate facilities, personnel, equipment, and services to comply with the provisions of this subchapter;

\*\*In Building O, Rooms 3244A & 3244B are used for major operative survival surgical procedures. The following items were identified in these rooms after having been cleaned following surgical procedures: 1. rusty base of IV stand and shelves/side bar of steel cart; 2. hair clippings on a table; 3. drips/splatter residue on wall; 4. excessive accumulation of dirt on air vents; 5. dark colored material on front drawers of anesthesia machine. These items can interfere with effective sanitation and may compromise aseptic procedures performed in this room. It is the responsibility of the facility to ensure appropriate facilities and equipment are available as set forth in this section in order to promote the health and well-being of the animals.

Correct by December 17, 2009

2.33 (b) (2)

### ATTENDING VETERINARIAN AND ADEQUATE VETERINARY CARE.

(b) Each research facility shall establish and maintain programs of adequate veterinary care that include: (2) The use of appropriate methods to prevent, control, diagnose, and treat diseases and injuries, and the availability of emergency, weekend, and holiday care;

#### 1. Use of Chemical grade compounds

a. A bottle with a label stating "saturated Potassium Chloride", (KCL) was noted in Building T, Rm142D. It was being used to euthanize swine under protocols #A00664, A00810, and A01195.

b. Protocol #A01245 calls for the administration of "Sodium Salicylate, USP grade from Sigma" to swine as part of the proposal for animal use. The approved proposal does not contain any scientific justification for the use of a chemical grade compound when pharmaceutical grade sodium salicylate for injection is available. Non pharmaceutical grade chemical compounds must only be used when veterinary or human pharmaceutical grade products are not available or for scientific reasons with the approval of the IACUC.

#### 2. The following outdated drugs or medical supplies were identified in various locations of the facility as noted:

- a. Building I, Room109: Acetaminophen liquid, 1 oz bottle, #1, exp 11/09.
- b. Building M, Triple antibiotic ophthalmic, tube #1, exp 5/09.
- c. Building M, Room 232: Chlorhexidine solution, gallon bottle, #1, exp 6/09.
- d. Building J, Room 658: Betadine solution, gallon bottle, #1, exp 11/08; Betadine solution 32 oz bottle, #1 exp 11/06 and #1 exp 2/07; Ophthalmic lube, tube #2; exp 7/08; Lactated Ringers Solution bag 500 ml, #1, exp 4/09

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- e. Building J, Room 575: Cyprofloxacin ophthalmic, tube #1, exp 9/02; Lubricant jelly tube, #1, exp 1/85
- f. Building F, Room 142: Furosamide, 50 ml bottle, #1, exp 7/09; Lidocaine, 100 ml bottle, #1, exp 8/07; Propofol, 50 ml bottle, #4, exp 11/1/08; Ketamine, 10 ml bottle, #2, exp 4/08; Dexamethasone 4 mg/ml, 30 ml bottle, #1, exp 11/08.
- g. Building O, Room 3244: Ophthalmic lube, tube #1, exp 3/08; Nexaband solution, #1, exp 12/01.
- h. Building O, Room 3243: Plastic bottle containing brown liquid that was labeled "Povidone Iodine Solution" that did not include the exp date of the contents of the bottle.
- i. Building O, Room 243: 3.0 Maxon suture packets, #12, exp 5/09; Red top tubes, #75, exp 9/08; Sterile water for injection, 10 ml bottle, #1, exp 2/1/08,
- j. Building T, Room 142D: Sterile water for injection, 20 ml bottle, #1, exp 3/07; Halothane 250 ml bottles, #1 exp 1/04, #1 exp 3/08, #1 exp 5/09; Isoflurane 250 ml bottles, #2, exp 7/08; Pentothal 1 gm bottles, #3, exp 9/1/06; Fentanyl, 50 ml bottle, #1, exp 9/1/06; Omnipaque contrast agent, 50 ml bottles, #1 exp 10/21/06, #1 exp 7/3/09; Lactated Ringers Solution bag 1000 ml, #8 exp 1/1/07, #3 exp 7/07; 0.9% Sodium Chloride bag 1000 ml, #2 exp 5/09

The use of outdated medications may not be safe or efficacious and is not considered an acceptable standard of veterinary practice. The IACUC and attending veterinarians need to address this issue.

Correct by: From this date forward.

**2.33 (b) (3) DIRECT NCI**  
**ATTENDING VETERINARIAN AND ADEQUATE VETERINARY CARE.**

(b) Each research facility shall establish and maintain programs of adequate veterinary care that include:..... (3) Daily observation of all animals to assess their health and well-being; Provided, however, That daily observation of animals may be accomplished by someone other than the attending veterinarian; and Provided, further, That a mechanism of direct and frequent communication is required so that timely and accurate information on problems of animal health, behavior, and well-being is conveyed to the attending veterinarian.....

1. In Building P, Room 310B the following was observed: Gerbil #1 was thin with sunken flanks, had difficulty breathing with some open mouthed breathing; was wobbly and weak having been unrecognized by facility personnel. Necropsy findings revealed; "that this animal had a body condition score of 1 out of 5, the subcutis had negligible body fat and the thoracic cavity contained moderately abundant red watery pleural effusion."
2. Review of medical records for dogs #BDW8, #SRS-6, and TJG-7 on Protocol #V01296 revealed the following: All of these dogs had a major operative procedure as described in the proposal. Post-operatively dog #BDVW8's medical records contained notations that it had sub-mandibular, cervical and facial edema; #SRS-6's medical records stated this dog was not eating, was vomiting, very depressed, had edema and not producing urine; TJG-7's medical records stated this animal was very depressed, vomiting and not producing urine. There was no documentation in the animals' medical records that the changes observed in the dogs' condition were conveyed to the attending veterinarian for evaluation and assessment.

It is the responsibility of the research facility and research staff to have a mechanism of direct and frequent

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communication to ensure that problems of animal health and/or behavior are conveyed in a timely manner to the attending veterinarian for evaluation and assessment to ensure the health and well-being of the animals.

Correct by: From this day forward

### 3.2 (b)

#### INDOOR HOUSING FACILITIES.

(b) Ventilation. Indoor housing facilities for dogs and cats must be sufficiently ventilated at all times when dogs or cats are present to provide for their health and well-being, and to minimize odors, drafts, ammonia levels, and moisture condensation.....

1. Building O, Room 2429: Two dogs were being housed in this room at the time of the inspection. There was a strong odor of dog urine noted immediately upon entering the room. The enclosures did not contain urine or feces, the unoccupied enclosures in the room were clean, and there was no obvious source of the strong odor. Indoor housing facilities must be sufficiently ventilated to minimize odors. The facility needs to assess the ventilation system servicing this room to provide for the health and well-being of the dogs.

Correct by December 17, 2009

### 3.11 (c)

#### CLEANING, SANITIZATION, HOUSEKEEPING, AND PEST CONTROL.

(c) Housekeeping for premises. Premises where housing facilities are located, including buildings and surrounding grounds, must be kept clean and in good repair to protect the animals from injury, to facilitate the husbandry practices required in this subpart,.....

\*\*The air filters above the animal enclosures in Building A, Room K4/150 had an excessive accumulation of debris. No notation was found in the log to indicate the filters had been changed in the month of November. The filters should be cleaned and maintained in a manner to prevent the accumulation of debris in order to facilitate proper husbandry practices and promote the health and well being of the animals.

Correct by December 17, 2009

### 3.75 (a)

#### HOUSING FACILITIES, GENERAL.

....(a) Housing facilities for nonhuman primates must be designed and constructed so that they are structurally sound for the species of nonhuman primates housed in them. They must be kept in good repair.....

1. There were areas of flaking and peeling paint on the ceiling above occupied animal enclosures in Building L, Room L-144 and Building K, Rooms 428C and B11.

2. Building M, Room 251: The cover of a ceiling mounted light fixture above an occupied primary enclosure housing

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two animals was hanging down as a result of a broken clip, and water had accumulated inside the light fixture cover.

Correct by January 15, 2010.

### 3.75 (e)

#### HOUSING FACILITIES, GENERAL.

(e) Storage. Supplies of food and bedding must be stored in a manner that protects the supplies from spoilage, contamination, and vermin infestation. The supplies must be stored off the floor and away from the walls, to allow cleaning underneath and around the supplies. Food requiring refrigeration must be stored accordingly, and all food must be stored in a manner that prevents contamination and deterioration of its nutritive value. Only the food and bedding currently being used may be kept in animal areas, and when not in actual use, open food and bedding supplies must be kept in leakproof containers with tightly fitting lids to prevent spoilage and contamination. Substances that are toxic to the nonhuman primates but that are required for normal husbandry practices must not be stored in food storage and preparation areas, but may be stored in cabinets in the animal areas.....

1. There were open supplies of primate food not stored in a container with a tightly fitting lid to prevent spoilage and contamination in the SPF kitchen. There was a plastic bucket with a broken top containing marshmallows in the cabinet and an uncovered pan containing cut up pieces of fruit inside the walk-in refrigerator.
2. Cooling vests were stored inside the walk-in refrigerators on a shelf in two different refrigerators in Building L.
3. Employees in Building L were observed cutting primate diet with a spray bottle of cleaning liquid on the table next to where food was being prepared.
4. Building M, Room 337: Primate chow in bags was stored on a table directly against the walls.
5. Building L, SPF Kitchen: Cartons of fruit were stored on the floor of the walk-in refrigerator.

Supplies of food for primates should be stored in a manner to protect the food supplies from spoilage, contamination and vermin infestation. The facility needs to address this issue of food storage for the health and well-being of the primates.

Correct by December 17, 2009

### 3.75 (f)

#### HOUSING FACILITIES, GENERAL.

.....(f) Trash containers in housing facilities.....must have tightly fitted lids on them at all times.....

1. Building M: There were uncovered trash containers located in several primate testing rooms that did not have a tightly fitted lid. Per this section, there must be a tightly fitting lid present on trash containers in primate housing facilities at all times to minimize odors and disease hazards.

Correct by December 17, 2009

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## Inspection Report

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**3.80** (a) (2) (ii)

### PRIMARY ENCLOSURES.

.....(a)(2) Primary enclosures must be constructed and maintained so that they: .....ii) Protect the nonhuman primates from injury.....

\*\*Red rubber hoses are used to supply water to animals in Building M. One of the hoses on top of an enclosure housing 2 primates in Room 29 was missing pieces of the outermost layer of red rubber as a result of the animals picking at the hose.

Primary enclosures should protect the animals from injury. Ingestion of foreign material can pose a hazard to the animals. This item was corrected by the facility during the inspection by replacing the damaged hose.

Corrected during the inspection

**3.84** (c)

### CLEANING, SANITIZATION, HOUSEKEEPING, AND PEST CONTROL.

(c) Housekeeping for premises. Premises where housing facilities are located, including buildings and surrounding grounds, must be kept clean and in good repair in order to protect the nonhuman primates from injury, to facilitate the husbandry practices required in this subpart,.....

1. Building L, Room 109: Sides of the floor drain were dirty and had particulate debris and Betadine on its surface.
2. Building L, Hallway outside Room 119: Non-human primates are transferred to rolling cages while their home cages are cleaned and sanitized. The rolling cages are placed temporarily in the hallway until being returned to their home cages. The textured ceiling tiles in the hallway were dirty, and the ceiling was within reach of the non-human primates through the top of their temporary enclosures.
3. Building M, Room 16: Dirty ceiling mounted air filter.
4. Building L, Room 113: A leather restraint glove was located on the top of an occupied primary enclosure and was accessible to the animals.
5. Building M, Room 41: The housing room wall was dirty and had dried, dark colored spots/splashes on the upper wall in the back corner of room.

Primate housing areas must be kept clean and in good repair in order to protect the nonhuman primates from injury, and to facilitate the husbandry practices required in this subpart,

Correct by December 17, 2009

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**3.125** (a)

### FACILITIES, GENERAL.

(a) Structural strength. The facility must be constructed of such material and of such strength as appropriate for the animals involved. The indoor and outdoor housing facilities shall be structurally sound and shall be maintained in good repair to protect the animals from injury and to contain the animals.....

1. Building D, Holding Barn: Metal flashing on one of the corners of the holding barn had been damaged exposing jagged edges. The corner of the holding barn should be repaired in order to prevent injury to the animals housed in the area.
2. Building T, Room 115: The floor of one pen housing a large adult male pig was comprised of narrow slats/grate system. The animal's feet continually slid on the floor surface as he walked around the enclosure. The animal's feet slipped out from under him causing him to fall down several times. Other animals in the room were also observed to slide on the portion of their pens that had a solid concrete surface. The facility should be constructed in a manner that is structurally sound and maintained in a manner to protect the animals from injury as set forth in this section.

Correct by December 17, 2009

**3.131** (c)

### SANITATION.

.....(c) Housekeeping. Premises (buildings and grounds) shall be kept clean and in good repair in order to protect the animals from injury and to facilitate the prescribed husbandry practices set forth in this subpart.....

1. The wooden shelves in the feed/bedding storage room of Building J were not sealed or impervious to moisture. The unsealed surfaces could interfere with effective cleaning and sanitation of the shelving. The facility needs to address this issue.
2. Building J, Room 662: Facility personnel stated that investigator staff is responsible for cleaning the room after animals are moved out. Animals had been housed in this room and it had already been cleaned. There were wooden shavings and animal waste present on the shelves where the enclosures were placed, there was a thick layer of dust on various surfaces in the rooms, and the wall in the back corner of the room was dirty.
3. Building J, Room 663: Assorted equipment and cleaning implements were stored on the same shelf adjacent to primary enclosures housing regulated species.
4. Building J, Room 575: There was a thick layer of dust on the ceiling mounted air vent in the room that housed chinchillas and the ceiling surface next to the air vent was dirty.
5. Building O, Room 3243: There was dried blood on the outside surface of the drawers and on the wall adjacent to the sharps container in the room.

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6. Building T, Room 115: Broken ceiling mounted light fixture cover above pen housing one pig.

7. Heifer area at Building G had not been adequately cleaned and cleared of hay, manure and debris. Livestock panels enclosing the area were not secure and were leaning from their supports in several areas.

Correct by December 17, 2009

### 3.131 (d)

#### SANITATION.

(d) Pest control. A safe and effective program for the control of insects, ectoparasites, and avian and mammalian pests shall be established and maintained.....

\*\*There was an excessive accumulation of flies in Building T Room 115. It is the responsibility of the facility to ensure that a pest control program is in place in order to control insects and/or pests in order to promote the health and well-being of the animals.

Correct by December 17, 2009.

THIS IS A CORRECTED COPY OF INSPECTION REPORT 343091838450594, DATED DECEMBER 10, 2009.

Note: This was a full facility inspection conducted 12/1/09 through 12/10/09 by Drs. Robert Willems, Paula Gladue, Michael Smith and Dawn Barksdale with the exit interview on 12/10/09.

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