United States Department of Agriculture
Animal and Plant Health Inspection Service

DBARKSDALE
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Inspection Report

UNIVERSITY OF WISCONSIN-MADISON

Customer ID: **616**
Certificate: **35-R-0001**
Site: 001
ALL CAMPUS SITES

RESEARCH ANIMAL RESOURCES CTR.
DIRECTOR RESEARCH ANIMAL
1710 UNIVERSITY AVENUE 396 ENZYME INST

Type: ROUTINE INSPECTION
Date: Dec-09-2009

MADISON, WI 53726

2.31 (c) (3)

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

(3)(c) 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.

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Dec-10-2009

Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Dec-10-2009

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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 post-operatively 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.

Correction: 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.

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Correct by: From this date forward

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: 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

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.

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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
e. Building Room 575: Cyprofloxicin 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, exp11/08.
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 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 AVs 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. Gerbil #1 housed in Building P Room 310B: was thin, sunken flank, difficulty breathing, wobbly, weak, some open mouthed breathing unrecognized by facility personnel. Necropsy findings revealed that this animal had a body condition score of 1 out of 5, the subcutis had neglible body fat and that the thoracic cavity contains moderately abundant red watery pleural effusion.
2. Review of Medical records for Dog #BDW8, #SRS-6, and TJG-7 on Protocol #V01296: 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 vomiting and very depressed with edema not producing urine,TJG-7's medical records stated this animal was very depressed, vomiting with no 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: 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 or 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 NHP enclosures in Building L, Room L -144 and Building K Rooms 428C, K-B11.

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2. Building M Room 251: The cover of a ceiling mounted light fixture above an occupied primary enclosure housing two NHP 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 NHP 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 uncovered 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 NHP diet with cleaning compound on the table 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 NHP's 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 NHP 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 NHP housing facilities at all times to minimize odors and disease hazards.

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Correct by December 17, 2009

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.....

1. Red rubber hoses are used to supply water to NHPs 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 NHPs picking at the hose. Primary enclosures should protect the NHPs 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: NHPs 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 NHPs 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 on located on the top of an occupied primary enclosure and was accessible to the animals.

5. Building M Room 41: Housing room wall 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 it walked around the enclosure and the animal's feet slipped out from
under the animal and it fell 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 were housed in this room until 11/26/09 and had already been cleaned. Wooden shavings and animal waste were present on the shelves where the animal enclosures are placed, there was a thick layer of dust on various surfaces in the room, 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 AWA covered 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.
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. Life stock panels enclosing the area were not secure and were leaning from their supports in several areas.

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Received By: (b)(6),(b)(7)(c) **Date:** Dec-10-2009

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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.

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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DIRECTOR RESEARCH ANIMAL RESOURCES CENTER

MADISON, WI 53726

Type: ROUTINE INSPECTION
Date: Oct-29-2009

This was a focused inspection involving the review of records at the Graduate School.

No non-compliant items were identified during this inspection.

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care
Date: Oct-29-2009
Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c)
Date: Oct-29-2009
Title:

United States Department of Agriculture
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388273 insp_id

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RESEARCH ANIMAL RESOURCES CTR.
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Type: ROUTINE INSPECTION
Date: Sep-09-2009

MADISON, WI 53726

2.33 (a) (2)

ATTENDING VETERINARIAN AND ADEQUATE VETERINARY CARE.

(a) Each research facility shall have an attending veterinarian who shall provide adequate veterinary care to its animals in compliance with this section:.....
.....(2) Each research facility shall assure that the attending veterinarian has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use;.....

**Animal #RH2288 experienced chronic health problems (lameness, neurologic signs) from March 2005 until its death in November 2008. Although treatment and observations were documented and a differential diagnosis of a possible neurologic and/or muscoskeletal disorder was made, recommendations discussed with the principal investigator were not followed. The research facility must ensure that the attending veterinarian has the appropriate authority to provide adequate veterinary care, oversee all animal husbandry practices and the role of the attending veterinarian must be understood by staff. The IACUC has investigated the situation and is addressing the issue through disciplinary action and retraining of staff. Corrective measures are being taken to prevent future incidents from taking place.

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;.....

**This inspection focused on a partial records review of specific non-human primates. Animal #92039 experienced health problems that required antibiotic treatment. Although the attending veterinarian recommended the antibiotic regimen should be changed and possible further evaluation for euthanasia, no documentation was provided in the medical records as to why these recommendations were not followed or addressed. Although treatment was initiated, the program of veterinary care should be maintained in a manner to provide clear and concise methods to prevent, control, diagnose and treat

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diseases in order to promote the health and well-being of the animals. Corrective measures have since been initiated to address this issue.

This inspection was focused on non-human primates at the Medical School.

Inspection was conducted with the Associate Director, RARC, Chief Campus Veterinarian and other staff members.

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Type: ROUTINE INSPECTION
Date: Apr-09-2009

3.80 (a) (2) (iii)

PRIMARY ENCLOSURES.

(a) General requirements. .....
.....(2) Primary enclosures must be constructed and maintained so that they:.....
.....(iii) Contain the nonhuman primates securely and prevent accidental opening of the enclosure, including opening by the animal;.....

**While reviewing records it was noted that non-human primate RQ2653 was found on the morning of 6/29/2007 to have escaped from its enclosure and was loose in the animal room. Interactions between RQ2653 and two other caged animals resulted in the hand injuries of #R97097 (laceration to the right palm) and #00E106 (right index finger). It is the responsibility of the facility to ensure that the enclosures securely contain the non-human primates in order to promote the health and well-being of the animals as set forth in this section.

**Records and interviews indicated that corrective procedures have been established to prevent animals from escaping. Personnel have been retrained in the proper handling and care of the animals housed in the facility.

Correction: Ensure established procedures are properly followed.

This inspection was focused on nonhuman primates at the Medical School.

Inspection was conducted with the Associate Director, RARC, Chief Campus Veterinarian and other staff members.

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98091853070730 insp_id

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1710 UNIVERSITY AVENUE 396 ENZYME INST

MADISON, WI 53726

Type: ROUTINE INSPECTION
Date: Apr-09-2009

3.80 (a) (2) (iii)

PRIMARY ENCLOSURES.

(a) General requirements.....
.....(2) Primary enclosures must be constructed and maintained so that they:.....
.....(iii) Contain the nonhuman primates securely and prevent accidental opening of the enclosure, including opening by the animal;.....

**While reviewing records it was noted that non-human primate RQ2653 was found on the morning of 6/29/2007 to have escaped from its enclosure and was loose in the animal room. Interactions between RQ2653 and two other caged animals resulted in the hand injuries of #R97097 (laceration to the right palm) and #00E106 (right index finger). It is the responsibility of the facility to ensure that the enclosures securely contain the non-human primates in order to promote the health and well-being of the animals as set forth in this section.

**Records and interviews indicated that corrective procedures have been established to prevent animals from escaping. Personnel have been retrained in the proper handling and care of the animals housed in the facility. Correction: Ensure established procedures are properly followed.

This inspection was focused on nonhuman primates at the Medical School.

Inspection was conducted with the Associate Director, RARC, Chief Campus Veterinarian and other staff members.

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Apr-09-2009
Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Apr-09-2009
Title:

United States Department of Agriculture
Animal and Plant Health Inspection Service

BARKSDALE
387030 insp_id

Inspection Report

UNIVERSITY OF WISCONSIN-MADISON
RESEARCH ANIMAL RESOURCES CTR.
DIRECTOR RESEARCH ANIMAL
1710 UNIVERSITY AVENUE 396 ENZYME INST

MADISON, WI 53726

Customer ID: **616**
Certificate: **35-R-0001**
Site: 001
ALL CAMPUS SITES

Type: ROUTINE INSPECTION
Date: Dec-04-2008

3.3 (e) (1)
SHELTERED HOUSING FACILITIES.

Sec. 3.3 Sheltered housing facilities.
(e) Surfaces. (1) The following areas in sheltered housing facilities must be impervious to moisture:
(i) Indoor floor areas in contact with the animals.....

**A portion of the sealant on the floor in one of the rooms housing several animals was not intact. The flooring in rooms housing the animals must be impervious to moisture in order to promote the health and well-being of the animals as set forth in this section. Animals affected: (3)
Scheduled for repair during inspection

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 several runs where animals are being housed had an excessive accumulation of debris. The filters should be cleaned in a manner to prevent the accumulation of debris in order to order to facilitate proper husbandry practices and promote the health and well-being of the animals. Animals affected: (9)
Scheduled for repair during inspection

This inspection was conducted at the School of Veterinary Medicine on December 2 and December 3, 2008.

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Dec-04-2008
Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Dec-04-2008
Title:

United States Department of Agriculture
Animal and Plant Health Inspection Service

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Inspection Report

UNIVERSITY OF WISCONSIN-MADISON
RESEARCH ANIMAL RESOURCES CTR.
DIRECTOR RESEARCH ANIMAL
1710 UNIVERSITY AVENUE 396 ENZYME INST

MADISON, WI 53726

Customer ID: **616**
Certificate: **35-R-0001**
Site: 001
ALL CAMPUS SITES

Type: ROUTINE INSPECTION
Date: Nov-07-2008

This was an inspection conducted at the College of Agricultural and Life Sciences.
Note: Annual Report requirements and facility issues were discussed.
Exit interview conducted with the Associate Director, RARC and other staff members.

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Nov-07-2008

Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Nov-07-2008

Title:

United States Department of Agriculture
Animal and Plant Health Inspection Service

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226691 insp_id

Inspection Report

UNIVERSITY OF WISCONSIN-MADISON	Customer ID: **616**
RESEARCH ANIMAL RESOURCES CTR.	Certificate: **35-R-0001**
DIRECTOR RESEARCH ANIMAL	Site: 001
1710 UNIVERSITY AVENUE 396 ENZYME INST	ALL CAMPUS SITES
	Type: ROUTINE INSPECTION
MADISON, WI 53726	Date: Mar-27-2008

This was a partial inspection of the Medical School.

Note: Inspector still needs to review pending test results.

Exit interview conducted with the Chief Campus Veterinarian and IACUC Chair and other staff members.

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Mar-27-2008

Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Mar-27-2008

Title:

United States Department of Agriculture
Animal and Plant Health Inspection Service

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Inspection Report

UNIVERSITY OF WISCONSIN-MADISON

Customer ID: **616**
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MADISON, WI 53726

Type: ROUTINE INSPECTION
Date: Dec-05-2007

2.33 (a)

ATTENDING VETERINARIAN AND ADEQUATE VETERINARY CARE.

(a) Each research facility shall have an attending veterinarian who shall provide adequate veterinary care to its animals in compliance with this section:.....

**A partial review was performed of specific non-human primate records. Animal cy0122 experienced chronic health problems (inappetance and diarrhea) from the time of arrival at the facility in July 2005 until its death in November 2005. Although treatment and observations were well documented, the differential diagnosis of a partial intestinal obstruction/abdominal mass was not pursued in a timely manner, resulting in the death of the animal.

Correction: ensure that appropriate diagnostic and treatment methods are used to provide adequate veterinary care.

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Dec-05-2007

Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Dec-05-2007

Title:

United States Department of Agriculture
Animal and Plant Health Inspection Service

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Inspection Report

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Customer ID: **616**
Certificate: **35-R-0001**
Site: 001
ALL CAMPUS SITES

RESEARCH ANIMAL RESOURCES CTR.
DIRECTOR RESEARCH ANIMAL RESOURCES CENTER

Type: ROUTINE INSPECTION
Date: Jun-20-2007

MADISON, WI 53726

2.31 (d) (1) (iv) (A)

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

The regulation states, "(iv) Procedures that may cause more than momentary or slight pain or distress to the animals will:
(A) Be performed with appropriate sedatives, analgesics or anesthetics, unless withholding such agents is justified for scientific reasons, in writing, by the principal investigator and will continue for only the necessary period of time;..."

***Protocol V660 states animals will be inoculated with a challenge infectious agent and that the disease process will result in some animal morbidity and/or death. A description of affected animals is provided and a scoring system for the deterimination of euthanasia as an endpoint is outlined for moribund animals. No analgesics will be provided. There is no written justification of the scientific reasons for withholding of any analgesic treatment. Written justification for withholding analgesics must be provided or analgesics must be used.

Correct by: prior to inoculation of any additional animals with infectious agents.

2.31 (e) (2)

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

The regulation states, "(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:...
(2) A rationale for involving animals, and for the appropriateness of the species and numbers of animals to be used...".

***Protocol V691 justifies animal numbers by stating, "The numbers of animals are based on our current animal need, however the number listed often exceeds the number of animals we find to place on this protocol. We have a maximum number that are available at any one time for this study and also a

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Jun-20-2007
Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Jun-20-2007
Title:

Inspection Report

minimum that are required for the various studies we perform." This is ambiguous and leaves it very unclear as to the rationale behind the number of animals requested. The principal investigator must provide a clear rationale as to the number of animals needed.

***Protocol V660 is also unclear as to the rationale for the number of animals needed. While the principal investigator alludes to USDA or EU animal number requirements for a manufacturer seeking to license a product, it is not clear that licensure is the objective of his proposed activities.

Correct by: August 31, 2007

2.31 (e) (3)

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

The regulation states, "(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..."

***A review of animal records from protocol V660 reveal that a surgical procedure is being conducted (neutering of male cats), but there is no mention nor description of this activity in the approved protocol. The review of nine male cat records indicated that all nine cats had undergone neutering.

Correct by: A full description must be provided and approved by the IACUC prior to any additional surgeries.

***The table provided in Protocol V660 describing the approximate time line does not provide a time line. There is a listed vaccine interval, but it is unclear when vaccination is started. Routes of administration of the challenge agent are listed, but time allowed for immunity to develop prior to challenge is unknown. The prinicipal investigator also notes that "experimental design can vary widely between studies" but the experimental design is not clearly stated and what varies widely is unknown.

Correct by: A full description must be provided and approved by the IACUC prior to any additional animal activities.

***Protocol V810 involving the use of skunks indicates that laboratory personnel will "score" all animals on an "at least weekly" basis for signs of disease. However, there is no documentation that this is occurring. Protocol V660 also involves a scoring process for each sick animal, but from the records reviewed, scoring was very rarely used. There is no documentation that this tracking procedure is being accomplished as stated in the approved protocol.

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Jun-20-2007

Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Jun-20-2007

Title:

Inspection Report

Correct by: Immediately

***Protocol V691 provides a very broad picture of animal use with very few details provided. The objective is to "better understand the cause or mechanism of spontaneous animal diseases". The description of potential blood collection states, "Blood samples are generally collected at arrival then as required (weekly, monthly) or at most twice weekly. The amount of blood collected is approximately 20 ml for adult cattle, or 10 ml from adult sheep, dogs or cats." Ten mls from a cat twice weekly for an unknown number of weeks is too much and will cause the animal to suffer or die. Humane endpoints are vague, as is treatment for pain. There is mention of the number of animals that will undergo surgery per year, but no explanation of what the surgery involves.

Correct by: A complete description must be provided and approved by the IACUC prior to any animal activities.

2.33 (b) (3)

ATTENDING VETERINARIAN AND ADEQUATE VETERINARY CARE.

The regulation states, "(b)(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..."

***Marked alopecia was noted on the tails of eight skunks. An examination of the animal records showed that this appearance had only been recorded in three of the eight records. Changes in appearance should be noted by care staff as well as research staff and discussed and documented with veterinary staff. Lines of communication are essential to ensure the health and well-being of the animals.

It is the responsibility of the research facility and staff to have a mechanism of direct and frequent communication to ensure problems of animal health and/or behavior are conveyed in a timely manner to the the attending veterinarian. Each research facility is required to establish and maintain programs of adequate veterinary care to maintain the health and well-being of the animals.

Correct by: July 31, 2007

2.33 (b) (5)

ATTENDING VETERINARIAN AND ADEQUATE VETERINARY CARE.

The regulation states, "(b)(5) Adequate pre-procedural and post-procedural care in accordance with current established veterinary medical and nursing procedures."

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Jun-20-2007

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Received By: (b)(6),(b)(7)(c) **Date:** Jun-20-2007

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***A review of animal records from Protocol V660 revealed that post-procedural care described in the protocol are not being followed. Monitoring of affected animals is stated as: 3 to 4 times daily after challenge; more often at times that morbidity is greatest; and, when the animals are showing signs of disease or discomfort, the animals are observed at no longer than 8 hour intervals to ensure the animals are euthanized before they die. The records reviewed show that most monitoring has been once (or in a couple of cases, twice) per day when an animal showed signs of disease. Length of time between monitoring points once an animal has begun to show disease signs has lead to unnecessary animal pain and suffering. Monitoring periods should be clearly specified and followed.

Correct by: Immediately

2.36 (a)

ANNUAL REPORT.

The regulation states, "(a) The reporting facility shall be that segment of the research facility, or that department, agency, or instrumentality of the United States, that uses or intends to use live animals in research, tests, experiments, or for teaching. Each reporting facility shall submit an annual report to the AC Regional Director for the State where the facility is located on or before December 1 of each calendar year. The report shall be signed and certified by the CEO or Institutional Official, and shall cover the previous Federal fiscal year."

***The 2006 Annual Report must be amended to show the correct numbers of animals. During a review of one principal investigator's animal usage (acquisition records), it was found that he ordered 177 dogs, 41 cats, 6 calves and 2 lambs during the period covered by the 2006 Annual Report. However, this investigator reported only 118 dogs and 41 cats, and no calves or lambs for inclusion on the institution's Annual Report.

Correct by: August 31, 2007

2.36 (b) (7)

ANNUAL REPORT.

The regulation states, "(7) State the common names and the numbers of animals upon which teaching, experiments, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used shall be attached to the annual report..."

***All animals that were used and in which pain and/or distress was identified and in which no analgesics were given (as with some animals in protocol V660) must be reflected in Column E of the 2006 Annual Report. An explanation of the procedures producing pain or distress in these animals and the reasons

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Title: VETERINARY MEDICAL OFFICER Inspector 1062

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Title:

Inspection Report

such drugs were not used must be attached to the amended report.

Correct by: August 31, 2007

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Jun-20-2007

Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Jun-20-2007

Title:

United States Department of Agriculture
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Inspection Report

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MADISON, WI 53726

Customer ID: **616**
Certificate: **35-R-0001**
Site: 001
ALL CAMPUS SITES

Type: ROUTINE INSPECTION
Date: Apr-12-2007

2.31 (e) (2)

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:.....

.....(2) A rationale for involving animals, and for the appropriateness of the species and numbers of animals to be used;.....

**Protocol G00496 gives an inadequate justification for the number of animals requested. For example, the principal investigator states the number of animals requested was calculated "assuming a lot of technical failures which we do not expect." Furthermore, it is impossible to follow how the principal investigator determined the number of animals necessary for this pilot study. Is the number of animals required for this study 64, 56, 55, 52, 49, 48, 44, 39, or 38? The principal investigator also states, "Note that this would leave us with 12-3+5+25=39 animals (or 44 animals if we use 30 instead of 25 as an estimate)" but he appears to be requesting 64 animals. The written protocol describes all possible scenarios, but the number of animals approved for the protocol (64) does not have adequate justification.

Correct by: May 4, 2007

2.31 (e) (3)

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

(3) A complete description of the proposed use of the animals;.....

***Protocol G00496 does not provide a complete description of animal use. The protocol uses the term "technical failures" and "technical complications", but does not describe what these terms actually mean in relation to this pilot study. Also, there is no description of what happens to the kidneys that are to be used as transplants in another animal (perfusion? type of perfusion solution?). Erroneous information was written n the protocol when describing previous work; animal 0074 was noted as being a donor to animal 0100, when, according to the animals medical records, 0074 was a donor to 0055. Protocols must be written to completely describe all animal use.

Correct by: May 4, 2007

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Apr-12-2007

Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Apr-12-2007

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Inspection Report

2.31 (c) (3)

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC).

.....(3) If program or facility deficiencies are noted, the reports must contain a reasonable and specific plan and schedule with dates for correcting each deficiency.....

**IACUC semiannual reports (Graduate School) have repeatedly identified numerous animal rooms needing maintenance (painting) over a period of more than two years. The correction dates for these deficiencies have not been met. Although a number of rooms have been refurbished, the institution is responsible for ensuring that identified deficiencies are corrected within a reasonable amount of time.

Correct by: August 15, 2007

Prepared By: DAWN E BARKSDALE, D V M USDA, APHIS, Animal Care **Date:** Apr-12-2007

Title: VETERINARY MEDICAL OFFICER Inspector 1062

Received By: (b)(6),(b)(7)(c) **Date:** Apr-12-2007

Title: