



ANIMAL TRACKS



A newsletter for the Duke research community

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<http://www.duhs.duke.edu>

The Duke Lemur Center: New Name, New Goals

(From Duke University News & Communications)

Duke University's 40-year-old home for primates is getting a makeover -- and a new name to match. "Our new name, the Duke Lemur Center, reflects a refocusing of our scientific goals and overall mission," said Anne D. Yoder, the center's director.

Although the center houses several types of prosimians, a sub-order of primates, lemurs are the stars. To support the center's reinvigoration, Duke is allocating roughly \$8 million to improve and expand its facilities. Three new buildings and associated habitats will provide the lemurs with more natural living conditions and open new opportunities for scientists.

"Our new emphasis positions lemurs as models of primate biology and evolution," Yoder said. "Lemurs are complex creatures, and their unique biology, combined with their similarities to other primates, makes them an ideal model."

In an important research direction, the center is partnering with the Duke Institute for Genome Sciences & Policy to establish a Duke Lemur Genome Initiative. One goal of the joint effort is to develop a toolkit of genome markers, distinctive segments of DNA that serve as landmarks for specific genes. Such comparisons, according to center scientists, are essential for guiding conservation priorities, given the dwindling numbers of wild lemurs.

Ongoing efforts by Duke researchers such as Elizabeth Brannon are probing the connection between linguistic ability and conceptualizing numbers, running experiments in which lemurs interact with computer touch screens. Dr. Brannon's findings run counter to the dogma that lemurs are less intelligent than other primates. Biologists Peter Klopfer and Andrew Krystal are studying hibernation in dwarf lemurs, which are the only primates to exhibit this trait. The National Aeronautics and Space Administration has expressed interest in this investigation.

The center also plans to strengthen its international connections with groups such as the Max Planck Institute (Germany) where lemurs could provide insight into male versus female morbidity and mortality in lemurs (and humans).

For a more detailed discussion of this exciting change, go to <http://www.dukenews.duke.edu/2006/04/lemurcenter.html>

Cage Space Requirements for Mice

This Duke animal care & use policy is based on a standard cage of 75 square inches. If larger or smaller cages are used, please consult DLAR for housing requirements.



Mice from the age of weaning to adulthood: mice of weaning age and above should be housed with no more than 5 mice per cage.

Breeding mice:

- No more than 3 adults in a cage when a litter is born.
- No more than 2 adults and 10 pups in the cage when any of the pups are older than 7 days of age. More than 10 pups older than 7 days can reside in a cage with 1 adult female if the pups are the progeny of the adult female.
- No litters in the same cage that are more than 2 weeks apart in age.
- Pups must be weaned at 21 days of age unless an exemption has been approved by the IACUC or the DLAR veterinary staff for health concerns. Breeding cages containing pups past the age of weaning that do not meet the criteria for exceptions are considered overcrowded.
- Write the date of birth of all litters and the IACUC or DLAR Vet approved weaning date, if different than 21 days, on a designated cage card.
- When litters need to be separated and the mothers and litters must be observed sufficiently to determine the appropriate mother for each litter before mice are moved from one cage to another.

For a complete copy of the policy, see the website at: <http://vetmed.duhs.duke.edu/documents/iacuc/pdf/>

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NEWLY APPROVED IACUC POLICIES



Minimum Protective Clothing for Animal Care/Use Areas



All persons in animal care or use areas will be properly attired to discourage occupationally acquired diseases. This practice is also consistent with good infection control practices, which supports the institution's commitment to the highest level of animal welfare.

Protection of the health of all humans who work in animal care of use areas is critically important. A minimum standard for clothing has been established which is intended to discourage contamination of 'non-work' clothing. This is not a new requirement but an enhancement of the existing policy consistent with occupational health and safety standards for working with laboratory animals.

Required protective clothing:

- ◆ A lab coat, gown, scrubs, or specified work uniform must be worn when entering animal occupied areas.
- ◆ Gloves are recommended at all times when working with animals.

A full copy of this policy is available on the web at: http://vetmed.duhs.duke.edu/documents/iacuc/pdf/policy_on_minimum_clothing_for_animal_use_areas.pdf

Use of DLAR Holding Protocol

The use of the DLAR holding protocol is intended to be temporary. Situations which may result in the use of the protocol include:

- Animals ordered without an approved protocol.
- Animals originating from inactive (or terminated) protocols.
- Animals on a protocol under investigation for potential issues of non-compliance where the welfare or well-being of the animals is in question.
- New investigators without an approved Duke protocol having animals that may require immediate housing at Duke.
- Investigators that are leaving Duke and do not have the necessary approvals for transfer to the new institution.

Request forms to place animals on the DLAR holding protocol will be generated by the principal investigator (PI), Director of DLAR, or Director of OAWA. Approval of the forms will be authorized by the IACUC Chair, OAWA director, or DLAR director.

Animal per diems for animals housed under the DLAR holding protocol will be charged to the PI or the department. DLAR may also place a surcharge for animals on the DLAR holding protocol.

No experimental procedures are allowed to be performed on the animals while they are maintained on the holding protocol, but breeding to maintain viability of the specific line may be performed. Feeding and sanitation will be performed as expected for the species and environmental enrichment will be provided to all animals housed under the DLAR holding protocol.

For a complete copy of the DLAR holding protocol as well as related forms, go to the Duke Animal Care and Use Program Website to this specific link: http://vetmed.duhs.duke.edu/documents/iacuc/pdf/policy_on_use_of_dlar_holding_protocol.pdf

Notification of Hazardous Work in Animal Care Areas



When animal research involves the use of hazardous agents (i.e. infectious agents, particularly hazardous chemicals, radiologicals, etc.) it is imperative that workers be notified of the potential risks and how to work safely when such risks are present. The timely posting of warning signage on doorways and individual cages is critical in ensuring proper notification.

Investigators must notify DLAR via written communication, preferable e-mail, at least two business days prior to the use of hazardous agents in animals. The following should be included in the notification:

- ⇒ Hazardous agent to be used
- ⇒ Proposed building and room number
- ⇒ Species in which the agent will be used
- ⇒ Contact information for the PI
- ⇒ SOP approved by OESO for the safe handling of the agents and the associated animals.

Researchers must assure all required signage is properly affixed and notification of pending or on-going hazardous work has occurred prior to working with the agent in an animal use area. The PI, along with OESO, will also prepare a standard operating procedure (SOP) that outlines safe work practices for the affected animal use area when hazardous agents are employed. DLAR must provide sufficient staff training to recognize the hazardous work area and will assign appropriate housing that is consistent with the approved SOP.

To review the complete policy, please refer to our website at: http://vetmed.duhs.duke.edu/documents/iacuc/pdf/policy_on_notification_of_hazardous_work_in_animal_care_areas.pdf



SPOTLIGHT ON.....



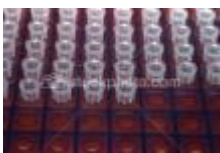
Use of Inhalant Anesthetic in an Open Method

It is important to ensure that when using the open method of inhalation anesthesia the animal does not come into contact with the liquid anesthetic agent. There must be a separator between the anesthetic-soaked gauze and the animal that is being anesthetized.

Several options for separating the animal from the anesthetic agent include: placing a wire mesh screen over the anesthetic-soaked gauze, placing the anesthetic-soaked gauze in a conical tube and placing the tube in the anesthetic chamber, or using an inexpensive and readily available option is to use the piece of plastic that holds pipette tips from a used pipette tip box. The plastic can be cut to fit your bell jar, anesthetic chamber, or other chamber and the holes where the pipette tips are normally held offer a small opening which allows the anesthetic agent to be separated from the mouse body but yet allows distribution of the anesthetic agent throughout the chamber.

For more specific information on the use of inhalant anesthetics, view our website at: http://vetmed.duhs.duke.edu/guidelines_for_inhalant_anesthesia_3.htm

Or Contact DLAR veterinary staff who are ready and able to provide hands on training or support using these methods of anesthesia.



Upcoming Events

June 1	SC meeting
June 1	Brown Bag Seminar
June 5	New protocol deadline
June 5	SC deadline
June 15	SC meeting
June 22	IACUC meeting
June 26	SC Deadline
July 6	SC meeting

SC= Significant change

Brown Bag Seminar June 1, 2006 Bryan Research Bldg: Room 103



“Oh-No! The IACUC is Coming”

The Duke Office of Animal Welfare Assurance will provide a practical discussion of how to effectively (and painlessly) prepare for an IACUC Semi-Annual Review of your laboratory or procedure area. Several common scenarios will be used as discussion points to clearly identify what the IACUC Site Visitors are looking for. Presenters will share preferred responses to the most common questions asked during a Semi-Annual Site Visit.

The Semi-Annual IACUC visits are an on-going part of the institution's program for animal care oversight. Often, these visits appear to bring angst and anxiety to the laboratory members, but understanding the process and how to prepare for a Semi-Annual Visit will ease the distress. This session is designed for specifically laboratory managers, but is useful for all laboratory members.

The session will begin promptly at noon and end at 1 PM. Drinks and desserts are provided by the animal care program.

Q & A Corner



Q: Why does the IACUC require me to assess pain and distress before the experiment is performed?

A: The federal agencies require the IACUC review animal protocols to ensure that pain and distress are minimized in laboratory animals. The IACUC must assure that the principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animal and has provided a written narrative description of the methods and sources used to determine that alternatives were not available.

The NRC *Guide for the Care & Use of Laboratory Animals* states that the IACUC should ensure the protocol addresses: “appropriate sedation, analgesia, and anesthesia; criteria for timely intervention, removal of animals from study, or euthanasia if painful or stressful outcomes are anticipated; and details of post-procedural care.”

The protocol must provide adequate information for the IACUC to assess the potential animal pain and/or distress resulting from the study and the effectiveness of the pain and distress relieving agents proposed for use. Criteria for re-dosing the animal should also be established.

OAWA's Brown Bag Seminar

Thursday, June 1st, 2006

Noon – 1 p.m.

Bryan Research Building: Room 103



Dr. Ron Banks
Director of the Office of Animal Welfare
Assurance will be presenting:

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The presentation will be on **Thursday, June 1st, 2006 from noon to 1 p.m.**

The session will be held in room **103 of the Bryan Research Building**, located at 421 Research Drive, on Duke University's West Campus.

Attendees are encouraged to bring a lunch.

OAWA will provide drinks and desserts.

Please plan on arriving prior to noon in order to get refreshments, sign in, and be seated.

For those who will be coming from off campus, driving directions and parking information can be found at the following link: <http://neuro.duke.edu/Links/map.htm>