



Animal Resource & UCAR E-News

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MICROISOLATOR TECHNOLOGY TIPS

ALWAYS:

1. MOP in and out of the room,
2. WEAR proper PPE,
3. WEAR protective sleeves,
4. TURN on the cabinet,
5. CHECK the date and time when Clidox is made - Clidox is only good for 24hrs,
6. WAIT for activation - Clidox takes 15 minutes to activate,
7. CHECK color - Clidox is yellow NOT GREEN,
8. SPRAY - Clidox must be used whenever you touch something outside of the cage
9. MANIPULATE community supplies (H2O bottles, cage tag holders) in the cabinet.
10. REMEMBER - Following these simple rules protects the health of all rodents

NEVER:

1. BRING a cart into or out of a room,
2. WEAR your lab coat in an MIT room,
3. OPEN animal cages in the cabinet when community supplies (H2O bottles, tag holders) are opened.

Contact the Animal Resource Office if you have questions regarding Microisolator Technology.



Association for the Assessment and Accreditation for Laboratory Animal Care, International (AAALAC) site visit July 7-9, 2008

The Animal Resource and UCAR are preparing the University faculty and staff who use animals in research and teaching protocols for a July 2008 site visit where external reviewers (AAALAC - Association for the Assessment and Accreditation of Laboratory Animal Care) may visit your lab. UCAR has already visited your labs and the Animal Resource is now offering a twenty minute "news you can use" PowerPoint presentation to prepare your lab staff for the upcoming site visit. One of the University veterinarians is available to give this brief presentation as well as perform a walk through of individual labs to trouble shoot for potential problems. For further information, please contact the Animal Resource Office at X5-2651. The AAALAC website is www.aaalac.org.

Comparative Medicine Residency Training Program

The American College of Laboratory Animal Medicine (ACLAM) approved a new veterinary residency training program in comparative medicine at the University of Rochester. Dr. Jeff Wyatt, the only ACLAM board certified veterinarian in Greater Rochester, will direct the two-year training program. The first two veterinary residents, Dr. Andrew Winterborn (DVM-Montreal 2005) and Dr. Angie Williams (DVM-Tuskegee 2004), completed the program and have already secured jobs at other facilities. As we say goodbye to our first residents, we welcome two more Dr. Jessica Keen (DVM-Auburn 2006) and Dr. Alexander Gordon (DVM-Florida 2004). The residents will participate in seminar series, enroll in Medical School courses and

"All carcass bags must be labeled with the yellow euthanasia tag prior to placement in morgue coolers. If you need tags contact the Animal Resource Office at 5-2651."

ANIMAL IDENTIFICATION: All animal cages that are brought to laboratories must be properly labeled with the Investigators name and UCAR number. All animal cages in the animal housing room must be labeled with the Investigators name, UCAR number and account number.

rotate through research, clinical and surgical services and programs at the University of Rochester as well as the Seneca Park Zoo. The goal of the residency training program is to prepare graduate veterinarians for board certification by ACLAM (www.ACLAM.org).

Laboratory Animal Allergies

All animal handlers are at risk of developing work-related allergy symptoms. Workers who had symptoms of allergies before they were employed as animal handlers are more likely to develop animal induced asthma. Also, workers who are sensitized to domestic animals, such as dogs and cats, are more likely to develop sensitivity to laboratory animals. Contact University Health Services Occupational Health at 275-1164 for questions, evaluation of, and follow-up for any work related allergy symptoms.

Learn More from the Animal Resource Website

ANIMAL RESOURCE WATER QUALITY: The NIH Guide (ILAR 1996) recommends that laboratory animals should have access to potable, uncontaminated drinking water. Water quality testing of the Rochester water supply includes periodic monitoring for pH, hardness, and microbial or chemical contamination. The most recent report (<http://www.mcwa.com/watqual.htm>) indicates that **Rochester drinking water meets all New York State and USEPA drinking water standards**. Please refer to the web site link above for more details about detected contaminants and a water quality summary. Supplemental treatment (e.g. autoclaving, acidification, hyperchlorination) of water provided to the University's laboratory animals is available by special request. All water provided to animals housed in the KMRB and CVRI facilities is treated by reverse osmosis.

Why is Micro Isolator Technology Important in Our Barrier Facilities?

Micro Isolator technology (MIT) is designed to effect a biological barrier at the level of the individual cage, thus preventing the horizontal transmission of pathogens between animals in different cages. By adhering to MIT, we are essentially treating the animal as if it is a bacterial culture. The MIT cage functions essentially as a Petri dish, protecting the animals from contaminants that may be present in the ambient environment. MIT protocol has been demonstrated to protect rodents from pathogens transmitted from cage to cage. Failure to comply with MIT provides a window of opportunity for pathogens to transfer between cages.

Many investigators are very concerned about such breeches of MIT protocol and are not willing to share a room with noncompliant investigators. Investigators who are not willing to comply with MIT will ultimately not be permitted to keep their animals in MIT rooms.

An on-line training course in Micro Isolator Technology through the [Blackboard Learning System](#) is available as a refresher course. Additionally, DLAM veterinary technicians can provide a hands-on review of the MIT procedure should the investigator so desire. If you have any questions, please contact the Animal Resource office at X5-2651.

Working with hazards within the Animal Facility often involves the use of special request forms, special hazard cage cards and notifying the Animal Resource. Please be familiar with the UCAR Review of Hazardous Substance Memo. This memo describes precautions and requirements when using hazards. Environmental Health & Safety prepares this document and sends it to the Investigator, Animal Resource and UCAR.

Barcoding

Remember to submit a form of activation when you create new cages. The forms of activation are; on-line submission or paper form (located in the rooms). If no form of activation is received the cages will be started with an activation date of our previous weekly room scan which could result in more per diem charges.

A form of deactivation needs to be submitted as soon as the cages are taken out of inventory. The forms of deactivation are: on-line submission, paper form (located in the rooms) or detaching the barcode from the cage card. If no form of deactivation is received the cages will accrue per diem charges for two weeks from the last time it was scanned in a room. Weekly scans are done on Monday and Tuesday of every week.

Update on Animal Ordering

Previously there were three ways to order animals; on-line submission, email Word Document or phone call. As of May 30, 2008 we have reduced to two forms of submission; On-line ordering and phones calls.

New Way to View Rodent Sentinel Health Reports

Beginning in July, quarterly rodent sentinel health reports for all rooms containing permanent populations of rodents at URMIC will be available for viewing on a password-protected website. The health status and husbandry practices of the rooms will also be described.

This new system will allow investigators to see not only the latest health report for their rooms, but also previous ones. In addition to giving investigators easy access to these reports, it will also allow the DLAM veterinary staff to track health trends and to provide health information to our colleagues who are receiving rodents from URMIC.

Your feedback on this new system is welcomed.

Carbon Dioxide Euthanasia – Why use a flow meter?

The Office of Laboratory Animal Welfare (OLAW) provided clarification for current requirements for using CO₂ as a euthanasia agent for small laboratory animals.

The acceptability of using CO₂ as a euthanasia agent is predicated on the following:

- High concentrations of CO₂ may be distressful to some species. Accordingly, pre-filling the chamber is recommended only under circumstances in which such use has not been shown to cause distress. This should not be done for rats or mice.
- All euthanasia chambers must be transparent so that all animals can be observed during the process.
- Chambers must not be overcrowded. In this regard, it is important to also consider that mixing unfamiliar or incompatible animals in the same container may be distressful.

- A CO₂ euthanasia SOP must be developed and posted for each location where CO₂ euthanasia is performed. The SOP must meet UCAR guidelines.
- **Compressed CO₂ in cylinders** is the only AVMA Panel-recommended source of CO₂ for euthanasia or sedation purposes. Dry ice is not an approved source of carbon dioxide.
- Flow to the euthanasia chamber **must be calibrated** to displace at least 20% - 70% of the chamber volume per minute in your set up. Your settings will vary for different sized chambers. The recommended way to insure that the system is achieving appropriate flow is by using a flow meter. Alternately, if you are using a 2-stage regulator, flow should be fairly reproducible for a given pressure at the second stage. You can use a flow meter to determine the appropriate pressure range that allows your regulator to deliver the appropriate volume of CO₂. If you wish to calibrate your system in another way, please state clearly how it will be done, and provide all calculations.
- Death must be verified after euthanasia and prior to disposal. Unintended recovery must be obviated by the use of appropriate CO₂ concentrations and exposure times or by other means. OLAW notes that thoracotomy after apparent death from CO₂ is one way to ensure the irreversibility of the procedure.
- UCAR requires that a secondary physical method be performed to ensure that the animals are dead. The recommended secondary physical methods are: decapitation, perfusion of a histological fixative via the major blood vessels, pneumothorax by opening the thorax, complete severing of the spine just below the base of the skull using a dorsal approach and cervical dislocation for animals under 200g.

Recruiting New PI's?

When bringing faculty to the University as potential new PI's using animals, please remember to schedule a meeting with Drs. Diane Moorman-White or Jeff Wyatt (5-2651 – Janet Meagher) to obtain information about services and space available in the Animal Resource.

New AALAS certifications:

Congratulate Mike Kinard (RLAT) and Rick Kurtelawicz (RALAT) on their recent certification. Great Job!!

Animal Resource
UCAR

Phone

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We're on the Web!

<http://www.urmc.rochester.edu/vivarium/>

<http://www.urmc.rochester.edu/ucar/>