



# Animal Resource & UCAR E-Newsletter

FEBRUARY 20, 2009

VOLUME WINTER 2009

The University of Rochester is committed to maintaining the highest standards of care for animals used in research, education and training. Please follow the link for additional information about reporting animal welfare concerns and the responsibilities of the institution to respond to these concerns

(<http://www.urmc.rochester.edu/ucar/animalconcerns.htm>).

## MICROISOLATOR TECHNOLOGY TIPS

### ALWAYS:

1. MOP in and out of the room,
2. WEAR proper PPE,
3. WEAR protective sleeves,
4. TURN on and disinfect the biosafety cabinet,
5. CHECK the date when Clidox is made - Clidox is good for **14 days**,
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



## University of Rochester, School of Medicine and Dentistry receives Full Accreditation from Association for the Assessment and Accreditation for Laboratory Animal Care, International (AAALAC).

Late last fall, Dr. Jeff Wyatt received correspondence from AAALAC, International regarding the results from our site visit in July 2008. AAALAC Council informed Dr. Wyatt that "our program conforms to AAALAC International standards as set forth by the Guide for the Care and Use of Laboratory Animals, NRC 1996. Therefore, Full Accreditation shall continue. Council commented that that our leadership provides and maintains an **exemplary** program of laboratory animal care and use. Additionally, Council commented on the our program's strengths: dedication and skill of the members of DLAM and animal care staff; excellent Post Approval Monitoring process and direct involvement of UCAR in that process; an engaged, knowledgeable and concerned UCAR; a well thought out and written disaster plan; the organized laboratories with well trained staff; excellent hazard labeling and room signage, very complete clinical records; and the provision of "flash cards" that provided specific information to assist in the identification of post-procedure pain and their use in the training of laboratory staff.

**Congratulations** and thanks for your assistance during the AAALAC accreditation process. What made this year memorable for many of us, was that the United States Department of Agriculture (USDA) visited the U of R during the AAALAC site visit. Phew....For further information, please contact the Animal Resource Office at X5-2651. The AAALAC website is [www.aaalac.org](http://www.aaalac.org).

## Pinworm Update from the Vivarium

Fenbendazole treatment combined with sanitation of animal housing and procedural areas are underway in the five suites of the KMRB vivarium and the four rodent rooms in CVRI (one-way and two-way) vivarium. We have benchmarked with colleagues and programs at other academic institutions (Tufts, Emory, Duke, Johns Hopkins, Univ of Fla-Gainesville, Mt Sinai) as well as the Army (USAMRIID) and vendors. Our recent experience with pinworms is not unique.

NEVER bring a cart into or out of a room, NEVER wear your lab coat, hat or sweater in an MIT room, NEVER open animal cages in the cabinet when community supplies (water bottles, tag holders) are opened, and NEVER take water bottles or tag holders out of the original container without using MIT.

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

**Documentation requirements for Investigators and staff that provide husbandry services for Animals**

Are you providing medicated food or water to your research animals? Are you changing cages? All husbandry services must be documented by animal care staff and research staff. Log sheets are available in the Animal Resource Office. If you have any questions, please contact the Animal Resource Office (X5-2651).

Veterinarians across multiple institutions agree that the primary cause of this national emergence of pinworms relates to the increase in transfer of mice (infected with pinworms but yielding false negative results on quarantine) between academic institutions and subsequent breeding and colony growth. We acquired 200 strains of mice in FY 07/08 and 100 strains so far in FY 08/09 from such noncommercial sources. Effective March of 2008 we no longer trust negative fecal exams for pinworms or pelt exams for mites on quarantine given the low sensitivity of the testing. We automatically treat mice on quarantine from non-commercial sources (e.g. other universities) and C-section rederive any mice with a history of infections.

Our enhanced pinworm surveillance program includes direct visual exam of the mouse cecum and colon for adult worms. Detecting pinworms in mice housed in CVRI one way zone indicates that our enhanced sentinel monitoring is more sensitive than the traditional anal cellophane tape test and fecal flotation. The CVRI one way zone was originally populated with mice from the KMRB last year. A small number of these mice originally from the KMRB must have been parasitized with pinworms which were not detected by the routine surveillance program. Our sentinel statistics are based on the assumption of

1. at least 100 mice in the population (true for most mouse rooms)
2. each mouse having an equal opportunity for infection (which is not true for MIT managed mice).

With these assumptions in place, we have a 95% probability of detecting one positive mouse out of six sentinels if there is a 40% prevalence of the disease. Increasing the number of mice tested decreases the required prevalence to detect a positive. Using sentinel testing which is more sensitive (cecal exams for adult worms and screening younger mice) also improves the likelihood of detecting a positive. As the prevalence of the pinworms in a mouse colony increases, the more likely a sentinel program will detect a positive. We believe that our recent increase in sentinels testing positive for pinworms is a reflection of the increased prevalence from these expanding, non-commercial breeding colonies. Treatment and facility wide sanitation will be completed by the end of May. We are evaluating expanded options to enhance our barrier including:

- (1) REQUIRED rederivation of all mice from non-commercial vendors before entry into a barrier (\$1000 producing 3 litters over 3 months) regardless of quarantine test results or health history,
- (2) permanent quarantine, testing and prophylactic treatment of mice from non-commercial sources with permanent post-entry isolation away from the most protected barrier units and
- (3) barrier enhancement of the most protected one-way zones including strict training & enforcement of Microisolator Technology, further restricting personnel entry and adding PPE (scrubs or tyvek style suits).

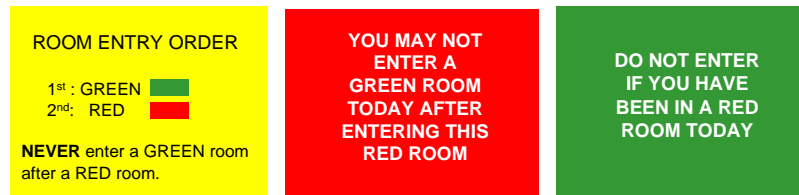
Further site specific updates will be distributed to staff and posted on the AR web site ([www.urmc.rochester.edu/vivarium](http://www.urmc.rochester.edu/vivarium)) and through the AR listserv.

**New Signage for Existing Traffic Patterns - Color Coding For Rodent One-Way and Two Way Housing (effective March 2, 2009)**

Our One-Way and Two-Way zones for housing rodents will experience a signage make over effective March 2, 2009. The existing Animal Resource Orientation which includes an auditorium presentation and targeted facility tour for all new employees emphasizes the concept of housing rodents in one way and two way zones. When ordering rodents through our Animal Resource Office, investigators specify one-way or two-way rooms to house their animals. As a reminder, rodents housed in a one way zone (e.g. KMRB vivarium, S-Wing Basement vivarium, CVRI Breeding Colonies) experience one-way movement out with no possibility of returning to the zone. In contrast,

rodents housed in two-way zones may be taken back and forth between the animal room and labs.

Two-way zones are at higher risk of breaking with an infectious agent (e.g. pinworms) given traffic in less controlled areas (e.g. public hallways and external, shared labs). Given the risk of carrying a murine infectious agent on your clothing, all personnel must follow the same traffic pattern as the mice. Simply put, staff may not enter a one-way zone (the most protected colony health) after being in a two-way zone (less protected colony health). If your work requires entry into one-way and two-way zones on the same day, you must plan your day to enter the one-way zones first. The color coded signage for **ONE WAY ZONES (Green)** and **TWO WAY ZONES (Red)** will visually reinforce the biosecurity strategy for personnel movement within the animal facility.



## Training Update

All research staff that work with rodents in Microisolator (MIT) husbandry rooms are required to complete an annual refresher course in MIT (Blackboard) and hands-on training which is offered by DLAM. Your Blackboard accounts should be active. DLAM will provide times and locations for the hands-on training.

If you have any questions regarding Blackboard contact Erin Hutteman at x3-5116. Questions regarding the hands-on training can be answered by DLAM at x5-2653.

## EH&S/IBC Review of UCAR Protocol for Hazards

The University Committee on Animal Resources (UCAR) regularly sends new protocols and modifications of existing protocols to Environmental Health and Safety (EH&S) and the University's Institutional Biosafety Committee (IBC) to be reviewed for health and safety concerns for Vivarium and research personnel. Since the IBC is also responsible for ensuring compliance with the NIH Guidelines for Research Involving Recombinant DNA Molecules, additional paperwork may be requested to initiate the review for biohazards.

Once the EH&S / IBC review has been completed, a safety summary will be provided to the Principal Investigator, the Vivarium, and the UCAR. This safety summary provides a succinct set of instructions tailored for the experiments. Questions regarding these instructions should be forwarded to Janet Ives (biohazards), Bob Passalugo (chemical hazards), or Tom Morgan (radiological hazards).

Lastly, all individuals including Principal Investigators who are listed on the UCAR protocol will be checked for compliance with the University's annual lab safety training requirement. Approvals from EH&S and the IBC cannot be finalized until everyone has completed this training.

### Helpful web links:

IBC: <http://www.safety.rochester.edu/ibc/>

EH&S: <http://www.safety.rochester.edu/>

Lab Safety Training:

<http://www.safety.rochester.edu/ih/ihtlabhome.html>

## Planning on using hazardous materials in the Vivarium?

The Animal Resource annually certifies rooms for the use of hazardous (chemical, infectious and radioactive) materials in animals that are housed in the Vivarium. Two weeks prior to administering each NEW hazardous agent to laboratory animals you must notify the Animal Resource of your intentions so that the room may be certified for your research program. The Notification of Intent to Use Hazardous Substances form is available at the Animal Resource Office or on the web site ([www.urmc.rochester.edu/vivarium](http://www.urmc.rochester.edu/vivarium)) under FORMS. Additionally, if the hazard is administered in food or water you are required to submit special request forms, use special cage cards and/or labels.

## New York State Department of Health inspection

The University of Rochester's Research Facility is inspected by regulatory agencies each year. On November 24 2, 2008 the New York State Department of Health made a visit to the Animal Resource and UCAR inspecting animal housing rooms, support spaces and evaluating UCAR function. The U of R passed the NYS inspection without any citations.

### **And now for something completely different....**



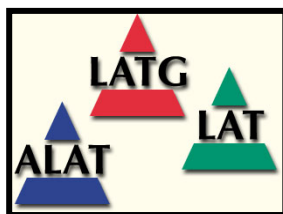
Dr. Jeff Wyatt, Professor & Chair of URM Department of Comparative Medicine and Director of Animal Health & Conservation at Seneca Park Zoo will speak about the successful reintroduction of the Lake sturgeon to the Genesee River and Lake Ontario. For more information about this presentation to be held Wednesday, February 25 at 7:30pm in the Brighton Town Hall (2300 Elmwood Avenue) go to <http://www.gvaudubon.org/node/46> .

#### Contact us:

#### Phone

AR 5-2651  
UCAR 5-1693

We're on the Web!  
<http://www.urmc.rochester.edu/vivarium/>  
<http://www.urmc.rochester.edu/ucar/>



#### AALAS Certification Update:

Rob McMillan, RLAT and Robin Westcott, LVT, RALAT.  
Job well done.