Training

Animal Care and Use Program to Transition to CITI

Established in 2000, the Collaborative Institutional Training Initiative (CITI Program) at the University of Miami provides web-based training for research education to millions of learners worldwide. Ohio State has been using the CITI Program to satisfy the training requirement for human subjects protection for nearly 10 years, and the IACUC has voted to move the Animal Care and Use Program (ACUP) training requirements to the CITI Program as well.

All investigators, key personnel and support staff who are listed on approved animal use protocols or handle animals used for research, testing or teaching as part of the ACUP must be appropriately trained in the care and use of animals. The current training requirements include two web-based "in house" courses: "Animal Care and Use Training" and "Occupational Health and Safety Training." These two requirements will be combined into a single CITI Program course that includes several modules, including a custom Occupational Health and Safety Program (OHSP) Module with specific information about the OHSP at Ohio State. Thus, Ohio State learners will no longer be required to complete two separate courses. All training requirements will be met upon completion of the CITI Program course with the custom OHSP module.

The modules in the current "in house" Animal Care and Use course closely mimic the modules in the CITI Program course, so the content is nearly identical even though the format is different. Completion of the CITI Program course satisfies the training requirements for three years. Investigators will not be required to complete this new course until their current training has expired. Another benefit of using the CITI Program is the option for meeting ongoing/continuing education. With the current "in house" program investigators are required to retake the same course every three years, while the CITI Program offers a shorter "Refresher Course" that will be offered every three years after initial completion of the basic course. The CITI Program regularly updates both the basic and refresher courses as regulations and guidelines are revised or updated, thus ensuring that members of the ACUP at Ohio State will always have the most current information as well.

Perhaps the most beneficial change for researchers associated with the transition to the CITI Program will be the implementation of a series of notifications to alert ACUP members of pending training expiration. Feedback from investigators during Quality Improvement protocol reviews includes suggestions for such a notification, since many researchers do not realize training has expired until an attempt is made to submit a change in personnel or a protocol for review. A process to provide advanced warning of training expiration will help keep personnel informed about their training status and eliminate those last-minute surprises and "under the wire" training updates.
**Supporting Documents** - Click on the “Attachments” tab from the home page of the protocol to find supporting documents associated with the protocol. These may include the Housing SOP and Emergency Plans for satellite housing locations or Animal Hazard Safety Protocols.

**Animal Hazard Safety Protocols** - The first responsibility listed on most Animal Hazard Safety Protocols is to notify ULAR at least 3 business days before administration of the hazard by logging into eProtocol and selecting the “Notify ULAR of Biohazard Use” link. Remember that most Animal Hazard Safety Protocols also require that the Safety Protocol sign itself be posted during administration of the hazard and for the duration indicated on the sign.

**Animal Transfers** - When transferring animals between investigators or locations remember to ensure that vivarium approval has been granted before physically moving the animals. It may appear in eProtocol that the receiving PI has accepted the transfer and that fiscal approval has been granted, but ULAR must check the health status on the sending and receiving end before issuing approval for the transfer. Look for the green checkmark (Vivarium Approval For Transfer Issued). For questions or assistance with animal transfers contact Barbara Comeaux at 292-8541 or comeaux.5@osu.edu.

**Hide/Show Errors** - Certain portions of the protocol form are linked or associated with other portions of the forms. For example, for each Protocol Activity listed in the form there must be an associated Animal Use Location identified where the activity will be performed, or each Protocol Group must have an associated Final Disposition. Personnel working on protocol submissions or amendments can quickly ascertain if these associations are appropriately linked by clicking on the “Hide/Show Errors” link at the top of each page in the form. Any errors identified must be corrected before the protocol can be submitted for review.

**Where's my protocol? Understanding the Review Process**

Guidance for investigators at Ohio State recommends submitting three-year renewals at least three months before protocol expiration to avoid a lapse in approval and a potential suspension of research activities.

Why does the review process potentially take so long? As the flowchart on the next page depicts, there are two basic steps to the process (Veterinary Pre-screen/Consultation and IACUC Review). Depending on the type of IACUC review (Designated Member Review or Full Committee Review) and the types of activities proposed, it is quite possible the entire process can take that long. But help is available! For assistance in protocol preparation and veterinary pre-screen/consultation contact Angela Phillips at phillips.270@osu.edu (292-3633). For assistance during the IACUC review process contact Anthony Yonkura at yonkura.1@osu.edu (292-4494) or Jennifer Spohn at spohn.31@osu.edu (247-1562).
Ohio State Protocol Review Process Flowchart

PI submits new or 3-year renewal protocol in Ohio State eProtocol system

PI modifies based on veterinary feedback

Veterinary Pre-Screen and Consultation

Does the protocol meet any of these criteria?
• Multiple major survival surgery
• Major survival surgery on USDA species
• Death as an endpoint
• Unrelieved pain and/or distress
• Non-human primates (except for observational)

Departmental Approval

IACUC Chair Assigns Reviewers

NO

Veterinary pre-screen and consultation can take as little as a week or up to 30 days depending on the complexity of the study.

Designated Member Review (DMR) typically takes at least a week if there are no requests for modifications or additional information, but could take longer if there are requests or if the protocol is called to full committee review (see below).

Full Committee Review (FCR) could take up to 60 days or more if there are requests for modifications that meet the criteria to go back to the next convened meeting.

YES

Assigned Designated Member Review (DMR) with 3-day option for any member to call for Full Committee Review

Called to FCR?

YES

Disapproved by FCR?

Disapproval Letter Sent to PI

Disapproved by FCR?

YES

NO

Disapproval Letter Sent to PI

Approved by FCR or DMR?

Approval Letter Sent to PI

NO

Protocol is sent back through IACUC Office to PI with request(s) for modification(s) or additional information

PI submits modifications or additional information back to IACUC for DMR or FCR as determined by the IACUC
All new and revised policies developed by the Ohio State Institutional Animal Care and Use Committee to assist investigators and staff with their research are available on the IACUC Policies and Procedures page of the Office of Responsible Research Practices website. These policies are reviewed and updated on a regular basis to ensure that they still meet regulatory requirements.

- **Revised** - **CO2 Euthanasia of Rodents Including Guinea Pigs**: The euthanasia policy was revised to include language about the appropriate flow rate for CO2 displacement. In accordance with the 2013 AVMA Guidelines on Euthanasia, the flow rate for CO2 displacement must be between 10% and 30% of the chamber volume/minute.

- **Revised** - **Housing Requirements for Animals**: The revision in this policy provides guidance for investigators on how to select satellite housing as a housing option in eProtocol and describes additional details about environmental alarm systems. Specifically, Standard Operating Procedures and Standard Management Plans must include alarm set-points, depending on the specific needs of the species and location, and environmental alarm systems must be verified semiannually for hard-wired systems or monthly for systems with battery back-up. Verification must be documented and available for review during semiannual inspections.

- **Revised** - **Movement of Animals Outside the Animal Housing Location**: This policy was revised to require justification for the use of personal vehicles to transport animals. Justification must be provided in eProtocol and reviewed and approved by the IACUC. Inspections of approved vehicles will be required every six months. In addition, transportation of animals classified as ABSL-2 or higher in personal vehicles is strictly prohibited.

- **Revised** - **Validate the Effectiveness of Manual Sanitation**: This policy was revised to clarify that validation of the sanitization method used for manual cleaning of primary housing enclosures (the enclosure and all items that come into direct contact with the animal during housing) must be completed semiannually, regardless of the product used, with results maintained and available during semiannual inspections. In addition, non-porous work surfaces and equipment should be sanitized using sporicidal disinfectants (e.g., Spor-Klenz, Wexcide, 10% Bleach, Opticide, Roccal-D). Please note that alcohol is neither a sterilant nor a sporicidal disinfectant.

- **Revised** - **Rodent Surgery**: The Rodent Surgery policy was revised to provide additional guidance regarding aseptic technique. Specifically, if a non-sterile object is touched during the surgery, the surgeon must either replace the gloves with new sterile gloves or properly disinfect the gloves. An acceptable method of disinfecting gloves is to wet them with Spor-Klenz then wipe dry with a sterile towel. If surgical instruments come in contact with a non-sterile object, the surgeon must replace the instrument with one from a new sterile pack or wipe the gross debris off with 70% alcohol, sterile water or saline, and then place the instrument tips in a hot bead sterilizer.
Charles R. Martin, a Registered Laboratory Animal Technician, has been a ULAR Training Specialist under the direction of Dr. Stephanie Lewis since December 2012. Charlie came to the ULAR training program after receiving a Bachelor of Science degree in Zoology here at The Ohio State University. He started with ULAR as an animal care team member assigned to support the biosafety level two housing locations, among other duties. In his current position Charlie helps develop, refine, implement and support training and continuing education programs for investigators, key personnel, veterinary technicians and professional students, and serves as the hazardous agent liaison among ULAR, EH&S, and investigators. He also provides technical support for laboratories, as needed. Charlie is an active member of the American Association of Laboratory Animal Science and Laboratory Animal Welfare Training Exchange. Charlie also serves as a council member for the Central Ohio Branch of the American Association of Laboratory Animal Science. For more information about services provided through ULAR’s Training Program, please contact Charlie at ulartraining@osu.edu

Melinda Bruns, a Certified Professional IACUC Administrator, joined the Office of Responsible Research Practices as a Quality Improvement Specialist in January. Prior to joining the program at Ohio State, Melinda developed and led the Post-Approval Monitoring program at the University of Cincinnati. She is also a Registered Veterinary Technician by the Ohio Veterinary Medical Licensing Board, a Registered Laboratory Animal Technologist by the American Association of Laboratory Animal Science, and earned her Bachelors degree in Biological Sciences from the University of Cincinnati. Her diverse background in animal care in both clinical and research settings allows her to identify educational needs, assist investigators, and foster a positive environment to achieve compliance with regulations, guidelines, and accreditation requirements at Ohio State.

**Reminders**

**Confirmation of death** - a secondary physical method of euthanasia is required to confirm death after CO₂ euthanasia and prior to disposal of carcasses. Acceptable secondary methods for confirmation of death include creation of a pneumothorax, removal of a vital organ, decapitation, exsanguination, or cervical dislocation.

**Weekly Eye Wash Check** - the Environmental Health and Safety SOP for flushing emergency eyewash stations states that eye washes should be activated on a weekly basis long enough to ensure flushing fluid is provided. Detailed steps for the flushing procedure, as well as a weekly checklist that can be used to document the flushing can be found on the EH&S website here.