ANIMAL CARE & USE PROGRAM UPDATE

Presented by
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RCO/Director
&
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IACUC Chair
OVERVIEW

- AAALAC Site visit summer of 2015
- MU PHS Animal Welfare Assurance – 4 year renewal
- ARC Disaster Plan (Updated 2014)
- New/Updated IACUC Guidelines
- IACUC Protocol Review - suggestions vs. requirements
- Reverse Light Cycle rooms
- Training Requirements & new training programs
- Continuing Education
- NIH Grant – IACUC Protocol Congruency
- ARC Facility 5-year plan & Per Diems
AAALAC SUMMER SITE VISIT
Purpose of the site visit
- Gain understanding of our program of animal care and use
- Collect evidence of good performance
- Gather sufficient quantities of information to serve as advocates before AAALAC Council

What is AAALAC provided before their visit to Marquette?
- A copy of our Program Description
- Review the history of accreditation
- Have a copy of previous evaluations

AAALAC will want to meet with
- The IACUC
- Animal Resource Center Staff
- Research Staff
Preparing for a Site Visit

Do

- Maintain program, facilities, labs in “inspection-ready” state
- Self-identify and resolve deficiencies
- Making sure that practices and program description and protocols match
- Ensure that previous promises to AAALAC have been kept
- Train and educate
- Have SOPs in place and making sure they are followed
- Be around for site visitors. Remember you are the best source for lab specific questions.
ANIMAL WELFARE
ASSURANCE
PHS Policy on Humane Care and Use of Laboratory Animals

“No activities involving animals may be conducted or supported by the PHS until the institution conducting the activity has provided a written Assurance acceptable to the PHS, setting forth compliance with this Policy”.

“Without an applicable PHS-approved Assurance no PHS-conducted or supported activity involving animals at the institution will be permitted to continue”.

What does that mean to you?

No PHS-approved assurance means no research using NIH funding.
ARC DISASTER PLAN
Do you know what to do in an emergency?

Catastrophic disaster plan

- GMO’s for breeding
- Non-GMO’s to maintain genetic lineage
- Non-breeders/experimental

Mass euthanasia of research animals
IACUC POLICY AND GUIDELINES
Updated:

- **Guidelines for Use and Maintenance of Guillotines and other Equipment Used for Decapitation** – on AAALACs radar last visit
  - Training and Training Documentation
  - Recommended frequency of blade sharpening – NEW Log for this
  - Life Science now sharpening the blades
    - Form that must be completed and sent before devices are brought to WLS
  - Training responsibility and procedures

- **Guidelines and Policy for Animal Procurement and Purchasing**
  - Harlan
  - Charles River
  - Jackson Labs
Updated:

- Surgical Log Update:
  - Updated surgical log to use as a template on our website
  - Must include:
    - Animal ID
    - Protocol #
    - Description of surgical procedure
    - Dose and route of anesthetics and analgesics administered
    - Frequency and type of intraoperative monitoring performed
    - Intra-operative admin and treatments
    - Post op monitoring and observations recorded

- IACUC will need to see each surgical log when approving a new or 3-year renewal protocol
New:

- Standard Euthanasia Guidelines – Use of Cervical Dislocation for Rodents
  - All staff must be trained when performing a physical method of euthanasia
  - Training needs to be recorded in the lab – if it’s not recorded you didn’t do it.
  - Record keeping of training – Appendix G to IACUC@Marquette.edu
IACUC SUGGESTIONS VS REQUIREMENTS

IACUC Approval

1. Protocol submitted
2. FCR
3. IACUC required mods or suggestions
4. Sent to PI for revision
5. Revision sent to DR for approval
6. Protocol approved - Letter sent

Aid from the IACUC Chair or ARC Director

Required changes – must be completed before approval is granted

Requested changes or alternate methods - must be addressed in the e-mail but will not be required to implement for approval
Analgesic administration – on AAALACs radar:

- “Animal use protocols involving surgery routinely used acetaminophen and/or ibuprofen in water (as opposed to injection). It was suggested the IACUC review the administration of analgesics to ensure the practices are consistent with currently accepted veterinary practice”. -AAALAC 2012 site visit report

- IACUC will push on all new protocols as well as 3-year renewals that an alternative be used.
  - MediGel with Carprofen for pain management will be suggested by the IACUC [www.clearh2o.com](http://www.clearh2o.com)
REVERSE LIGHT CYCLE ROOMS
Animal Health Checks and Transportation – On AAALACs radar

Red light flood lights in rooms & red light flash lights were added to reverse light cycle rooms – ARC provides training

IACUC policy on animal transport
- Policy should be posted outside each room
- If it’s in your protocol… adhere to it
RECORD KEEPING
If it’s not recorded...

Animal Weights
Surgical Logs
Training Logs
Feeding Logs

You didn’t do it!

If it’s in your protocol… adhere to it!
SURGERY
## SURGERY SECTION OF IACUC FORM

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<th>Non-Survival Surgery</th>
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<td></td>
<td>apply</td>
<td>chemical disinfectant</td>
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<tr>
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<td>Pick one or all that</td>
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<td>gloves, mask</td>
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TRAINING PROGRAMS
CITI – Collaborative Institutional Training Initiative

- Purchased by the University and ARC for initial and continuing training and education for all animal users.
- Web-based training materials
- In the set-up stage and will (tentatively) be implemented/launched late Spring 2015
- Animal Care and Use and Biosafety/Biosecurity content
- Once the MU CITI site goes live – ARC will hold training sessions
TRAINING REQUIREMENTS AND NEW TRAINING PROGRAMS

- Working with the IACUC
- Federal mandates
- Alternatives
- Endpoint criteria
- Surgery
- Collecting Blood
- OHS
- Housing
- Restraint
- Euthanasia

- IACUC Approval
- Reporting non-compliance
- Aseptic Surgery
- IACUC Basics
- Post-procedural care
- Pain and distress
- Behavior
- Working with the rat
- Working with the mouse

- USDA Pain/Distress categories
- Personnel training and experience
- Using hazards in animals
- Animal Biosafety
Surgical Training – getting updated

Current Surgical Training
- NIH Survival Surgery DVD
- Surgical training within the lab according to training SOPs or what is posted in the protocol
- **IMPORTANT** – all labs need to make sure they are recording ANY laboratory training
- **Reminder** – Consultation with the Veterinarian for review of anesthesia, analgesia, suturing, etc. is recommended and encouraged
Surgical Training – getting updated

Future Surgical Training – survival and non-survival surgeries
- All or any anticipated animal surgeon must participate in the surgical training program.

Training will now include (in addition to previous slide)
- Participation in the “Rodent Surgical Training Session” presented by the ARC
- Power Point presentation on the basics of rodent surgical training
- Watching the NIH DVD on “Training in Survival Rodent Surgery”
- Isoflurane vaporizer training if appropriate
- CITI component – all surgeons will be required to participate in the “Post-Procedural Care of Mice and Rats in Research” and “Minimizing Pain and Distress” courses and will compete the course with a passing score on the associated exam.
Contents of the Surgical Training PowerPoint

1. General Principles of Rodent Surgery
2. Record Keeping
3. Anesthesia and Analgesia
4. Instrument Preparation
5. Animal Preparation
6. Conducting Surgery – Aseptic
7. Postoperative Care
8. Pain Recognition
TRAINING REQUIREMENTS AND NEW TRAINING PROGRAMS

- IACUC assessment assuring that personnel are qualified to perform surgical procedures

- Responsibility of the PI
  - Complete Surgical Appendix D of the Protocol form
  - Relevant experience with the animal model (question #4 on form)
    - Be specific – education, training, certification, and experience of surgeon
  - Surgeon training and training method used (question #5 on form)
    - Be specific – how is training conducted, assessed, and recorded. Any information you provide will better assist the IACUC.
CONTINUING EDUCATION REQUIREMENTS
The Guide for the Care and Use of Laboratory Animal states: “Continuing education programs should be offered to reinforce training and provide updates that reflect changes in technology, legislation, and other relevant areas.”

What does this mean for the Marquette Animal Program?

- Creation of a continuing education program
- IACUC, faculty, staff, students, anyone involved in vertebrate animal-based research or teaching, ARC staff, animal surgeons, and any animal user that will be working with bio hazardous materials in live animals.
- One (1) hour of continuing education will be required annually.
How can I get my one hour completed and how is it recorded?

- Attend a training session offered by the ARC
- Attend an outside conference/seminar with topics applicable to animal care and use or research
- View and on-line live or recorded webinar – from IACUC approved list of webinars
- CITI training modules with a passing score on the associated exam
- Making a presentation (on your research) to the ARC staff

The IACUC will have a list of approved continuing education training materials

Submit all continuing education materials to IACUC@Marquette.edu
CONGRUENCY
PHS and NIH Grants Policy requires the institution to verify, before award, that the institution’s IACUC has reviewed and approved the animal work outlined in the proposal. Specifically, “It is an institutional responsibility to ensure that the research described in the application is congruent with any corresponding protocols approved by the IACUC” (NIH Policy Statement 10/12).
What does this mean for you?

Receive a “JIT Notification” and you submit an IACUC protocol
- Review/Congruency will be done at this time before the scheduled IACUC meeting

- Meaning that you will need to submit to the Compliance Officer (Austin) a copy of NIH grant (electronically) or a word document with the vertebrate animal section and the research strategy section.

- IACUC congruency policy is being updated and will be under review by the IACUC.
ARC 5-YEAR PLAN & ANIMAL PER DIEMS
Animal Space
- What is our max capacity using current cage setup?
- What is our capacity as of today?
- What are our housing options if we do not expand?

Procedural Space
- Where do we stand on procedural space?
- Is there any room for growth?
- Are we maxed out?

ARC husbandry equipment and supplies
- Are we in need of husbandry supplies?
- What is the age of most of our equipment? Time to replace?

ARC Operating Budget
Current per diem rates went into effect for FY11 and FY12

In taking a look at the long term plan... per diems most likely will increase each fiscal year by no more than 3%

Per diem review will be conducted and assessed during the ARC five year plan.

Do not have a date of implementation at this time.
We have a great new/updated website

www.Marquette.edu/orc

Animal Resource Center
  - Forms, Policies, & SOPs
  - ARC Training & Workshops

IACUC
  - IACUC Forms, Policies, & SOPs
  - OHS information
  - IACUC review and approval process

Biosafety and IBC
  - Review and approval process
QUESTIONS

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