Preparation of the NCI Animal Study Proposal

Presented by:
Olga Kuznetsova, NCI-Bethesda
ACUC Coordinator

and

Angela Stahl, NCI at Frederick
ACUC Coordinator
Key Topics of Discussion
Animal Care and Use Program

- Overview of the Animal Care and Use Committee (ACUC) and its responsibilities
- Federal Regulations and Policies
- Investigator and Animal User responsibilities
- Completing the Animal Study Proposal (ASP) Form
- ASP review process
- Electronic system in Bethesda (iRIS)
- Updates on the electronic system in Frederick (Topaz)
- Tips to make the ACUC approval process smoother
Why does the ACUC exist?

• Animal Welfare Act
• PHS Policy on the Humane Care and Use of Laboratory Animals
• Guide for the Care and Use of Laboratory Animals
• Association for Assessment and Accreditation of Laboratory Animal Care International
Who serves on the ACUC?

Chair
Attending Veterinarian
Scientists
Unaffiliated Members
Nonscientific Members
Safety Representatives
What does the ACUC do?

- Assist with proposal submissions
- Review proposals for adherence to Federal and institutional guidelines and policies
- Develop guidelines
- Review program and recommend improvements
- Inspect animal facilities and labs
- Investigate animal care and use concerns
Principal Investigator (PI) and Animal User

What are your responsibilities?
PI and Animal User’s Responsibilities

- Comply with Federal Regulations and ACUC Guidelines
- Ensure that all individuals listed on a proposal are properly trained and enrolled in the occupational health program
- Ensure adherence to content of approved proposal
- Notify ACUC of changes to proposal in advance… failure to do so may result in suspension of animal activities
- Complete annual and triennial review (renewal) of proposal
- Update training every three years
Things to Remember …

- Conscientious research
- Maintain public trust
- Animals are living creatures that experience pain and distress
- It is your responsibility as a researcher to ensure that your animals receive appropriate care
- Be familiar with the behavioral characteristics of your animal subject as a mechanism for identifying potential pain, distress, or health related issues
Animal Study Proposals

A step-by-step process ...

- Consult with your veterinarian and ACUC coordinator
- Consult with your facility manager
- Consult with the safety representative
- Refer to the ACUC and ARAC guidelines (Bethesda)
Refer to the ACUC Policies and Guidance

Animal Numbers Justification
Humane Endpoints
Transportation
Experimental Neoplasia
MTBM Testing
Breeding and Weaning
Genotyping
Needle size/dose volume

Alternatives to Ascites
Perioperative Analgesia
Postoperative Pain Evaluation
Euthanasia
Renewal and Annual Review
Pharmaceutical Grade Compounds
Animal Study Proposal Content

- Follow the ASP form directions
- Ensure ALL staff is included (and adequately trained) for all procedures in the ASP
- Rationale and justifications
- Accurately detail ALL procedures that animals will undergo
- Reference applicable policies and guidelines
- Have questions … Please ask
Animal Study Proposal Rationale

• For study objectives, use non-technical language (lay language)
• Animal number justification, provide a scientific rationale for group size and total number of animals required
• For procedures outside of the ACUC guidelines, scientific justification is required
Alleviate Pain and Distress

- Consideration of alternatives
- Recognition
- Known or potential adverse effects
- Anesthetics and Analgesics
- Veterinary consultation
Humane Endpoints

- Expectations
- Physical appearance
- Physiological changes
- Behavioral or activity changes
- Changes in body weight

Frequent observation and veterinary staff involvement are key factors for ensuring appropriate humane endpoints.
**Major Survival Surgery**

Any surgery that:
- penetrates and exposes a body cavity
- produces substantial impairment of physical or physiologic functions
- or involves extensive tissue dissection or transection
- (e.g., laparotomy, thoracotomy, joint replacement, and limb amputation)

Please consult with the veterinarian in advance of proposal submission
Post-Operative Care

- Individual responsible for care
- Monitoring
- Analgesics used (agent, volume, route, dose)
- Wound closure removal
- Special housing/diet
- Body temperature
How do I assign pain or distress categories?

<table>
<thead>
<tr>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(USDA C)</strong></td>
<td><strong>(USDA D)</strong></td>
<td><strong>(USDA E)</strong></td>
</tr>
<tr>
<td>Minimal, transient, or no pain or distress</td>
<td>Pain or distress is relieved by appropriate measures</td>
<td>Pain or distress is not relieved</td>
</tr>
<tr>
<td>Any procedures not involving anesthesia (e.g., breeding, injections)</td>
<td>Any animal receiving anesthesia/analgesia to relieve pain must fall into this category</td>
<td>Consult a veterinarian if you are proposing to conduct procedures that fall into this category</td>
</tr>
</tbody>
</table>
Animal Study Proposals

Review Process
Proposal Received by ACUC office

- Facility Manager
- IBC Coordinator
- Safety Reviewer

ACUC designated Reviewers/Attending Veterinarian

- Pre-review comments to investigator

ACUC Committee

- Post-review follow up
Proposal Received by ACUC office

ACUC Coordinator

Pre-review comments to investigator

LASP Veterinarian

Investigator submits response

Safety Representative/IBC

ACUC Committee

Post-review follow up
## Modification or New Submission

How do I know what to submit for a change?

<table>
<thead>
<tr>
<th>Modification</th>
<th>New Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>All changes that fall under the same scope of study as the original proposal</td>
<td>If the changes you are proposing do not fall under the same scope of study as the original proposal</td>
</tr>
<tr>
<td>Surgery, procedures, bleeding, personnel, holding location, increase of animal numbers, species, strain, hazardous agents, etc.</td>
<td></td>
</tr>
<tr>
<td>Modification form (Bethesda) Memorandum (Frederick)</td>
<td>New ASP Form</td>
</tr>
</tbody>
</table>
Proposal Reviews
What is my responsibility?

Review every year

Renew every 3 years
Electronic Submission System in Bethesda

- iRIS (iMEDris product)
- Web-based application
- Real-time tracking of application progress
- Help links & guidance
- Electronic signatures
- Training (upon request)
- Major update
iRIS Tips and Tricks

• Use the Help Links

• Study Contact will get all submission correspondence

• Can’t find a user? Search LDAP and enter only part of the name

• When responding to stipulations, make sure you edit the submission
Electronic Submission System in Frederick

*Expected launch - late 2019*

- Topaz Technologies
- Web-based application
- Electronic signatures
- Help links and guidance
- Real-time tracking of application progress
- Currently in development/testing to ensure user-friendly submission process
- User training in 2019
Helpful Tips for a Smooth Approval

• Answer all of the questions
• Make sure personnel training up to date
  AEP Enrollment
  OACU Course Completion (Bethesda)
  ACUC Course (Frederick)
  Sign off on Protocols and Modifications
• Attach MSDS for chemicals (Bethesda)
• If adding cell lines, please attach MTBM test results or reference the specific exception
• Meet submission deadlines
Animal Welfare Concerns

- Veterinary Staff
- ACUC Chairperson
- Institutional Official
- Office of Laboratory Animal Welfare
Contact Information

NCI-BETHESDA
Dr. James Mitchell, ACUC Chair........................................240-858-3101
Olga Kuznetsova, ACUC Coordinator.................................240-781-3343
Kelly Lucas, ACUC Coordinator........................................240-760-6375
Veterinarians
    Bob Hoyt, DVM (Attending Veterinarian)..........................240-781-3323
    Melody Roelke-Parker, DVM........................................301-827-4230
    Josh Kramer, DVM....................................................301-435-5689
    Matthew Breed, DVM................................................301-451-1960

NCI at Frederick
Melinda Hollingshead, ACUC Chair.................................301-846-5680
Angela Stahl, ACUC Coordinator....................................301-846-7544
Veterinarians............................................................301-846-5577, 5195
    Jatinder Gulani, DVM, DACLAM (Attending Veterinarian)
    Gillian Braden, VMD, DACLAM
Helpful Links - Bethesda


- iRIS: https://iris.nci.nih.gov/

- OACU PI & animal user training (register & online course): https://oacu.oir.nih.gov/
Helpful Links - Frederick

- NCI at Frederick ACUC website: https://ncifrederick.cancer.gov/Lasp/Acuc/Frederick/Default.aspx
- ACUC Guidelines: https://ncifrederick.cancer.gov/Lasp/Acuc/Frederick/GuidelinesFnl.aspx
- Animal Study Proposal form and helpful hints: https://ncifrederick.cancer.gov/Lasp/Acuc/Frederick/Proposal.aspx
- ACUC Online Training: https://ncifrederick.cancer.gov/Lasp/Acuc/Frederick/Training.aspx