Animal Research at UTHSCH

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Animal Welfare Committee Office

https://inside.uth.edu/animal-research
Animal Care Regulations

• Animal Welfare Act
  – Implemented by the United States Department of Agriculture (USDA)

• Public Health Service (PHS) Policy
  – Implemented by the Office of Laboratory Animal Welfare

• The Guide for the Care and Use of Laboratory Animals
  – Standards for the care and use of laboratory animals

• AAALAC
  – Voluntary accreditation
What is an IACUC (Pronounced “I-a-cook”)?
What is an IACUC?

- The **Institutional Animal Care and Use Committee**
  - Ensures that all vertebrate animals used for research or instruction are treated ethically and humanely. The focus is animal welfare.

- IACUCs are mandated for institutions receiving PHS research dollars
What makes an IACUC?

- On the recommendation of the Institutional Official (IO), the President (CEO) appoints IACUC members
- A veterinarian
- A practicing scientist experienced in animal research
- A non-scientist
- Non-affiliated member
Role of the Animal Welfare Committee (AWC)

- Clearly articulate policies and procedures so that everyone understands expectations
- Implement regulations using scientifically sound, performance-based standards
- Establish effective training programs that are realistic
- Assure the public of quality animal care
What information is available to the public?

• Under the Freedom of Information Act (FOIA), the following can be requested by the public
  – USDA inspection reports
  – AWC-approved protocols
  – Minutes of AWC meetings
  – Assurance statement
Role of the Veterinarian and Staff

• Ensure adequate and proper animal care and use
• Work in concert with the AWC and investigators
• Exercise professional judgement to facilitate the science in the context of animal welfare
Role of the Scientist

- Plan research in the context of quality animal care
- Work to strengthen the animal care and use program
- Engage in the process
  - AWC participation
  - Know the regulations
AWC Animal Protocol

• Covers all animal activities performed at UTHSC facilities
• All animal activities, even off site, where UTHSC funds are used to purchase the research animals
• Production of custom antibodies
• Tissue harvest protocols with antemortem manipulations
Collaborations with Other Institutions

• Animals owned by UTHealth
  - Temporary transfer to another facility e.g., MDAnderson SAIF
  - Host IACUC protocol
  - Description in AWC protocol

• Animal activity subcontracted to another institute
  - UTHealth is the prime grantee
  - Another institution performs all or part of animal activities
  - Other institute is responsible for IACUC approval
  - Umbrella Protocol
Principal Investigator (PI)

• Must be a faculty member
• Responsible for submitting application & annual review(s)
• Ensures proper training of personnel
Animal Protocol Submission

Resources for Animal Researchers

- Facility Inspections
- Investigator Training
- iRIS Training
- FAQs
- Medicine and Care (CLAMC)

https://iris.uth.tmc.edu
AWC website resources
https://inside.uth.edu/animal-research/index.htm

Resources for Animal Researchers

Policies for Animal Research

- Occupational Health Program for Personnel with Animal Exposure
- Reporting Animal Welfare Concerns
- Contact Us

- Non-pharmaceutical Grade Compound (NPG) Policy
- Prolonged Restraint Policy
- Rabbit Environmental Enrichment Policy
- Rodent Survival Surgery Policy
- Rodent Tail Clipping Policy
- Rodent Toe Clipping Policy
- Rodent Tumor Policy
### AWC website resources

https://inside.uth.edu/animal-research/index.htm

<table>
<thead>
<tr>
<th>Protocol:</th>
<th>Strain:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of experimental mice needed</strong></td>
<td>Colony productivity (pups/week/female) 0.75</td>
</tr>
<tr>
<td>Number mice needed for experiments</td>
<td></td>
</tr>
<tr>
<td>Number of years remaining in project</td>
<td>3</td>
</tr>
<tr>
<td>Sexes needed</td>
<td>Both</td>
</tr>
<tr>
<td>Breeding scheme</td>
<td>Homozygote vs. homozygote</td>
</tr>
<tr>
<td>Surplus mice (fudge factor)</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Colony productivity</strong></td>
<td>Number of mice needed (incl. surplus) 0</td>
</tr>
<tr>
<td>Average number of pups weaned per litter</td>
<td>6</td>
</tr>
<tr>
<td>Average number of litters produced per breeder female</td>
<td>4</td>
</tr>
<tr>
<td>Average productive female's breeding lifespan (weeks)</td>
<td>32</td>
</tr>
<tr>
<td>Mating system</td>
<td>Pair</td>
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<tr>
<td><strong>TOTAL NUMBER OF BREEDERS NEEDED</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL SURPLUS MICE PRODUCED</strong></td>
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Resources for Animal Researchers

**Forms and Resources**
- Policies for Animal Research
- Occupational Health Program for Personnel with Animal Exposure
- Reporting Animal Welfare

**CLAMC Information, Forms, and Handbooks**

- **Badge Access Request**
  - Complete and submit this form to the CLAMC for badge access to the facilities

- **Animal Transfer Request**
  - Complete and submit this form to the CLAMC to transfer animals to another protocol or PI

- **Laboratory Animal Request**
  - Complete and submit this form to the CLAMC to order animals

AWC website resources
https://inside.uth.edu/animal-research/index.htm
Protocol Review Timeline

- Application received
- Preliminary Review
- Revision Cycles
- Protocol sent to committee
- Revision Cycles
- Committee issues decision
AWC website resources
https://inside.uth.edu/animal-research/index.htm

Resources for Animal Researchers
- Grant Guidance

Meeting Dates and Protocol Guidelines
- Forms and Resources
- Policies for Animal Research

<table>
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<tr>
<th>Suggested Initial Submission Date</th>
<th>Return Responses to Pre-Review by</th>
<th>For Review on:</th>
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<tbody>
<tr>
<td>August 29, 2017</td>
<td>September 11, 2017</td>
<td>September 22, 2017</td>
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<td>September 26, 2017</td>
<td>October 16, 2017</td>
<td>October 30, 2017</td>
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<td>October 31, 2017</td>
<td>November 13, 2017</td>
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<td>November 28, 2017</td>
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<tr>
<td>January 3, 2018</td>
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<td>January 15, 2018</td>
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AWC Considerations for Animal Use

• The rationale provided for using animals
  • What is the significance of this research that can justify animal use?

• Appropriateness of the species
  • Why use this species? Justification of the species and the number of animals to be used.

• Were alternatives considered for this research?
  • Minimize the pain and suffering of the animals used
  • For example, use of cell lines for cell cultures, use of computer simulations etc.

• Consideration of the “Three Rs”
  • Replacement, Reduction, Refinement
Requirements to conduct research

- Approved animal protocol
- Completion of CLAMC training
- Enrollment in Occupational Health Program
- Approval for the use of chemical, biological or radioactive agents
  - SCRO approval for the use of human stem cell in animals
- Submission of the annual Financial Disclosure Statement
- Disclosure of Research Conflicts of Interest
What happens post-approval?

• 3-year renewal
• Post-approval monitoring visits
• Amendments
  – New personnel, new strains, experiments & procedures
• Adverse Events & Protocol Deviations
  – Retraining, protocol modification
  – Suspension of animal activity
  – Reporting to OLAW
• Submission of annual review(s)
  – USDA-covered species
Grant Guidance

Application Information

- AAALAC Accreditation Current Status and Date: Full Accreditation, March 25, 2015.
- Original date of AAALAC accreditation: May 31, 1978

- USDA Registration Number: 74-R-0068

Institutional Animal Care and Use Committee (IACUC) Approval Information

Most grants that propose the use of live animals or animal tissues require that the animal work be reviewed and approved by the federally-mandated institutional animal care and use committee, known at UTHealth as the Animal Welfare Committee. In most cases, this approval is not sought until the grant is to be funded or has a high likelihood of being funded. In the case of NIH, this is called the JIT or Just in Time Notice. To obtain this approval for the funding agency, the animal work must be covered by an approved AWC Animal Protocol(s). Animal protocols may cover more than the work proposed in the grant, but they MUST at least cover the animal work outlined in the to-be-funded grant application.
Grant Congruency-Does the AWC Protocol match the grant?

• Satisfy the requirements of the PHS Policy & the terms & conditions of NIH grants policy
  - General scope of the work
  - Experimental procedures and endpoints
  - Agents
  - Species
  - Euthanasia Method
  - Approximate number of animals

• Grant animal activities ≠ Animal Protocol Activities
  - Amend protocol to be consistent with grant
  - Inform NIH if procedure will not be conducted as originally proposed
Typical Timeline for Grant Submission

- Grant Submission
- Grant Review Assignment
- Peer review
- Priority Score
- Congruence Review
- Congruence Review
- JIT
- Grant Award

Timeline:
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sep
- Oct
AWC Office: (713) 500-3625
awc@uth.tmc.edu

AWC website: https://inside.uth.edu/animal-research/

CLAMC main line: (713) 500-7728
acare@uth.tmc.edu

iRIS helpline: 713-500-7960, option #2
What Species Can I Work With?

• Non-USDA (99%)
  • Rat
  • Mouse
  • Fish
  • Frog
  • Duck
  • Newt
  • Salamander

• USDA covered (1%)
  • Pig
  • Rabbit
  • Sheep
  • Hamster
  • Guinea Pig
  • Naked Mole Rat
  • Non-Human Primate
  • Goat, Ferret, Dog, Cow