Animal Use Ethics

The Principal Investigator at DU has an ethical obligation to:

- Assure the benefits of the research clearly outweigh pain, discomfort, and distress that might be experienced by the animals. Alternatives to animal use must be considered: alternatives must be used if appropriate alternatives exist.
- Select the optimal species for a particular project, while assuring the number of animals utilized are the minimum consistent with sound scientific design and statistical standards.
- Ensure that all animals are lawfully acquired.
- Seek the least painful techniques feasible that will allow accomplishment of the protocol objective(s).
- Estimate the probability of occurrence, magnitude, and duration of the pain, discomfort, or distress in order to adequately plan for the prevention and treatment of pain.
- Take all necessary steps to assess and monitor pain as well as discomfort and distress.
- Minimize pain and distress in intensity and durations through the administration of appropriate anesthetics, analgesics, and tranquillizers.
- Never conduct potentially painful experiments on an awake animal while under the influence of paralytic or curarizing drug without the concomitant use of an appropriate anesthetic.
- Choose the earliest possible end-point in order to minimize pain and discomfort. An animal in pain that cannot be alleviated must be euthanized.
- Subject no animal to multiple survival surgeries, except when they are approved by the IACUC.
- Use physical restraint procedures on awake animals only after alternative procedures have been considered and found to be inadequate.
- Ensure adequate post-surgical/procedural care is provided to all animals.
- Use only methods of euthanasia that are consistent with the guidelines of the American Veterinary Medical Association.
- Assure all procedures are performed by individuals with the appropriate qualifications and experience relative to the procedures to be carried out on live animals.
- Adhere to the 4 R’s of Research:
  - Reduction
  - Replacement
  - Refinement
  - Responsibility

Program Points of Contact

**IACUC Administration/Training & Education**
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303-871-2121

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**Occupational Health Program**
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Protocol Submission

- SUBMISSION FOR IACUC REVIEW: Submit animal use applications to: www.IRBNet.org

- ADMINISTRATIVE PRE-REVIEW: You will receive a confirmation that the application has been added to the IACUC’s agenda. The DU IACUC Office will perform an ‘Administrative Review’ and may suggest enhancements.

- VETERINARY PRE-REVIEW: The DU attending veterinarian will review the application prior to IACUC consideration and may suggest enhancements.

- HEALTH & SAFETY REVIEW: All applications are reviewed by the DU Environmental Health & Safety Department. You will receive an email for issues that require attention. Clearance is required prior to granting approval for animal use.

- PRIMARY IACUC MEMBER REVIEWER: A few days before the IACUC meeting you may receive an email from an IACUC member assigned as the primary reviewer requesting clarification of certain points. The primary reviewer will be your advocate at the IACUC meeting and will need clear and accurate information to best present your protocol.

- NOTICE OF IACUC REVIEW: Post IACUC meeting you will be advised of the outcome of the IACUC’s review. If approved, you will receive an e-mail. If additional clarification are required to secure approval, you will receive a stipulation letter regarding modifications required to secure approval.

Protocol Maintenance

- VISIT THE DU ANIMAL PROGRAM WEBSITE (for forms and animal use guidelines): www.du.edu/orsp/research-compliance

- OBTAIN YOUR DU IRBNet Username and Password to submit protocol: www.irbnet.org

- COMPLETE THE HEALTH QUESTIONNAIRE: Contact Chris Short, MBA 303-871-7501 / christopher.short@du.edu

- COMPLETE THE BASIC TRAINING FOR ANIMAL USERS: www.citiprogram.org

- FACILITY ORIENTATION: Contact Nancy Lorenzon, PhD 970-217-8361 / nancy.lorenzon@du.edu

- PRE-REVIEW: Submit your protocol to www.IRBNet.org and a pre-review will be conducted by the veterinarian and the IACUC Administrator.

- QUESTIONS? Call 303-871-2121

- ANNUAL PROGRESS REPORT: A request for your annual progress report will be sent during the 10th month of the protocol activity. Please complete and return the progress report promptly in IRBNet. Failure to obtain approval of the Annual Progress Report may affect continuation of approved animal use activities.

- AMENDMENTS TO APPROVED ACTIVITY: Any change of research direction, addition of new procedures or personnel, or changes in approved procedures or numbers must be IACUC approved PRIOR TO performing the new or modified activity. Depending upon the nature of the change, amendments require 3 -14 business days for approval.

- DE NOVO REVIEW: NIH Policy dictates that projects exceeding 3 years require a re-submission of a new protocol and IACUC approval. You will receive notice at the 34th month of the current protocol to submit a new protocol for review and approval.

- POST APPROVAL MONITORING: IACUC representatives will monitor animal procedures and confirm that the laboratory practices are as described in the approved protocol. Researchers should consider PAM visit as partnering with the institution to assure program integrity and animal welfare.