

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 preventions 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 tranquilizers.
- 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:

IACUC@du.edu
303-871-2121

David Patterson, PhD
IACUC Chair
303-871-5650 / david.patterson@du.edu

Tyler Ridgeway, CPIA
IACUC/IBC Administrator
303-871-6947 / tyler.ridgeway@du.edu

Veterinary Care:

Ron Banks, DVM
Attending Veterinarian
303-871-4563 / ron.banks@earthlink.net

Animal Facility:

Aurelie Ledreux, PhD
Vivarium Director
303-871-4345 / Aurelie.Ledreux@du.edu

Occupational Health Program

Chris Short, MBA
Director of Environmental Health & Safety
303-871-7501 / christopher.short@du.edu



Animal Care & Use Program



An Overview & Checklist for New Faculty & Staff



Animal Welfare Program

303-871-2121

IACUC@du.edu

Getting Started



- **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 OCCUPATIONAL HEALTH REVIEW FORM:**
Contact Tyler Ridgeway, CPIA
303-871-6947 / tyler.ridgeway@du.edu
- **COMPLETE THE BASIC TRAINING FOR ANIMAL USERS:**
www.citiprogram.org
- **FACILITY ORIENTATION:**
Contact Aurelie Ledreux, PhD
303-871-4345 / Aurelie.Ledreux@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

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 require a corresponding safety protocol that is reviewed by the DU IBC. You will also be required to complete the Occupational Health Review Form and Lab Safety Training before receiving clearance for your animal work.
- **PRIMARY IACUC MEMBER REVIEWER:**
An IACUC member will be assigned as the primary reviewer prior to the IACUC meeting. The primary reviewer will be your advocate at the IACUC meeting and will present any clarifications that are necessary to the IACUC.
- **NOTICE OF IACUC REVIEW:** Post IACUC meeting you will be advised of the outcome of the IACUC's review via email and through IRBNet. If approved, you will receive an approval letter. If additional clarification are required to secure approval, you will receive a stipulation letter regarding modifications required to secure approval.



Protocol Maintenance



- **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 (PAM):**
The IACUC Administrator will schedule a PAM meeting during the anniversary month of the protocol's approval. The PAM process is conducted for the IACUC to ensure continued compliance with PHS and Institutional requirements during the protocol's approval period. Researchers should consider PAM meeting as partnering with the institution to assure program integrity and animal welfare.