Research Responsibility:
Institutional Animal Care Program
Research Compliance Services
IACP
Institution Animal Care Program

Supporting Animal Research through the

IACUC
Institutional Animal Care and Use Committee
Dr. Steve Goddard
Associate Vice Chancellor for Research
Institutional Official
472-4430

Dr. Kelly Heath
Attending Veterinarian and Director
472-6958

Dr. Craig Kreikemeier
Clinical Veterinarian
472-4425

Katherine A. Pinkerton
Assistant Director
Compliance and Training
472-4466

Megan Ebbers
IACUC Project Manager
472-4486
Institutional Animal Care and Use Committee
Diversified membership:

- Chairperson
- Scientist
- Veterinarian
- Non-Scientist
- Member not affiliated with the Institution

Reporting to the IO:
Institutional Official
IACUC

- Reviews animal use protocols.
- Evaluates program of animal care.
- Investigates allegations of non-compliance.
- Makes recommendations to the institutional official.
IACUC
Inspection of Animal Facilities, Laboratories, And Holding Areas.
IACUC Approval Criteria

The **animal model** selected should be for the project based upon anatomical, physiological or other characteristics in consideration of the scientific objectives and the need to obtain valid results.

The **procedures** involving animals should only be those which are necessary in order to achieve the scientific aims of the research and should be conducted in appropriate facilities.

The **living conditions** of the animals must be appropriate for their species and contribute to their health and well being.
Animal Use Protocol

Key Points to Consider:
★ Appropriate animal species
Animal Use Protocol

Key Points to Consider:
- Appropriate animal species
- Brief layman’s description
Animal Use Protocol

Key Points to Consider:

★ Appropriate animal species
★ Brief layman’s description
★ Consider need for approval of Biohazards, Chemical and Radiology hazards
Or Snow, Sleet or Ice...
Animal Use Protocol

Key Points to Consider:
★ Appropriate animal species
★ Brief layman’s description
★ Consider need for approval of Biohazards, Chemical and Radiology hazards
★ Justify the use of animals
Animal Use Protocol

Key Points to Consider:
★ Appropriate animal species
★ Brief layman’s description
★ Consider need for approval of Biohazards, Chemical and Radiology hazards
★ Justify the use of animals
★ Provide a statistically sound rationale for the number of animals utilized
Rationale for Animal Use

* Lay Summary: BRIEFLY, outline the specific scientific goal(s) of this research in straight-forward, nonmedical, nontechnical language that would be understandable to a layperson (aim for a high school-senior reading level). Spell out all acronyms at first occurrence. (250 word limit)

* Specifically justify why you chose this species for your work and include a rational for the appropriateness of the species.

* How will the comfort and well-being of the animal be considered?

* How will humans or animals ultimately benefit from this study?

* Justify the use of animals for this research.
Rationale for Animal Use

* Lay Summary: BRIEFLY outline the specific scientific goal(s) of this research in straight-forward nonmedical, school-aged student-level language.

Harm-Benefit Analysis

* In 2-3 sentences and using lay language, compare the potential harm to participating animals with the potential benefits of the research for humans, animals and/or the advancement of science.

Statistical Information

* How will the number of animals be determined?

The number of animals should be the minimum number required to obtain statistically valid research results. A power analysis is strongly encouraged to justify group sizes when appropriate. Statistical consulting resources at UNL are available from the Department of Statistics and the Survey, Statistics and Psychometrics Core Facility (SSPCF). Contact the UNL Department of Statistics Faculty Consultants at 472-7302, or refer to the website: http://statistics.unl.edu/Resources/Consulting/ for assistance. The SSPCF web site is http://ssp.unl.edu. Java applets for power and sample size

* Define the statistical method used to establish animal numbers

* Justify the number of animals...
POWER ANALYSIS
Harm – Benefit
Animal Use Protocol

Key Points to Consider:
★ Appropriate animal species
★ Brief layman’s description
★ Consider need for approval of Biohazards, Chemical and Radiology hazards
★ Justify the use of animals
★ Provide a statistically sound rationale for the number of animals utilized
★ Search various sources, such as MEDLINE, Animal Welfare Information Center, for duplication of research
Animal Use Protocol

Key Points to Consider:

★ Appropriate animal species
★ Brief layman’s description
★ Consider need for approval of Biohazards, Chemical and Radiology hazards
★ Justify the use of animals
★ Provide a statistically sound rationale for the number of animals utilized
★ Search various sources, such as MEDLINE, Animal Welfare Information Center, for duplication of research
★ Provide scientific design
Hypothesis.....

Goals.....

Theory.....
Animal Use Protocol

Key Points to Consider:
★ Appropriate animal species
★ Brief layman’s description
★ Consider need for approval of Biohazards, Chemical and Radiology hazards
★ Justify the use of animals
★ Provide a statistically sound rationale for the number of animals utilized
★ Search various sources, such as MEDLINE, Animal Welfare Information Center, for duplication of research
★ Provide scientific design
★ Describe samples to be taken, or drugs to be administered to the animal
Animal Use Protocol

Key Points to Consider:
★ Appropriate animal species
★ Brief layman’s description
★ Consider need for approval of Biohazards, Chemical and Radiology hazards
★ Justify the use of animals
★ Provide a statistically sound rationale for the number of animals utilized
★ Search various sources, such as MEDLINE, Animal Welfare Information Center, for duplication of research
★ Provide scientific design
★ Describe samples to be taken, or drugs to be administered to the animal
★ Diet and holding area for the animal
Animal Use Protocol

Key Points to Consider:
★ Appropriate animal species
★ Brief layman’s description
★ Consider need for approval of Biohazards, Chemical and Radiology hazards
★ Justify the use of animals
★ Provide a statistically sound rationale for the number of animals utilized
★ Search various sources, such as MEDLINE, Animal Welfare Information Center, for duplication of research
★ Provide scientific design
★ Describe samples to be taken, or drugs to be administered to the animal
★ Diet and holding area for the animal

Restricted
Diet?? ⇒

⇐ Full
Feed??
Animal Use Protocol

Key Points to Consider:
- Appropriate animal species
- Brief layman’s description
- Consider need for approval of Biohazards, Chemical and Radiology hazards
  - Justify the use of animals
- Provide a statistically sound rationale for the number of animals utilized
- Search various sources, such as MEDLINE, Animal Welfare Information Center, for duplication of research
- Provide scientific design
- Describe samples to be taken, or drugs to be administered to the animal
  - Diet and holding area for the animal
  - Animal restraint
  - Stress and Pain relief
Pain and/or Distress Classification

- Class B: Animals being bred, conditioned, or held for using in teaching, testing, experiments, research, or surgery, but not yet used for such purposes. For example, breeding colonies, newly acquired animals, or wild animals being observed.

- Class C: Animals upon which teaching, research, experiments, or tests will be conducted involving no pain, distress, or use of pain relieving drugs. For example, blood collection, administering of electrolytes or oral medication, SC, IM or IP injections, euthanasia according to the AVMA approved methods, or short-term manual restraint.

- Class D: Animals upon which teaching, research, experiments, surgery or tests will be conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs will be used. For example, surgical procedures, blood collection by invasive routes, or administration of drugs or chemical that would be expected to produce pain or distress, but which will be alleviated by analgesics, or appropriate intervention to relieve pain and distress by timely euthanasia.

- Class E: Animals upon which teaching, research, experiments, surgery or tests will be conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic or tranquilizing drugs will adversely affect the procedures or results. For example, procedures producing pain or distress unrelieved by analgesics, surgical procedures that produce unrelieved pain or distress, negative conditioning via electric shocks that would cause pain in humans, or unusually restrictive restraint in unconditioned animals.
Animal Use Protocol

Key Points to Consider:
- Appropriate animal species
- Brief layman’s description
- Consider need for approval of Biohazards, Chemical and Radiology hazards
- Justify the use of animals
- Provide a statistically sound rationale for the number of animals utilized
- Search various sources, such as MEDLINE, Animal Welfare Information Center, for duplication of research
- Provide scientific design
- Describe samples to be taken, or drugs to be administered to the animal
- Diet and holding area for the animal
- Animal restraint
- Stress and Pain relief
- Details of surgical procedures
All facilities must have a detail disaster plan in place by July, 2013!
Regulatory Oversight:

- **USDA** (United States Dept. of Agriculture)
- **PHS** (Public Health Service)
- **UNL** (University of Nebraska)
Animal Welfare Act

Public Health Service

University of Nebraska Policy and Procedures Manual for the Use of Animals

Regulatory Branch: USDA
Animal and Plant Health Inspection Service

Regulatory Branch: OLAW
Office of Laboratory Animal Welfare
Animal Welfare Act

Public Health Service

University of Nebraska Policy and Procedures Manual for the Use of Animals

Regulatory Branch:

OLAW

USDA

Animal and Plant Health Inspection Service

Regulatory Branch:

Office of Laboratory Animal Welfare

Guide for the Care and Use of Agricultural Animals in Research and Teaching
Animal Welfare Act Regulations

“Covered Species”
Animal Welfare Act Regulations
IACP:

Animal Use Protocol

➤ Assistance with experimental design

➤ Veterinary consultation and review prior to IACUC submission

➤ Provide training.

➤ Notification of yearly review and 3 year renewal

➤ Updated training certificates and transcripts for current technicians and new staff.
IACP:

General Regulation Training

- General overview of regulations working with animals on campus.
- Offered as a class at least twice a semester, and/or as needed by appointment.
- Or online at: http://www.unl.edu/research/orr/grttraining.shtml
- For all PI’s, Grad Students, Undergrad students, or associates.

★ Required for all persons handling animals in research or listed on a protocol.
IACP:
Species Specific Training

• Online training available for all animals used in research.

• Available 24/7.

• One on one species handling and manipulation training by appointment.

• Training for ALAT, LAT or LATG available online.
One-on-one training by species
Development of SOP’s and Guidelines
https://www.youtube.com/watch?v=sfhI2dmEUqw&sns=fb
Questions?
Comments?
Kathy Pinkerton
Assistant Director,
IACUC Compliance and
Training Coordinator
472-4466
110 Mussehl Hall
East Campus