

Austin College

Student Animal Caretaker Training  
Date

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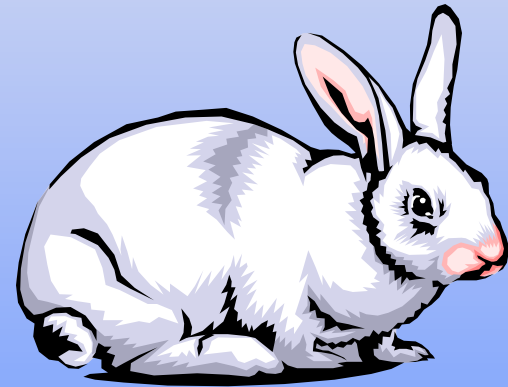
- What is the Institutional Animal Care and Use Committee?
- What do I have to know about animal research?
- What is my role in Austin College's Animal Care program?
- What do I need to know about occupational health?
- What happens if we don't do our jobs effectively?

# The Importance of Animals in Biomedical Research



Because of biomedical research both humans *and* animals now have:

- Life-saving surgical procedures;
- Cancer therapies;
- Organ transplantation;
- Vaccines;
- Safe consumer products; and
- Treatments and cures for countless other medical disorders and diseases.



# Austin College IACUC

By law, an institutional committee must review all aspects of the animal care and use program. This committee is most commonly referred to as the "Institutional Animal Care and Use Committee", or IACUC.

## Four important people to know:

1. IACUC Chairperson – John Enwright
2. Attending Veterinarian – Gordon Brackee, DVM
3. Clinical Veterinarian(s) – Brakebill Animal Hospital
4. Principle Investigators: Lance Barton  
Wayne Meyer

<http://artemis.austincollege.edu/acad/bio/IACUC/index.htm>

# Austin College IACUC

The IACUC is responsible for:

Reviewing and approving animal use by faculty for research or teaching

Monitoring the animal care and use program at the College

**Remember: Animal Research is a privilege and not a right.**

This system is built on trust, any serious issue of noncompliance can jeopardize Austin College's privilege to use animals.

# Animal Care Regulations

The USDA and the PHS regulate animal care and use procedures according to the Animal Welfare Act (AWA) and their respective federal policies.

The purpose of these concepts is to minimize animal use and pain or distress while still achieving the critical scientific objectives that lead to advances in health and medicine.

# USDA Pain and Distress

Level B: Breeding or Holding Colony Protocols

Level C: No more than momentary or slight pain or distress.

Level D: Pain or distress relieved with anesthetics, analgesics and/or tranquilizer drugs or other methods for relieving pain or distress.

Level E: Pain or distress or potential pain or distress that is not relieved with anesthetics, analgesics and/or tranquilizer drugs or other methods for relieving pain or distress.

**Pain & Distress must be minimized at all times**

# Austin College Animal Use

Birds – Pigeons and Quail

Rodents – Mice and Rats

Cold-Blooded Vertebrates – Frogs



# Animal Housing Requirements

## Floor Space Requirements

Birds: Pigeons – 0.8 sq. ft.  
Quail – 0.25 sq. ft.

Mice: 15 sq. in.

## Temperature Requirements

Birds: 61 – 81 ° F

Mice: 64 – 79 ° F

**Therefore: Keep an eye on the thermostat and don't overcrowd animals in cages.**

All animals are to be kept on a fourteen hour photoperiod

Minimize all disturbances and noise to the animal facility

# Animal Husbandry Requirements: Food

All animals must be fed palatable, uncontaminated, nutritionally adequate food daily

Immediately dispose of moldy, insect infested, or otherwise contaminated food

Food should be stored in sealed containers and kept off the floor

Animal foods generally have a shelf-life of 6 months (check dates).

# Animal Husbandry Requirements: Water

All animals must have access to potable, uncontaminated drinking water

Immediately dispose of contaminated water

When using water bottles, it is better to replace than to refill

Water and food levels should be checked daily

# Animal Husbandry Requirements: Bedding

Bedding is a controllable environmental factor that can affect experimental outcomes

Bedding should remain dry between cage changes

Contaminated bedding should not come in contact with food or water sources

Bedding must be changed at appropriate intervals (varies from daily to weekly)

All used bedding and wastes should be disposed of immediately

# Animal Husbandry Requirements: Sanitation

Primary enclosures should be sanitized with each bedding change (rodents once a week or more)

Enclosures with non-contact bedding or dropping catch pans need to be cleaned monthly

Hot water (180 ° F) and disinfectants should be used for cleaning, all materials rinsed thoroughly

Make sure plastic cages do not come in contact with concentrated disinfectant... dilute properly!

# Animal Husbandry Requirements: Sanitation

All animal facilities, tools, utensils should be cleaned and disinfected on a regular schedule.

Floor drains need to be treated with 1 cup of bleach every two weeks and flushed daily.

All laboratory safety rules apply when handling animals, chemicals, and cleaners in the animal housing areas

- eye protection

- gloves

- clothing protection

# Animal Husbandry: Emergency Procedures

Weekend and Holiday care for the animals is essential

In the event of a disaster (including loss of power), make sure you are aware of what needs to be done to care for the animals.

The disaster plan is posted on the inside of the doors of the animal facility

Review this plan immediately, do NOT wait until an emergency to read it.

Your responsibility is as a local responder, but you should always contact your PI, building facilities coordinator, campus police and/or physical plant.

# Animal Husbandry

Your PI will go over the specific emergency procedures for each animal suite with you individually

Your PI will also cover species-specific handling procedures on an individual basis

Be careful to watch food and bedding supplies and inform the PI when supplies need to be ordered. Do NOT Wait until the supplies run out to reorder

Your PI can get you key access after you have completed this training.



# Euthanasia

All animals are to be euthanized according to AVMA recommendations, unless otherwise approved by the IACUC

Approved: CO<sub>2</sub> or overdose of anesthetics

Not approved: cervical dislocation or other physical means without anesthesia

Do not perform euthanasia, or any other procedure on an animal until a person experienced with the procedure has trained you, and you feel confident performing the technique.

When possible, two mechanisms of euthanasia should always be performed on each animal – make sure you verify death

Do not perform euthanasia in the presence of other animals

# Surgery or Medical Care

Report any unusual behavior, injuries, or health concerns to your PI immediately.

Proper use of anesthetics, analgesics, or medication requires PI supervision

Use only sterile needles, scalpels, and other implements with each animal

**NEVER RECAP NEEDLES!** Sharps containers are provided for disposal of needles, scalpel blades, etc.

# Animal Caretaker Protection

Health risks associated with animal research include

- Zoonotic disease
- Allergies
- Bites & Scratches
- Needle Sticks
- Chemical or Biohazard exposure
- Environmental/Laboratory hazards

Exercise CAUTION at all times when in the animal facilities

Report any indications of illness, respiratory problems, or physical trauma (ie. bites or scratches) to the PI and the nurse immediately

# Animal Caretaker Protection

## Level I Risk Animals:

Pre-exposure survey must be completed with the nurse's office

- Annual surveys must be completed each year

Maintain a current tetanus vaccination

Personal protection is available for you:

- Face masks
- Gloves
- Lab coats
- Eyeglasses
- Bouffant hair caps (microbial isolators only)

# Animal Care Deficiencies

Any serious deficiencies in animal care can cost Austin College its privilege to perform animal research

If you see any deficiency in animal care and/or husbandry, you must report the deficiency to the IACUC Chair (John Enwright) or to John West, IACUC member.

No person reporting a deficiency should be approached, reprimed, or discriminated against.

The IACUC and our attending veterinarian will inspect all animal facilities and procedures semi-annually and you will be apprised of any deficiencies or policy changes

# Federal Policies and Regulations

If you have any questions about the federal laws or the Austin College IACUC policies there are a number of references you may consult.

- The Guide for the Care and Use of Laboratory Animals
- Public Health Service Policy on Humane Care and Use of Laboratory Animals
- Animal Welfare Act and Animal Welfare Regulations (USDA)
- National Library of Medicine
- National Agricultural Library
- American Association for Laboratory Animal Science  
([www.aalas.org](http://www.aalas.org))

# Questions/Comments/Concerns

Thank you for your patience.

Before leaving:

Please complete, sign and date the IACUC animal care pledge

Before entering the animal facility:

complete a health survey questionnaire and submit it to the nurse

complete species specific training with your PI