

## Physical Restraint

### Background

Physical restraint is defined by the *Guide* as "the use of manual or mechanical means to limit some or all of an animal's normal movement for the purpose of examination, collection of samples, drug administration, therapy, or experimental manipulation" (2011 *Guide* p. 29). Restraint must be performed with appropriate devices and by well-trained handlers to minimize trauma or excessive distress to the animal, and to prevent injury to the handler. Additionally, restraint must be compatible with research or teaching objectives and the species of animal. Acclimation/training utilizing positive reinforcement should be used when adapting animals to the physical restraint that is being performed, unless doing so has the potential to cause additional stress to the animal or adversely affect the experiment.

### Policy

1. Restraint, whether by physical or mechanical means, should be as brief as necessary to accomplish the research goals. Animals must be properly adapted to restraint methods and personnel handling them. Animals that fail to adapt to restraint should be removed from study.
2. Restraint devices should not be used as a convenience in handling animals when appropriate training or conditioning of the animal will accomplish the same goal. Restraint devices must be suitable in size, design, and operation to minimize trauma to the animal and the handler.
3. Prolonged restraint should be avoided unless it is necessary to protect the animal or handler from injury, or is essential to accomplish research objectives. **Prolonged, conscious restraint is defined as restriction of the animal's normal movements for periods exceeding 30 minutes.** Animals restrained for prolonged periods of time must be observed at appropriate intervals by research staff; the observation interval must be approved by the IACUC.
4. Veterinary care must be provided if illness or injury occurs as a consequence of restraint. The veterinarian may require modification or removal of restraint if injuries, illness, or severe behavioral changes have developed.

### References

FASS (2010). *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*. Savory, IL. Federation of Animal Science Societies (pg 49-50).

NRC (2003). *Guidelines for the Care and Use of Mammals in Neuroscience and Behavioral Research*. Washington D.C. National Academies Press.

NRC (2011). *The Guide to the Care and Use of Laboratory Animals*. Washington D.C. National Academies Press (Pg. 29).

USDA. *Animal Welfare Act Regulations* 9 CFR Part 3, Chapter 1 3.81.d.