

## GUIDELINES FOR PROLONGED PHYSICAL RESTRAINT

The use of prolonged physical restraint for animals used in research and teaching should be avoided whenever possible. IACUC approval for prolonged physical restraint will be granted only if scientifically justified. The Guide for the Care and Use of Laboratory Animals (2011, p. 29) states:

"Physical restraint is 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. Animals are restrained for brief periods, usually minutes, in many research applications.

Restraint devices should be suitable in size, design, and operation to minimize discomfort, pain, distress, and the potential for injury to the animal and the research staff. Dogs, nonhuman primates, and many other animals can be trained, through use of positive reinforcement techniques, to cooperate with research procedures or remain immobile for brief periods ... Prolonged restraint, including chairing of nonhuman primates, should be avoided unless it is essential for achieving research objectives and is specifically approved by the IACUC."

IACUC has defined "prolonged restraint" as physical restraint that is greater than 15 minutes for rodents and greater than 30 minutes for higher mammals.

## The following guidelines must be considered when using prolonged restraint:

- 1. Restraint must be scientifically justified in the animal use protocol. Alternatives to physical restraint should be considered.
- 2. Restraint devices should not be used as a normal method of housing or solely for the purpose of convenience in handling or managing animals.
- 3. Even when deemed necessary, the use of physical restraint should be of the minimum duration and frequency required to accomplish the research objectives.
- 4. Animals to be placed in restraint devices should be given habituation to the restraint and training with positive reinforcement whenever possible.
- 5. Animals that fail to habituate to the restraint should be removed from the study.
- 6. Restrained animals must be observed at appropriate intervals, as determined by the IACUC during review, based on specifics of the restraint.
- 7. Veterinary care must be provided if lesions, illness or severe behavioral changes indicative of distress associated with prolonged restraint are observed. This often necessitates the temporary or permanent removal of the animal from restraint.

All animal protocols involving prolonged restraint must address all guidelines listed above and include:

- Scientific justification that the restraint is necessary to accomplish research objectives and assurance that it will occur for the shortest possible time.
- Documented consideration of alternatives and the reasons that alternatives were not selected.
- Description of the device to be employed and its duration of use.
- Plans for habituating/training and monitoring animals during restraint.