

I. Purpose

This policy has been designed to establish standards and ensure that animals restrained for research purposes are restrained in a way that does not adversely affect animal welfare. This policy has been developed to ensure that UCSF complies with the Guide for the Care and Use of Animals, 8th Edition, and the Animal Welfare Act.

II. Regulatory or Accreditation Authority

The Guide for the Care and Use of Laboratory Animals, 8th Edition, November 2013. – Program Oversight. pp. 29-30.

Animal Welfare Act and Regulations, 9 C.F.R. 3.81(d),

AAALAC Program Description Template, Section 2, I. B.1. c. iii. Physical Restraint.

III. Scope

This policy applies to all labs utilizing laboratory animals at UCSF.

IV. Definitions (optional)

Physical Restraint: 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.

Prolonged Restraint: is the use of a physical restraint of a non-sedated animal for 30 minutes or longer in a natural position, 10 minutes or longer in an unnatural position, or any duration for any position (natural or unnatural) in which a body part is fixed. Chairing of nonhuman primates is considered prolonged restraint, regardless of duration.

A "natural position" is a position which an animal normally engages in (e.g., any normal postural position for that species). An "unnatural position" is one in which the particular animal species would not typically engage, assuming it is a healthy animal.

V. Policy

Prolonged restraint should be avoided unless it is essential for achieving research objectives. Justification for prolonged restraint and consideration of alternatives must be provided in the protocol, amendment, or Standard Operating Procedure (SOP) and approval by the IACUC must be obtained before implementing such practices.

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.

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

Protocols including physical restraints must include provisions for Animals that do not adapt to necessary restraint systems should be removed from the study.

When restraint devices are used, they should be specifically designed to accomplish research goals that are impossible or impractical to accomplish by other means or to prevent injury to animals or personnel.

Protocol Requirements

Protocols including the use of Physical Restraints must include the following information:

- Justification as to why the restraint is necessary, and why alternative methods such as positive reinforcement or conditioning are not feasible;
- A description of all restraint devices used in the protocol;
- The estimated duration the animals will remain in the restraint device;
- Methods or acclimation procedures used to minimize animal distress;
- Monitoring parameters for restrained animals such as monitoring frequency and signs of distressed animals;
- Criteria for removal of the animal from the study based on their inability to adapt to the restraint device;
- Potential adverse effects or events which may be caused by the restraint device;

IACUC Appendices for Restraint of Conscious Animals

Appendices are provided as IACUC suggestions or recommendations. Deviation from the attached appendices may require IACUC approval.

Appendix A: Restraint Guidelines from *The Guide for the Care and Use of Animals* IACUC Approved: January 2013

Important guidelines for restraint of any duration

- Restraint devices should not be considered a normal method of housing, and must be justified in the animal use protocol.
- Restraint devices should not be used simply as a convenience in handling or managing animals.
- When restraint devices are used, they should be specifically designed to accomplish research goals that are impossible or impractical to accomplish by other means or to prevent injury to animals or personnel.
- The period of restraint should be the minimum required to accomplish the research objectives.
- Animals to be placed in restraint devices should be given training (with positive reinforcement) to adapt to the equipment and personnel.
- Provision should be made for observation of the animal at appropriate intervals, as determined by the IACUC.
- Animals that fail to adapt should be removed from the study.
- Veterinary care must be provided if lesions or illnesses associated with restraint are observed. The presence of lesions, illness, or severe behavioral change often necessitates temporary or permanent removal of the animal from restraint.
- The purpose of the restraint and its duration should be clearly explained to personnel involved with the study.