1.0 Directive Purpose

The purpose of this directive is to advise researchers regarding the appropriate use of single housing of animals as an exception to standard Social Housing practices.

2.0 To Whom the Directive Applies

This directive applies to all individuals using live vertebrate animals under an IACUC-approved animal use protocol at Brown University.

3.0 Directive Statement

The Guide for the Care and Use of Laboratory Animals (the Guide) states that single housing of social species should be the exception. AAALAC International holds a similar position, namely that Social Housing will be considered the default method of housing social species unless justified based on social incompatibility resulting from inappropriate behavior, veterinary concerns regarding animal well-being, or scientific necessity approved by the IACUC. Social Housing will be considered by the IACUC as the default method of housing unless otherwise justified. When necessary, single housing of social animals should be limited to the minimum period necessary and, where possible, visual, auditory, olfactory and, depending on the species, protected tactile contact with compatible conspecifics should be provided.

Examples of social species that may be used at Brown and to which this directive may apply include Nonhuman primates, pigs, rabbits, rodents, sheep, and fish.

Animals may need to be singly housed for a variety of reasons. The following are general categories of exceptions to Social Housing and the IACUC-approval requirements for each.

3.1 Single Housing as Part of Standard Animal Husbandry

Brown standard animal husbandry and management practices include single housing of social animals in situations where attempts to socially house the animals could jeopardize animal welfare. When animals are single housed for this reason, a specific justification in the IACUC animal use protocol and case-by-case approval by the IACUC are not required.

Examples (non-exhaustive) of situations where socially housing animals could jeopardize animal welfare such that single housing is authorized include the following:
• separation of aggressive or incompatible conspecifics (for example, adult males of certain species such as mice, rabbits, dogs and Nonhuman primates where aggression is a documented issue)
• attrition of cage/pen mates or uneven number of animals
• separation of pregnant females to prevent overcrowding following birth of offspring
• preparation for pending parturition
• quarantine prior to entering or reentering a facility or herd
• separation of littermates at weaning when the number of offspring does not allow for all animals in a litter to be placed with a compatible cage mate (for example, single male weanlings)
• short-term recovery post-operatively, in which case single housing must be for the minimum amount of time post-operatively necessary for recovery and/or healing as determined by the Principal Investigator (PI) in consultation with the Center for Animal Resources and Education (CARE) veterinarians
• when an animal is considered a danger to other animals, itself, or personnel.

3.2 Single Housing for Clinical Reasons

CARE veterinary staff may require single housing of animals due to medical concerns. In such cases, IACUC approval is not required. The responsible veterinarian will record the period of single housing and the frequency of reevaluation in the animal’s medical record, monitor the animal, and re-house the animal when the clinical concern is resolved. These cases will be reported to the IACUC at the discretion of the Attending Veterinarian.

3.3 Single Housing for Experimental Reasons

When the single housing of social species is necessary for experimental reasons, other than short-term recovery from experimental manipulation, a scientific justification must be described in the IACUC animal use protocol and approved by the IACUC. Single housing cannot begin until approval is granted by the IACUC for that protocol.

4.0 Definitions

For the purpose of this directive, the terms below have the following definitions:

Social Housing: Housing animals in same sex, compatible pairs, or groups in the animals’ primary enclosure.

5.0 Responsibilities

All individuals to whom this document applies are responsible for becoming familiar with and following it. Animal research program stakeholders (IACUC, CARE, ARC) are responsible for promoting the understanding of this document and for taking appropriate steps to help ensure adherence to it.

6.0 Consequences for Violating this Directive
Violation of this directive may be considered a serious event of noncompliance that is reportable to the IACUC, funding and accrediting agencies, as well as other regulatory agencies. Violations are a serious matter that may adversely affect both the ability to perform animal work and acquire funding sources.

7.0 Related Information

Brown University is a community in which employees are encouraged to share workplace concerns with University leadership. Additionally, Brown's Anonymous Reporting Hotline allows anonymous and confidential reporting on matters of concern online or by phone (877-318-9184).

The following information complements and supplements this document. The information is intended to help explain this directive and is not an all-inclusive list of policies, procedures, laws and requirements.

7.1 Related Policies:

• Program to Promote the Psychologic Wellbeing of Nonhuman Primates SOP

7.2 Related Procedures: N/A

7.3 Related Forms: N/A

7.4 Frequently Asked Questions (FAQs): N/A

7.5 References:

• AAALACi Social Housing Position Statement
• Guide for the Care and Use of Agricultural Animals in Research and Teaching; 4th ed., American Dairy Science Association, the American Society of Animal Science, and the Poultry Science Association, Champaign, IL. 2020

8.0 Document Owner and Contact

8.1 Owner: IACUC

8.2 Approved by: IACUC

8.3 Subject Matter Contact: Brown University Animal Research Compliance

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9.0 History

9.1 Effective Date: December 6, 2013

9.2 Last Reviewed: December 2, 2022

9.3 Update/Review Summary: This Directive is not new; it was converted from the policy format to a directive and re-reviewed by the IACUC at its convened meeting on December 2, 2022. Prior version of this directive was:

• Reviewed by IACUC Dec. 2016
• Reviewed by IACUC Dec. 2019
• Reviewed by IACUC March 2021
• Converted to University policy template and reviewed by IACUC at convened meeting on October 2, 2020.