1.0 Directive Purpose

The purpose of this directive is to provide guidance to research personnel regarding breeding of transgenic animals or crosses between strains of animals that produce phenotypes for which the corresponding IACUC animal use protocol contains no provision for clinical care or experimental endpoints.

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

Pursuant to the eighth edition of The Guide for The Care and Use of Laboratory Animals (the Guide), policies and procedures must be in place to monitor the phenotype and genotype of genetically modified animals (GMAs), and a reporting process must be in place to notify the IACUC of unexpected phenotypic outcomes that adversely affect the health and well-being of the animals.

The Guide outlines the responsibilities of the Principal Investigator (PI) and the IACUC regarding the generation of novel GMAs, either by creation of a new line, or by intercrossing established lines to generate a new compound genotype.

All novel GMAs must be monitored from birth in the F1 generation for the development of unexpected phenotypes. All unexpected phenotypes that affect the health and well-being of the animal are considered a reportable event, and must be reported to both the Center for Animal Resources and Education (CARE) and the IACUC using the Adverse Event Reporting Form. Any phenotype that has been previously described in the approved IACUC protocol is not unexpected and is thus not reportable.

If unexpected phenotypes are identified, then additional monitoring and analysis may be warranted as determined by a Brown veterinarian or requested by the IACUC. Additional monitoring and analysis could lead to a better understanding of the condition and result in actions that may alleviate the impact of the alteration or better define humane endpoints for the line in question. Brown veterinarians must be consulted by the research team to identify means of alleviating any pain or distress associated with the phenotype.

Phenotypes that are highly recurrent within a given line must be described in a modification to the corresponding approved IACUC animal use protocol to avoid the necessity of continued reporting. Once the modification is approved, the phenotypic condition will not be subject to further reporting as it is no longer unexpected.
4.0 Definitions: N/A

5.0 Responsibilities

All individuals to whom this directive applies are responsible for becoming familiar with and following this 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 Document

Violation of this document 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 of this document are a serious matter that may adversely affect both the ability to perform animal work and acquire funding sources.

Failure to comply with this and related policies/directives is subject to disciplinary action, up to and including suspension without pay, or termination of employment or association with the University, in accordance with applicable (e.g., staff, faculty, student) disciplinary procedures.

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 document and is not an all-inclusive list of policies, procedures, laws and requirements.

- Related Policies/Directives/SOPs: N/A
- Related Procedures: N/A
- Related Forms: N/A
- Frequently Asked Questions (FAQs): N/A
- Other Related Information: References:

8.0 Document Owner and Contact

- Owner: IACUC
- Approved by: IACUC
- Subject Matter Contact: Brown University Animal Research Compliance (ARC)
  - Telephone: 401-863-3050
  - Email: IACUC@Brown.edu

9.0 Document History

- Effective Date: June 1, 2018
- Last Reviewed: June 7, 2024
• **Update/Review Summary:** This document is was converted into Directive format and included minor updates June 7, 2024.
  • This policy is not new; it was converted to the University’s new policy template and re-reviewed by the IACUC at its convened meeting on June 4, 2021. Previous version superseded by this version:
  • IACUC Policy on Unanticipated Outcomes of Genetically Modified Animals, date of IACUC review and approval: June 1, 2018.