Institutional Animal Care and Use Committee (IACUC) Directive 4.0: Training and Education for Personnel Working with Laboratory Animals

1.0 Directive Purpose

The purpose of this directive is to outline the training requirements for personnel working with laboratory animals at Brown University, the process by which training is assigned and completion is documented, and actions that will be taken by the IACUC and/or the Center for Animal Resources and Education (CARE) if requisite training and education are not completed.

2.0 To Whom the Directive Applies

This document applies to all persons working with live vertebrate animals at Brown University.

3.0 Directive Statement

In compliance with federal regulations, Brown’s IACUC must ensure that all scientists, research technicians, animal technicians, and other personnel involved in animal care, treatment, and use are qualified to perform their duties. CARE and the Office of Environmental Health and Safety (EHS) administer on-line and in-person training and education for personnel working with live animals for the purposes of teaching, testing and/or research. Online training is administered through the TrainCaster® learning management system (TrainCaster®).

The IACUC evaluates the qualifications of personnel on each animal care and use protocol to conduct the activities and procedures to which they are assigned, and ensures that training assigned to individual personnel is completed prior to beginning of animal work and renewed at required intervals.

A core group of training offerings must be completed by each individual prior to working with animals and entering facilities where animals are housed (collectively, CARE Facilities). Individual personnel are assigned to additional training based on the specific needs of the animal protocol(s) on which they are listed. CARE assigns and manages protocol-specific training and education of animal users. Training marked below with an asterisk (*) must be completed to gain key card access to CARE Facilities.

3.1 Background

Public Health Service (PHS) Policy, the Guide for the Care and Use of Laboratory Animals, and the Animal Welfare Regulations require that all personnel involved with the care, treatment, and use of laboratory animals be adequately educated and trained in animal handling, experimentation, and the use of research and testing methods that limit the number of animals used, animal pain, and distress. In addition, Brown University is required to establish and maintain an occupational health and safety program as an essential part of its overall animal care and use program. It is the responsibility of the IACUC to ensure that all research personnel have the necessary knowledge and expertise for the specific animal procedures proposed and the species used before beginning animal work.
3.2 Animal Research Orientation and Training (Required)*

All personnel who will be working with laboratory animals must complete a web based orientation within TrainCaster®. The topics discussed include an introduction to CARE, the laws and agencies regulating research with laboratory animals, minimizing animal pain and distress, occupational health and safety, zoonotic diseases, animal allergies, emergency procedures, individual safety and the requirement to consult a CARE Veterinarian prior to protocol submission.

A document summarizing the topics covered is signed by the individual at the end of the session, retained by CARE, and recorded in TrainCaster®. After the initial training, this online course is repeated once every 5 years. Personnel are prompted to complete training by TrainCaster®. Documentation is retained by CARE and recorded in TrainCaster®.

3.3 Occupational Health and Wellness Survey (Required)*

All faculty, staff, students, and other personnel who work with or have contact with animals or their tissues and body fluids, or have duties in animal housing areas or support areas, must complete the online Occupational Health and Wellness Survey (OHWS) once every three years. Failure to remain current with this requisite training will result in termination of key card access to the CARE Facilities. Personnel are prompted to complete the OHWS by TrainCaster®. Documentation of completion is retained by University Health Services and recorded in TrainCaster®.

3.4 CARE related training requirements

3.4.1 Species specific AALAS learning library and on-line CARE training modules

Personnel working with the species identified in the table below must complete the listed AALAS Learning Library (ALL) or CARE training module(s) associated with that species. Access to these modules is provided via TrainCaster® and documentation of participation is auto-updated and recorded in TrainCaster®.

<table>
<thead>
<tr>
<th>Personnel working with</th>
<th>Must take</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphibians</td>
<td>Introduction to Amphibians (ALL)</td>
</tr>
<tr>
<td>Bats</td>
<td>Introduction to Bats (ALL)</td>
</tr>
<tr>
<td>Birds</td>
<td>Introduction to Birds (ALL)</td>
</tr>
<tr>
<td>Fish</td>
<td>Introduction to Fish (ALL)</td>
</tr>
<tr>
<td>Gerbils</td>
<td>Introduction to Gerbils (ALL)</td>
</tr>
<tr>
<td>Mice</td>
<td>Introduction to Mice (ALL)</td>
</tr>
<tr>
<td>Nonhuman Primates</td>
<td>Introduction to Nonhuman Primates (ALL)</td>
</tr>
<tr>
<td>Nonhuman Primates</td>
<td>Working Safely with Nonhuman Primates in Biocontainment (ALL)</td>
</tr>
<tr>
<td>Nonhuman Primates</td>
<td>CARE NHP Understanding and Behavior</td>
</tr>
<tr>
<td>Nonhuman Primates</td>
<td>Herpes B exposure retraining (CARE module – repeated annually)</td>
</tr>
<tr>
<td>Rabbits</td>
<td>Introduction to Rabbits (ALL)</td>
</tr>
<tr>
<td>Rats</td>
<td>Introduction to Rats (ALL)</td>
</tr>
<tr>
<td>Sheep and Goats</td>
<td>Introduction to Sheep &amp; Goats (ALL)</td>
</tr>
<tr>
<td>Sheep and Goats</td>
<td>Q Fever Training</td>
</tr>
<tr>
<td>Swine</td>
<td>Introduction to Swine</td>
</tr>
<tr>
<td>Xenopus</td>
<td>Working with Laboratory Xenopus</td>
</tr>
<tr>
<td>Zebrafish</td>
<td>Working with Laboratory Zebrafish</td>
</tr>
</tbody>
</table>
3.4.2 Procedure specific AALAS learning library and online CARE training modules

<table>
<thead>
<tr>
<th>Personnel performing</th>
<th>Must take</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse Breeding</td>
<td>Mouse Breeding (CARE)</td>
</tr>
<tr>
<td>Rodent Surgery</td>
<td>Aseptic Technique for Rodent Survival Surgery (ALL)</td>
</tr>
<tr>
<td>Rodent Euthanasia</td>
<td>Rodent Euthanasia Training (CARE)</td>
</tr>
<tr>
<td>Euthanasia in species not specifically listed above</td>
<td>AVMA Guidelines for the Euthanasia of Animals: 2020 Edition (ALL)</td>
</tr>
</tbody>
</table>

3.4.3 In person training requirements

Personnel conducting the procedures listed below must complete the corresponding in-person training, unless otherwise specified in the table. The below in-person courses will be conducted by CARE and recorded by CARE in Traincaster®.

<table>
<thead>
<tr>
<th>Personnel conducting</th>
<th>Must take</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse research - handling and experimentation</td>
<td>Mouse 101 will review hands-on mouse handling, restraint, identification methods, common health issues, injection techniques, and euthanasia. This course is not required for PIs.</td>
</tr>
<tr>
<td>Rat research - handling and experimentation</td>
<td>Rat 101 will review hands-on rat handling, restraint, identification methods, health issue communication, injection techniques, and euthanasia. This course is not required for PIs.</td>
</tr>
<tr>
<td>Nonhuman primate research</td>
<td>NHP 101. This training emphasizes the unique physical safety considerations for those working with NHPs, including Herpes B post-exposure procedures.</td>
</tr>
<tr>
<td>Work using controlled substances</td>
<td>Controlled Substance Training. This course covers the regulations concerning the handling and administration of controlled substances including proper record keeping, storage and disposal.</td>
</tr>
<tr>
<td>Surgery (in any species)</td>
<td>Practical, hands-on surgery training is offered by CARE on an OPTIONAL basis.</td>
</tr>
</tbody>
</table>

3.5 Environmental Health and Safety (EHS) Training

EHS has oversight of and responsibility for providing training required by regulatory agencies (e.g., Occupational Safety and Health Administration, National Institutes of Health, Centers for Disease Control, Department of Transportation) for personnel working with laboratory animals and/or with hazardous agents. All Brown personnel working with animals are required to complete EHS safety training(s) that covers reporting allergies, injuries, and accidents. Personnel working with hazardous agents in research laboratories or in the CARE Facilities are required to take appropriate safety training provided by EHS based on the type of hazards (chemicals, biological agents, or radioactive materials).

- Depending on the research proposed, personnel may be required by EHS to complete a combination of the training listed below:
  - Laboratory Safety Training
  - Biological Safety and Bloodborne Pathogens (BBP) Training
  - Radiation Safety Training
  - Hazardous Waste Training
  - Hazard Communication/Right-to-Know Training
● Respiratory Protection

This is not an exhaustive list and additional training may be assigned based on the protocol.

3.6 Documentation of Training

Documentation of participation in training is recorded in TrainCaster®.

3.7 Key Card Access to CARE Facilities

To gain key card access to the CARE Facilities, research personnel must complete the online Animal Research Orientation and the Occupational Health and Wellness Survey. Failure to complete the OHWS triennially and any associated and required medical monitoring will result in deactivation of key card access by CARE. Key card access will be reinstated when requisite training is completed.

3.8 Completing Assigned Training

Personnel are responsible for completing assigned training prior to beginning work on an animal use protocol and must remain current with such training in accordance with this directive. If new procedures and/or species are added to an approved animal use protocol via an amendment, personnel must promptly complete any additional training assigned as a result of such changes and cannot begin the new work until training is complete. Failure to complete requisite training and/or failure to remain in compliance with required renewal of training may result in suspension of an individual on a protocol, if the issue is isolated, or suspension of the relevant IACUC protocol(s), if the issue is systemic.

3.9 Suspension Due to Training Noncompliance

Compliance with required training will be reviewed at the time of protocol submission, when an amendment is submitted to add new personnel or to add new procedures/species that require additional training, at annual continuation, and at the time of de novo protocol renewal. It is also assessed as part of the IACUC’s Post-Approval Monitoring Program administered by Animal Research Compliance (ARC). If training non-compliance is identified during any of these review activities, the matter will be referred to the IACUC for review at its next convened meeting.

In accordance with PHS Policy, suspension of an approved animal use protocol can occur only after review of the matter at a convened meeting of a quorum of the IACUC in which the majority votes to suspend. In addition, the Institutional Official, in consultation with the IACUC, must review the reasons for suspension. Notification of protocol suspension and the circumstances surrounding the suspension must be reported to the Office of Laboratory Animal Welfare, when applicable. When the protocol involves United States Department of Agriculture (USDA)-covered species, the suspension must be reported to the USDA-Animal and Plant Health Inspection Service.

3.10 Re-Instatement of Suspended Individual or Suspended Protocol

Once all required training has been completed, the IACUC may reinstate approval of the protocol via Designated Member Review or Full Committee Review. For individual personnel, approval may be reinstated administratively by the ARPP.

3.11 Required Re-Training Due to Noncompliance

When noncompliance with federal regulations, institutional policy, or an approved IACUC animal use protocol is reported, the IACUC may require additional training or re-training of individual personnel or an entire laboratory. Any training or re-training assigned by the IACUC as a result of noncompliance must be completed promptly and by any deadline set forth by the IACUC. If the
noncompliance necessitates re-training in a procedure and/or use of a certain species, the individual and/or laboratory cannot re-engage in such work until the training is completed and documented by the laboratory and by CARE.

4.0 **Definitions:** N/A

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

7.1 **Related Policies/Guidelines/SOPs/Directives:** N/A
7.2 **Related Procedures:** N/A
7.3 **Related Forms:** N/A
7.4 **Frequently Asked Questions (FAQs):** N/A
7.5 **Other Related Information:**
   ● Brown EHS
   ● TrainCaster®
   ● NIH IACUC Responsibilities

8.0 **Document Owner and Contact**

8.1 **Document Owner:** IACUC
8.2 **Document Approved by:** IACUC
8.3 **Subject Matter Contact:** Brown University Animal Research Compliance
   ● Telephone: 401-863-3050
   ● Email: IACUC@brown.edu

9.0 **History**

9.1 **Effective Date:** November 6, 2015
9.2 **Last Reviewed:** Sept 9, 2022

**Update/Review Summary:** The Training offerings were updated and the document was moved into Directive format to remove it from UC Policy format.
Section 8.3 was updated on December 2, 2020, to reflect a new office title. 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 May 1, 2020. Old template policy version superseded by this policy:

- **IACUC Training and Education Policy for Personnel Working with Laboratory Animals, Date of IACUC Review and Approval: November 6, 2015 and updated on December 9, 2019.**
- **Updated version reviewed by IACUC on September 9, 2022 to reflect additional training offerings and to move it from “policy” to Directive.**