



Education and Training Requirements

354.1 Purpose

The 8th Edition of the *Guide for the Care and Use of Laboratory Animals (Guide)*, p.15-17, requires that all personnel involved with the care and use of animals be adequately educated, trained, and/or qualified, and that training programs include continuing education. The *Guide* also requires that this training be documented, and that the IACUC should work with the individual animal care programs to formalize a documentation system that allows for timely and sufficient data retrieval.

354.2 Scope

This policy applies to all research faculty, staff and students at Emory University who are using animals in research, testing or training and IACUC members. Note: all training and associated testing materials must be completed by the person receiving credit for the training. This policy does not apply to faculty and staff of the Division of Animal Resources and Yerkes Animal Resources Program.

354.3 Requirements

354.3.1 Researchers

354.3.1.1 Initial Training Prior to Protocol Approval

Prior to working with animals, individuals must complete basic training components as detailed below. Note, that additional training may also be required if an individual changes job responsibilities. All individuals are required to complete basic training requirements (see Appendix A) but may also be required to take additional training based on job duties.

- Online Training – AALAS Learning Library (ALL)
All new animal users or hires are required to complete ALL courses as part of their initial training. A list of required training is provided in Appendix A. Note that some of the courses are required for all personnel, but that other requirements are dependent upon job responsibility. Personnel with previous Collaborative Institutional Training Initiative (CITI) training do not need to complete the corresponding course in the ALL if completed prior to December 31, 2013. Note that not all ALL courses have a CITI corresponding course, and that CITI training courses taken at other institutions do not transfer to Emory University.
- In Person Lectures
All individuals performing survival surgery are required to attend a didactic lecture at either EU-DAR or Yerkes, depending upon their primary campus location. Please see appendix A for more details.

354.3.1.2 Initial Training After Protocol Approval

After protocol approval some individuals will be required to take additional training based on job responsibility. Training should be scheduled with EU-DAR or Yerkes depending upon campus location and will be monitored and verified by the IACUC office under the time-frames

noted in Appendix A. These training sessions may include the following:

- EU-DAR or Yerkes Orientation Lecture and Facility Orientation. (Required for everyone requiring key card access to the facilities: must be completed before card access will be granted. Contact the respective facility for additional details).
- Survival Surgery Proficiency Assessment
- Rodent Weaning Training
- CO2 Euthanasia Training
- Physical Methods of Euthanasia Proficiency Assessment
- Rodent Handling and Techniques Workshop (EU-DAR)
- New user training sessions (Yerkes-contact Training Coordinator for more information)

354.3.1.3 Continuing Education

Three continuing education units (CEUs) are required within a 3 year time frame for all personnel with direct animal contact. This must include 1 CEU for the DAR SOM Orientation CE or Yerkes Facility Refresher. The remaining 2 CEUs can be obtained from courses in the AALAS learning library (Appendix B) or administered by the DAR or Yerkes animal resources department (Appendix A). For personnel without direct animal contact, the DAR SOM Orientation CE or Yerkes Facility Refresher is required once within a 3 year time frame. Refer to Appendix A for details on training courses available through the DAR and Yerkes animal resources programs.

All personnel listed on an IACUC protocol must have completed the continuing education requirements within 3 years prior to protocol approval. For personnel who have had direct animal contact while at Emory University for less than 3 years at the time of protocol approval, 1 CEU will be required for each year the person has had direct animal contact at Emory. For personnel without direct animal contact, the DAR SOM Orientation CE or Yerkes Refresher courses will be required if the person has been on an IACUC protocol for more than 1 year. Courses taken to qualify for initial training as described above in 354.3.1.2 cannot be used to meet the continuing education requirements for any personnel. Weaning, CO2 euthanasia and the surgery lecture courses cannot be used for continuing education credits.

354.3.1.4 Additional Training

Under some circumstances additional training may be required. This could include new training, or a requirement to repeat training previously completed. These would be required by the IACUC and would generally fall under the following situations:

- Alteration in job responsibility necessitating additional training
- Observation that staff have performed tasks incorrectly and thus need retraining
- Documented Noncompliance resulting in corrective action taken by IACUC including a training/retraining component
- Based on request of the individual

354.3.2 IACUC Members

354.3.2.1 Initial Training

Initial Training for new members is required for voting members, alternate voting members and recommended for non-voting or ex officio members. There are three main areas of required training as follows:

- 1) orientation/training with the IACUC Director

- 2) electronic system protocol review training
- 3) online training. These are detailed in Appendix B.

354.3.2.2 Continuing Education

1 CEU is required annually for each voting and alternate voting member. Pre-approved CEU are listed in Appendix C. IACUC members may submit other educational or training activities to be considered for CEUs to a committee of each AV or AV designee and IACUC Chair or designee. This committee will determine if and how many CEU will be awarded. Continuing education presented during IACUC meetings will qualify for CEU as determined by the aforementioned committee.

354.4 References

The 8th Edition of the *Guide for the Care and Use of Laboratory Animals*

354.5 Appendices

- Appendix A - Initial Training Requirements
- Appendix B - AALAS Learning Library Course Catalog
- Appendix C - IACUC Member Training

354.6 Document Properties

Authored by: IACUC
Administering Division/Department: IACUC Office
Original Approval Date: 05/07/14
Effective Date: 11/18/2015
Version: v. 20151118

Appendix A: Training Requirements: Researchers

1) Training Required Prior to IACUC Approval

Item	Required for	Link/Contact
OHS Annual Certification	All Staff	Emory Occupational Health & Safety Program
Working with the IACUC	All Staff	http://www.iacuc.emory.edu/training/web-training.html
Pain Management in Laboratory Animals	All Staff with animal contact	http://www.iacuc.emory.edu/training/web-training.html
Introduction to: SPECIES SPECIFIC	By species	http://www.iacuc.emory.edu/training/web-training.html
Post-procedural Care of rodents	By Job duty	http://www.iacuc.emory.edu/training/web-training.html
Inhalation Anesthesia systems for Rodents	By Job duty	http://www.iacuc.emory.edu/training/web-training.html
Aquatic Animal husbandry	By species	http://www.iacuc.emory.edu/training/web-training.html
Ethical Case 2: Rat with partial paralysis	By Job duty	http://www.iacuc.emory.edu/training/web-training.html
Yerkes Surgery Lecture (Survival Surgery)	All Yerkes surgeons	Training Coordinator Jen McMillan (jmcmil3@emory.edu)
EU-DAR Surgery Lecture (Survival Surgery)	all EU-DAR surgeons	http://www.dar.emory.edu/pi/index.php

2) Additional Training Required

Item	Required For	Training required by:**
Aseptic surgery proficiency assessment	All surgeons performing survival surgery	30 days after initiation of surgeries
Rodent Weaning Training	By Job duty	90 days post-approval
AVMA: CO2 Euthanasia Training	By Job duty	90 days post-approval
Physical methods of euthanasia proficiency assessment	By Job duty	90 days post-approval
Rodent Handling and Techniques Workshop	New rodent users	90 days post-approval

**** Note: Schedule for training indicates the DEADLINE for obtaining training. Individuals are encouraged to obtain training as soon as possible after protocol approval and prior to performing procedures.**

For **main campus** please schedule these training opportunities by visiting the following website, and looking under the Training and Facility Access section (<http://www.dar.emory.edu/pi/index.php>).

For **Yerkes** please contact the Training Coordinator, Jennifer McMillan (jmcmil3@emory.edu)

3) Continuing Education: Information about training opportunities at DAR can be found on the DAR website (<http://www.dar.emory.edu/pi/index.php>) or by emailing dartrn@emory.edu, and at Yerkes by contacting the Yerkes Training Coordinator, Jennifer McMillan (jmcmil3@emory.edu). The table below includes regularly scheduled classes which are conducted at intervals from twice monthly to annually depending on the course, and ad hoc techniques training which is scheduled based on availability and request.

Course Title	CEU	Format	Other Information
DAR Orientation CE	1	Lecture or online course	Register through ELMS for the online course or regularly offered lecture. The lecture can also be scheduled for individual labs by contacting dartrn@emory.edu .
Yerkes Facility Refresher	1	Lecture	Register by contacting jmcmil3@emory.edu . The lecture is available monthly or can be scheduled for individual labs.
Continuing Education Webinars (various titles)	1	Webinar	The IACUC office and animal resources departments host webinars from various organizations. These are advertised in advance.
Rodent Handling & Techniques Workshop	2	Wet lab	Register through ELMS. Course offered at DAR.
Rodent Identification Techniques Workshop	2	Wet lab	Register through ELMS. Course offered at DAR.
Rodent Basic Surgery Techniques	2	Wet lab	Register through ELMS. Course offered at DAR.
Mouse Breeding Management 101	1	Lecture	Register through ELMS. Course offered at DAR.
Ad hoc animal techniques training	1	Wet lab	The course is tailored to individual training requests (eg. blood collection techniques). Contact DAR (dartrn@emory.edu) or Yerkes (jmcmil3@emory.edu) to schedule.

Appendix B: AALAS Learning Library Course Catalog

(Includes mandatory and continuing education information)

Analgesia, Anesthesia, and Surgery

- Aseptic Technique for Rodent Survival Surgery
- Inhalation Anesthesia Systems for Rodents
- Pain Recognition and Alleviation in Laboratory Animals
- Post-Procedure Care of Mice and Rats in Research
- Minimizing Pain and Distress
- Small Ruminant Anesthesia and Intra-Operative Monitoring

Animal Health and Wellbeing

- Environmental Enrichment for Laboratory Animals
- Introduction to Laboratory Animal Medicine
- Laboratory Animal Nutrition

Bioethics

- Ethical Case 1: Mouse in a Parasitology Experiment
- Ethical Case 2: Rat with Partial Paralysis
- Ethical Decision-Making in Animal Research

Biosecurity

- Introduction to VA Biosecurity Concepts
- Laboratory Biosecurity

Conversions and Calculations

- Basic Metrics for the Laboratory Animal Facility
- Dose Calculations: Basic
- Fractions and Percentages and Decimals

Compliance and IACUC Training

- Avoiding Financial Conflict of Interest in Federal Research
- Common Compliance Issues
- Essentials for IACUC Members
- Maintaining Animal Procedure Areas
- Post-Approval Monitoring
- Refresher: Working with the IACUC (non-VA version)
- Semiannual Facility Inspection
- Working with the IACUC: non-VA version
- Working with the IACUC: VA version

Facilities, Supplies, and Materials

- Aquatic Animal Husbandry and Management
- Personal Protective Equipment for Working in a Laboratory Animal Facility
- Selection of Cage Cleaner Products—Chemistry Driven

- Syringes and Needles
- Watering Systems

Occupational Health and Safety

- Bloodborne Pathogens Training for Animal Research
- Ergonomics for Animal Technicians: Working Smart
- Health Risks and Safety Procedures for Working with Nonhuman Primates
- Introduction to Ergonomics in the Lab Animal Facility
- Laboratory Animal Allergy

Species-Specific Courses

- Genetically Engineered Mice (3 courses):
 - Approaches for Evaluating the Phenotype
 - Historical Perspectives
 - Overview of Transgenesis and Conditional Control
- Introduction to Amphibians
- Introduction to Cats
- Introduction to Dogs
- Introduction to Ferrets
- Introduction to Gerbils
- Introduction to Guinea Pigs
- Introduction to Hamsters
- Introduction to Mice
- Introduction to Nonhuman Primates
- Introduction to Rabbits
- Introduction to Rats
- Introduction to Sheep and Goats
- Introduction to Swine
- Mouse Breeding Colony Management
- Working with Laboratory *Xenopus*
- Working with Laboratory Zebrafish
- Working with Poultry in the Laboratory
- Working with the Laboratory Dog (5 courses):
 - Endotracheal Intubation
 - Injections and Blood Collection
 - The Basics
 - Urinary Catheterization
 - Venous Catheterization
- Working with the Laboratory Ferret
- Working with the Laboratory Mouse
- Working with the Laboratory Rat
- Working Safely with Nonhuman Primates in Biocontainment
- Working Safely with Rabbits and Ferrets in Biocontainment
- Working Safely with Rodents in Biocontainment
- Working Safely with Ungulates in Biocontainment

US Mandates and Guidelines

- 8th Edition of the Guide for the Care and Use of Laboratory Animals
- Animal Welfare Act Regulations
- AVMA Guidelines for the Euthanasia of Animals: 2013

- Good Laboratory Practice Regulations
- Occupational Health and Safety in the Care and Use of Research Animals
- Orientation to Biosafety in Microbiologic and Biomedical Laboratories, 5th Edition
- PHS Policy on Humane Care and Use of Laboratory Animals
- Working with Controlled Substances

Management and Training

- Active Listening
- Communicating with the Non-Native English Speaker
- Delegation and Empowerment
- Reaching Out to the Public: A How to Guide
- Team Building
- Time Management and Goal Setting
- Workplace Training
- Writing Multiple Choice Questions

Core Courses

- Animal Biosafety Risk Assessment and Management
- Animal Facility Design for Biocontainment
- Biocontainment Equipment
- Biosecurity in Animal Biocontainment Facilities
- Concepts and Practices of Animal Biosafety: ABSL-2 and ABSL-3
- Incident Planning and Response within the Animal Biocontainment Facility
- Institutional Responsibilities and Animal Biosafety
- Introduction to the AALAS Animal Biosafety Training Program
- Microbiological Decontamination in Biocontainment
- Occupational Health and Animal Biosafety
- Select Agents and Toxins Regulations
- Working Safely with Laboratory Animals in Biocontainment

Appendix C - IACUC Member Training

Initial Required Training/Orientation – Items 1-5 trained by IACUC Director

	Printed	Electronic	Verbal
1. Regulatory Requirements for Training	✓		✓
2. Materials			
a. Guide for the Care and Use of Laboratory Animals		✓	
b. Guide to the Care and Use of Agricultural Animals		✓	
c. Guide to the Care and Use of Mammals in Neuroscience & Behaviour Research			
d. Institutional Animal Care and Use Committee Guidebook		✓	
e. Schedule of Meetings		✓	
f. Membership List		✓	✓
g. Schedule of Site Visits		✓	
h. AAALAC Program		✓	
i. Animal Welfare Act & Animal Welfare Regulations		✓	
j. PHS Assurance		✓	
k. IACUC Policies		✓	
l. APHIS IACUC Guidelines		✓	
m. ALL Course - Essentials for IACUC Members, Basic Course		✓	
n. An IACUC Member’s Guide to Facility Inspections – online training		✓	
		✓	
3. IACUC Business Forms			
a. DMR Agreement	✓		
b. Confidentiality Agreement	✓		
4. Organization of the Emory University IACUC			✓
5. Members IACUC Responsibilities			
a. Attendance expectations			✓
Semi-annual Review: site visit and program review			
b. participation			✓
c. Protocol Review Processes			✓
d. AAALAC Accreditation Responsibilities			✓

6. TOPAZ Web P&R Training – Reviewer Role; trained by IACUC Office Staff

Mentoring – Optional; new members are paired with experienced reviews for varying lengths of time determined by the new member. This can be used during protocol review, site inspections, and program reviews

Continuing Education for IACUC Members

1. **During IACUC Meetings** – Changes in regulations, pertinent laws, guidance are presented during meetings
 2. **Regulatory Webinars** – Live and pre-recorded webinars are presented by USDA, OLAW, NABR, and others agencies, associations, and relevant organizations are presented.
 3. **AALAS Learning Library** provides courses for IACUC members such as:
 - 8th Edition of the Guide for the Care and Use of Laboratory Animals
 - Animal Welfare Act Regulations
 - AVMA Guidelines for the Euthanasia of Animals: 2013
 - Good Laboratory Practice Regulations
 - Occupational Health and Safety in the Care and Use of Research Animals
 - Orientation to Biosafety in Microbiologic and Biomedical Laboratories, 5th Edition
 - PHS Policy on Humane Care and Use of Laboratory Animals
 - Working with Controlled Substances
- IACUC Protocol Specific Courses and Animal Welfare Conferences are available and members are encouraged to attend**