



**QUEENS COLLEGE DIVISIONAL**  
**LABORATORY ANIMAL FACILITIES**

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**STANDARD**

**OPERATIONS AND PROCEDURES**

**MANUAL**

**( REVISION 7 . 1 )**



## **I. THE PURPOSE OF THIS MANUAL**

This manual is intended as a guide for faculty, students, fellows, staff, and any other individuals who plan to carry out research, training, or testing, whether funded or unfunded, involving animals as subjects. It provides basic information about what materials are needed to apply for approval and how to do it.

All research that is conducted by an individual in connection with his or her institutional responsibilities and/or which involves the use of any of the College's property or facilities must conform to a standard of ethics reflected in specific regulations of *Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals* and the *Animal Welfare Act (AWA)*. This includes studies done at the College, at another location, and studies done in the field.

As an Animal Welfare Assured institution, Queens College is monitored by the *Office of Laboratory Animal Welfare (OLAW)*. In addition, as a *United States Department of Agriculture (USDA)* registered institution, we are also monitored for our compliance with the *AWA*. Both agencies monitor our compliance with the *Policy* and the *AWA* to ensure the humane care and use of animals in PHS-supported research, testing, and training. We must also maintain compliance with the *New York State Department of Health (NYC DoH)*, who also monitors our work and facilities regularly.

Copies of the Animal Welfare Assurance and of the regulations governing research involving animals as subjects may be obtained from the campus IACUC Office (Delany Hall, Room 305).

## **II. INTRODUCTION**

Research, training, or testing with animals as subjects, which is conducted by any member of the QC community (onsite, offsite/in the field) or anyone using QC facilities, must be reviewed and approved by the Queens College Institutional Animal Care and Use Committee (referred to hereafter as the IACUC). The purpose of this review is to allow the IACUC to evaluate the research for its adherence to guidelines and regulations. The IACUC's interest is to ensure the humane care and use of animals in research, testing, and education.

In order to submit research, teaching, or testing protocols for review, investigators must complete the IACUC Protocol Application which may be obtained through the IACUC Office or by accessing it on-line at <https://myqc.qc.cuny.edu/AdminServices/Provost/ORC/default.aspx>

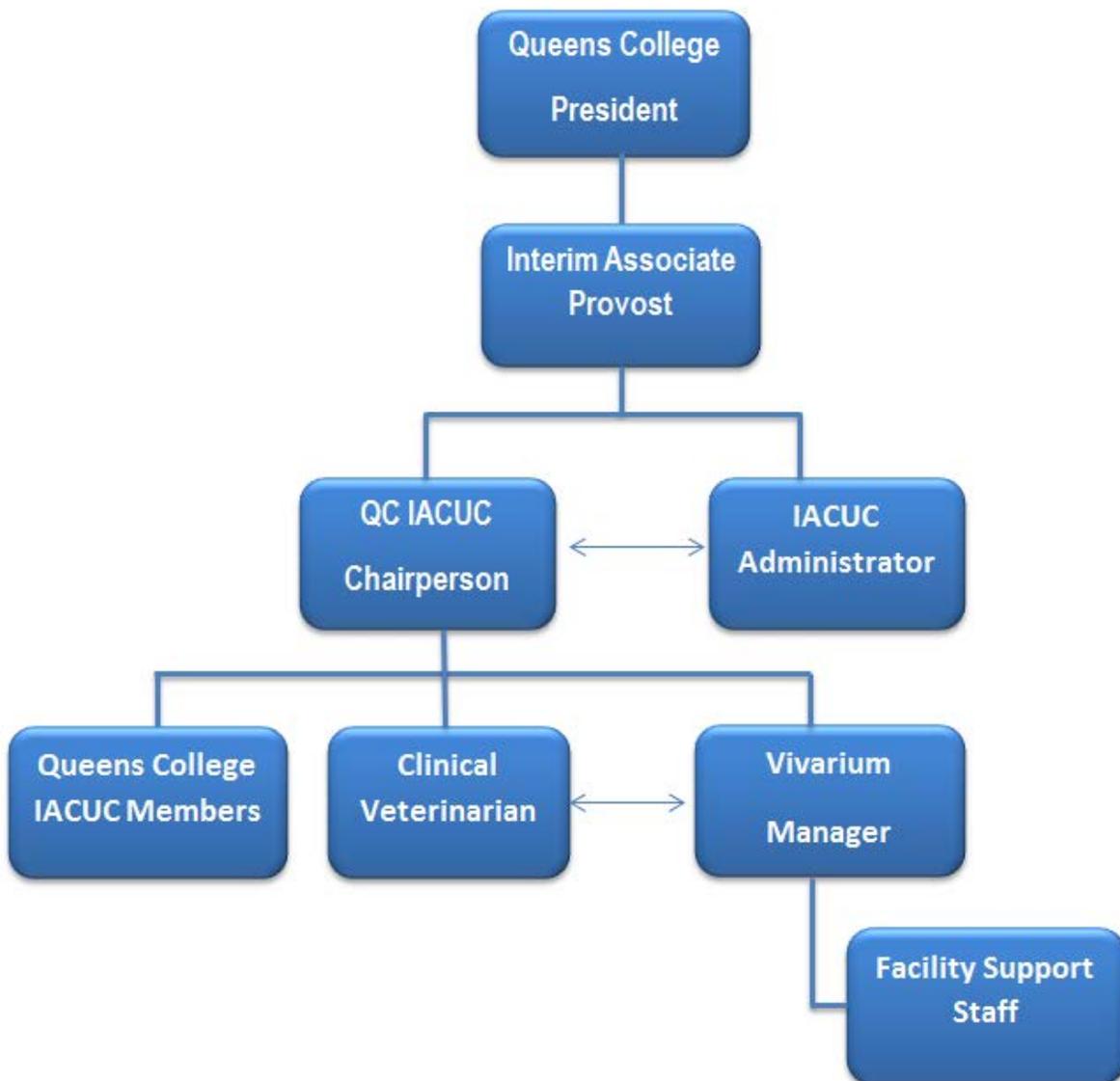
In order to facilitate approval of the application for use of animals as subjects in research, training, or testing it is necessary for all relevant information to be included in the application. It is of equal importance that the document presents a clear and concise explanation of the proposed research project.

**Delays in approval by the IACUC are frequently a result of:**

- a) Insufficient information
- b) Relevant information being omitted from the application (or placed in appendices rather than in the text of the application)
- c) Presenting information in a manner that is too technical and cannot be understood by IACUC members whose backgrounds and areas of expertise vary greatly and

**III. IACUC COMPOSITION**

The IACUC is composed of faculty who are engaged in research using animals as subjects, faculty who do not utilize animals as subjects, a non-scientist, and at least one community member who is not affiliated with the City University of New York.



## IV. DEFINITIONS

(from <http://grants.nih.gov/grants/glossary.htm>)

AAALAC – Association for the Assessment and Accreditation of Laboratory Animal Care

ACLAM - American College of Laboratory Animal Medicine

Animals in Research - Any live, vertebrate animal used for research, research training, biological testing, or related purposes.

Animal Welfare Assurance - Document an institution and all performance sites involving animals in research must have on file with the [Office of Laboratory Animal Welfare](#) before a [PHS](#) Agency may award a grant or contract.

APHIS – Animal and Plant Health Inspection Services

AV – Attending Veterinarian (at Queens College this individual has the title of Consulting Veterinarian)

AVMA - American Veterinary Medical Association

Biosecurity of animals - includes all measures to control known or unknown infections in laboratory animals.

CDC - Centers for Disease Control and Prevention

CFR - Code of Federal Regulations

CITI – Collaborative Institutional Training Initiative

CV - Consulting Veterinarian

DHHS - Department of Health and Human Services

Experimental Endpoints – The experimental endpoint of a study occurs when the scientific aims and objectives have been reached.

FASS - Federation of Animal Science Societies

Field work – Teaching, training, or research conducted in the field by a Queens College employee or student where animals are being observed, handled, or

Humane Endpoints - The humane endpoint is the point at which pain or distress in an experimental animal is prevented, terminated, or relieved.

IACUC – Institutional Animal Care and Use Committee

ILAR - Institute for Laboratory Animal Research

Institutional Animal Care & Use Committee (IACUC) - Established at institutions in accordance with the PHS Policy on Humane Care and Use of Laboratory Animals with broad, and have broad responsibilities to oversee and evaluate the institutions' animal programs, procedures, and facilities. IACUC review and approval is required for all PHS supported activities involving live vertebrate animals prior to funding.

IVC - Individually ventilated cage

LCT – Lower critical temperatures

Macro environment - The physical environment of the secondary enclosure (e.g., a room, a barn, or an outdoor habitat).

Microenvironment - The immediate physical environment surrounding the animal (i.e., the environment in the primary enclosure such as the cage, pen, or stall).

NIH – National Institutes of Health

OLAW - Office of Laboratory Animal Welfare

Office of Laboratory Animal Welfare (OLAW) - NIH office overseeing compliance with the [PHS Policy on Humane Care and Use of Laboratory Animals](#).

PAM – Post Approval Monitoring

PHS – Public Health Services (US)

Public Health Service (PHS) - Umbrella organization in the U.S. Federal Government consisting of eight [HHS](#) health Agencies, the Office of Public Health and Science, and the Commissioned Corps (a uniformed service of more than 6,000 health professionals). The NIH is the largest Agency within the PHS.

PHS Policy on Humane Care and Use of Laboratory Animals - Term and condition of all PHS awards involving live, vertebrate animals.

Protocol - Formal description and design for a specific [research](#) project. A protocol involving animal subject research must be reviewed and approved by an Institutional Animal Care and Use Committee (IACUC).

Research - A systematic, intensive study intended to increase knowledge or understanding of the subject studied, a systematic study specifically directed toward applying new knowledge to meet a recognized need, or a systematic application of knowledge to the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements

Terrestrial animal - animals that live on the land, either entirely or mostly.

Thermoneutral zone - The ambient temperature range in which thermoregulation occurs without the need to increase metabolic heat production or activate evaporative heat loss mechanisms

TNZ - Thermoneutral zone

UCT – Upper critical temperatures

USDA – United States Department of Agriculture

Vivarium – Facility for housing animals

## **V. INITIAL REVIEW PROCESS**

1. Submit an [IACUC Research application](#) to the IACUC office, Delany Hall, Room 305. Electronic submissions of application are acceptable. However, if the electronic version does not contain a signature, a hard copy must be delivered to Delany Hall, Room 305 for the file. In addition each investigator and their key personnel must complete [CITI](#) (Collaborative Institutional Training Initiative) Certification for Working with the IACUC. Documentation of CITI completion is to be submitted to the IACUC office. Upon submission of an application form, a protocol number will be assigned and copies will be distributed to the members of the IACUC for review. The protocol copies are held in strictest confidence by the IACUC members.
2. The full IACUC Committee will review the application at the next scheduled meeting if the application has been received by the deadline. Applications received after a deadline (but prior to a meeting) will be reviewed at the following committee meeting pertaining to the next deadline. The PI will be informed of the IACUC's meeting date, time, and location. The PI is encouraged to be available to answer any questions the committee may have during the meeting.
3. Two members of the IACUC will review the application (Designated Member Review) and the Administrator will inform the principal investigator (PI) of the decision, usually within two weeks of receipt. If revisions are necessary, directions will be provided. Please note that every effort is made to move this process along. However, the speed of completion is dependent upon the PI's speed of response to revisions.
4. If Full Committee review is needed, the PI's proposal will be reviewed at a scheduled meeting. The PI will be informed of the IACUC's meeting date, time, and location. The PI is encouraged to be available to answer any questions the committee may have during the meeting. If minor revisions are needed as a result of the full committee's review, the proposal will be approved pending the PI's revisions. If substantive revisions are needed,

the PI's proposal needs to be revised and resubmitted for review at the IACUC's next meeting.

### **A. Deadlines**

The IACUC's practice is to circulate applications requiring review to designated IACUC members, and have the application available for members who were not designated for the review. Applications to the IACUC must be submitted a minimum of four to eight weeks prior to the start of the proposed research.

If a Full Board meeting is required, one will be called and the PI will be invited to attend. Any questions, comments or concerns raised by members are discussed at the meeting. After the meeting, results of the discussion are transmitted in writing to the PI. At times a written response will be required from the PI before approval can be given.

It is the PI's responsibility to see that the application is complete (i.e., all questions are answered), required materials are attached (when applicable), the **application is submitted in a timely manner**, and the PI attends the Full Board meeting when invited.

Failure to adhere to these requirements may lead to a delay in review and/or approval.

## **THE QUEENS COLLEGE DIVISIONAL LABORATORY ANIMAL FACILITIES**

The facilities are composed of two separate units, located in two different buildings on campus. One is located on the second floor of the **GREGORY RAZRAN HALL**, and contains the main offices of the Divisional Laboratory Animal Facilities. The other unit is located on the third floor of the **NEW SCIENCE BUILDING (NSB)**. All support functions, including animal; maintenance and caging inventories, are segregated by facility, with minimal equipment exchange between each facility. Any equipment transferred between the two units must undergo a through de-contamination procedure, the exact nature of which is discussed in a later section of this manual. In this way, we are able to minimize the possibility of cross-facility disease contagion between the two units. All equipment used for laboratory animal support within both facilities is the property of the Divisional Laboratory Animal Facilities and is for the use of all bona-fide investigators on campus. **NO PRIVATELY-OWNED EQUIPMENT IS ALLOWED FOR USE OR STORAGE IN THE FACILITIES AT ANY TIME.**

Animal watering is accomplished through the use of an automatic manifold watering system which supplies filtered house water via a CPVC pipe manifold. Each rack has its own

distribution system and can be connected or disconnected from the supply manifold at will. In addition, these racks are supplied with a manifold air-break to prevent contamination from one of the racks being transferred throughout the facility by the watering system. Optional individual watering of cages using conventional water bottles is available, if such watering is required, by pre-arrangement with the Facility Manager. Each facility has on-site a high temperature bottle washer for the hygienic preparation and maintenance of this equipment.

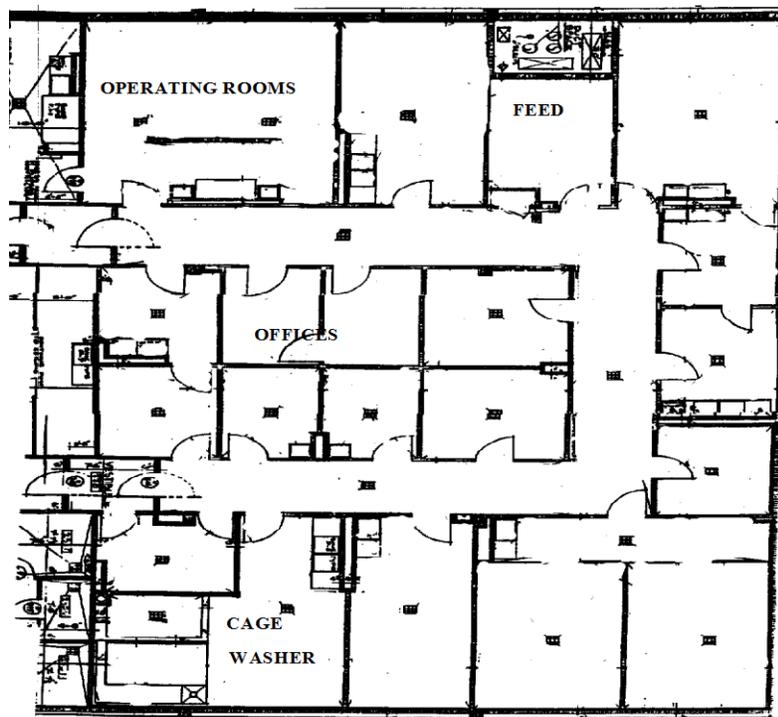
The **Queens College Divisional Laboratory Animal Facilities** are licensed to operate as a Laboratory Animal Research Facility by the **New York State Department of Health**. In addition, we are a registered research institution with the **United States Department of Agriculture**. Queens College also has its own separate Assurance of Compliance filed with the **Public Health Service**.

### **SYNOPSIS OF N.I.H. POLICIES**

The N.I.H. has a long standing commitment to the principle that laboratory animals used in experiments supported by N.I.H. funding, must receive appropriate care and humane treatment. The **GUIDE FOR CARE AND USE OF LABORATORY ANIMALS** (P.H.S. Publication #1024) was first published in March, 1963, and has undergone many revisions since its initial printing, with the latest revision occurring in 2011. Public Health Service research and training grant instructions state that the criteria established in the **GUIDE** should be followed.

Effective in June of 1971, institutions using living animals in projects supported with N.I.H. funds are now required to assure the N.I.H. that they will evaluate their laboratory animal facilities in regard to the maintenance of acceptable standards for the care and treatment of such animals. Institutions must also provide assurance of such a program by either accreditation of the facilities by a recognized professional laboratory animal evaluation body, such as the **American Association for Accreditation of Laboratory Animal Care (A.A.L.A.C.)**, or by the establishment of a committee, at least one member of which is a Doctor of Veterinary Medicine. It is the purpose of this committee to evaluate the care and use of living animals held or used for research, teaching, or other activities, on a continuing basis. While the **Queens College Divisional Laboratory Animal Facilities** are not currently accredited by the A.A.L.A.C., we do have an active standing **Institutional Animal Care and Use Committee (I.A.C.U.C.)** to fulfill this requirement. Institutions receiving N.I.H. funding are required to submit an **Assurance of Compliance** with the signatures of all legally responsible individuals, including the President of the College, to the Public Health Service. As alluded to earlier, the **Queens College Divisional Laboratory Animal Facilities** have filed this assurance. In addition, the I.A.C.U.C. conducts unannounced inspections of both laboratory animal facilities at least twice during the year. The I.A.C.U.C. also inspects any and all laboratories where laboratory animals are transferred for testing and manipulations. **It should be noted that any laboratories that house animals for more than 12 hours at a time are considered to be satellite facilities and must adhere to the same strict standards for caging and environment as those of the primary facilities.**

## GREGORY RAZRAN HALL FACILITY DESCRIPTION

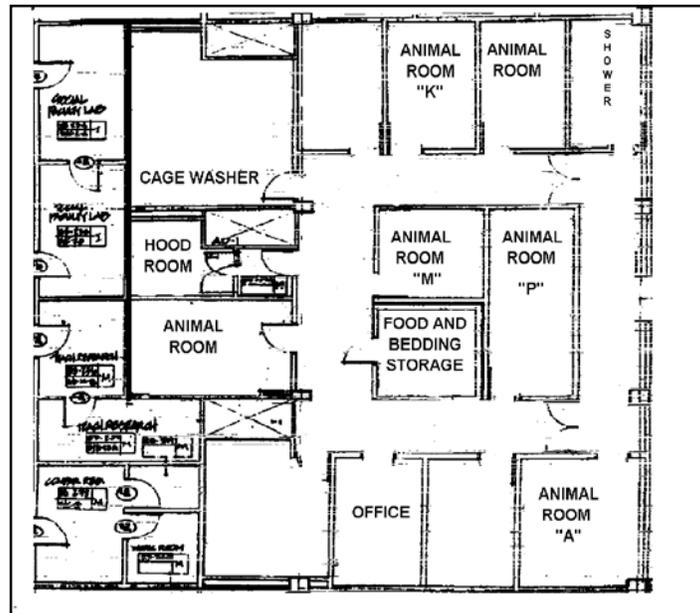


This facility is comprised of twelve laboratory animal rooms, one feed storage room, two equipment storage rooms, one cage washing and preparation room, the Divisional Facilities main offices, and two surgical suites. Due to space limitations, standardization requirements, and security concerns, no individual investigator-owned equipment may be stored within the confines of the facility unless prior arrangement has been made through the Facility Manager's office.

**NO EQUIPMENT, OTHER THAN THAT NEEDED FOR THE SUPPLYING OF DIRECT ANIMAL CARE, IS TO BE STORED IN AN ACTIVE LABORATORY ANIMAL ROOM AT ANY TIME.**

The Razran Hall unit is the older of the two facilities and is constructed with cinder-block walls and epoxy flooring. All internal surfaces are painted with epoxy paint and complete surface integrity between the floors, walls and ceilings are maintained at all times. The facility has its own separate "single-pass" air conditioning and heating plant and maintains a high to lower air pressure flow of animal rooms to facility hallways. In addition, there are two high pressure air locks to eliminate the mixing of facility and outer building air when personnel enter the facility. Each animal room has its own stainless steel sink with hot and cold house water supplied.

## NSB FACILITY DESCRIPTION



The NSB laboratory animal facility consists of eight animal rooms, a feed and bedding storage room, office, cage washer and sterilization room, and a special procedures-hood room. In addition, there is a locker and shower room located within the facility. There is also an on-site pathological incineration unit which, as of this writing, is currently out of service. As in the Razran Hall facility, each room has its own stainless steel sink with house supply hot and cold water supplies. The walls and ceilings are constructed of 1 inch thick gypsum board, painted with epoxy paint. The floors are of the same construction as those in the Razran Hall facility. Both facilities accept new animal deliveries *only* when an approved protocol is on file, and only animals that are certified viral antibody free by the vendor.

## GENERAL RULES OF OPERATION

Laboratory animals are segregated according to species, with no inter-species housing arrangements permitted in individual laboratory animal rooms. Only minor manipulations of animals is permitted within the laboratory animal rooms, such as weighing and injections.

**AT NO TIME ARE ANY INVASIVE SURGICAL PROCEDURES OR PROLONGED MANIPULATIONS REQUIRING ANESTHESIA TO BE PERFORMED WITHIN THE CONFINES OF A LABORATORY ANIMAL ROOM.**

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These procedures are to be carried out in specially designated and dedicated procedure areas, such as the Razran Hall operating suites or the NSB special procedure-hood room.

Animal support costs are borne either entirely by the college, as is the case with animals under approved teaching/class protocols, or through a per diem charge back system, which is the case for all research protocol animals. All animals housed within the facility for either experimental or educational purposes, **MUST** be covered by an **I.A.C.U.C.** approved experimental and/or teaching protocol, as mandated by federal law. As stated before, **NO ANIMALS WILL BE ACCEPTED FOR DELIVERY AT EITHER FACILITY UNLESS A CORRESPONDING APPROVED, CURRENT, PROTOCOL IS ON FILE.**

Approval of all protocols is accomplished through the submission of a completed protocol review form to the **Queens College Institutional Animal Care and Use Committee (I.A.C.U.C.)**. A blank form can be found in the appendix of this manual. Upon submission, a protocol number will be assigned and copies will be distributed to the members of the I.A.C.U.C. for review. The committee, a list of whose current members can be found at the end of this manual, is currently composed of two faculty members each from the Biology and Psychology departments, the facility clinical veterinarian, one non-scientific faculty member, an outside community representative, and the facility manager. The protocol copies are held in strictest confidence by these members and the protocol will either be approved for implementation, or requests for further clarification and/or information may be made of the principle investigator prior to approval. Upon protocol approval, housing arrangements are made with the facility manager. In addition, two copies of the protocol's expiration date will be provided to the investigator. One copy **MUST** be on prominent display in the P.I.'s principle laboratory, and one in each laboratory animal room housing animals listed for that protocol. **THIS IS THE ONLY OFFICIAL I.A.C.U.C. NOTIFICATION THAT WILL BE GIVEN REGARDING PROTOCOL RENEWAL DATES FOR EACH INVESTIGATOR. THE COMMITTEE WILL REVIEW AND ACT ON EACH PROTOCOL AS THEY BECOME DUE FOR RENEWAL. THE COMMITTEE WILL NOT CONTACT INDIVIDUAL INVESTIGATORS TO REMIND THEM OF THEIR RENEWAL DATES, BUT WILL CONTACT THE FACILITY MANAGER AS PROTOCOLS COMING UP FOR RENEWAL ARE PLACED ON THE NEXT I.A.C.U.C. MEETINGS AGENDA. THE MANAGER SHALL ENDEAVOR TO CONTACT INDIVIDUAL EFFECTED P.I.'S UPON SUCH NOTIFICATION.**

In addition, any changes, no matter how minor, to the procedures as described in your approved protocol **MUST** be brought to the attention of the I.A.C.U.C., in writing **BEFORE** implementation. Failure to do so will result in the instant suspension of your protocol and project, with the I.A.C.U.C. reserving the right to recommend that the project be terminated by the President of Queens College.

## **GENERAL POLICY AND PROCEDURES:**

Queens College policy regarding the laboratory animal facilities is set by the **I.A.C.U.C.**, with administrative oversight provided by the office of the Dean of Mathematics and Natural Sciences. It is the duty of the laboratory animal facility personnel to implement the policies directives from this body, provided they do not place the institution at variance with any applicable laws or mandates. In the event of any problems regarding the care or support your animals are receiving, the first line of contact is the **Facility Manager** at **997-3548**. In the event that the problem cannot be successfully ameliorated, it should be brought to the attention of the **I.A.C.U.C. Chairperson** for consideration and action.

All facility investigators will be kept informed of the status of their animal populations on a monthly basis. A full statement of your per diem account, as well as an overview of the entire facility, is provided at that time. In each animal room, a monthly census form for each investigator and colony is placed on the first of each month. These forms are used as the basis for any and all debits against your per diem account for animal care and support. Laboratory animal facility personnel do periodic animal counts in each room but it is important that you tell your technicians and students to keep any debits in populations current. Should they neglect to do this; the only basis for your account charges will be our periodic counts. It is to your benefit to keep this form current. At the end of the month, the census sheet is removed and replaced with a new one, and the account records for the removed sheet are closed. The specific policy statement governing per diem accounts can be found at the end of this manual.

Any physical plant problems that might develop within the facilities will be brought to the attention of all effected investigators and the **I.A.C.U.C.** as soon after the event as possible. Any health problems that may be noted in the colonies will be brought to the attention the investigator involved as well as the clinical veterinarian. **Should this problem be of a magnitude to affect other investigator's animals housed in different facility rooms, the situation will be brought to the attention of all investigators. No active treatment, except on an emergency basis, will be instituted without the express consent of the principle investigator. In the event that such consent is not forthcoming after two documented attempts to contact the principle investigator for treatment approval, the facility reserves the right to institute such measures as deemed both proper and necessary by the clinical veterinarian in order to maintain the humane care and treatment of all laboratory animals in our care, as well as to protect the health integrity of the other animal colonies housed within the facilities.**

Diagnostic and consultative services are available to all investigators through the QCIACUC clinical veterinarian, whose name and telephone number is as follows;

**Lawrence Herbst, DVM, Ph.D.**  
**(718) 839-7135**

### **A. CUNY Lab Safety Policy Regarding Animals**

As per CUNY's Lab Safety Manual:<sup>1</sup> It is a violation of federal regulations to carry out studies using vertebrate animals without an approved animal use protocol or to maintain animals after expiration of a previously approved protocol. Federal regulations mandate the establishment of an Institutional Animal Care and Use Committee (IACUC) to provide guidance, to oversee the animal care and use program, and to ensure compliance with applicable laws, regulations, and policies. The IACUC oversees the animal use program as mandated by the United States Public Health Service Policy and Animal Welfare Act.

Federal regulations and standards stipulate that personnel must be trained so they are qualified to perform research on animals. Each college is responsible for providing training to perform research on animals, and the college's IACUC must ensure that personnel are qualified to perform the procedures. All CUNY-affiliated college IACUCs now require that researchers and other key personnel involved in animal research complete a prescribe list of CITI (Collaborative Institutional Training Initiative) computer-based training modules (see section VIII for additional training information).

Researchers and personnel handling wild animals are strongly encouraged to get a pre-exposure Rabies vaccination. See the NYC DOHMH<sup>2</sup> website for more information.

### **B. Personal Hygiene, Handling Hazardous agents and Personal Protection**

College policy requires all animal care personnel to wear protective clothing including gowns, gloves, masks, caps and footwear. The staff is asked to maintain a neat and clean appearance at all times. Staff members are required to wash their hands thoroughly before and after handling the animals using an antibacterial/antimicrobial soap.

Information for the *Environmental Health and Safety Office* can be found at:  
<https://myqc.qc.cuny.edu/AdminServices/EnviHealthSafety/default.aspx>

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<sup>1</sup> CUNY Lab Safety Manual Section 13.2;

<http://www.cuny.edu/about/administration/offices/ehsrn/CUNYLabSafetyManualFINAL.pdf>

<sup>2</sup> NYS Department of Health, Rabies Information;  
<http://www.nyc.gov/html/doh/html/cd/cdrab.shtml>

Additional College Policies can be found at:

- Biohazard Spill Control Safety Plan  
<https://myqc.qc.cuny.edu/AdminServices/EnviHealthSafety/Laboratory%20Safety/Safety%20Training%20Handouts/Biohazardous%20Spill%20Outside%20of%20a%20Biosafety%20Cabinet.pdf>
- Chemical Hygiene Plan  
<https://myqc.qc.cuny.edu/AdminServices/EnviHealthSafety/Laboratory%20Safety/Chemical%20Safety.html>
- Hazardous Waste Management Plan  
<https://myqc.qc.cuny.edu/AdminServices/EnviHealthSafety/Laboratory%20Safety/Chemical%20Hazard%20Communication%20.html>
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- Radioactive Waste Management Plan:  
<https://myqc.qc.cuny.edu/AdminServices/EnviHealthSafety/Laboratory%20Safety/radioactivewaste.html>
- Regulated Waste Management Plan:  
[https://myqc.qc.cuny.edu/AdminServices/EnviHealthSafety/Laboratory%20Safety/Regulated\\_medical\\_waste.html](https://myqc.qc.cuny.edu/AdminServices/EnviHealthSafety/Laboratory%20Safety/Regulated_medical_waste.html)
- Universal Waste Management Plan:  
<https://myqc.qc.cuny.edu/AdminServices/EnviHealthSafety/Laboratory%20Safety/Universal%20Waste.html>
- Medical Care and Injuries

The College has a medical office staffed by qualified medical personnel, including a full-time nurse and physicians from two local hospitals. It also has a designated occupational safety and health officer and a laboratory safety officer. The Laboratory Safety/Biosafety/Chemical Hygiene Officer is responsible for the safety and health of all laboratory workers. New employees hired to work with animals are to be informed of these services.

Should an accident occur in the animal facility, it must be reported to the supervisor, to the medical office, and to the occupational health officer. A detailed accident report must be completed. Our laboratory animals are to be purchased from reputable vendors and certified to be disease free. We are not to house any animals of unknown origin so the chance of any disease being introduced or spreading will be minimal.

All persons having significant contact with animals are to receive regular tetanus immunizations and have regular Tuberculosis tests. The National Research Council's publication Occupational health and Safety in the Care and Use of Research Animals (NRC 1997) contains guidelines and references for establishing and maintaining an effective, comprehensive OHS program. Vaccination is recommended if research is to be conducted on infectious diseases for which effective vaccines are available.

Animal care personnel training is to include information about laboratory animal allergies, preventive control measures, early recognition and reporting of allergy symptoms, and proper

techniques for working with animals.

If a person is bitten, and after initial care and first aid, a referral to a physician of their choice , or transportation to a local emergency room for treatment by qualified medical personnel, is strongly recommended. Should the patient decline further treatment, they must sign a release form acknowledging their informed decision.

For informational purposes, the following is the relevant excerpt from the Guide regarding personnel health;

*Medical Evaluation and Preventive Medicine for Personnel Development and implementation of a program of medical evaluation and preventive medicine should involve input from trained health professionals, such as occupational health physicians and nurses. Confidentiality and other medical and legal factors must be considered in the context of appropriate federal, state, and local regulations (e.g., PL 104-191).*

*A preemployment health evaluation and/or a health history evaluation before work assignment is advisable to assess potential risks for individual employees. Periodic medical evaluations are advisable for personnel in specific risk categories. For example, personnel required to use respiratory protection may also require medical evaluation to ensure that they are physically and psychologically able to use the respirator properly (Sargent and Gallo 2003). An appropriate immunization schedule should be adopted. It is important to immunize animal care personnel against tetanus (NRC 1997), and preexposure immunization should be offered to people at risk of infection or exposure to specific agents such as rabies virus (e.g., if working with species at risk for infection) or hepatitis B virus (e.g., if working with human blood or human tissues, cell lines, or stocks). Vaccination is recommended if research is to be conducted on infectious diseases for which effective vaccines are available. More specific recommendations are available in the BMBL (DHHS 2009). Preemployment or preexposure serum collection is advisable only in specific circumstances as determined by an occupational health and safety professional (NRC 1997). In such cases, identification, traceability, retention, and storage conditions of samples should be considered, and the purpose for which the serum samples will be used must be consistent with applicable federal and state laws.*

*Laboratory animal allergy has become a significant issue for individuals in contact with laboratory animals (Bush and Stave 2003; Gordon 2001; Wolfle and Bush 2001; Wood 2001). The medical surveillance program should promote the early diagnosis of allergies (Bush 2001; Bush and Stave 2003; Seward 2001) and include evaluation of an individual's medical history for preexisting allergies. Personnel training should include information about laboratory animal allergies, preventive control measures, early recognition and reporting of allergy symptoms, and proper techniques for working with animals (Gordon et al. 1997; Schweitzer et al. 2003; Thulin et al. 2002). PPE should be used to supplement, not replace, engineering or process controls (Harrison 2001; Reeb-Whitaker et al. 1999). If PPE for respiratory protection is necessary, appropriate fit testing and training should be provided.*

*Zoonosis surveillance should be a part of an OHSP (DHHS 2009; NRC 1997). Personnel should be instructed to notify their supervisors of potential or known exposures and of suspected health hazards and illnesses. Nonhuman primate diseases that are transmissible to humans can be serious hazards (NRC 2003a). Animal technicians, veterinarians, investigators, students, research technicians, maintenance workers, and others who have contact with nonhuman primates or their tissues and body fluids or who have duties in nonhuman primate housing areas should be routinely screened for tuberculosis. Because of the potential for exposure to Macacine herpesvirus 1 (formerly Cercopithecine herpesvirus 1 or Herpes B virus), personnel who work with or handle biologic samples (blood and tissues) from macaques should have access to and be instructed in the use of bite and scratch emergency care stations (Cohen et al. 2002). Injuries associated with macaques, their tissues or body fluids, or caging and equipment with which the animals have had direct contact, should be carefully evaluated and appropriate postexposure treatment and follow-up implemented (ibid.; NRC 2003a).*

*Clear procedures should be established for reporting all accidents, bites, scratches, and allergic reactions (NRC 1997), and medical care for such incidents should be readily available (Cohen et al. 2002; DHHS 2009).*

## **D. Covered personnel, procedures for hazard and risk assessment, training of personnel**

Each newly hired animal caregiver is to be trained by supervisory staff, not only on the pragmatics of the job description, but also on general Animal Care principles, including topics such as hygiene, the requirements of the *Guide* (2010), proper handling of animals, safety precautions, and emergency procedures should an accident occur. (see section on *Training in Animal Care and Use*)

## **E. Children/Visitors in Laboratories**

The QC IACUC has adopted the CUNY Policy which states that “It is the responsibility of the Department Chairperson, P.I.s, and laboratory supervisors to restrict access of visitors and children to areas under their supervision when potential health and physical hazards exist.”<sup>3</sup> **In addition, at no time is photography and/or video recording permissible within the confines of the laboratory animal facilities**

It is one of the primary functions of the laboratory animal facility staff to monitor compliance with all regulatory laws and standards within the facility, and to assure adherence to the stated procedures of approved protocols. Both facilities are subject to unannounced site visits and protocol review by inspectors from both the **United States Department of Agriculture (U.S.D.A.)**, and the **New York State Department of Health**. **Should there be any non-compliance with the stated procedures and objectives of any given protocol, the I.A.C.U.C. has the power to suspend that protocol and block access to the animals involved by anyone but laboratory animal facility personnel.** As stated before, should any protocol non-compliance be documented after investigation by the **I.A.C.U.C.**, the laboratory animals involved will be placed under **I.A.C.U.C.** ownership, and a recommendation for termination of the project will be made to the College President. **The laws regarding the oversight of projects by the institution where approved research is being done are quite clear and specific, and adherence by all members of the institutions scientific community is mandatory.**

## **SECURITY, DISASTER PLANNING AND EMERGENCY PREPAREDNESS**

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<sup>3</sup> CUNY Lab Safety Policy 4.9.2;

<http://www.cuny.edu/about/administration/offices/ehsrm/CUNYLabSafetyManualFINAL.pdf>

While contingency plans normally address natural disasters, they should also take into account the threats that criminal activities such as personnel harassment and assault, facility trespassing, arson, and vandalism pose to laboratory animals, research personnel, equipment and facilities, and biomedical research at the institution. Access to the Queens College Animal Facility is accomplished through the use of a keycard/magnetic locking system that controls and logs access to the facility 24 hours a day. In addition, the Razran Hall facility is under motion detector recording video surveillance as well.

Animal facilities may be subject to unexpected conditions that result in the catastrophic failure of critical systems or significant personnel absenteeism, or other unexpected events that severely compromise ongoing animal care and well-being (ILAR 2010). Facilities must therefore have a disaster plan. The plan should define the actions necessary to prevent animal pain, distress, and deaths due to loss of systems such as those that control ventilation, cooling, heating, or provision of potable water. If possible the plan should describe how the facility will preserve animals that are necessary for critical research activities or are irreplaceable. Knowledge of the geographic locale may provide guidance as to the probability of a particular type of disaster.

Disaster plans should be established in conjunction with the responsible investigator(s), taking into consideration both the priorities for triaging animal populations and the institutional needs and resources. Animals that cannot be relocated or protected from the consequences of the disaster must be humanely euthanized. The disaster plan should identify essential personnel who should be trained in advance in its implementation. Efforts should be taken to ensure personnel safety and provide access to essential personnel during or immediately after a disaster. Such plans should be approved by the institution and be part of the overall institutional disaster response plan that is coordinated by the IO or another senior-level administrator. Law enforcement and emergency personnel should be provided with a copy of the plan for comment and integration into broader, area wide planning (Vogelweid 1998).

In the event of an emergency, institutional security personnel and fire or police officials should be able to reach people responsible for the animals. Notification can be enhanced by prominently posting emergency procedures, names, or telephone numbers in animal facilities or by placing them in the security department or telephone center. Emergency procedures for handling special facilities or operations should be prominently posted and personnel trained in emergency procedures for these areas. A disaster plan that takes into account both personnel and animals should be prepared as part of the overall safety plan for the animal facility. The colony manager or veterinarian responsible for the animals should be a member of the appropriate safety committee at the institution, an “official responder” in the institution, and a participant in the response to a disaster (Vogelweid 1998).

**Queens College has a disaster/Incident contact procedure that is administered through both our Buildings and Grounds Department and Public Safety Department. A list of contact individuals is maintained by these departments so that, in the event of an emergency, all relevant personnel will be contacted. In addition, provision has been made that all upper**

management administration officials will be contacted as well.

The animal facilities are monitored by an automated, dedicated server system. The server has its own static IP address and uninterruptable power supply (UPS) in order to maintain monitoring procedures during a total power failure. All of the animal rooms are monitored 24 hours a day/7 days for for temperature and relative humidity condidtions. Should one of the rooms go out of threshold, the necessary responsive personnel are contacted via email and cell phone text messaging by the dedicated server. In addition, should an electrical power outage occur, the backup power system has the capability of contacting designated responsive personnel in the same manner.

*It should also be noted that, in the event of an emergency requiring immediate evacuation of the facility or building, provision should be made for the rapid termination of animals that are undergoing surgical procedures under anesthesia.*

## **SURGICAL SERVICES**

As stated earlier in this manual, minor manipulations, such as weighing and palpation, are permissible within the confines of the animal rooms. Any invasive procedures, except the parenteral administration of substances under approved protocols, is to be carried out in the operating room suites in the Razran Hall facility, or the special procedure-hood room in the NSB facility. Any animals used in such invasive procedures **must** receive suitable anesthesia and pain alleviation drugs as is deemed necessary and proper by both the experimental protocol and clinical veterinarian. It is the responsibility of the principle investigator to supply the necessary items to accomplish these requirements. It is also the principle investigator's responsibility to ascertain and document the competency of any technicians and/or students under their employ or oversight as having received the proper training and proficiency of skills to accomplish the required procedures properly and humanely. The competency of your personnel also must be demonstrated to the satisfaction of the facility Clinical Veterinarian. In addition, all personnel will be subject to periodic testing by the facility Clinical Veterinarian, both on an announced and unannounced basis, to assure their competence and that they remain current with all practices, techniques, and regulations regarding the work with animals. A sample form for this requirement can be found in the appendix section of this manual.

Scheduling for operating room time is done through the laboratory animal facility offices. Access to the surgical facility is through the use of authorized keycards. While overall maintenance of the operating room suites is the responsibility of the laboratory animal facility, local cleanup and refuse disposal is the responsibility of the person using the facilities.

**DISREGARD OF THE CODICIL WILL RESULT IN THE REVOCATION OF ALL OPERATING ROOM PRIVILEGES.**

**PROCEDURES FOR ANIMAL PURCHASE**

All animal purchased for use within the facility **MUST** be approved for admission to the facility by the facility manager, as acknowledged by a signed **Animal Housing Authorization** form. The criteria for admission to the facility by the manager is based on space and support availability. In addition, the animals purchased **MUST** be under the auspices of an **I.A.C.U.C.** approved protocol. Please see the **GENERAL RULES** section of this manual for protocol submission and review procedures.

**PLEASE BE ADVISED THAT ANIMALS THAT ARE ORDERED AND DO NOT MEET THE ABOVE ADMISSION CRITERIA WILL BE DENIED ENTRY TO THE FACILITY WITH ANY ADDITIONAL CHARGES BEING THE SOLE RESPONSIBILITY OF THE ORDERING INDIVIDUAL.**

If the animals presented for delivery by the vendor do not, in the opinion of the receiving laboratory animal facility personnel, represent healthy and/or an overall acceptable appearance, and/or do not represent the number or strain of animals agreed to for admission, they will be denied access to the facility. It is the responsibility of the vendor to send suitable replacements in the event of the delivery of poor quality animals as per industry norms. In house breeding programs are not normally conducted in the facilities, as they are not cost effective and require a great deal of oversight. If no other method of animal procurement is available, small scale breeding programs may be instituted. Contact the Facility Manager for further information.

ANIMAL DENSITY PER CAGE WILL STRICTLY FOLLOW THE DIRECTIVES FOUND IN THE GUIDE FOR THE CARE AND USE OF LABORATORY ANIMALS WITH NO EXCEPTION. ANY DEVIATIONS WILL BE IMMEDIATELY CORRECTED BY THE FACILITY STAFF AND WILL BROUGHT TO THE ATTENTION OF THE P.I. CONCERNED, AS WELL AS THE Q.C.I.A.C.U.C. CHAIRPERSON.

**Repeated violation of the guidelines will lead to Protocol Suspension.**

The following guideline chart can be found posted in every animal room for easy reference;

**ANIMAL**  
**IDENTIFICA**  
**TION**

All animal housed in the facilities must be identified by cage card as to ownership and

Animals	Weight, g	Floor Area/Animal		Height *	
		in <sup>2</sup>	cm <sup>2</sup>	in	cm
Mice	<10	6	38.70	5	12.70
	Up to 15	8	51.60	5	12.70
	Up to 25	12	77.40	5	12.70
	>25 <sup>a</sup>	≥15	≥96.75	5	12.70
Rats	<100	17	109.65	7	17.78
	Up to 200	23	148.35	7	17.78
	Up to 300	29	187.05	7	17.78
	Up to 400	40	258.00	7	17.78
	Up to 500	60	387.00	7	17.78
	>500 <sup>a</sup>	≥70	≥451.50	7	17.78
Hamsters	<60	10	64.50	6	15.24
	Up to 80	13	83.85	6	15.24
	Up to 100	16	103.20	6	15.24
	>100 <sup>a</sup>	≥19	≥122.55	6	15.24
Guinea Pigs	≤350	60	387.00	7	17.78
	>350 <sup>a</sup>	≥101	≥651.45	7	17.78

protocol number. Upon arrival at the facilities, a cage card will be generated and placed on the housing unit. This identification must follow the animal during its stay at the facilities. Additional and/or replacement cards can be secured by contacting the Facility Manager.

 **Queens College**  
**Divisional Laboratory Animal Facilities**  
**RAZRAN HALL FACILITY**

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**INVESTIGATOR: SAMPLE, S.**  
OFFICE #: Razran XXX DEPARTMENT: Psychology  
TELEPHONE #: XXXX  
SPECIES: Rat L/E ROOM: XXX  
VENDOR: CRL Raleigh, NC VAF: YES  
PROT.#: XX  
DOA: XX/XX/XX DOB: XX/XX/XX  
SEX: MALE

 **Queens College**  
**Divisional Laboratory Animal Facilities**  
**RAZRAN HALL FACILITY**

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P.I: SAMPLE BREEDING CAGE  
OFFICE #: Razran XXX DEPARTMENT: Psychology TELEPHONE #: XXXX  
SPECIES: Mouse CD-1 ROOM: 279 PROTOCOL #  
BREEDING CAGE SETUP DATE: \_\_\_\_\_  
FEMALE SEPARATION DATE: \_\_\_\_\_  
LITTER D.O.B & NUMBER: \_\_\_\_\_  
LAB CONTACT: \_\_\_\_\_  
TEL. NUMBER: \_\_\_\_\_

## **ANIMAL DISPOSAL AT THE CONCLUSION OF EXPERIMENT**

The humane termination of animal life at the conclusion of an experiment is the sole responsibility of the principle investigator. **Only euthanasia methods and materials condoned and approved by the New York State Department of Health's Veterinary Division, as articulated by the American Veterinary Medical Society's Euthanasia Guidelines, will be acceptable and allowed for this purpose.** The laboratory animal facility will be responsible for the proper disposal of animal remains after they have been remanded to the Facility Manager for disposal, EXCEPT under the conditions noted below;

***IN THE EVENT THAT THE ANIMAL REMAINS REQUIRE SPECIAL HANDLING, I.E. THOSE THAT REPRESENT A POTENTIAL BIOLOGICAL, RADIOACTIVE, OR CHEMICAL HEALTH HAZARD TO HUMAN PERSONNEL, IT IS THE SOLE RESPONSIBILITY OF THE PRINCIPLE INVESTIGATOR TO ARRANGE FOR THE PROPER PICK-UP AND DISPOSAL OF THESE HAZARDOUS REMAINS.***

**IN ADDITION, ALL HAZARDOUS REMAINS DISPOSAL MUST BE DONE WITH THE KNOWLEDGE AND APPROVAL OF THE QUEENS COLLEGE HAZARDOUS MATERIALS SAFETY OFFICER.**

**Parmanand Panday**

**Phone: 718-997-4171 Dept: Dean of Faculty of Math & Natural Sciences  
Bldg/Rm: Remsen 114D E-mail: [parmanand.panday@qc.cuny.edu](mailto:parmanand.panday@qc.cuny.edu)**

## **TECHNICIAN TRAINING**

All technicians and/or students sponsored by investigators under approved protocols are required to take an orientation course **BEFORE** being allowed to work with animals in the facility. Upon completion of the orientation program, a certificate will be issued and signed by the Facility Manager and the Principle Investigator. It is understood that, upon completion of the orientation, the student/technician is expected to conduct their research duties in a professional and responsible manner at all times. **Failure to do so will result in the revocation of facility privileges.** As stated before, any technicians and/or students who are to perform invasive manipulations as part of the experimental protocol, must be certified as being fully trained and competent to perform said manipulations by the principle investigator, **IN WRITING**. The Clinical Veterinarian will ascertain the competence of any and all technicians by observing their performance during the execution of their duties. A copy of the P.I. assurance form can be found at the back of this manual.

Queens College and CUNY are active participants in the Collaborative Institutional Training Initiative (CITI) Program. This on-line program provides training to IACUC members, Researchers, Research Staff, and other individuals involved in animal care, treatment, and/or use.

**All IACUC Members** are required to take the following course:

• **Essentials for IACUC Members; modules included are:**

- Federal mandates
- The Veterinary Consultation
- Personnel Training and Experience
- Occupational Health and Safety
- Reporting Misuse, Mistreatment, or Non-Compliance
- Introduction to Essentials for IACUC Members
- Responsibilities of the IACUC and IACUC Members
- The Members of the IACUC
- The IACUC, the CEO, and the IO
- The Authority of the IACUC
- Conducting IACUC Business – The Quorum
- Procedures for Reviewing Protocol Forms
- Outcomes of the Animal Protocol Review
- The Types of Protocol Review
- Documenting Process
- IACUC Semi-Annual Self-Evaluation

- Performing the Facility Inspection and the Program Review
- Identifying, Documenting, and Correcting Deficiencies
- Investigating Allegations
- Maintaining the Public Trust

**All Researchers, Students, Facility Staff, Key Project Personnel are required to take the following course:**

**• Working with IACUCs; modules included are:**

- The Integrity Assurance Statement
- Introduction to Working with the IACUC
- Working with the IACUC
- Federal Mandates
- The Veterinary Consultation
- Getting Started
- Alternatives
- Avoiding Unnecessary Duplication
- USDA Pain/Distress Categories
- Endpoint Criteria
- Surgery
- Antibody Production
- Collecting Blood Samples
- Personnel Training and Experience
- Occupational Health and Safety
- Using Hazardous and Toxic Agents in Animals
- Housing Social Animals
- Prolonged Restraint
- Euthanasia
- Making Changes after You Receive Approval
- Reporting Misuse, Mistreatment, or Non-Compliance
- Final Comments

**The following courses are electives available to all depending on their area of research:**

- If you are working with **Mice**, you must complete:

**Housing Rodents on Wire Floors**

**Introduction to Post-Procedure Care of Mice and Rats in Research: Minimizing Pain and Distress**

Then you must complete the 13 modules listed **DIRECTLY** under “**Introduction to Post-Procedure Care of Mice and Rats in Research: Minimizing Pain and Distress** “ on the *Optional Modules* page.

They include:

- Investigator Responsibility
- Minimizing Sources of Nonexperimental Variation

Systematically Monitoring for Pain and Distress  
Detecting Clinical Signs of Pain and Distress  
Appearance and Behavior  
Physical Exam for Clinical Condition  
Body Weight  
Fluid and Electrolyte Balance  
Body Temperature  
Tumors  
Alleviation of Pain and Distress  
Documentation of Post-Procedure Care  
Summary

**AND**

### **Introduction to Working with Mice in Research Settings Modules**

Then you must complete the 5 modules listed **DIRECTLY** under “**Introduction to Working with Mice in Research Settings Modules**” on the *Optional Modules* page. They include:

- Research Mandates and Occupational Health Issues
- Alternatives Searches, Humane Standards, Housing, and Acclimation and Quarantine
- Detecting Pain and Distress, Genetics, and Biological Features
- Injections, Blood Collection, and Antibody Production
- Surgery, Supportive Care and Monitoring, Euthanasia, and References

Once you are done, you can go back to the *Optional Modules* page and print (or save as PDF or Word) and send to the IACUC office, 6S-137.

- If you are working with **Rats**, you must complete:

### **Housing Rodents on Wire Floors**

#### **Introduction to Post-Procedure Care of Mice and Rats in Research: Minimizing Pain and Distress**

Then you must complete the 13 modules listed **DIRECTLY** under “**Introduction to Post-Procedure Care of Mice and Rats in Research: Minimizing Pain and Distress**” on the *Optional Modules* page.

They include:

- Investigator Responsibility
- Minimizing Sources of Nonexperimental Variation
- Systematically Monitoring for Pain and Distress
- Detecting Clinical Signs of Pain and Distress
- Appearance and Behavior
- Physical Exam for Clinical Condition
- Body Weight
- Fluid and Electrolyte Balance
- Body Temperature
- Tumors
- Alleviation of Pain and Distress
- Documentation of Post-Procedure Care

Summary

**AND**

**Introduction to Working with Rats in Research Settings Modules**

Then you must complete the 5 modules listed **DIRECTLY** under “**Introduction to Working with Rats in Research Settings Modules** “ on the *Optional Modules* page. They include:

Research Mandates and Occupational Health Issues  
Alternatives Searches, Humane Standards, Housing, and Acclimation and Quarantine  
Detecting Pain and Distress, Genetics, and Biological Features  
Injections, Blood Collection, Antibody Production, and Pain Relief  
Surgery, Supportive Care and Monitoring, Euthanasia, and References

Once you are done, you can go back to the *Optional Modules* page and print (or save as PDF or Word) and send to the IACUC office, 6S-137.

- If you are working with **Amphibians**, you must complete:

**Introduction to Working with Amphibians in Research Settings Modules**

Then you must complete the 4 modules listed **DIRECTLY** under “**Introduction to Working with Amphibians in Research Settings Modules** “ on the *Optional Modules* page. They include:

Taxonomy, Research Mandates and Occupational Health Issues  
Alternatives Search, Housing, Source, and Acclimation and Quarantine  
Biology, Pain and Distress, Handling, and Pain Relief  
Surgery, Supportive Care and Monitoring, Euthanasia, and References

Once you are done, you can go back to the *Optional Modules* page and print (or save as PDF or Word) and send to the IACUC office, 6S-137.

- If you are conducting **Surgery**, you must complete:

**Aseptic Surgery**

Once you are done, you can go back to the *Optional Modules* page and print (or save as PDF or Word) and send to the IACUC office, 6S-137.

**SPECIAL NSB FACILITY PROTECTIVE ADDENDUM**

The NSB facility, as stated in a previous section of this manual, is considered and operated as a pathogen free colony. Only animals that are certified as being viral antibody free (V.A.F.) are permitted housing in the NSB. Since we do not currently have the ability to physically quarantine every order of animals as they arrive, it is imperative that they be certified from the vendor as to their health status. Since the Razran Hall facility has been in operation much longer than the NS, and since we have had evidence of chronic pathogens being present in the Razran Hall colonies, all equipment that is moved between the facilities requires preparation to prevent possible cross-contamination of the facilities. While we endeavor to not transfer any equipment, the need does arise. Equipment that is transferred is broken down and washed in a high-temperature washer using both steam and water of at least 180 degrees F. In addition, chemical disinfectants and/or steam sterilization techniques may be employed. Any equipment transfers **MUST** be cleared by the Animal Facility Manager, and are to be remanded to the facilities care for processing. Please call **997-3548** for further information.

The Divisional Laboratory Animal Facilities also have available a high-containment paradigm available for investigators in the NSB facility. This is an extra-cost option and is subject to certain modifications.

## **NSB HIGH-CONTAINMENT OPTIONAL PROCEDURES**

### **PERSONNEL:**

All animal support personnel who are to enter the high-containment rooms within the NSB facility are required to change into a fresh, clean scrub uniform **BEFORE** entry into the inner animal housing area. A locker/shower room for this purpose is located in room "L" off the outer hallway of the NSB facility. Personnel who are to enter the assigned animal rooms must clean their shoes by stepping on the sticky mats outside the doorways before donning disposable shoe coverings. All head and face coverings must also be in place before entry into the animal room. Disposable gloves are to be put on once the individual is within the animal room itself. Upon leaving the room, all disposable accessory coverings, such as shoe coverings, masks, and gloves, are to be removed **BEFORE** any attempt is made to enter another animal room. In addition the following codicil **MUST** be followed;

**IF YOU HAVE BEEN INSIDE, OR EXPOSED TO, A LOW CONTAINMENT ROOM,  
A FRESH SCRUB SUIT MUST BE ACQUIRED BEFORE ATTEMPTING  
ENTRY INTO A HIGH-CONTAINMENT ROOM.**

Personnel afforded access to the high-containment rooms must be trained and proficient in these techniques. The Divisional Laboratory Animal Facility management will oversee adherence to the paradigm. In certain instances, and with the express approval of the Facility Manager, a P.I. may designate their own personnel to provide animal care when a high-containment paradigm is in effect. Such an arrangement must be deemed scientifically

warranted and in no way abrogates the supervisory and control responsibility of the facility management. All personnel and procedures involved in such a special arrangement shall be under the direct control and supervision of the Facility Manager. Any additional costs that may be encountered are the sole responsibility of the Principle Investigator requesting the service.

**Access to ALL facility rooms by the facility management is mandatory, and at no time are any proprietary security procedures, such as additional locks, to be installed within the facility. ANY VIOLATION OF THIS RULE WILL RESULT IN THE IMMEDIATE REVOCATION OF ANIMAL FACILITY PRIVILEGES AND INVESTIGATION BY THE I.A.C.U.C.**

### **CLEANING SUPPLIES:**

All cleaning and disinfecting supplies will be provided by the facility. Brooms for each room shall be marked and stored in their designated room. **ONLY APPROVED CLEANING AND DISINFECTANT CHEMICALS, PROCEDURES, AND EQUIPMENT SHALL BE ALLOWED FOR USE WITHIN THE FACILITY!!** This is for the protection of our operating license and to maintain the operational integrity of the facility, as well as to protect both the animal colonies and human personnel.

All cleaning traffic patterns should be essentially one way, i.e. room to inner hallway to outer hallway to disposal. Since the facility is not constructed as a clean/dirty corridor system, care must be taken to avoid contamination of clean replacement supplies by those removed for disposal and/or servicing.

### **CAGE CHANGING:**

All animal caging is to be changed on a three times per week schedule in the case of direct and indirect bedding cages. In addition, all support racks are to be changed at least every two weeks of service. Fresh, clean cages for changing may be stored in the animal room on a floor support. They can be stored within the room provided space permits, and for no longer than two days prior to use. Fresh bedding is loaded into each cage and the animals are transferred on a one-for-one basis. All attendant cage and animal identification documents must be transferred to the new cage at this time. It should be noted that the cage cards generated by the facility are for identification **ONLY**. No experimental data is to be kept on these cards save for any additional investigator-designated identification marks.

All dirty cages are to be taken into the outer hallway where they are scrapped of any residual waste. These cages are then taken into the cage washer area for additional processing. Once processed, the clean cages are to be stored in a clean cage storage room, designated for this exclusive use, until needed for the next cage changing cycle. The room is then to be swept and mopped with an approved disinfectant/cleaner solution.

**WASTE DISPOSAL:**

All garbage bags that have been used during cage changing are to be sealed and placed in the trash trundle outside the facility for transport down to the loading dock for disposal. The trundles are to be left outside the facility proper as they are considered to be highly contaminated. The trundle will be available for use outside the facility once it has been unloaded.

Animal deliveries are to be handled as described previously. In addition, special certified and/or sterilized diets and bedding can be provided at additional cost. Please call the facility offices (3548) for current availability and prices.