Institutional Animal Care and Use Committee (IACUC): The names and applicable telephone numbers for these members are posted in the SARC facility or may be obtained from the SARC director.

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I OVERVIEW

The Science Animal Resource Center (SARC) in the School of Science can provide quality care for rodents, rabbits, small birds, and amphibians used for research and teaching in the School of Science. A per diem charge is made for this service. The SARC is staffed by two full-time technicians and a Director. On matters regarding animal care the SARC Director reports to the Associate Dean for Research and Graduate Studies in the School of Science. The SARC currently utilizes a Veterinarian from the Indiana University School of Medicine Laboratory Animal Resource Center (LARC), for routine inspection of animal health and consultation on matters of animal care and use.

Faculty in the School of Science who wish to use animals in research or teaching must have an approved animal care and use protocol. An application (protocol) form is obtained from the SARC director. This form must be completed in detail by the investigator. It is then reviewed for appropriate and humane use of animals and, if acceptable, approved by the School of Science IACUC. The IACUC monitors the operation of the SARC, including animal care and use (i.e., adherence to approved protocols).

II FORMS FOR THE USE OF ANIMALS

Before you may use animals in research or teaching, you must have an approved animal care and use protocol. Follow the guidelines below to complete the necessary forms.

A. Application Forms
   1. Obtaining forms: Periodically updated application forms for the use of animals in research or teaching may be obtained by calling the SARC Director.
   2. Completing forms: The application form will come with a set of instructions. If you need assistance in completing the form, contact the IACUC Chair. Pay particular attention to the instructions to prevent delays from inadequately addressed items.
   3. Submitting completed forms: Send the original (signed) form to the SARC. Be sure to make a copy for yourself.
   4. Review process: The SARC Director will give your application ("protocol") a unique number and enter it as "pending" in the database. The protocol along with survey sheets will then be distributed to the School of Science IACUC for review and the completed survey sheets will be collected by the SARC director. If the committee requests additional information, modification, or clarification, the IACUC chair will contact you and request information or suggest modification of your protocol. When the IACUC meets, your protocol will be voted for full or provisional approval or tabled until the following cycle in order to obtain further clarification. Once you have received full approval, the Chair will inform you by letter along with a signed cover page of the protocol. The status of the protocol is updated in the database.
   5. Record keeping: Copies of protocols are kept in the SARC director’s office. It is very important that you also keep a copy of the protocol and all correspondences for your own files. All files must be kept for the life of the protocol and an additional three years after completed.
B. Annual Continuing Review of a Protocol Forms

1. Obtaining forms: Prior to the anniversary date of your approved protocol, the SARC director will send you a Continuing Review of a Protocol form.

2. Completing and submitting: You must complete this form and return the original to the SARC director by the date requested. If you fail to complete and return the Continuing Review of a Protocol forms, your animal use privileges for that project will be administratively terminated. Be sure to complete all blanks, including both the number of animals (remember to include species) used during the past year and the total number of animals used in the project (all years). If you have any questions regarding completion of Continuing Review of a Protocol forms, contact the IACUC chair.

3. Review process: The Continuing Review of a Protocol form undergoes the same routing for review as the original. If the document is incomplete, the IACUC chair will contact you for additional information or clarification. You will be sent a letter and a signed copy of the form once it is approved.

C. Amendments

Significant changes in the use of animals in your project must first be approved by the IACUC. Entirely new projects (i.e., when both the goal of the research and the use of animals are different) should be submitted as new applications, not amendments. Follow the guidelines below to amend an approved animal care and use protocol.

1. Obtaining forms: Amendment forms may be obtained from the SARC director.

2. Completing and submitting: On the amendment form describe in detail how animal care and use will differ from the original protocol. Justify the need for this change. Send the signed original to the SARC director. Keep a copy for yourself.

3. Review process: The amendment will be reviewed as described for the original protocol. Once the amendment is approved, you will receive a letter and a signed copy.

D. Resubmission of Updated Forms

Because the regulations for the care and use of animals in research and teaching are revised often, it is sometimes necessary to alter the application forms to provide the required records. Therefore, at least every three years, you will be sent a new application with your Annual Review Form. Your updated application will be reviewed by the IACUC for completeness. You will be advised of any changes that will be necessary to comply with new regulations. You may wish to consult with IACUC chair while filling out the updated form.
III STRUCTURE OF THE SCHOOL OF SCIENCE SARC

A. Personnel
1. The School of Science has an Institutional Animal Care and Use Committee (IACUC). It is the responsibility of the IACUC to review and approve protocols (for animal use), thus, the School of Science IACUC reviews, approves, and monitors animal use protocols in the School of Science, and helps to implement relevant policies concerning animal use. It also oversees the operation of the School of Science SARC. The School of Science IACUC consists of both scientists and nonscientists within and outside of the University. Committee members are appointed by the Institutional Official, the Dean of the School of Science.

2. SARC Staff: The SARC is currently staffed by a director and two full-time technicians. The technicians are responsible for routine animal care and maintenance of the physical animal facility. The technicians are supervised by a director who has oversight of the SARC. The SARC director is also responsible for animal procurement, record keeping, and handling problems associated with the physical facility. The technicians and the SARC director report to the Associate Dean for Research and Graduate Programs with regard to the SARC and animal care.

B. Physical Facility
1. Size and arrangement of the facility: The SARC is >10,000 sq. ft. divided between two sites, one in Engineering, Science and Technology (SL) and one in Science and Engineering Laboratory Building (SELB). Both sites have areas for animal housing, rodent surgery, cage washing, and storage. Space allotment in the SARC is determined by the School of Science Space committee.

2. Species to be accommodated: The SARC has the potential to house small rodents (e.g., rats, mice, hamsters), rabbits, small birds, and amphibians. The SARC cannot accept dogs, cats, nonhuman primates, and other large animals. Investigators wishing to use animals that cannot be accommodated in the SARC will be referred to the School of Medicine Laboratory Animal Resource Center (LARC).

3. Access and security: Access to the SARC is limited to faculty in the School of Science who have approved animal use protocols, their technicians and students who are trained in the use of animals, IACUC members, staff of the SARC, and administrative faculty. Classes of students are never permitted in the SARC. Access is by key and keycard. All suspicious or unauthorized entry into the SARC should be reported to either the staff of the SARC, the IACUC members, or, in the case of apparent danger, to IUPUI police.
IV ACQUISITION AND MAINTENANCE OF ANIMALS

A. Acquisition

1. Who to contact: To order animals from a commercial supplier or to arrange to have animals acquired from another legal source, contact the SARC director. The SARC will make every attempt possible to house suitable animals for use under an approved protocol. However, depending upon the SARC census, there may be space and species limitations. It is advisable to meet jointly with the IACUC Chair and the SARC director to determine space availability if one wishes to order a large number of animals or a species that is not currently accommodated in the SARC.

2. What information you need: When you request animals, an order will be completed and forwarded to the SARC director. Please note that you must have an approved protocol before receiving animals for a project.

3. When to order: Please allow at least 2 working days between order and receipt. Keep in mind that there may be delays in obtaining the animals that you need and plan your ordering accordingly. In those cases in which the animals are not commercially available and/or have an unpredictable availability, please inform the SARC Director of the number and nature of animals that you hope to order/receive in the near future.

B. Maintenance

1. Responsibilities of the SARC technicians

- Food and water will be provided or monitored daily (including weekends and holidays) by the technicians. Special requirements are the responsibility of the investigator unless arranged in advance. Examples of special requirements are custom diets and food/water restrictions.
- All bedding and cage changes are done by the technicians. The chart below describes these changes for the various species.

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>CAGE TYPE</th>
<th>BEDDING</th>
<th>CHANGE FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rodents</td>
<td>Solid bottom cages</td>
<td>Pressed paper or sanichips</td>
<td>Bedding, 1-2 times per week; Cages sanitized weekly</td>
</tr>
<tr>
<td>Aquatics</td>
<td>Solid bottom cages</td>
<td>N/A</td>
<td>Water and cages changed ~three times per week (adults), daily (juveniles), or circulated</td>
</tr>
</tbody>
</table>

- All animals are checked daily for food, water, cage conditions, and general health. A health log is maintained for health concerns; this log is kept on a desk at each site (SL, SELB) of the SARC.
- All rooms are sanitized quarterly. Rooms are sanitized if there is a species change in that room. Room sanitation is monitored for effectiveness with Rodac (microbiological growth) plates.
- Maintenance problems are routinely reported by the SARC director. Emergency and after hours problems are reported by the person discovering the problem. In the case of an emergency, contact the SARC director or IACUC Chair.
- All routine food, bedding, and supplies are ordered by the SARC.
2. Responsibilities of the Principal Investigator

- The PI is responsible for providing nonstandard care (e.g., custom diets, food/water restrictions, weighing) of animals. This responsibility may be delegated to the PI's technicians and students trained in the care and use of animals. A SARC technician may provide some nonstandard care if it is arranged in advance. The PI is required to submit the care instructions in writing.
- The PI is responsible for the proper use (including authorization) and disposal of radioactivity, hazardous chemicals, and biohazards.
- The PI or the person he/she designates must keep records of controlled substances, surgeries (including anesthesia), and other procedures that are not part of the routine care and use of animals but that impact the health of the animals or are required by law.
- The PI and his/her technicians and students are responsible for reporting animal health and related problems to the SARC (orally or in writing).
- The PI must supply equipment that is not available in the SARC and that is to be used exclusively for the PI's research.
- The PI guarantees that animal husbandry and use are accomplished as described in the approved protocol.

3. Per Diem

The per diem charges cover labor, standard food, bedding, cleaning and sanitizing supplies, uniforms and protective gear for technician, trash bags, office supplies, veterinary care and other types of items needed for the care of the animals. Rates are calculated using the standards outlined in the “Cost Analysis and Rate Setting Manual for animal research” by the NCRR (National Center for Research Resources). Contact the SARC director for current rates.

4. Disposition of animals

- Animal carcasses are to be placed in the bags in either the freezers in the SL or SELB internal corridors. These bags will be picked up by Stericycle for disposal. Radioactive or hazardous carcasses are to be disposed of by the Investigator through appropriate channels.
- If postmortems are required for a study, the SARC staff should be notified so that the animal is not frozen.
- The PI technician generally performs euthanasia on animals remaining at the end of a study. The PI should arrange for euthanasia of the animals, or inform the technician of other arrangements.
- The suggested method of euthanasia for most species housed at the SARC is CO₂ inhalation, followed by a physical means to assure death (decapitation, exsanguination, vital organ removal, bilateral pneumothorax). There are other acceptable methods of euthanasia; refer to the guidelines of the AVMA Panel on Euthanasia (a copy is available in the Animal Welfare Training Guide).
- Other methods of disposition: Animals may be transferred to another study if the protocol has indicated that method. Animals may be released to the wild or taken home as pets if authorized by the IACUC.
V. TRAINING

A. In-House Training Sessions
Participants required to complete the training program include:
- Principal Investigators on IACUC protocols
- Research Staff listed on IACUC protocols
- Animal Care Staff
- Veterinarians
- Student Employees using and caring for animals
- Other IUPUI Staff needing access into animal facilities

Employees concerned with occupational exposure to laboratory animal who are not required to enroll in the program can voluntarily enroll in the program.

Please go to https://apps.ehs.iupui.edu/OccupationSafetyHome.aspx to log-in to the site and complete the risk assessment and medical questionnaire.

All new personnel must read this guide in addition to the online training. At least once each year the SARC director in conjunction with the IACUC, conduct a training meeting. All personnel involved with animal projects must attend and sign a signature form. The original signature form will be kept by the SARC director for record keeping.

**Occupational Health and Safety for Individuals with Animal Exposure at School of Science**
This program, operated by the Office of Environmental Health and Safety (EHS), with support from the IUPUI School of Science Institutional Animal Care and Use Committee (IACUC), the Vice President for Research, the Science Animal Resource Facility (SARC), and IUPUI Health Services, is designed to protect university staff, students, the public, and laboratory animals as well as fulfill policy requirements.

**Oversight and Management**
The oversight and management of this program is done through the coordination of the IACUC and EHS, and an occupational health oversight committee. This group reviews this program based on the requirements of the Occupational Health and Safety Program and guidelines in the National Research Council Guide for the Care and Use of Laboratory Animals and the Occupational Health and Safety in the Care and Use of Research Animals.

**Questions** If you have any questions about the program, contact:
Environmental Health and Safety
Phone: 317-274-2005
Email: occsafe@iupui.edu
II. General Rules for Safe Animal Research

1. Do not use sick animals for experiments.
2. Do not eat, drink, smoke, or wear open toes shoes in animal rooms.
3. Use proper restraint techniques to prevent animal bites.
4. Wear protective clothing. A clean lab coat or uniform should be worn when in the animal facility. In barrier rodent rooms and biohazard rooms, a protective gown, gloves, cap, mask, and shoe covers are required.
5. Wash your hands after handling animals. In biohazard rooms, wash your hands before you exit from the room.
6. Help maintain healthy animals and notify facilities when working with other similar species facilities or pets.

B. Responsibility of the Principal Investigator
The principal investigator must guarantee that all persons including him/herself are adequately trained for the proposed use of animals. This involves, in addition to the training video, individualized training of each technician or student by the PI or another qualified person. If the PI lacks the necessary expertise, then the Attending Veterinarian will provide or otherwise recommend appropriate training measures. Approval of the animal care and use protocol (see section II.A) will be conditional upon completion of the required training.

VI. SURGERY

Please refer to the Instructions for a Protocol for surgery guidelines.

A. Terminal Surgery
Aseptic technique is not required for surgical procedures from which the animals will not recover. However, living animals must be appropriately anesthetized during the surgical procedure.

B. Survival Surgery
All recovery surgery on vertebrates must be performed using aseptic technique, and the animal must be appropriately anesthetized. You are urged to consult with the attending veterinarian before attempting surgical procedures. The SARC has eight surgical suites that can be used for recovery surgery on rodents. The countertop on which recovery rodent surgery is performed must be sanitized prior to use.

C. Multiple Surgeries
Multiple surgeries are discouraged in the School of Science. When submitting a protocol proposing multiple surgeries, be sure to clearly justify the need for multiple surgeries. Also, explicitly state the time interval between surgical procedures.

VII. DEALING WITH PROBLEMS AND CONCERNS

A. Physical Facility
   1. Fire and other serious emergencies: Procedures for fire and other emergencies are posted by the SARC telephones. For fires, chemical spills posing immediate risk, and hazardous gas leaks, activate the nearest alarm box. Then dial 4-2311 to report the location of the emergency and any other pertinent information, and 4-7911 to contact the IUPUI Public Safety Dispatch Center. Evacuate the building via the stairwells, and inform the firefighters of the location of the animals. The firefighters will decide if it is feasible to evacuate the animals.
   For an ambulance, dial 317-274-7911 (IUPUI Public Safety Dispatch Center).
   2. Problems "after hours" (other than serious emergencies): For problems involving the physical facility, call the SARC Director or technicians. If no answer is received and the situation is not safe to leave until the next regular workday, call Campus Facility Services (8-1900) or the IUPUI police (4-7911).  
   3. Problems "during hours" (other than serious emergencies): Contact in this order until an answer is received: the SARC Director (4-2870), a SARC technician (4-0585), appropriate Building Coordinator, Campus Facility Services.

B. Sick Animals
   1. "During hours": Contact in this order until an answer is received: the SARC technician, the SARC director, the PI, the IACUC Chair.
   2. "After hours": Use your best judgment as to whether the problem is acute or whether it will be safe to wait until the next regular workday. If the problem is acute, call personnel in this order until an answer is received: the SARC Director, a SARC technician, the PI, Attending Veterinarian, IACUC Chair.

C. Security Problems
   Note that the main SARC corridors are to be kept locked at all times. Deviation from this procedure will not be tolerated. It represents a significant hazard to the animals and the research in the SARC.
   1. Imminent danger: Call the IUPUI police at 317-274-7911.
   2. Potential concern: Contact the SARC director, a SARC technician, or the IACUC Chair at your earliest convenience (presumably the next working day).

D. Personnel problems
   An atmosphere of collegiality and collaboration is desired for the efficient operation of the SARC. If a problem arises concerning the staff of the SARC, if possible, the concerns should be communicated directly to the staff member in a diplomatic manner. If a satisfactory conclusion is not reached, then the concerns should be communicated to the Associate
Dean for Research and Graduate Programs. Likewise, problems encountered by the staff should first be communicated in a courteous fashion to the investigator. If the problem is not resolved, then the Associate Dean for Research and Graduate Programs will intervene to work with the investigator to achieve a solution.

E. Injury or Animal-related Health Problems

If injured while working with animals or animal related health problems develop do the following:

1. Notify your immediate supervisor and complete an Illness/Injury Report form and note incident in the injury logbook located in the facility.

2. Report to IU Occupational Health Services with a completed Illness/Injury report. IU Occupational Health Services is located in Coleman Hall, 1140 W. Michigan Street, CF 101; phone 317-274-2274. They are open from 7:30 a.m.-5:00 p.m. Monday, Tuesday, Wednesday, and Friday, and from 9:00 a.m. –5:00 p.m. on Thursday.

Page 312-OUCH (312-6824) for contaminated injuries after hours. Contaminated injuries involve exposure to potentially infectious blood or body fluids of animals. For a non-contaminated injury, report to IU OHS during business hours or to the University Hospital ER during off hours.

3. Notify the SARC office in by calling 317-274-0585 or by paging the on-call staff at 317-541-5996.

Coleman Hall CF 101, 1140 West Michigan, Indianapolis, IN 46202 (Phone 317-274-2274)
7:30 a.m.-5:00 p.m. Monday, Tuesday, Wednesday, and Friday: from 9:00 a.m. –5:00 p.m. on Thursday