

Institutional Animal Care and Use Committee

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<https://www.research.ucsb.edu/compliance/animal-subjects/>

IACUC PROCEDURE: TRAINING REQUIREMENTS FOR PROTOCOL PERSONNEL

DATE IMPLEMENTED: March 21, 2014

DATE(s) REVISED: January 6, 2015; April 24, 2015; March 31, 2016; May 19, 2016; July 11, 2017; March 1, 2018; August 27, 2018; March 3, 2020

Background:

In accordance with the federal Animal Welfare Act Regulations, Public Health Service Policy, and as described in the *Guide for the Care and Use of Laboratory Animals*¹: All personnel involved with the care and use of animals must be adequately educated, trained, and/or qualified in basic principles of laboratory animal science to help ensure high-quality science and animal well-being. The IACUC is responsible for providing oversight and for evaluating the effectiveness of the training program. All personnel training should be documented. The IACUC, along with the Attending Veterinarian, has the responsibility for determining that personnel performing surgical procedures are appropriately qualified and trained in the procedures to be performed.

At UCSB, training and instruction are available online, from the IACUC Coordinator and/or the Attending Veterinarian, and/or from designated trainers. Training requirements, and verification of training, is specifically provided according to the following system:

Responsibilities:

1. The Principal Investigator (PI) is responsible for ensuring that all personnel listed on her/his protocol(s) are appropriately trained and qualified, and for documenting that training and qualification. The PI is encouraged to use the protocol [Training Roster](#) or [Procedural Training Template](#) to document all personnel training.
2. The IACUC has established some basic training requirements for all personnel (see below), and the IACUC Coordinator is responsible for verifying the completion and documentation of these requirements prior to any protocol personnel (including the PI) beginning to work with live animals.
3. The Attending Veterinarian is responsible for assessing the competency of personnel that perform surgical procedures on animals.

Training Requirements for New Personnel, by Personnel Classification:

1. Principal Investigator working directly with live animals:

¹ Guide for the Care and Use of Laboratory Animals, 8th edition. National Academies Press. 2010. Pages 15, & 116.

- a. Complete the following online training courses from Citiprogram (www.citiprogram.org):
 - i. “Working with the IACUC” course for Investigators, Staff and Students
 - ii. “Reducing Pain and Distress in Laboratory Mice and Rats” course, if she/he will be working with laboratory rats or mice.
 - iii. Animal-specific courses relevant for the species of animal that she/he will be working with, if available.
 - iv. “Aseptic Surgery” supplemental training course, if she/he will be performing a surgical procedure on an animal.
 - v. “Wildlife Research” for animal users working with wild animals in the field.
 - b. If Citiprogram does not have an animal-specific course relevant to the research, then read and review the taxon-specific guidelines that are relevant to the protocol. For example, if they are named on a protocol using birds, protocol personnel should read and review the [Ornithological Council Guidelines to the Use of Wild Birds in Research](#). Links to these guidelines are available on the IACUC website at <https://www.research.ucsb.edu/policies#iacuc>.
 - c. Attend the IACUC Seminar
 - i. The IACUC Seminar is offered at least once per year, or more frequently if needed, and is presented by the IACUC Chair and Coordinator. The seminar provides training on various regulatory matters, including reporting animal welfare concerns and other important topics.
 - ii. This condition is not a requirement to begin work on a protocol.
 - d. Read and review the IACUC Guidelines that are identified (i.e., checked) on the protocol. All of the IACUC Guidelines are available on the IACUC website at <https://www.research.ucsb.edu/policies#iacuc>.
 - e. Read and review the *Zoonotic Diseases* reference material that pertains to the species and animal experimental procedures that are to be performed on her/his animal protocol(s). This reference material is available on the Centers for Disease Control and Prevention (CDC) website at <http://www.cdc.gov/onehealth/zoonotic-diseases.html>.
 - f. Enroll in the UCSB Occupational Health and Safety (OHS) Program for animal users by completing and submitting (to the IACUC Office) the *OHS Evaluation* form, which includes questions about the animal work to be done, risks that will be encountered during this work, and personal medical history. This form is available on the IACUC website at https://www.research.ucsb.edu/sites/default/files/forms/iacuc/ohs_form.pdf.
 - g. If working in a laboratory setting, complete the EH&S Fundamentals of Laboratory Safety Training through the UCSB Learning Center. (<https://learningcenter.ucsb.edu/default.aspx>).
 - h. If working in the ARC, once all other training has been completed, contact the ARC Manager to schedule a date and time for the Vivarium Facility Orientation.
2. Principal Investigator NOT working directly with live animals:
 - a. Complete the following online training courses from Citiprogram (www.citiprogram.org):
 - i. “Working with the IACUC” course for Investigators, Students, Staff
 - b. Confirm with the IACUC Coordinator that the PI will not be in direct contact with animals. The Coordinator will supply the PI with an Occupational Health and Safety Waiver form acknowledging that she/he will not come into contact with live animals

in research settings. Submit this waiver to the IACUC Office where it will be kept on file.

3. Personnel Working in the Animal Resource Center (ARC):

Training procedures are outlined in the [Researcher Training Checklist](#).

- a. Complete the following online training courses from Citiprogram (www.citiprogram.org):
 - i. “Working with the IACUC” course for Investigators, Staff and Students
 - ii. “Reducing Pain and Distress in Laboratory Mice and Rats” course, if she/he will be working with laboratory rats or mice.
 - iii. Animal-specific courses relevant for the species of animal that she/he will be working with, if available.
 - If working with Grass (Nile) Rats, researchers must also read the “[2016 Guidelines of the American Society of Mammalogists for the use of wild mammals in research and education](#)” and complete the “Wildlife Research” course, in addition to the other Citiprogram requirements.
 - iv. “Aseptic Surgery” supplemental training course, if she/he will be performing a surgical procedure on an animal.
- b. Attend the IACUC Seminar
 - i. The IACUC Seminar is offered at least once per year, or more frequently if needed, and is presented by the IACUC Chair and Coordinator. The seminar provides training on various regulatory matters, including reporting animal welfare concerns and other important topics.
 - ii. Note this condition is not a requirement to begin work on a protocol.
- c. Read and review the IACUC Guidelines that are identified (i.e., checked) on the protocol(s). All of the IACUC Guidelines are available on the IACUC website at <https://www.research.ucsb.edu/policies#iacuc>.
- d. Read and review the *Zoonotic Diseases* reference material that pertains to the species and animal experimental procedures that are to be performed on the protocol. This reference material is available on the Centers for Disease Control and Prevention (CDC) website at <http://www.cdc.gov/onehealth/zoonotic-diseases.html>.
- e. Enroll in the Occupational Health and Safety (OHS) Program by completing and submitting (to the IACUC Office) the *OHS Evaluation* form, which includes questions about the animal work to be done, risks that will be encountered during this work, and personal medical history. This form is available on the IACUC website at https://www.research.ucsb.edu/sites/default/files/forms/iacuc/ohs_form.pdf.
- f. Complete the EH&S Fundamentals of Laboratory Safety Training through the UCSB Learning Center. (<https://learningcenter.ucsb.edu/default.aspx>).
- g. Once all other training has been completed, contact the ARC Manager to schedule a date and time for the Vivarium Facility Orientation.

4. Personnel Working in the Satellite Animal Holding Facilities:

Training procedures are outlined in the [Researcher Training Checklist](#).

- a. Complete the on-line training courses from Citiprogram (www.citiprogram.org) including:
 - i. “Working with the IACUC” course for Investigators, Staff and Students
 - ii. “Reducing Pain and Distress in Laboratory Mice and Rats” course, if she/he will be working with laboratory rats or mice.

- iii. Animal-specific courses relevant for the species of animal that she/he will be working with, if available.
 - iv. “Aseptic Surgery” supplemental training course, if she/he will be performing a surgical procedure on an animal.
 - v. “Wildlife Research” for animal users working with wild animals in the field.
 - b. If Citiprogram does not have an animal-specific course relevant to the research, then read and review the taxon-specific guidelines that are relevant to the protocol. For example, protocol personnel should read and review the [Ornithological Council Guidelines to the Use of Wild Birds in Research](#), if they are named on a protocol using birds. Links to these guidelines are available on the IACUC website at <https://www.research.ucsb.edu/policies#iacuc>.
 - c. Attend the IACUC Seminar
 - i. The IACUC Seminar is offered at least once per year, or more frequently if needed, and is presented by the IACUC Chair and Coordinator. The seminar provides training on various regulatory matters, including reporting animal welfare concerns and other important topics.
 - ii. Note this condition is not a requirement to begin work on a protocol.
 - d. Read and review the IACUC Guidelines that are identified (i.e., checked) on the protocol. All of the IACUC Guidelines are available on the IACUC website at <https://www.research.ucsb.edu/policies#iacuc>.
 - e. Read and review the *Zoonotic Diseases* reference material that pertains to the species and animal experimental procedures that are to be performed on the protocol. This reference material is available on the Centers for Disease Control and Prevention (CDC) website at <http://www.cdc.gov/onehealth/zoonotic-diseases.html>.
 - f. Enroll in the Occupational Health and Safety (OHS) Program by completing and submitting (to the IACUC Office) the *OHS Evaluation* form, which includes questions about the animal work to be done, risks that will be encountered during this work, and personal medical history. This form is available on the IACUC website at https://www.research.ucsb.edu/sites/default/files/forms/iacuc/ohs_form.pdf.
 - g. Complete the EH&S Fundamentals of Laboratory Safety Training through the UCSB Learning Center. (<https://learningcenter.ucsb.edu/default.aspx>).

5. Personnel Working on Field Studies:

Training procedures are outline in the [Researcher Training Checklist](#).

- a. Complete the online training courses from Citiprogram (www.citiprogram.org) including:
 - i. “Working with the IACUC” course for Investigators, Staff and Students
 - ii. Animal-specific courses relevant for the species of animal that she/he will be working with, if available.
 - iii. “Aseptic Surgery” supplemental training course, if she/he will be performing a surgical procedure on an animal.
 - iv. “Wildlife Research” for animal users working with wild animals in the field.
- b. If Citiprogram does not have an animal-specific course relevant to the research, then read and review the taxon-specific guidelines that are relevant to the protocol. For example, if they are named on a protocol using birds, protocol personnel should read and review the [Ornithological Council Guidelines to the Use of Wild Birds in Research](#). Links to these guidelines are available on the IACUC website at <https://www.research.ucsb.edu/policies#iacuc>.
- c. Attend the IACUC Seminar

- i. The IACUC Seminar is offered at least once per year, or more frequently if needed, and is presented by the IACUC Chair and Coordinator. The seminar provides training on various regulatory matters, including reporting animal welfare concerns and other important topics.
 - ii. If a researcher who will be working in the field resides outside of the Santa Barbara area, inform the IACUC Coordinator. For these personnel, confirming review of the IACUC Seminar will be required prior to being approved for animal work, except under extenuating circumstances.
 - iii. For researchers that reside in the Santa Barbara area, this requirement is not a condition of approval.
 - d. Read and review the IACUC Guidelines that are identified (i.e., checked) on the protocol. All of the IACUC Guidelines are available on the IACUC website at <https://www.research.ucsb.edu/policies#iacuc>.
 - e. Read and review the *Zoonotic Diseases* reference material that pertains to the species and animal experimental procedures that are to be performed on the protocol. This reference material is available on the Centers for Disease Control and Prevention (CDC) website at <http://www.cdc.gov/onehealth/zoonotic-diseases.html>.
 - f. Enroll in the Occupational Health and Safety (OHS) Program by completing and submitting (to the IACUC Office) the *OHS Evaluation* form, which includes questions about the animal work to be done, risks that will be encountered during this work, and personal medical history. This form is available on the IACUC website at https://www.research.ucsb.edu/sites/default/files/forms/iacuc/ohs_form.pdf.
 - i. If a researcher who will be working in the field resides outside of the Santa Barbara area, inform the IACUC Coordinator. The signed Researcher Training Checklist may be emailed to the IACUC Office; however, a hard copy of the *OHS Evaluation* form must be mailed to the IACUC Office.
6. Personnel not affiliated with UCSB:
- a. Personnel who are not UCSB students or employees may still participate in research projects with UCSB PIs. Before beginning any of the above training, these researchers must affiliate themselves with UCSB as a “volunteer”, usually through the PI’s home department. Non-UCSB personnel may not enroll in the OHS program or take courses through Citiprogram.org.
7. IACUC Members:
- a. Complete the “Essentials for IACUC Members” and “Working with the IACUC” for Investigators, Staff and Students online training courses from Citiprogram (www.citiprogram.org).
 - i. The community member is also required to complete the “IACUC Community Member” course.
 - b. IACUC members may be exposed to hazards or allergens during the Semiannual Facility Inspections. Enroll in the Occupational Health and Safety (OHS) Program by completing and submitting (to the IACUC Office) the *OHS Evaluation* form, which includes questions about the animal work to be done, risks that will be encountered during this work, and personal medical history. This form is available on the IACUC website at https://www.research.ucsb.edu/sites/default/files/forms/iacuc/ohs_form.pdf.

Anesthesia & Surgery (either non-survival or survival) Training Requirement:

On-the-job surgical training and the surgical technique proficiency evaluation are provided according to the following system:

1. Protocol personnel performing surgical procedures on mammalian species other than rodents (e.g., rabbits) must be appropriately trained and qualified. To perform surgeries without direct supervision, personnel will be required to demonstrate proficiency in their surgical technique to the AV, unless they are specifically exempted by the IACUC. Direct supervision must be provided by a qualified surgical trainer (i.e., someone who has successfully completed a proficiency evaluation with the AV for the surgical procedure in the particular species). Contact the AV if a qualified surgical trainer is not available in your lab.
2. Protocol personnel performing surgical procedures on non-mammalian species (e.g., fish, birds, reptiles, or amphibians) must be appropriately trained and qualified. To perform surgeries without direct supervision, personnel will be required to demonstrate proficiency in their surgical technique to the AV, unless they are specifically exempted by the IACUC. Direct supervision must be provided by a qualified surgical trainer (i.e., someone who has either successfully completed a proficiency evaluation with the AV or received an exemption for the surgical procedure in the particular species). Contact the AV if a qualified surgical trainer is not available in your lab.
3. Protocol personnel performing surgical procedures on rodent species (e.g., rats and mice), which accounts for the vast majority of surgical procedures performed in our animal care and use program, will be required to complete the following training and proficiency program:
 - a. **Basic Aseptic Surgical Technique Seminar:**

The AV, or his designee, will cover basic rodent surgery training topics, such as: asepsis, gentle tissue handling, minimal dissection of tissue, appropriate use of instruments, anesthesia monitoring, and correct use of suture materials and patterns. Personnel performing anesthesia and surgery generally attend this training prior to engaging in surgical procedures on live animals. However, personnel may perform anesthesia and surgery without first attending this basic seminar, if they are receiving assistance and direct supervision from a surgical trainer (i.e., someone who has successfully completed a proficiency evaluation with the AV or his designee).
 - b. **Procedure-Specific Surgical Training:**

All individuals to be engaged in surgical procedures must receive procedure-specific training from a qualified surgical trainer within the lab. A qualified surgical trainer is someone who has successfully completed a proficiency evaluation with the AV for the surgical procedure in the particular species. Contact the AV if a qualified surgical trainer is not available in your lab.
 - c. **Competency:**

Protocol personnel (e.g., graduates, research assistants/associates, post-docs and PIs) performing survival surgical procedures are required to demonstrate competency to the AV, unless exempted by the IACUC, and must NOT perform surgical procedures without the assistance and direct supervision of the surgical trainer or AV, until they have successfully completed a proficiency assessment. Personnel will be deemed competent if they can demonstrate to the AV that they possess the necessary knowledge and technical skill to successfully complete the surgical procedure. Anyone that cannot competently perform the surgical procedure (i.e., fails their proficiency evaluation) should receive additional training under the direct supervision of a trained and qualified individual.

Continuing Education Requirement for Approved Personnel:

1. Every three years, all personnel working with live animals must complete the “Working With Animals in Biomedical Research – Refresher” course from Citiprogram (www.citiprogram.org). PIs who have submitted an OHS Program Waiver and have no contact with live animals do still need to complete the Refresher course to stay up-to-date on policies and regulations.
2. Either once a year, once every three years, or when someone’s health history and/or animal model has changed, personnel working directly with live animals must renew their enrollment in the Occupational Health and Safety Program by completing and submitting (to the IACUC Office) the *OHS Evaluation Form*, which includes questions about personal medical history. This form is available on the IACUC website at https://www.research.ucsb.edu/sites/default/files/forms/iacuc/ohs_form.pdf.

Training Verification and Documentation, and Clearance to Begin Working with Animals:

1. Once new personnel have completed the necessary training described on the *Researcher Training Checklist*, they should set up an appointment to meet with the IACUC Coordinator.
 - a. For this meeting, they must bring with them:
 - i. The *Researcher Training Checklist* signed by the PI. The Checklist should list the protocol(s) that they will be working on.
 - ii. The completed Occupational Health and Safety form in a signed and sealed envelope.
 - b. During this meeting the IACUC Coordinator will:
 - i. Emphasize that working with animals is not a right, but a privilege.
 - ii. Emphasize the importance of reading the protocol(s) in its entirety, as well as any associated housing or procedural Standard Operating Procedures (SOPs). Personnel are responsible for knowing which of the animal procedures described in the protocol(s) they will be responsible for, as well as being responsible for performing those procedures as described in the protocol or SOPs. Personnel must also read and review the IACUC Guidelines that are identified (i.e., checked) towards the back of the protocol. Remind personnel that protocols, SOPs and Guidelines will occasionally be updated and that they should always make sure they are working from the current version.
 - iii. Explain the rest of the clearance process and emphasize that personnel cannot begin working with live animals until they and their PI have been notified, in writing, by the Coordinator that they have been “cleared for participation”.
 - iv. Review how to report any animal welfare concerns, emphasizing that anyone who reports a concern may request to remain anonymous. The Coordinator will also mention that there are signs posted around the vivaria and labs that have a list of contacts whom they can report to.
 - v. Review the need for completing additional training if, in the future, the researcher needs to work on another protocol, work with a different species or perform a new experimental animal procedure, especially if the new procedure involves anesthesia and surgery.
 - vi. Provide each person working in the ARC with information on obtaining security access to the Bio2 and Psychology Vivaria. Emphasize to new personnel the importance of not sharing their Access Card with others and not holding the vivarium door open for personnel they do not know.
 - a. If the new personnel does not have an Access Card yet, the Coordinator will provide information on how to obtain one.

- c. If the new animal user still has any uncompleted training at the time of their appointment, then the IACUC Coordinator will provide them and their PI with a list of the pending training requirements.
2. The IACUC Coordinator will verify that new personnel have completed all the following **basic training requirements**:
 - a. Completion of the required Citiprogram training courses.
 - b. Review of the “Zoonotic Diseases” reference material on the Centers for Disease Control and Prevention (CDC) website.
 - c. Completion the EH&S Fundamentals of Laboratory Safety Training, if the new personnel will be working in a laboratory setting.
 - d. Review of the protocol(s) they will be working on, required IACUC Guidelines and the taxon-specific guidelines on the IACUC website.
3. Clearance to begin working with animals will be formally granted when the IACUC Coordinator has:
 - a. Verified that all the basic training requirements have been met.
 - b. Received the completed and signed *Researcher Training Checklist*.
 - c. Received confirmation from the Occupational Health and Safety Physician that the individual is cleared to work with animals, with or without additional recommendations.
 - d. Received confirmation that the individual has completed her/his facility orientation, if the new personnel needs access to the ARC.

Notes:

1. Some protocols may be approved to work with several species and/or procedures, but not all protocol personnel may be working with all listed species or on all of the animal procedures described in the protocol. Therefore, each person to be added to the protocol only needs to complete the training requirements that are relevant to the work that she/he will be performing on the protocol. The IACUC Coordinator will note the species that each researcher has been cleared to work with, as well as the date they were cleared for participation in the notification to the researcher, PI, and ARC Manager, if applicable.
 - a. If a researcher will be working in the ARC, the IACUC Coordinator will copy the ARC Manager on the clearance for participation email.
2. In some instances, personnel may belong to more than one classification. For example, field study protocols often contain a laboratory research component, and personnel on such protocols may be conducting research in both the laboratory and field. In instances such as these, it is important for the researcher to complete ALL applicable training requirements (i.e., those listed under #3 and/or 4, and 5 above).
3. Due to the large number of protocol personnel working at the REEF and high rate of turnover, the IACUC Coordinator will meet with the MSI Aquarist at least once per quarter to review and update the training roster.
4. Personnel working in animal housing areas, but not performing research (e.g., custodians, maintenance workers), are also required to enroll in the Occupational Health and Safety Program.
5. If a PI or surgeon notices a pattern of poor surgical outcomes (e.g., animal deaths peri- or post-operatively), the AV should be promptly contacted for advice and assistance on surgical technique.