

Researcher Laboratory and Vivarium Space Inspection Checklist

Please see the IACUC website **Policy Page** and **Resources Page** for further details regarding applicable policies and resources: www.ucdenver.edu/IACUC

Is the animal area clean and tidy?

- Will my elbows hit stuff while doing the surgery/dissection?
- Is there a chance something might fall into the surgery/dissection area?
- Is there blood or tissue bits in the area from the last surgery/dissection?
- Are all primary and secondary containers labeled and stored appropriately?

Rodents brought into the laboratory:

- Is bringing rodents to the laboratory approved on your IACUC Protocol?
- Are you sure to always use the freight elevator to bring rodents to the laboratory space?
- In what containers are animals transported?
- Is disposable caging (purchased from the vivarium) available if rodents will wait longer than 2 hours prior to the procedure?
- Is food and water available to rodents in disposable caging if they will wait longer than 6 hours prior to the procedure?
- Are live animals in the laboratory for less than 12 hours unless there is approval from the IACUC?

If doing survival surgery:

- Am I starting with fully sterilized equipment (instruments must begin autoclaved)?
 - Is autoclave efficacy monitored?
 - How long are autoclaved materials stored?
- Do I have a method to maintain sterility of the instruments throughout surgery (i.e. a sterile field to place instruments or instrument tips, suture, materials, etc on)?
- If using Tip Only Technique, do I have an appropriate method to sterilize instruments in between animals (i.e. a bead sterilizer – liquid sterilants are not appropriate)?
- Am I removing hair prior to the surgery?
- Am I disinfecting the skin at the surgical site, prior to making an incision, with more than just alcohol? An example of an appropriate disinfection method is scrubbing with an appropriate disinfectant (betadine or chlorhexidine) alternated with alcohol three times each (6 total).
- Are the animals receiving heat support during the procedure and until fully recovered?
- If it is a long procedure, are the animals receiving fluid supplementation (IV or SubQ)?
- Am I using appropriate draping to ensure a sterile surgical field?
- Am I wearing a surgical mask, hair bonnet, and lab coat/isolation gown during the surgery?
- When surgery is being performed, is that space not used for anything else?
- Are the animals being monitored while recovering from anesthesia?
- Is analgesia being administered to the animals post-surgery per the IACUC protocol?
- Do I have anesthesia and analgesia records filled out for any anesthetic event lasting longer than 5 minutes?

If using anesthesia:

- Is the anesthetic drug expired?
- Are drugs pharmaceutical grade if available? If not, are they justified in the protocol?
- Is the isoflurane being used in a biosafety hood or is a vaporizer being used with appropriate scavenging?
- Has isoflurane vaporizer been calibrated within the last year?
- If using a charcoal scavenging system, is the charcoal canister weight regularly recorded on the canister and canisters are disposed of when they are spent according to manufacturer instructions?
- If using DEA drugs, are they being stored properly and are records readily available?

If using CO₂ for euthanasia:

- Do I have a flow meter attached to the regulator on the CO₂ tank?
- Do I have signage indicating the appropriate flow rate for the size euthanasia container that is being used?
- Do I make sure that the euthanasia chamber is “aired out” in between animals to ensure that the chamber is not pre-charged?
- Is the euthanasia chamber cleaned in between animals?

If using isoflurane for euthanasia:

- Am I working within a Fume Hood or another area with appropriate scavenging to ensure appropriate safety for personnel?
- Is the device being used set-up so that the animal cannot come in contact with the isoflurane liquid?
- Is the chamber being used cleaned in between animals?

Are there appropriate safety standards in place?

- Am I using any hazardous agents on the animals while they are in the laboratory and am I following the Standard Operating Procedure (SOP) developed for that material. This includes having the appropriate precautions available (PPE) when using those hazards. Please make sure you know what the SOP states and have a copy on hand and visible.
- Is there a sharps box readily available? I.e. don't have to cross the lab with a sharps in order to reach one.
- Are all liquids properly labeled and stored, with the name of the liquid (in English) and the expiration date (if applicable)?
- Are gas cylinders appropriately secured? This includes empty ones.
- Is there any food or drink in the lab? (There shouldn't be)
- Aware of animal allergy potential to direct and indirect users?
 - Wearing appropriate PPE
 - If N95s are utilized, are users fit tested?

Personnel:

- All personnel working with animals are listed on the IACUC protocol(s) that they are working on and understand what is on the protocol. Employees should have access to protocols in some way (printed copies, lab shared drive, eSirius, etc) and understand what is approved on the protocol (the site visitors will ask you about your protocol and compare what you say to what is in the protocol).
- Everyone working with animals are enrolled in the Occupational Health Program and have submitted their most recent annual renewal form.
- All personnel, even those that do not use animals, know where to find the information regarding who to contact if there is an Animal Welfare Concern (signage at the exit of the laboratory area, in the vivariums, on the IACUC website).
- Everyone follows the rules regarding No Eating or Drinking in the laboratory area or vivarium.
- Emergency contact information is posted.

Staff Training:

- Everyone working with animals have been through the IACUC and OLAR required training (Skillport Modules, in person orientation, euthanasia training).
- Everyone working with animals is qualified either through training at a previous institution or training at CU Denver by their laboratory, another research group, or OLAR to perform the procedure(s) that they will be performing.
- Training should be documented at a minimum on the Personnel Qualifications form which is submitted to the IACUC and may be documented per individual laboratory records.
- Other training (i.e. required EHS training such as chemical safety, blood borne pathogens, should also have documentation available).

Miscellaneous:

- If using a guillotine or scissors for decapitation, when was it last sharpened? (generally it should be within the last year or more frequent if used often and the date should be documented)
- Are carcasses being stored in the freezer until being picked up or taken to animal facility freezer?
- Are carcasses properly labeled if radiation or biological hazards were utilized?
- SDS are available to lab staff for all applicable chemicals used in the lab.
- Are biological safety cabinets and fume hoods certified within the last year?
- Is there appropriate signage in areas where it is applicable (i.e. radiation area, biohazards, etc)?
- Is waste being disposed of appropriately (chemicals, biological, liquid)?
- Sanitation method and frequency of sanitation of materials is appropriate
- Know how to contact veterinary group if an animal emergency arises
- If you have breeding animals, please make sure that they are set up according to what is in your approved IACUC protocol. Please make sure that all of your cages comply with the IACUC Overcrowding Policy.

- If you have mice with tumors please make sure that they meet the criteria outlined in your protocol. For most groups this means the tumor is less than 2cm and is not ulcerated or impairing the animals ability to ambulate, eat, or drink.

Information about AAALAC site visitors:

- The site visitors will be escorted by members of the Animal Program staff at all times.
- Asking questions is normal for AAALAC; a lot of writing by AAALAC is also normal. Do not be worried if this occurs.
- Please do continue your research during this time. We have no desire to delay your research and AAALAC likes to see properly done research in action (i.e. following IACUC approved protocols). If you are in the middle of something sensitive, it is ok to ask the site visitors to come back later.
- Please answer their questions directly, briefly and honestly. If you do not know, do not make something up; just say I do not know. That is better in the long run.
- Do not let the site visitors do dumb things! They may try to push a bit to see if you know the proper procedures. For example, they may try to access an area without proper personal protection equipment (PPE; gowns, etc.); they do want you to stop them. This evidence that you know the proper procedures and the rules.