

University of Arizona
Animal Surgical Training Program Description

Training Requirements: A combination of online and hands on surgical training must be completed prior to being approved to independently perform **non-survival or survival** surgery on vertebrate animal species. Direct observation by a UAC veterinarian may also be required for individual surgeons and/or surgical procedures to ensure personnel are adequately trained to perform the IACUC approved surgical procedure(s). The latter requirement is imposed at the discretion of the IACUC and/or the Attending Veterinarian (or designee) whenever the surgical proficiency of an individual for a surgical procedure is in question. All required training must be documented.

1. General Aseptic Surgery Training: All personnel performing surgery must complete and pass the online CITI module "Aseptic Surgery" and view applicable online CITI "Aseptic Surgery" video(s).

2. Species-specific Surgery Training: Personnel must also complete species-specific surgery training before they can perform the surgical procedures approved in the IACUC protocol.

- **Small animal (rodent, bat, bird, frog, etc.):** All individuals performing rodent surgery must complete the General Rodent Surgical Training course provided by UAC and covers: surgeon preparation, instrument handling, wound closure, anesthesia, analgesia, patient monitoring, and surgical/peri-operative record keeping. Hands on training in laboratory-specific surgical techniques is provided by the PI (or designee). Documentation of the surgical training provided by the PI laboratory to each individual surgeon must be maintained and available during IACUC inspections and post-approval monitoring. Surgical proficiency is assessed by the PI (or designee) and the IACUC post-approval monitoring program.
- **Large animal (rabbit, ferret, cat, non-human primate, dog, pig, ruminant, horse, etc.):** UAC veterinary care staff must be involved in surgeries performed on regulated large animal species. The level of UAC veterinary involvement (surgical assistance, monitoring anesthesia, immediate availability for emergency care, etc.) is determined during the **required** pre-procedure planning and is dependent on the surgeon's experience level and proficiency.
- **NOTE:** Surgery on all animal species is only to be performed at location(s) approved by the IACUC in accord with IACUC Policy 301.

3. Additional Training: The need for this is assessed during the IACUC protocol/amendment review process, e.g. when a protocol amendment substantially changes the surgical procedures in the protocol. The IACUC and/or Attending Veterinarian (or designee) may also require retraining when a lack of understanding or insufficient training for approved surgical procedures is identified through other mechanisms.

4. Exemptions: DVMs, visiting scientists with extensive and documented animal surgery experience, and MDs with advanced training applicable to the surgical procedures being performed may request exemption from surgical training requirements. All exemption requests are reviewed by the Attending Veterinarian (or designee) prior to approval.

Justification: Insufficient surgical training of members of research teams can result in poor surgical outcome(s), including excessive bleeding or tissue trauma, incisional dehiscence, slow recovery, post-operative pain or infection, unexpected mortality, and altered research data. Multiple federal regulations (AWA/R, NIH Guide, Ag Guide, PHS Policy) require adequate training of personnel in proper pre- and post-procedural care of animals and aseptic surgical methods and procedures.

Implementation: This training program applies to all personnel performing animal surgery for the first time at the UA or performing animal surgery on a category of animal (small vs. large animal species) for which they have not previously been certified. Existing UA researchers must complete training before approval/renewal of their protocols/amendments that include surgical procedures.

Program Review: This IACUC-approved UA Animal Surgical Training Program will be periodically reviewed and updated to reflect any relevant changes in regulatory requirements and/or IACUC policies.