**Surgery:**­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Dates Of training:**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Trainee:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Trainer:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Generally, it is recommended to begin training new rodent surgeons on carcasses prior to training on live animals. Work on euthanized animals/animal tissues does not need to be described in the protocol and so can occur on any culled animals. After comfort with specific procedure/surgery has been achieved on carcasses, then use of live animals (terminally) is suggested and lastly live animals under supervision. All activities must be performed as described on the protocol.

Unexpected outcomes should result in immediate euthanasia.

* PI training of protocol staff should meet requirements as discussed in I-IC-GU-301 Surgical Training and Facilities guidance/policy [add links if you think reasonable]
* Surgery/anesthesia records should be kept as described on protocol for all training animals just as they would for experimental animals separate to this training form. Trainee understands what information is required to record and performs good record keeping pre/intra/post op for all training surgeries.
* 1. Surgical preparation protocol (Aseptic technique)- All trainee surgeons are required to have a surgical assistant.
  1. **Pre-operative support**
     1. Anesthetize the animal until toe pinch reflex is gone - circle appropriate method for this surgery

Anesthesia Per Protocol:

* + - * Isoflurane 1-5% in Oxygen (1-2 L/min)
      * Ketamine/Xylazine/Acepromazine, PI (Per Protocol, Dose used (mg/kg): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      * Ketamine/Xylazine, IP (Per Protocol, Dose used (mg/kg): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      * Ketamine only- booster if needed
    1. Apply Sterile ophthalmic ointment generously (Directly from tube to eye, without touching eye)
    2. Shave Fur at surgical site (blade size \_\_\_\_) OR Depilatory cream & thorough rinse (Wide area)
    3. Clean shaved area by one of the following 2 options, each step MUST have a new gauze or cotton swab
       - 1 wipe chlorohexidine -> 1 wipe 70% ethanol 🡪1 wipe chlorohexidine; Repeat for a total of three times OR
       - 1 wipe betadine scrub **-**> 1 wipe 70% ethanol 🡪 1 wipe betadine scrub, repeat a total of three times
    4. Administer subcutaneous (SC) saline fluids
       - 3mL for rat OR 1mL for mouse
    5. Administration of other Protocol Approved substances (I.e. Analgesics): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  1. **Post-operative support**
     1. Remove animal from surgical area and place in a clean, padded, recovery bin with the body on a heated side of a pan that is half on the heat/half off (NO human-type electrical heating pad)
     2. Observe animal until it is fully awake, moving about pan and able to reach food/water
     3. Record observations during recovery
* 2. Trainee will watch trainer complete a minimum of \_\_\_ complete surgeries
  1. Trainer is responsible for all recovery follow-up
  2. Date of observations: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* 3. Trainee will be a surgical assistant for a minimum of \_\_\_\_\_ surgeries
  1. Date of assists and number of animals each day: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* 4. Trainee will perform \_\_\_\_ successful supervised surgeries
  1. Trainee/trainer are both responsible for recovery follow-up

Dates of supervised surgeries: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 5. Trainee will perform \_\_\_ surgeries unsupervised with acceptable success rate to perform surgery unsupervised regularly\*

a) Trainee responsible for all recovery follow-up

* 1. Dates of unsupervised Surgeries and number of animals each day:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\*** If competency in the procedure is not achieved or maintained, then retraining is initiated and Steps 2-4 are repeated.

Attach separate comments sheet or additional Documentation as needed.

**Date training completed:­­­­**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Trainee signature:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Trainer Signature:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_