Aseptic Surgery Guidelines for Rodents (at-a-glance)

1- Wear exam gloves when handling and prepping the animal. Give the anesthetic and wait for anesthesia to take full effect before manipulating the animal. Apply ophthalmic ointment in both eyes.

2- Shave surgical site(s) and do the preparation of skin in a location separate from the area where the surgery will be performed. Vacuum or brush the shaved hair away.

3- Preparation of the skin -Clean the skin at surgery site(s) with Betadine or Nolvasan scrub (surgical soap) applied with applicators or gauze and rinse with alcohol, repeat 2 more times. The goal is to remove all loose hair and disinfect the skin. (For intracranial procedures the skin preparation can be done in the stereotaxic device).

4- Intracranial surgery- (sterile tips technique)

a) Instill local anesthetic (lidocaine or Marcaine) drops into both ear canals. Position the animal in the stereotaxic device. Perform surgical site preparation as above.

b) Open instrument pack or sterile drape and create the sterile field. Place all sterilized instruments and materials on the sterile field by opening and dropping them (i.e. needles/syringes, saline, gauze, drill bits, screws, etc.)

c) A sterile tips technique will be used. Remove exam gloves and put on new pair of gloves, non-sterile exam gloves or sterile gloves may be used for sterile tips technique. Once the instruments are used, the tips must be placed back in the sterile field. The sterile field should not be touched unless wearing sterile gloves.

5- Intravenous catheter implantation surgery (sterile gloves technique)

a) Dorsal and ventral sites must be prepared as above. If using local anesthetic, infiltrate the proposed incision sites by subcutaneous injection of Marcaine or lidocaine, (or alternatively apply by dripping on incision site immediately after incision).

b) Cover the sites with sterile gauzes when completed. Move the animal to the location where the surgery will be performed. Position the animal on its back.

c) Open instrument pack or sterile drape and create the sterile field. Place all sterilized materials on the sterile field by opening and dropping them (i.e. catheters, needles/syringes, saline, gauze, etc.)

d) Remove the exam gloves and put on sterile surgeon gloves. Use a sterile drape to cover hair exposed portions of the animal’s body, the sterile glove wrapping can be used for this. Body can also be wrapped in sterile drape material or plastic wrap.

e) Make a skin incision in neck over the jugular vein, expose jugular vein, cover the incision with sterile gauze, roll the animal to access the dorsal site. Perform headmount or backmount surgery, route the catheter subcutaneously to the ventral site (blunt dissection with forceps, not fingers). Roll the animal over and complete the jugular vein catheterization. If gloves are contaminated during the process, then change them before proceeding with further surgery.