Rodent Surgery Checklist

Review the IACUC Guideline on Survival Surgery for details. Consult with CAR veterinary staff (carvets@msu.edu) and CAR training coordinator (cartrain@msu.edu) on surgical guidelines.

Surgery Room/Area
- Clean and disinfect the surface with a disinfectant before each surgery
- Provide adequate lighting to area for visualizing surgical site and access
- Provide heat source (recommend: warm water recirculating blanket at medium setting: 37°F)

Patient Preparation
- Prepare animal in an area separate from the surgical site
  - Remove hair from surgical site with clippers
  - Place non-mediated sterile ophthalmic ointment in eyes
- Administer pre-operative analgesics
- Transfer animal to the surgical room/area
- Position animal using care not to overstretch the limbs or bind them restricting circulation
- Perform surgical scrub using a skin disinfectant
  - Alternate wiping site up to 3 times the disinfectant agent (i.e. chlorhexidine-based scrub) with ethanol
- Prepare warm saline or LRS (fluids) for prolonged or invasive procedures

Preparation of the Surgeon, Instruments, and Sterile Field
- Ensure appropriate instruments have been sterilized
- Don clean laboratory coat; remove all jewelry (rings, bracelets, watches, etc.)
- Don a surgical mask
- Create a sterile area. Cover the surgical site/animal with a sterile drape (transparent recommended)
- Anything touching the sterile field, drape or portion of the animal surgically prepared, must be sterile
- Scrub hands, dry, and then don sterile gloves when prepared to begin surgery

Surgery and Intraoperative Monitoring
- Assure appropriate depth of anesthesia for animal prior to initiating surgical procedure
  - Animal should be nonresponsive to tactile stimuli, toe-pinch, etc with a slowed rate of breathing
- Ensure sterile technique and handle all tissues with care and precision
- Perform anesthetic depth and vital sign monitoring while under anesthesia
- Use caution when performing subsequent procedures on multiple animals.
  - Do not break the sterile field. Use of sterile instruments on each animal.

Postoperative Care
- Monitor the animal continuously until it is conscious; then every 10-15 minutes until fully ambulatory
- House animal individually until fully ambulatory
- Do not return to housing area animal is in a normal ambulatory and conscious state
- Complete surgical cage cards & update each day for 3 days post-operatively

Report any concerns or complications to the CAR veterinary staff (carvets@msu.edu).