## 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-medicated 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).