This checklist is designed to provide an easy to follow set of guidelines. For more detailed information, the IACUC Guideline on Survival Surgery should be reviewed. The CAR veterinary staff (carvets@msu.edu) and training coordinator (cartrain@msu.edu) are available for consultation and training 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 overstretched the limbs or bind them restricting circulation
- ✔️ Perform surgical scrub using a skin disinfectant
- ✔️ Alternate wiping site up to 3X 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 and cover the surgical site/animal with a sterile drape (recommend: transparent drape)
- ✔️ Any item touching the sterile field/drape or the 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-pinches, etc with a slowed rate of breathing
- ✔️ Perform 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 and ensure 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)