MEDICAL CARE FOLLOWING ANESTHESIA AND/OR SURGERY

SCOPE: This document covers all species other than amphibians, birds, fish, reptiles, and rodents. See CAR Rodent Survival Surgery Guidelines for rodent specific information.

For amphibians, birds, fish and reptiles, please contact a Campus Animal Resources (CAR) Veterinarian.

It is the primary responsibility of the Principal Investigator to ensure that appropriate post-anesthesia/post-surgical monitoring is performed. A veterinarian must be contacted if problems with anesthetic recovery develop.

Following procedures involving anesthesia, animals must be monitored with all post-surgical and post-procedural findings recorded according to the following schedule:

When animal is unconscious or semi-conscious:
Intubated animals must be monitored continuously until 5 minutes after endotracheal tube extubation (respiratory complications are most likely to occur during the first 5 minutes after extubation). Endotracheal tubes should be removed when the animal exhibits a gag reflex or is observed to swallow, NOT EARLIER.

- Check heart and respiration rates, color, and response to toe pinch.
- Check condition of the surgical site if possible.
- Check body temperature; if abnormal take appropriate steps to correct. Animals may benefit from an appropriate heat source. It is imperative that the heat source is not so warm that the animal is inadvertently burned.
- Assess hydration and provide fluids as necessary.
- Assess animal behavior.
- Document findings.

When animal can stand and move, but not eating and/or drinking normally:
Examine twice daily.

- Check heart rate if possible. Check respiration rate and color.
- Check condition of the surgical site.
- Check body temperature if possible; if abnormal take appropriate steps to correct. Animals may benefit from an appropriate heat source.
- Assess hydration and provide fluids as necessary.
- Assess animal behavior.
- Provide analgesics*.
- Document any abnormalities.

When animal is active, alert, eating and drinking normally:
1. Monitor at least daily.
2. Document surgical site care and observations until the sutures/staples are removed (they should be removed within 14 days of surgery unless absorbable suture material is utilized).

Once animal is normal and skin sutures/staples are removed Specific post-surgical care and its documentation are no longer required.
Postoperative analgesia is given to animals subjected to either minor or major survival surgery according to the following guidelines unless an exception has been approved by the Institutional Animal Care and Use Committee (IACUC):

A. Minor surgery (such as placement of subcutaneous pumps, surgical implantation of catheters or castration) requires a minimum of 24 hours of analgesia.
B. Major surgery (penetrates/exposes a body cavity and/or produces substantial impairment of physical or physiologic functions after the animal is allowed to recover from anesthesia) requires a minimum of 48 hours of analgesia.
C. Procedures that potentially cause severe pain (extensive orthopedic surgery, burns, thoracic surgery) require a minimum of 72 hours of analgesia with some animals and/or procedures requiring considerably more.
D. After these time periods, analgesia may be given on an “as needed” basis. The PI should specify in their AUF what features will indicate a need for further analgesia and how often animals will be monitored.

For recordkeeping requirements, refer to IACUC guideline IG007