## STANDARD OPERATING PROCEDURES

# DIVISION OF COMPARATIVE MEDICINE UNIVERSITY OF SOUTH FLORIDA

SOP#: 1140.3 Date Issued: 3/04 Date Revised: 3/15 Page 1 of 3

TITLE: SurgiVet Multi-Station Lab Research Anesthesia System

SCOPE: Research and Animal Care Personnel

RESPONSIBILITY: Facility Manager, Technical Staff, and Professional &

Administrative Staff

PURPOSE: To Outline the Proper Procedures for Use and Maintenance of the

SurgiVet Anesthesia System

#### I. PURPOSE

1. Isoflurane inhalation provides safe general anesthesia for a variety of animal species. This procedure outlines the use and maintenance of a veterinary inhalation anesthesia machine that incorporates an oxygen flow meter, anesthetic vaporizer, and a non-rebreathing system with a waste gas scavenging system.

#### II. RESPONSIBILITY

- 1. The Facility Manager ensures that equipment is appropriately cleaned, maintained in good working order, and available for research personnel as requested.
- 2. The veterinary professional, administrative, and managerial staff ensures that all research and technical staff are adequately trained to use the SurgiVet Multi-Station Lab Research Anesthesia System.

### III. EQUIPMENT SET- UP

- 1. Assemble equipment and ensure all necessary supplies are available (e.g., Isoflurane, oxygen tank).
- 2. Check to ensure all control dials are in the off position . Primary and station flow meters, and vaporizer settings should be at zero.
- Check that the isoflurane level

SOP# 1140.3 SurgiVet Anesthesia System and Technique Effective 3/15 Page 2 of 3

- 6. Clean machine surfaces, hoses, circuits, and masks/nosecones with chlorhexidine solution (1 ounce/1 gallon water).
- 7. Attach an "E" tank to the oxygen yoke located beneath the Station Flow Console, secure and strap in position utilizing provided hardware. Do not use a tank with a damaged or broken valve stem. Using a tank wrench, turn knob on the oxygen tank counter-clockwise and check pressure. A full tank will register ~2000 psi, the tank should be replaced when the pressure gauge reads 200 psi or less.
- 8. Turn on the oxygen flow meter on the Primary Flow assembly to check that gas supply is operational. Open individual Station Flow Outlets one at a time and listen for movement of gas.
- 9. Close all of the flow meters and observe the primary pressure manometer, pressure readings at the oxygen tank and primary flow assembly should remain constant. Failure to maintain pressure indicates malfunction. This unit has an automatic Relief Valve designed to protect the components of the machine from over pressurization.
- 10. If unit appears to be non-operational, contact the Facility Manager for assistance.