

**STANDARD OPERATING PROCEDURES**  
**DIVISION OF COMPARATIVE MEDICINE**  
**UNIVERSITY OF SOUTH FLORIDA**

SOP#: 1138

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<b>TITLE:</b>	<b>Xenogen® Bioluminescence Imaging Gas Anesthesia System</b>
<b>SCOPE:</b>	All Animal Care and Research Personnel.
<b>RESPONSIBILITY:</b>	Surgical Core Manager, Facility Manager, Animal Care & Research Personnel
<b>PURPOSE:</b>	To Establish How to Operate the Isoflurane Gas Anesthesia Unit Portion of the Xenogen Imaging System.

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**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 breathing system with a passive waste gas scavenging system; the unit described is part of the Xenogen Imaging System.
2. The system is comprised of two parts, an induction chamber and manifold, described herein are the steps needed to ensure appropriate anesthesia is maintained throughout an imaging experiment utilizing the Xenogen Bioluminescence Imaging and Anesthesia System.

**II. RESPONSIBILITY**

1. It is the responsibility of the Surgical Core Manager to ensure that all anesthesia equipment is appropriately calibrated, certified, in good working order, and available for research personnel as requested. However, since ownership of this unit is under the Mouse Model Core, it must be contacted prior to any such actions; the Surgical Core Manager will then assist with the coordination of services.
2. It is the responsibility of the veterinary professional, administrative, and managerial staff to ensure that all research and technical staff using this equipment are adequately trained and
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4. Turn on the oxygen to the unit by turning the green handle up.