IACUC Policy On The Maintenance Of Anesthetic Vaporizers Utilized In Animal Research
IACUC Requirements for Maintenance of Anesthetic Vaporizers Utilized in Animal Research

The Institutional Animal Care and Use Committee (IACUC) encourages the use of gas anesthesia in lieu of injectable agents as a refinement of technique.

For human and animal safety, volatile gas anesthetics (e.g., isoflurane and sevoflurane) must be used with a precision vaporizer for survival procedures. The open-drop method (anesthetic soaked gauze in a container) is not permitted as precision vaporizers provide a much safer and reliable method of inducing anesthesia. In order to assure that the equipment is in good working order and administers the anesthetic in proper concentration, all vaporizers must undergo an annual inspection.

Therefore, the IACUC has established the following policy regarding the maintenance of anesthetic vaporizers utilized in animal research.

1) All gas anesthesia vaporizers must be inspected by a certified technician no less than annually.
2) Annual inspection includes leak and efficacy testing. A vaporizer must be sent out for calibration if it meets one of the following criteria:
   a) Leak test failure that cannot be resolved at the time of the inspection
   b) The difference between the “set” value and the “actual” gas value determined during efficacy testing deviates by 20% or more at two settings.
   c) The difference between the “set” value and the “actual” gas value determined during efficacy testing deviates by 40% or more at one setting.¹
3) The date of servicing must be clearly posted on the vaporizer.
4) Failure to complete annual inspection will result in the vaporizer being considered unsafe for use. All animal procedures utilizing this equipment will be prohibited until the equipment has been appropriately serviced.
5) RARC assumes responsibility for wall-mounted vaporizers in procedure rooms and on Veterinary Services anesthesia carts.
6) Laboratories with their own gas anesthesia vaporizers are responsible for scheduling the annual service of their equipment. The vendor below provides this service:

RONCO TECHNICAL SERVICES, INC.
1132 Park Avenue
Plainfield, NJ 07060
Telephone: 1-908-753-8204
Out of State: 1-800-635-2006
FAX: 1-908-753-0024
www.roncotech.com

¹ The Associate Director, CCMP will review inspection results and determine if calibration is necessary.