

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

SOP#: 1126.3

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<b>TITLE:</b>	<b>NuAire® Horizontal Laminar Flow Clean Work Bench</b>
<b>SCOPE:</b>	Research and Animal Care Personnel
<b>RESPONSIBILITY:</b>	Surgical Core Manager, Professional and Administrative Staff
<b>PURPOSE:</b>	To Outline the Proper Procedures for Use and Maintenance of a NuAire® Horizontal Laminar Flow Clean Work Bench

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**I. PURPOSE**

1. This procedure outlines the use and maintenance of the NuAire® Horizontal Laminar Flow Clean Work Bench.

**II. RESPONSIBILITY**

1. It is the responsibility of the Facility Manager in conjunction with the Surgical Core Manager to ensure that all equipment is appropriately cleaned, maintained in good working order, and available for research personnel as requested.
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 experienced in the use of the Laminar Flow work bench.

**III. EQUIPMENT APPLICATION**

1. The Horizontal Laminar Flow Clean Work Bench is used to protect products being manipulated within it from contamination (e.g., tissue culture, rodent surgery) by providing a clean environment, by HEPA filtration, for conducting these procedures.

**IV. EQUIPMENT USE**

1. Turn on cabinet blower and light, note that fluorescent and UV lamps will not work simultaneously. It is recommended that the germicidal UV lamp be run for 15- 20 minutes prior to using the bench. Check air intake ports for obstructions.
2. The laminar flow bench is designed to be run continuously to maintain clean conditions.
3. Cabinets with UV lights must be turned off during the day when personnel occupy the room. Good procedure includes decontamination of the cabinet by wiping down with disinfectant prior to commencing work.

4. If the bench is turned off, the face of the protective screen should be cleaned by brushing, the interior surfaces wiped with a mild detergent or Quatricide, and the blower allowed to operate for at least 15 minutes prior to using the bench.
5. Minimize room activity, unnecessary activity (even walking past the cabinet) may create disruptive air currents.
6. All work should be performed with the operator's hands and equipment down stream of the critical process.
7. Allow only essential items should be placed in the workstation. Objects should not be placed between the HEPEX and any point where the clean environment must be maintained.
8. Use proper attire, lab coat, mask, and gloves.

## **V. MAINTENANCE**

1. Inspect condition of unit and electrical cord/plug to ensure safe operation. Equipment determined to be unsafe will be removed from service immediately.
2. Keep unit clean. Wipe down Plexiglas and Formica surfaces with a cloth and Sporidicin (Do Not Use Alcohol or Organic Solvents on Plexiglas).
3. Pre-filter replacement interval depends on time of use, amount of contaminants and their size. A typical period is every 3 months.
4. The HEPA filter should be replaced when the efflux velocity cannot be maintained at 90 LFPM.
5. Yearly schedule certification and routine maintenance with vendor (since actual time of hood use is so low, yearly filter checks by the vendor should cover all recommended service intervals).
6. Certification is documented by labeling the equipment with the date of certification and the date when certification is due.
7. The Surgical Core Manager maintains records of equipment certification and maintenance.
8. Any additional maintenance/service should be performed by authorized personnel and unit re-certified in writing.

## **VI. REFERENCES**

Refer to the manufacturer's manual for additional information.

**Approved:**

**Date:**