



Stony Brook University

CASE STUDY

Fighting Biological Contamination and Safeguarding Labs and Animals

Implementing Visium Far-UVC fixtures reduces microbial load and pathogen risk in veterinary research labs

OVERVIEW

Stony Brook University, on Long Island in New York, is a leading national research institution with a strong focus on advancing biotechnology. Within its animal research facilities, staff face ongoing risks of infection and contamination from fomites and bioaerosols.

Protecting research animals, which are often expensive and irreplaceable models, was essential to preserving the integrity of ongoing studies. Even a single outbreak could be both costly and catastrophic for research outcomes.





THE CHALLENGE

Traditional terminal cleaning methods and existing ventilation systems leave gaps in sanitation. Germs and genetic material can accumulate on high-touch surfaces and continue to circulate in the air. In lab environments, contamination often stems from bioaerosols generated by animals and exposure to the surrounding environment.

OUR SOLUTION

Visium Far-UVC Fixtures

Two Visium devices were installed inside an animal cage-change station laminar flow hood, used regularly for colony maintenance and handling of research animals. The fixtures continuously inactivate bioaerosols and surface bioburden in this 10 sq. ft. workspace. Devices were mounted above the hood's working surface to provide optimal coverage without interfering with staff workflows or animal welfare.

The addition of Far-UVC for continuous air and surface treatment helps inactivate pathogens in real time. This reduces the risk of cross-contamination between test subjects and staff and strengthens overall research biosecurity.



KEY FEATURES



Continuous air and surface sanitization in occupied spaces



Passive, silent and highly effective with zero disruption to the workplace



IoT-enabled for remote controls and monitoring via an online dashboard



Outcome

Visium Far-UVC integrated seamlessly into Lighthouse's existing hygiene practices, providing continuous sanitization verified by independent testing.

- ✓ Seamless integration: Visium fixtures became part of Stony Brook's cage-change station and hygiene protocols without disruption.
- ✓ Added biosecurity: Continuous Far-UVC reduces risks of airborne and surface contamination.
- ✓ Uninterrupted operations: Research and animal care proceed without interference.
- ✓ Safe and efficient: Animals and staff are unaffected by Visium, and each fixture operates at just pennies per day in energy costs.
- ✓ Sustainable sanitation: Passive, continuous performance keeps workspaces cleaner between manual cleaning cycles.

"This novel technology holds great promise for our vivaria, healthier animals, more reliable science, and faster discovery at Stony Brook."

Rachel Brownlee
Director of the Division of Laboratory Animal Resources



Conclusion

Stony Brook University is committed to adopting eco-friendly, innovative solutions to protect its research and animals.

With Visium Far-UVC, the lab achieved and exceeded their goal to lower infection risks and improve sanitation without interrupting daily operations or adding significant costs.

The installation provides a reliable safeguard against bioaerosols and pathogens, strengthening both research continuity and animal welfare.

"In research environments where the health of both animals and personnel directly impacts outcomes, preventing biological disruptions is critical," said Dr. Janet Price, Visium's Chief Science Officer. "Even a single outbreak can compromise data integrity, halt progress, and delay lifesaving discoveries. Visium plays a vital role in minimizing these risks—helping safeguard research continuity when it matters most."

Contact & Next Steps

Ready to learn how Visium can transform your spaces?
Find information about Visium and its applications at LitThinking.com.

