

University of Louisville
Institutional Animal Care and Use Committee
Policies and Procedures

Microbiological Monitoring of PI-Maintained Animal Housing Rooms, Support Areas, and Equipment

Policy: Principal investigator-maintained animal housing rooms (defined as spaces holding animals for 24 hours or longer), support areas, and equipment surfaces that research animals come into direct contact with must be evaluated for the effectiveness of sanitation at least semiannually and must pass ATP (adenosine triphosphate) assessment standards to be verified effective. Principal investigator-maintained animal housing rooms and support areas within Comparative Medicine Research Unit (CMRU) vivaria must also adhere to CMRU Standard Operating Procedures (SOPs) for these areas, and appropriate SOPs will be made available to research staff who maintain space within the CMRU vivaria. **Note:** equipment used solely for terminal procedures is **excluded** from the ATP assessment required by this policy but must still be regularly cleaned and sanitized in accordance with the *Guide for the Care and Use of Laboratory Animals*¹ (*Guide*).

Rationale: All animal housing rooms, support areas, and equipment used for animal research must be maintained as per standards described in the *Guide* which describes regular sanitation practices coupled with **verification measures** to ensure adequate sanitation.

Procedures, Guidelines, and Exceptions:

1. Researchers responsible for dedicated animal housing rooms (defined as spaces holding animals for 24 hours or longer) support areas, and equipment surfaces (such as behavioral testing equipment, metabolic caging, inhalation exposure chambers, etc.) that come into direct contact with research animals must verify effective sanitation at least semiannually. **Note:** equipment used solely for terminal procedures is **excluded** from the ATP assessment standards required by this policy but must still be regularly cleaned and sanitized in accordance with the *Guide*¹.
2. PI-maintained housing (defined as spaces holding animals for 24 hours or longer), support areas, and equipment surfaces that research animals come into direct contact with are swabbed semiannually during January-February and July-August.
3. Walls, floors, sinks, work surfaces, and equipment surfaces that research animals come into direct contact with will be evaluated via ATP assessment by Comparative Medicine Research Unit (CMRU) staff.
4. Researchers may utilize the form “ATP Testing Request Form” that can be found at <https://louisville.edu/research/cmru/cmru-forms/ATP-Test> you will need to use your ULink credentials to login and access the forms) to schedule testing of equipment. Principal Investigators (PI) are responsible for removing all visible debris and organic matter, sanitizing, and contacting CRMU staff to arrange for ATP sanitation verification. At least

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one week's notice of an assessment need should be provided to CMRU staff. For shared equipment and spaces, researchers should designate one individual/laboratory to arrange for ATP sanitation verification.

5. Rooms and equipment must be dry prior to assessment and should be swabbed by CRMU staff within 24 hours of sanitation. All areas and items pending testing should not be accessed or utilized prior to testing as this may cause test failure.
6. If a PI-maintained room or piece of equipment has not been used since the last testing period and no future use is planned within the next six months, testing will not be required at that time. Records will indicate "Not in use."
7. Rooms and equipment must be re-sanitized and pass microbiological assessment prior to being returned to use.
 8. If the ATP assessment fails, indicating inadequate sanitation, the PI will be contacted by the IACUC office. The PI will be responsible for re-sanitizing the area or equipment and arranging for retesting. Records of tests and results will be directly uploaded from the ATP reader into a centralized database maintained by the CMRU. All data will be kept for at least three years and made available to the PI, IACUC, and other outside inspection/accrediting agencies upon request.

References:

1. National Research Council. (2011). *The Guide for the Care and Use of Laboratory Animals* (8th ed, pp. 70-73). Washington DC: National Academies Press.

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