



Duke University Animal Care & Use Program Policy



P.I. MANAGED HOUSING/HOLDING FACILITIES

PERFORMANCE STANDARD: Animal care, irrespective of location, will be performed to the same level of consistent standards as defined by the Guide, IACUC Policies, and DLAR care standards.

BACKGROUND: Federal regulation, PHS Policy and standards of AAALAC accreditation require each research institution establish a process for animal care that meets referenced standards and veterinary care expectations. This policy applies to all areas where animals are maintained for longer than 12 hours outside of a DLAR managed animal care facility.

ROLES: The Principal Investigator has a number of duties and responsibilities that include responsibility for all animal care and use activities performed under their IACUC approved animal protocol.

DEFINITION:

- **PI-MANAGED HOUSING:** Includes any non-DLAR animal holding space managed by an individual, a group of individuals, or a department.

POLICY:

1. **NEW PROPOSALS FOR PI-MANAGED HOUSING:** The IACUC uses a two stage process for consideration and approval of PI-managed space.
 - a. **Stage 1:**
 - i. The PI completes the IACUC application for a PI Managed Housing Facility (<http://vetmed.duhs.duke.edu/documents/iacuc/pdf/Protocol%20Form%20Parts/Section%20T%20-%20PI%20Managed%20Facility.pdf>)
 - ii. The IACUC considers the scientific justification of the housing request at a called meeting of the full Committee. If the IACUC determines that there is compelling scientific justification for approval of a PI-managed housing space, then proceed to Stage 2.
 - b. **Stage 2:**
 - i. A Subcommittee consisting of representative from OESO, IACUC and DLAR will visit the proposed site. This Subcommittee will review the proposed site for appropriate infrastructure, adequate safety provisions, adequate husbandry provisions, effective security, and proper disease prevention and surveillance techniques.
 - ii. In addition to the work of this Subcommittee, the following actions will also be performed:
 1. E&O will perform a Heating, Ventilation, and Air Conditioning (HVAC) assessment for appropriate air flow measurements; and

2. DLAR will establish measures appropriate to oversee the management of the area. DLAR will also provide husbandry, health reporting, or management training necessary to assure properly trained care staff. DLAR will provide the necessary training, as determined by DLAR, to the individuals providing care to the animals held at the PI Managed facility.
 - iii. The IACUC will consider each of the above reports (i., ii., iii) at a subsequent meeting of the full Committee. The IACUC will review and either approve, require additional clarification, or disapprove the request for PI-Managed Housing.
2. **ANNUAL RE-APPROVAL OF PI-MANAGED HOUSING:** An annual re-approval will be required for all PI-Managed Housing. The annual re-approval process will include:
 - a. Submission of the scientific justification for the continuation of the or PI-Managed Housing; and
 - b. Review and 'CLEARANCE' by the IACUC Subcommittee (consisting of DLAR, OESO, and IACUC representation). HVAC re-assessment may also be required as determined by the Subcommittee.
 - c. The IACUC will consider the above information at the anniversary of the original approval date.
 - d. IACUC Review Procedures:
 - i. Full Committee Review is required if there is a change in scientific justification from that of the prior year.
 - ii. DMR by the IACUC Chair, or their designee, may be used if the scientific justification has not changed from the prior year to the present annual report.
 - e. The IACUC will review and either approve, require additional clarification, or disapprove the request for continuation of the PI-managed housing space (DMR cannot disapprove, but may elevate consideration of the justification).
 - f. The animals held in those facilities that are not approved for continued PI-managed housing will be transferred to DLAR 'Holding Protocol' immediately.
3. **SPECIFIC REQUIREMENTS FOR PI-MANAGED HOUSING**
 - a. A responsible individual (the PI or a Designee) must be assigned for each facility.
 - b. If the P.I. or designee must be off campus for more than 2 days, then an alternate designee must be assigned, and the OAWA notified.
 - c. If graduate or undergraduate students are used to maintain the facility and/or care for the animals, a plan for facility operations during student vacations must be included in the request for P.I. Managed housing.
 - d. Quarterly validation procedures (e.g., RODAC plates, Firefly, etc.) must be performed to validate the effectiveness of sanitation of primary contact areas (e.g., cages). Quarterly validation is not required when the caging materials are sanitized by a DLAR mechanical cage washing system.

- e. Temperature: Twenty-four hour temperatures must be monitored and must be maintained within 2 degrees F of the ranges of temperature defined for the species in The Guide, unless deviation is approved by the IACUC.
- f. Humidity: Twenty-four hour humidity must be maintained within the range of 30% to 70% RH. When daily monitoring records indicate humidity has fallen below the 30% for more than 72 continuous hours, there are four options.
 - i. The humidity can be measured at animal level by attaching a surface sanitized humidistat to the inside wall of the cage. This is the preferred option, as the relative humidity in cages at animal level is unlikely to fall below 30%.
 - ii. Animals should be transferred to a DLAR holding facility, if such transfers are permissible under the protocol. Such transfers must be coordinated with DLAR and require DLAR-specific approval.
 - iii. A 'feedback-regulated humidifier' is installed to assure RH within the specified range; or
 - iv. An IACUC exception to policy waiver must be applied for and scientifically justified, and approved by the IACUC.
- g. Environmental and census recordkeeping should be standardized by using a P.I. managed lab recording sheet that includes temperature, humidity, feeding, providing water, and animal census. Appropriate sheets can be obtained from DLAR:
 - i. When animals are not being housed in the facility, the records must indicate the date the animals were removed (no animals were held). Daily monitoring records are not required when animals are not being housed for 12 hours or longer.
 - ii. When animals are returned to the holding room, the monitoring records must indicate the date the animals were returned, after which daily monitoring is required.
 - iii. Monitoring forms are available at the animal program website.
- h. **Live Traps for Transgenic Animal Facilities:**
 - i. Facilities holding transgenic animals must have a life capture trap within the facility. If the holding area is enclosed within a suite, then a trap within the suite, between the holding spaces and the exterior door, is appropriate.
 - ii. Specifications for the live trap include a commercial product designed for the purpose of live trapping, and having a viewing window.
 - iii. Daily assessment of the trap must be performed for period of time when transgenic animals are housed in the facility. The daily checklist must show assessment of the trap on a daily basis for the period of time when animals are held within the facility.
 - iv. Any animal captured in the live will be reported to DLAR immediately for disposition.
- i. To ensure that situations that endanger animal welfare are recognized, all personnel involved in P.I. Managed Housing are required to take a DLAR-directed training course on recognizing animal illness.
- j. Immediate reporting of any clinical abnormality is required.

- k. If the facility will not be used for at least six months, the facility manager shall contact the IACUC and place the facility on an 'inactive status.' Such facilities can be reactivated following an inspection by the IACUC Subcommittee on P.I. Managed Housing.
- l. Each facility will have a determined maximum housing density. Density is defined as the number of cages (rodents) or number of animals (larger species) that can thrive in the space allotted under the conditions provided. Aquatic species density is defined as appropriate water quality and general minimal volume per animal for the species being housed. All deviations from published standards must be IACUC approved.