

Subject: Space and Housing Policy

Source: Office of Laboratory Animal Resources
Effective Date: 12-18-2020
Replaces: New
Applies to: Principal Investigators housing animals in OLAR run facilities
Reference: Animal Welfare Act; PHS Policy on Humane Care & Use of Laboratory Animals; Guide for the Care & Use of Laboratory Animals

The Office of Laboratory Animal Resources (OLAR) is responsible for managing the animal facilities, animal husbandry, and veterinary care for animals housed and used for research at the University of Colorado Denver | Anschutz Medical Campus (CU Denver | Anschutz). They are responsible for all animal housing and support areas with the exception of IACUC satellite housing.

Policy Statement

This policy is intended to provide information regarding how space is assigned and managed in OLAR run facilities to include animal housing, procedure room use and space, research equipment and the temporary storage of unutilized research equipment. All space on the campus belongs to the Chancellor who in turn assigns space to schools and units. The Chancellor, in conjunction with the Vice Chancellor of Research, has delegated to the Office of Laboratory Animal Resources (OLAR) the management of limited, dedicated space used for *in vivo* research models due to its expertise in veterinary care, animal husbandry, animal welfare and facility management. As a result, all vivarium space is under the control of OLAR who then allocates space based on certain principles as outlined below. Space allocation is regularly assessed, as it is understood that investigator's space needs may change over time. OLAR will make every possible attempt to accommodate investigator needs based on current space availability and other research needs and priorities within OLAR managed facilities.

Animal Housing Spaces

- Animal housing rooms are shared spaces within OLAR.
- Space assignment considerations:
 - Housing needs by species and population.
 - Risk assessment performed by EH&S and OLAR for human and animal pathogens, respectively.
 - Access to cores.
 - Access to procedure spaces/ testing rooms.
 - Availability of space for equipment.
 - Collaborations.
 - Animal health, including stress, and biosecurity status.
 - Nature of animal experiments – breeding vs. non-breeding, high traffic, etc.
 - Maximize space utility to benefit the most research/users.
 - IACUC approved protocol.
 - Building location of PI assigned dedicated wet lab space outside of OLAR will be the lowest priority.
- Rodent Housing
 - Investigators are assigned cage slots in an overall room, not to specific racks within a room.

- More than one investigator may be housed on a housing rack to ensure appropriate utility of a room.
- Housing density is generally assigned to approximately 85% of room capacity but may be changed depending on the needs of the users.
- Investigators are encouraged to work with the other research groups and the OLAR animal husbandry technicians within a room to keep colonies organized.
 - Significant changes in the location of cages/colonies within a room will be communicated with the PI prior to cage movement.
 - Organizational tools such as colored stickers, cage flags, or other means may be used to facilitate organization.
 - Organizational tools used by labs must leave the bar code visible to ensure proper scanning of cage cards.
- Investigators generally are assigned to only one standard (green) housing room.
- Large Animal Housing
 - Investigators are assigned cages or pens based on availability in coordination with:
 - OLAR surgical room scheduling
 - Project length
 - Requirement for specialized veterinarian care

Space Allocation for Animal Housing is assigned using the following system:

- Upon initially arriving at CU Denver | Anschutz, an Animal Housing Questionnaire must be completed which will include animal census targets for approximately the next 2-3 years.
 - OLAR will assign initial housing based on the information provided.
- At least annually, each OLAR Facility Manager will assess the average census of all investigators to determine if current housing numbers are accurate. Any that have exceeded or are below the proposed census targets will be contacted to update their animal population targets, based on current information.
- Investigators will have space assigned or reassigned based on the following criteria in order of priority:
 - **First-come, First-serve:**
 - **Changes in Needs:** may require a colony move to accommodate any of the following
 - increases/decreases in targeted census
 - use of cores / specialized areas
 - use of large equipment
 - collaboration with other PIs
 - increase/decrease in procedure space needs
 - change in type of experimental work (i.e. behavior, high traffic, breeding, etc)
 - Currently the above two methods are the only ones in use. However, if space is limited and is not able to be assigned based on the above two criteria, the following methods will be taken into consideration by OLAR when assigning space.
 - **Investigator Status:** Early Stage (ESI), followed in priority by Early Established (EEI) Investigators will be given priority over more senior/established investigators to ensure that they have the appropriate resources to achieve promotion in the 7 year cycle. ESI and EEI will follow the NIH definitions.
 - Early Stage Investigators (ESI): As defined by NIH (Notice Number: NOT-OD-17-101) individuals who have recently completed their terminal degree within the past 10 years and who have not previously competed successfully as PD/PI for a substantial NIH independent research award.

- Early Established Investigators (EEI): As defined by NIH (Notice Number: NOT-OD-17-101) individuals who are PD/PI, within 10 years of receiving their first substantial, independent competing NIH RO1-Equivalent research award as an ESI.
- Established/Senior Investigators are not defined by NIH, but are defined as investigators that do not meet the above definitions and have reached at least the rank of Associate Professor.
- **Awards with Full Indirect Rates and CU Sponsored Competitive Grants:** Projects funded through grants/contracts that pay full F&A rates will be given priority over other funding
 - Note: Projects conducted by outside companies are the lowest priority
- **Maximize Utility:** Space allocation will be based on a philosophy to benefit the most number of independent or collaborating research groups as possible. Multi-unit, collaborating research groups, or space utilization as shared space will be given priority over single unit, non-collaborating research groups.
- **IACUC Protocol Approval:** Investigators that allow their protocols to lapse and have no animals in the facility, may have their current space assignment reallocated.
- **Other Methods:** If the above criteria are not able to determine how to assign available space, every effort will be made to accommodate all funded projects using other methods as determined by the Director and Associate Director of OLAR.

Shared Procedure Rooms

- Procedure rooms are shared in OLAR vivariums and are organized by:
 - First-come, first-serve: procedure rooms that are not listed on the EMS reservation system
 - Reservation: Rooms that are listed on the EMS room reservation system. Reservation ability will be posted for at least one procedure room within a suite.
 - Reservations are forfeited if the room is not being used within 15 minutes of the reserved start time or if the room is left unattended for more than 15 minutes during the reservation
- Investigators will be allowed to access shared procedure rooms within the suite where their animals are housed.
 - Investigators may be permitted to access other shared procedure rooms in the facility based on need per approval by the OLAR Facility Manager
- Inadequate care of shared procedure room space:
 - A \$75 charge to the PI speedtype for space not left clean after use.
 - Damages to any surfaces (i.e. walls, floors, fixtures, equipment, etc.) incurred during use will be billed to the PI speedtype for the purpose of repair.
- Any additional furniture or permeant fixtures needed for the space beyond what is provided – tables, chairs, cabinets, are the responsibility of the PI to purchase.
 - Prior to purchase, all furniture must be approved by the OLAR Facility Manager
 - If OLAR has extra equipment available, it may be made available to the PI but will remain the property of OLAR
 - Any damages to OLAR property will be billed to the PI for either adequate repair or replacement.

Space Allocation for Specialized Behavior/Procedure Rooms, Including for Individual Investigators, Cores, and Distinct Multi-Investigator Groups :

- Cores and Shared Resources from this point forward will be referred to as Cores, are research units, recognized by the institution that provide specialized services or equipment to serve the CU Denver | Anschutz Campus as fee-for-service or dedicated cost center.
- Distinct Multi-Investigator Groups are groups of investigators that have worked together to purchase research specific equipment for use in the vivarium that is not available to the general research population for use. They will be referred to as Groups.
- Assigned based on the following criteria in order of importance
 - Space availability
 - Cores
 - Multi-investigator groups collaborating with the same equipment or space
 - First-come-first serve
 - Revenue generation or grant funding need as determined by the Director or Associate Director of OLAR
- Individual Investigators and Groups generally will not be permitted to have more than one individually assigned space. Cores may have more than one space dependent on their needs to service the research community and space availability.
- Investigators/Cores/Groups are responsible for ensuring rooms are organized and clean. All equipment is maintained per all cleaning SOPs set by the IACUC. OLAR will assist with general cleaning (Floors, walls, trash, etc).
 - Investigators failing to keep rooms and equipment clean, resulting in cleaning that requires more effort beyond basic cleaning/maintenance will incur a \$75 charge.
- Use of the room will be monitored. Lack of use may result in loss of room assignment
- Billing for the use and maintenance (trash, sweeping, mopping, auditing) of individually assigned specialized behavior/procedure space **MAY** be initiated to recover personnel time to maintain those spaces. Billing paradigms may include:
 - Maintenance/cleaning fee based on OLAR's published technician hourly rate.
 - Pro-rating of the per diem charges that could be obtained by multi-use/general-use allocation.
 - Price per square foot per month
- All modifications to the space must be approved and coordinated with OLAR in advance of work. In most cases, due to the nature of finishes and infrastructure, this work will need to be performed by the University Facilities Department or a full construction project coordinated through OLAR and the Facilities Projects group.
 - All modifications will be at the cost of the PI/Core/Group.
 - Damages to any surfaces (i.e. walls, floors, fixtures, equipment, etc.) incurred during use will be billed to the PI speedtype for the purpose of repair.
 - If the space requires modifications to return the space to its original state after the PI/Core/Group vacates the space, it will be at the cost of the PI/Core/Group.
- Any furniture or permanent fixtures for the space – tables, chairs, cabinets, are the responsibility of the PI to purchase.
 - Prior to purchase, all furniture must be approved by the OLAR Facility Manager
 - If OLAR has extra equipment available, it may be made available to the PI but will remain the property of OLAR
 - Any damages to OLAR property will be billed to the PI for either adequate repair or replacement.

Investigator/Core/Group Owned Equipment

- All equipment must be approved by the OLAR Facility Manager before it is brought into the facility.
- All equipment must be clearly labeled with the PI name
- Initial decontamination of equipment into the vivarium will be performed at no cost. More frequent decontamination events will be charged at the stated rate at the discretion of OLAR.
- Large equipment that is scientifically justified to be in close proximity to animal housing must be approved by the OLAR Facility Manager prior to being brought into the facility
- All modifications to the space must be approved and coordinated with OLAR in advance of work. In most cases, due to the nature of finishes and infrastructure, this work will need to be performed by the University Facilities Department or a full construction project coordinated through OLAR and the Facilities Projects group.
 - All modifications will be at the cost of the PI/Core/Group.
 - Damages to any surfaces (i.e. walls, floors, fixtures, equipment, etc.) incurred during use will be billed to the PI/Core/Group speedtype for the purpose of repair.
 - If the space requires modifications to return the space to its original state after the PI/Core/Group vacates the space, it will be at the cost of the PI/Core/Group.
- Equipment that is not in use is not permitted to be stored in the facility.
 - An audit of equipment will be performed by OLAR facility management as needed based on space demands.
 - Equipment identified that is not in use or is not adequately utilizing the space it occupies will be required to move to:
 - Alternative location within the vivarium if available
 - Removed from the vivarium.
 - Decontamination out of the facility may or may not be required based on a risk assessment performed by both EH&S and OLAR due to humane and animal pathogens, respectively.
 - If equipment will return to the facility at a later date, decontamination may be required.

Storage of Supplies in the Vivarium

- Storage of disposable supplies should be limited.
 - In the event of a decontamination, disposable supplies will be thrown out.
 - All medical materials that are stored in the vivarium must adhere to IACUC policies regarding labeling and expiration dates.
 - If items are found to be out of date or improperly labeled, the lab will be notified.
 - Failure to correct the issue within 7 calendar days will result in a charge for OLAR to provide the correction. Correction could include disposal, confiscation, or correction.
 - No controlled substances may be stored in the vivarium without prior approval.
- Supplies, feed, and equipment brought into the facility must follow decontamination and storage procedures as outlined by OLAR.
- Assigned storage supplied by OLAR
 - Each PI/Core/Group is eligible to be assigned one lockable cabinet or cart within the facility.
 - Storage is subject to inspection by OLAR and the IACUC at any time.
 - Items that are not in compliance will be forwarded to the PI/Core/Group for correction.

- Lockable carts and cabinets supplied by the PI/Core/Group
 - Prior approval by the OLAR Facility Manager is required before any storage carts or cabinets are brought into a facility.
 - Must be able to be easily moved for cleaning.
 - Lab must provide the combination or a key so that OLAR and the IACUC can inspect/audit when required.
 - All pad locks must be combination locks.
 - Key locks are only permitted for storage cabinets that already come with a keyed lock.
 - All carts/cabinets must be clearly labeled with the PI name.
- Large equipment that cannot fit into an assigned cabinet, please see the section above on investigator owned equipment.