



Animal Holding and Use within Extra-Vivarium Spaces

Purpose / Scope

This policy outlines the requirements for holding and/or use of live animals outside of a Laboratory Animal Facility ('Facility'), hereto referred to as an Extra-Vivarium Space (EVS).

This policy does not pertain to wild animals studied within their natural habitat.

Rationale

Holding or use of animals within extra-vivarium spaces is strongly discouraged by Western University and our federal and provincial regulators. Work with animals outside of Facilities exposes Western, Lawson and its researchers¹:

- **Animal care and welfare:** Facilities are designed and built to meet regulatory standards for animal holding and use. Facilities are staffed with qualified personnel for provision of oversight, delivery of animal care, and assurance of animal welfare.
- **Human health and safety:** Allergy is likely the most common occupational hazard among those working with laboratory animals. Work with animals outside of Facilities is associated with risk of exposure of others to allergens, some of whom might not be aware they are at risk (students, custodial staff, members of the public, etc.). Limiting animal work involving the use of biological or chemical hazards to Facilities allows for application of appropriate containment measures and decreases the risk of exposing other people to such hazards.
- **Potential research confounds:** Transportation and holding in an unfamiliar environment is stressful for animals. To avoid the potentially confounding effects of stress on research, animal holding and use should be limited to Facilities whenever possible. Facilities are purpose-built for tight control of environmental parameters such as temperature, humidity, air quality, lighting and noise. Variability in environmental parameters introduces variability in data.
- **Animal health and biosecurity issues:** Facilities are maintained according to a specific health status for the colony. Transportation of animals, equipment and personnel to and from areas outside of these facilities can spread unwanted pathogens, which threaten ongoing research programs.
- **Professional and emergency support:** When animal work is performed in Facilities, technical and veterinary staff is available to assist researchers and ensure conformance to best practices and

¹ Animal transport outside of purpose-built facilities is considered to be "inefficient and increases risks with respect to security, biosafety, biosecurity, animal stress, laboratory animal allergies, and oversight of animal care and use." CCAC's Policy Statement for Senior Administrators Responsible for Animal Care and Use Programs (2008). Appendix VII – Animal Facilities. Retrieved on 4Feb2019 from https://www.ccac.ca/Documents/Standards/Policies/Senior_administrators.pdf



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standard operating procedures. Timely assistance in case of emergencies is more challenging when procedures are conducted outside the Facility.

- *Secure containment:* Limiting animal-based work to Facilities allows for management of appropriate containment measures for handling of biological hazards, chemical hazards and genetically modified organisms to meet regulatory requirements as a condition to conducting research with these agents.

Policy

Unless approved by the Animal Care Committee (ACC), animal holding and use must take place within a Laboratory Animal Facility (Facility).

Work with animals outside of a Facility must be avoided wherever possible.

Exemptions to this policy require strong justification and prior approval by the Animal Care Committee's (ACC) Executive Working Group.

Exemptions

Prior to use and based on the assessment of the proposed area, the ACC Executive, in conjunction with the VPR Space Planning Working Sub-Group, must determine an EVS's suitability for the proposed live animal-based science activities.

For new spaces and those undergoing renovation, the ACC must be notified at the planning stage to facilitate engagement by provincial and national regulators, as applicable. The ACC must be notified minimum six months in advance of a space that has either had no previous live animal use, or one within which more invasive procedures are proposed.

The EVS Assessment Process (PROC-016) must be followed. EVSs will be certified for specific animal species, procedures, and other conditions, as listed on the associated EVS Approval Certificate.

Following approval, the area will be subject to regular inspections by the ACC or their delegates and veterinary staff. EVS Approval Certificate renewals must be undertaken annually, e.g., via the ACC Site Visit.

The ACC will consider proposals for animal holding or use outside of a Facility by evaluating the following criteria:

- *Justification:* There must be clear and compelling reasons for why a Facility cannot support the proposed work.



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- *Suitability:* The proposed area must be assessed and approved (see requirements below) by the ACC for the specific procedures outlined within the associated Animal Use Protocol(s).
- *Supervision:* The proposed area must be assigned a supervisor (if not the AUP holder) with responsibility for maintenance of the area to ensure alignment with all applicable standards.
- *Oversight:* There must be sufficient resources (ACC and/or veterinary) to provide oversight to the proposed area.
- *Academic approval:* The proposed area must be approved for use by the associated institutional leader.

Requirements for Approval of Extra Vivarium Spaces

Spaces must:

- Meet or exceed CCAC guidelines and OMAFRA regulations for animal holding or use with respect to infrastructure, maintenance and environmental parameters (i.e., sanitation, appropriate enclosures, environmental enrichment, lighting, noise control, air quality, humidity and temperature);
- Be secure and accessible at all times to only authorized research staff, Facility staff, veterinarians, and the ACC;
- Be in close proximity to the Facility in order to minimize the time that the animal spends in transport, and avoidance of public areas in route; and
- Mitigate/avoid exposure of others to potential allergens.

Operational Requirements for Approved Extra Vivarium Spaces

- Research staff must promptly follow the *Sick Animal Response Policy* (POL-009).
- Research staff must complete and maintain animal care and use records, as per the *Animal Care and Use Records Policy* (POL-003) as for those performed in a Facility (e.g., surgical records, monitoring templates) and maintain these records with the animals.
- For areas approved for holding > 12 hours, all animals must be monitored at least once a day, including weekends and holidays by qualified Facility staff. Daily monitoring is to be recorded using logs maintained in the holding area, available for inspection for at least annually, as per the *Animal Care and Use Records* (POL-003) and *Animal Husbandry* (POL-010) policies.
- When necessary, daily monitoring may be coordinated between research and Facility staff. The roles and responsibilities of each party must be developed with and approved by the Facility supervisor/veterinary staff.



References

- Animals for Research Act, R.S.O. 1990, c. A.22, 24, 25
 - Canadian Council on Animal Care.
 - Guidelines on animal laboratory facilities – characteristics, design and development (2003)
 - Guidelines on the care and use of fish in research, teaching and testing (2005)
 - Other species-specific guidelines
 - Animal Care Committee Policies and Standard Operating Procedures
 - University Senate’s MAPP 7.12 – The Animal Ethics and Care Program
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Revision History

Version	Date	Description of Changes	Author
00	12-MAR-2020	New Policy	KB / EB / TR / LT
01	09-DEC-2021	Updated content under ‘Purpose/Scope’ and ‘Policy’ statements; reformatted; add requirements to proactively involve the ACC Executive in assessing and ultimately approving EVSS; involvement of the VPR Space Planning Working Group	LT